



BIBLIOGRAPHY
OF
INDIAN ZOOLOGY

Vol. 7
1964



Edited by the Director
ZOOLOGICAL SURVEY OF INDIA
1977

NO.

016.591
DIR

BIBLIOGRAPHY
OF
INDIAN ZOOLOGY

Vol. 7
1964



Edited by the Director
ZOOLOGICAL SURVEY OF INDIA
1977

© Copyright 1977, Government of India

016-591

~~200~~
DIR

Acc. no. P304
Dt. 23/3/57



Price : Inland : Rs. 30.00

Foreign : £ 2.00 or \$ 3.75



**BIBLIOGRAPHY OF INDIAN ZOOLOGY
FOR THE YEAR 1964**

Compiled by
M. K. BISWAS, M. L. DE AND M. Z. ANSARI

CONTENTS

				Page
I. Brief Review for the year 1964	...	...	...	7
II. Bibliography of Indian Zoology 1964	...	...	...	13
III. List of New Taxa	...	...	...	111
IV. Subject Index	...	...	...	118

Acc. no. P304
Dt 21/3/67



I. BRIEF REVIEW FOR 1964

INTRODUCTION

The present issue of the Bibliography of Indian Zoology contains 1639 references of published work on Indian Fauna during the year 1964. The list of references is preceded by a short review and is followed by a subject index and a list of new taxa from the Indian region.

The review contains 12 sections as follows :

- | | |
|--------------------|-------------------|
| 1. GENERAL | 10. ARTHROPODA |
| 2. PROTOZOA | (a) Crustacea |
| 3. PORIFERA | (b) Myriapoda |
| 4. CNIDARIA | (c) Arachnida |
| 5. PLATYHELMINTHES | (d) Insecta |
| (a) Trematoda | 11. ECHINODERMATA |
| (b) Cestoda | 12. CHORDATA |
| 6. ASCHELMINTHES | (a) Pisces |
| (a) Gastrotricha | (b) Amphibia |
| (b) Nematoda | (c) Reptilia |
| 7. ANNELIDA | (d) Aves |
| 8. ECHIURA | (e) Mammalia |
| 9. MOLLUSCA | |

1. GENERAL

Jayangoudar has studied bio-ecology of Nuggikari lake in Dharwai, Mysore State. Ramanadham, Reddy and Murty have studied the salinity, distribution, diurnal variation of surface water temperature and current in Chilka lake. Ramamirtham and Nair have given an account of variation of vertical stability parameter in the surface layers of the Arabian sea off Cochin. Murthy and Varma have discussed the hydrographical features of the waters of Palk Bay during March 1963. Patil, Ramamirtham, Varma and Nair have studied the hydrography of the west coast of India during the pre-monsoon period of the year 1962.

2. PROTOZOA

Mandal and Chakravarty have described five new species of the genus *Isospora* and a new species of *Dorisella*. Ray and Banik have studied the morphology of a new coccidium, *Eimeria oryctolagi* from a domestic rabbit and a new species *Isospora canis* from dog, *Canis familiaris*. Qadri and Rao have described a new flagellate *Polymastix periplaneta* from the common cockroach *Periplaneta americana*. Narasimhamurti has studied nuclear division in *Entamoeba invadens*. Maity, Chakravarty and Ray have

made observations on the nucleic acids in different phases of development in three species of Myxosporidia. Haldar and Chakrabarty have made cytochemical studies on three species of termite flagellates.

3. PORIFERA

Mukherjee and Ganguly have studied contact reaction of cells in sponge aggregation.

4. CNIDARIA

Mitra and Mookherjee have discussed radiation tolerance in *Hydra*. Mookherjee and Mookherjee have studied isolated DNA from *Hydra*. Mookherjee has studied descending column of cells in *Hydra*.

5. PLATYHELMINTHES

(a) Trematoda

Unnithan has established four new genera *Tylosuricola*, *Anchovicola*, *Heterocotyla* and *Scomberocola* and described nine new species of trematodes parasitic on the gills of marine fishes.

Thapar has described a new species *Cathaemasia tuticorina*. Jaiswal has given a review of the genus *Lyperosomum* with a description of a new species *L. (Brachylecithum) ravi*. Agrawal, V. has described one new species each of *Allocreadium*, *Eumasenia*, *Haplorchis*, *Postorchigenes*, *Helicometra*, *Prostocus* and *Podocotyle*. In another paper she has described a new species *Lyperosomum stunkardi* from the intestine of a common mynah *Acridotheres tristis*. Gupta, N. K. has described a new species of the genus *Aspharyngostrigea* from the digestive tract of *Ardeola grayii*. Gupta, R. has discussed the taxonomic position of the genus *Schwartzitrema* and described a new species, *S. angingi*. Gupta, S. P. has described one new species each of *Encylobrephus* and *Neoganada* respectively. Mukherjee has described a new species of *Glaphyrostomum* from pigeons. Nath and Gupta have studied a new species of *Schwartzitrema dumbeli* from the intestine of snake *Anhinga melanogaster*. Pande, Bhatia and Rai have described a new species *Diplostomulum singhi*. Rai has described a new species *Azygia stunkardi* and discussed the life history of a new species *Phyllodistomum srivastavai*. Simha has described a new species *Haplorchis solus*.

Dutt and Srivastava have worked on the life-history of

Orientobilharzia turkestanicum. Rai has studied the morphology and life history of *Aspidogaster indicum*.

(b) Cestoda

Mukherjee has described two new species *Choanotaenia dutti* and *C. sonati* from Passeriformes birds. Singhal has studied a new cestode belonging to the genus *Anonchotaenia* Cohn, 1900 from the house sparrow, *Passer domesticus* and a new cestode of the genus *Hymenolepis* Weinland, 1858 from the common babbler, *Turdoides caudatus*. Singh has described six new species viz., *Ophryocotylo indicus*, *Biuterina dicruri*, *Choanotaenia tandani*, *C. picusi*, *Panuwa stylicirrosa* and *Anonchotaenia indica* from birds. Tandon has described a new species *Ophryocotyloides dasi* from a Himalayan barbet.

6. ASCHELMINTHES

(a) Gastrotricha

Visvesvara has studied some Gastrotricha from India with description of two new species, *Polymerurus magnus* and *Stylochaeta abarbita*.

(b) Nematoda

Agrawal, V. has described a new nematode, *Procamallanus (P.) buckleyi* from a freshwater fish, *Heteropneustes fossilis*. Siddiqi and Jairajpuri have established a new species, *Oxyspirura basiri*.

Sultana has described eight new species of *Oxyspirura* from birds in India and one new species, *Pseudaprocta mirzai*, from the large pied wagtail in India.

Edward and Misra have described one new species each of *Criconemoides* and *Hemicriconemoides* from U. P. Jairajpuri has erected a new family Nygellidae and four new sub-families Nygellinae, Belondirinae, Swangerinae and Dorylaimellinae and described four new species of *Dorylaimellus*, three new species of *Axonchium* and one new species each of *Nygellus*, *Belondira* and *Oxydirus*. Jairajpuri has also established three new genera viz., *Dorella*, *Basirotyleptus* and *Leptonema* and described new species, *Dorella mira*, *Basirotyleptus basiri*, *Leptonema thornei*, *Criconema taylori*, *Rotylenchus sheri*, *Longidorella opisthodelphis* and two new species of *Proleptonchus*. Jairajpuri and Siddiqi have described three new species of *Nordia*. Khan, E. has established one new sub-family, Boleodorinae and described a new species each of *Boleodorus*, *Enchodorella* and *Longidorus*. Khan, E. and Basir, M. A. have described two new species of *Boleodorus* and one new species of *Paurodontus* while Khan, E. and Khan, S. H. have studied a new species *Longidorella impar*. Khan, S. H. has established a new genus

Sakia and described new species, *S. typica* and *Criconemoides siddiqii*. Khan, S. H. and Basir, M. A. have described two new species of *Helicotylenchus*. Raski, Prasad and Swarup have described a new nematode, *Telotylenchus housei* from Mysore. Siddiqi, M. R. has described four new species of *Dorylaimellus*, and one new species each of *Tylencholaimus*, *Diphtherophora*, *Tylencholaimellus*, *Axonchium*, *Ziphinema*, *Paralongidorus*, *Helicotylenchus* and *Rotylenchus*. Siddiqi, M. R. and Goodzy, J. B. have discussed the status of the genera and sub-families of the Criconematidae. Siddiqi, M. R. and Husain, Z. have described two new species of *Helicotylenchus* and one new species of *Rotylenchus* while Siddiqi, M. R. and Khan, E. have erected a new genus *Xenonchium* and described one new species each of *Xenonchium*, *Proleptonchus*, *Trichonchium* and *Tylencholaimellus* with a key to the species of *Tylencholaimellus*.

Ansari and Basir have published a monograph on the histological anatomy of *Setaria cervi*.

Devendraprasad has studied the effect of temperature on the egg of *Strongyloides papillosus*.

Nadakal has studied the plant parasitic nematodes of Kerala and dealt with host range, seasonal variations and summer fallow survival of zingiber root-knot nematode, *Meloidogyne incognita*.

7. ANNELIDA

Rangarajan has described a new species, *Ancistargis brevicirris* from Palk Bay, South India. Tampi and Rangarajan have listed 43 species of polychaetes of which two are new records from Indian waters.

Devo has studied the histochemical localization of alkaline phosphatase and discussed its physiological significance in the testicular nephridia of *Hirudinaria granulosa*.

8. ECHIURA

Joso has described a new species, *Acanthobonellia pirotanensis* from the gulf of Kutch. Menon, Dattagupta and Johnson have studied two new bonellids, *Acanthobonellia vulgaris* and *A. rollandoe* from the gulf of Kutch.

Dattagupta and Menon have described the morphology and histology of the males of *Acanthobonellia*.

9. MOLLUSCA

Rajagopal has described two new species of marine borers, *Nausitora lanceolata* and *N. sajnakhaliensis*.

Ghose, K. C. has studied the morphogenesis of the

pericardium, heart, kidney, ureter, gonad, gonoduct and the pace-maker mechanism and refilling of the auricle in the giant land snail, *Achatina fulica*. Durve has made preliminary observations on the seasonal gonadal changes and spawning in the clam *Meretrix casta*.

Brahmachary has studied free amino acids in *Limnaea* and in the egg fluid and embryos of *Pila*.

10. ARTHROPODA

(a) Crustacea

Premkumar has described a new species of sand-crab of the genus *Ocypoda*. George has made a new record of *Metapenaeus burkenroadi* in the Indian waters.

Bennet has described a new copepod, *Bomolochus sardinella*, parasitic on *Sardinella albella*. Pillai has described ten new copepods parasitic on South Indian fishes. Rao has described a new cyclopoid copepod parasitic on starfish. Reddiah has studied the copepod fauna of Assam and described two new species, *Neodiptomus kamakhiae* and *Tropodiptomus lakhimpurensis*. Sebastian has described a new species, *Taeniacanthus dentatus* parasitic on the fish *Bembrops candimaculata* while Sebastian and George have studied a new copepod, *Lernaenicus anchoviellae*. Saraswathy has made a new record of the cyclopoid copepod *Hersiliodes laterica* (Grube) from the Indian waters.

Biswas, S. has described a new species *Latona tiwari* from Rajasthan.

Daniel and Ghosh have studied a new cirripede, *Balanus* (*Megabalanus*) *squillae*. Pillai has erected a new genus *Pseudirona* and described ten new parasitic isopods while Pillai and Mariamma have described a new species, *Spelaeomysis longipes*.

Tembe and Deshpande have listed the amphipods of Bombay shores.

Dinamani has studied the variation in form, orientation and mode of attachment of the cirriped, *Octilasmis stella*, symbiotic on the gills of lobster. George has studied the reproductive system and embryology of the crab *Neptunus sanguinolentus*. Gomez has studied the anatomy and regeneration in the crab *Paratelphus hydromous*.

(b) Myriapoda

(i) Diplopoda

Sharma, Ramprashad and Handa have studied chromosomes of two species of millipedes.

(ii) Chilopoda

Babu has studied ventral nerve cord of centipedes. Jangi

has studied sensory physiology of the anal legs of centipedes.

(c) Arachnida

Tikader has described six new species of spiders from Nepal. Basu has established two new species each of *Pistius* and *Lychas*. Sen has described a new species, *Thomisus shillongensis*. Bhatnagar and Sadana have listed the spider fauna of the family Lycosidae from Chandigarh. Basu has described two new species of the genus *Tetranychus*. Bhattacharyya has described 3 new species of mites. Choudhury and Mukherjee have studied the taxonomy of a new parasitic mite, *Leiodynychus parasiticus*. Joshee has described 3 new species of the genus *Trombicula*. Trapido and Hoogstraal have given an account of two new species of *Haemaphysalis*. Kaiser and Hoogstraal have listed the ticks of the genus *Hyalomma* from India, Ceylon and Pakistan. Rao and Rao have made two new records of predacious mites from India.

Rao, P. K. has made neurophysiological studies on the scorpion, *Heterometrus fulvipes*.

(d) Insecta

(i) General

Azarwal and Siddiqi have listed the sugarcane pests in India. David, Kalyanaraman and Narayan have studied the status and seasonal variations in population density of the sugarcane pests in Madras State. Dutta has listed the jute pests in India. Khan has given a list of insect pests of oil seeds. Mookherjee has listed stored grain pests.

Mani has published a book on ecology of plant galls. Mathur has dealt with forest entomology in India. Reddy, Rajagopalan and Panikkar have published Bibliography of Plant Protection in India.

Haque has discussed the role of atomic energy in insect study and control.

(ii) Thysanura

Joseph and Mathad have established a new genus, *Naetelura* and described a new species under it.

Krishna and Rajulu have studied mode of hardening of the cuticle of *Machilis variabilis*.

(iii) Collembola

Choudhuri has discussed some aspects of the biology of the three species of the genus *Onychiurus*.

(iv) Ephemeroptera

Peters, Gillies and Edmunds have established a new genus, *Masharikella*.

(v) Odonata

Sahni has described four new species, *Himalagrion pithoragarhicus*, *Onychargia indica*, *Calicnemis maheshi* and *Caconeura gaudawricus* from Kumaon Hills. Bhatnagar and Sahni have reported some species of Zygoptera and Anisoptera of Kumaon region.

Bhatnagar and Sahni have described the external morphology of *Anax parthenope*. Selys and Hakim have given a comparative anatomy of the cervix and thorax of the adult Odonata.

(vi) Orthoptera

Bhowmick has described a new species each of the genera *Chlorizeina* and *Eyprepenemis*. Kevan has established a new genus, *Nilgiracris* and described a new species *Ramkrishnaia gracilis* while Kevan and Singh have established a new genus, *Neorthacris* and a new subgenus *Pseudorthacris*.

Khattar has given an account of the cephalic musculature of *Schizodactylus monstrosus* Don.

Basuchoudhuri has conducted experiments on the choice of oviposition sites of two species of *Chorthippus*.

Choudhuri has studied the haemocytes of a species of the genus *Tristria*.

Rakshpal has studied the growth and respiration during post-embryonic development of diapause in *Gryllus veletis*.

(vii) Dermaptera

Ramamurthi has described two new species, *Epilandex undulata* and *Labia fulleri*.

Kadam has studied the tracheation of the nymphal wing-pads of *Labidura riparia* var. *inermis* Brunner.

(viii) Dictyoptera

Gupta has given an account of chromosome number and sex chromosome mechanism in fifteen species of the Indian praying mantids. Rajasekharasetty and Ramanamurthy have studied chromosome behaviour in a meiosis of a new species of *Periplaneta*. Ramanamurthy has described chromosome behaviour in the male *Pycnoscelus surinamensis* (Linn.).

(ix) Isoptera

Chatterjee and Thapa have described a new species each of *Grallatotermes* and *Speculitermes*. Chatterjee and Thakur have described a new species, *Angulitermes akhorisainensis*. Kushwaha has dealt with taxonomic differentiation in three species of *Odontotermes* as based on chaetotaxy. Roonwal and Chhotani have described two new species of *Speculitermes* and one new species of *Odontotermes*. Roonwal and Bose have published an account of the termite fauna of Rajasthan.

Kushwaha has described external morphology of the termite, *Odontotermes (Odontotermes) obesus* (Rambur).

Banerjee has studied cytochemical localization of alkaline phosphatase during the early embryogenesis of *Odontotermes redemanni* (Washmann). Misra has described the physiology of digestion in termites.

(xi) Hemiptera

Basu has established two new genera, *Brachymzus* and *Neobetulaphis* and described two new species each of *Brachymzus* and *Vesiculaphis* and one new species each of *Cavariella*, *Greenideoida*, *Liosomaphis*, *Masonaphis*, *Mollitrichosiphum*, *Neobetulaphis*, *Oedisiphum* and *Sitobion*. Borchsenius has erected one new genus, *Miniaspis* and described two new species of *Lopholeucaspis*, one new species each of *Miniaspis* and *Insulaspis*. Drake and Livingstone have described two new species, *Monosteira edeia* and *Tingis agrana* while Drake and Quadri have described one new species, *Dictyla eudia*. Ghauri has described a new species each of *Velu* and *Ficiana*. Joseph has studied a new species, *Stenocranus ajmerensis*. Stroyan has described a new species, *Protrama penecaeca*. Ganguli and Ghosh have given a list of coccoids of Tripura.

Bhatnagar has studied the cytology of enzyme secretion and the fate of certain carbohydrates in the gut of *Oxycarenus hyalinipennis*. Khanna has studied the maxillary glands of *Dysdercus koenigii* and described the digestive system of *Dysdercus koenigii*. Rai and Trehan have described the internal anatomy of *Bagrada cruciferarum* Kirk.

Ghosh and Raychaudhuri have given a preliminary account of bionomics and taxonomy of aphids of Assam. Srivastava and Saxena have discussed the taxonomy, distribution, habits, bionomics and control of rice bug, *Leptocoris varicornis* Fabricius with reference to allied species. Sidhu and Singh have dealt with control schedule of mustard aphid in the Punjab.

Rajasekhara and Chatterji have studied the biology of *Psallu* sp. Sidhu and Singh has described the biology of the mustard aphid, *Lipaphis crysimi* in the Punjab.

(xii) Thysanoptera

Ananthakrishnan has established seven new genera, *Alloiothrips*, *Azaleothrips*, *Carissothrips*, *Loyolaia*, *Pyknothrips*, *Stigmothrips* and *Stannardiana* and described 17 new species. In another paper, he has given an account of the Tubulifera (Thysanoptera) from India.

Dev has studied the biology of *Scirtothrips dorsalis* Hood from Assam.

(xiii) Trichoptera

Kimmins has studied the Trichoptera of Nepal.

(xiv) Mecoptera

Ramamurthy has studied the distribution of RNA in the ooplasm of scorpionfly and intercellular bridges in the ovarian follicles of *Panorpa communis*.

(xv) Lepidoptera

Philips has listed the butterflies collected from Maldivian islands.

Gupta has studied chromosomes of Indian Lepidoptera. Bhattacharjee and Menon have studied the binomics, biology and control of *Hymenia recurvalis* Fabr. Srivastava and Mathur have studied the morphology and musculature of the head capsule of mature larva of *Prodenia litura* Fabr.

Atwal and Pajni have studied the insecticidal properties of drupes of *Melia azedarach* against caterpillars of *Pieris brassicae*.

(xvi) Diptera

Alexander has described 133 new species of the family Tipulidae. Pant has described a new species, *Fannia burmana*. Chaudhuri and Mitra have described a new species, *Cyclopodia kalyania* and discussed its systematic position. Rao, Hiregaudar and Alwar have described a new species, *Lipoptena indicum*. Wirth and Delfinado have made a revision of the Oriental species of *Alluaudomyia* and described a new species, *Alluaudomyia marginalis*. James has given a list of the blowflies of Nepal.

Ganguly has studied the anatomy and histology of the larva of *Ceroplastus testaceus* while Nayar has described morphology of the thorax of *Balioptera argentata*. Upadhyaya and Thomas have described a characteristic feature of wing venation of *Ischiodon scutellaris* (Fabr). Ipe has studied the anatomy of the final instar larva of *Melanagromyza obtusa* (Malloch), a pest on the developing seeds of *Cajanus indicus*.

(xvii) Hymenoptera

Agarwal has made taxonomic studies on Aphelinidae collected at Aligarh and described 4 new species of *Cocophagus*, 3 new species of *Prospaltella* and one species each of *Enearsia*, *Aphytis*, *Physcus*, *Prophyscus* and *Azotus*. Baltazar has described a new species *Millironia bifasciata* from Anamalai Hills. Malaise has established 4 new genera belonging to the subfamily Blennocampinae and described 11 new species. Wilson has described a new species, *Aenictus doryloides*. Lal has listed new records of hosts and new records of distribution of the parasite *Theronia zebra zebra* Vollenhven.

Rakshpal has studied free amino acids in the poison of *Vespa orientalis* Fabr.

Teotia has given comparative morphology and anatomy of the last instar larvae of *Bracon* (*Microbracon*) *gelechia* Ashmed and *Apanteles flavipes* Cameron.

Gupta has studied the ecology and population pattern of *Oecophylla smaragdina* Fabr. Venkatraman has studied superparasitism and multiparasitism in *Horogenes cerophaga* (Grav.) and *Hymenobosmina rapi* (Cam.), the larval parasites of *Plutella maculipennis* (Curt.).

(xviii) Coleoptera

Kapur has described two new species each of *Dactylotus* and *Hyperomias*. Rai and Chatterjee have revised the Indian species of *Heterobostrychus*. In another paper, Rai and Chatterjee described a new species, *Xylopertha dunensis*. Vazirani has described a new species, *Amphizoia kashmirensis* and also discussed morphology and ecology of the larvae of *Cybister* spp. Kushwaha has dealt with the beetle fauna of soil in Allahabad.

Dasgupta has studied the cytology of *Cybister limbatus*, *Gymnopleurus koengii*, *Aulacophora intermedia* and *Alcides* sp.

Ahmad has described the external morphology of the sweet potato weevil, *Cylas formicarius elegantulus* (Summers).

George and Nair have made quantitative study of changes in fat and glycogen during metamorphosis of the dermestid beetle *Anthrenus vortex*.

Joshi has studied cannibalism in *Lasioderma serricornis* Fabr.

11. ECHINODERMATA

Giese, Krishnaswamy, Vasu and Lawrence have studied the reproductive system and biochemistry of a sea urchin, *Stomopneustes variolaris*.

12. CHORDATA

(a) Pisces

Jayaram and Mazumder have discussed the nomenclature and systematic position of the genus *Chaca* Gray and redescribed its single species. They have listed 19 species of fishes collected from N. E. F. A. and have also discussed the systematic position, variations and geographical distribution of some species. Menon has published a monograph on the cyprinid fishes of the genus *Garra* Hamilton while Menon and Dutta have described a new cyprinid fish, *Psilorhynchus pseudochenus* from Nepal. Qureshi has given a field-key to the identification of the order Perciformes. Jones and Kumaran have made new records of fishes from the seas around India while Jones and Silas have made a systematic review of the scombroid fishes of India.

Agrawal and Singh have studied the physiology of diges-

tion in *Notopterus notopterus* (Pallas) while Agrawal and Bala have described the morphology and physiology of the alimentary canal of *Rita rita* (Ham.) George and Bokdawala have studied cellular organisation and fat utilization in fish muscle. Munshi has dealt with "Chloride cells" in the gills of freshwater teleosts while Pasha has dealt with the pancreas and the digestive enzymes of fish.

Jones and Kumaran have given an account of eggs, larvae and juveniles of *Myripristis murdjan* and *Holocentrus* sp. Talwar has studied the biology of *Hyporhamphus georgii*. Belsare has studied the seasonal changes in the ovary of *Ophicephalus punctatus* Bloch.

Pasha has described the anatomy and histology of the alimentary canal of *Mystus gulio*, *Tilapia mossambica* and *Megalops cyprinoides*. Rajbanshi has made histological study of the lateral line sense-organs of *Mystus vittatus*.

Agrawal, V. P. has studied functional morphology of the stomach of *Caprella linearis* (L.) while Agrawal and Singh have described the functional morphology of the rectal caecum of *Notopterus notopterus* (Pallas).

Datta, N. C. has studied the musculature of the pelvic girdle of *Mugil corsula* Ham. Shafi has studied the cranial nerves of *Clarius batrachus*. Sarkar has made comparative study of the cranium of the two cat-fishes *Mystus (Osteolagus) seenghala* and *M. (O.) aor*. Tilak has described the comparative morphology of the otoliths of Indian siluroids. He has also studied the osteocranium and the weberian apparatus of the fishes of the family Schilbeidae.

Sharma, Ramparshed and Rishi have studied chromosomes in some species of fishes.

Talwar has made observations on the food and feeding habits of the Indian oil sardine, *Sardinella longiceps*; he has also carried out studies on the food and feeding relationships of the half-beak fishes (Hemirhamphidae) from the gulf of Mannar and Palk Bay.

(b) Amphibia

Grandison and Daniel have described a new species of toad, *Bufo sulphureus* from Satara district, Maharashtra.

Deb and Chakravarty have studied the effect of carbon tetrachloride intoxication on the liver of toad (*Bufo melanostictus*).

Sharma, Ramparshad and Sethi have discussed chromosomal variability in the various tissues of the common toad, *Bufo*.

Krishnamoorthy and Swami have studied the subcellular electrical characteristics of amphibian muscle.

(c) Reptilia

Nayar and Pandalai have discussed neurohypophysial

structure and problem of neurosecretion in the garden lizard *Calotes versicolor*. Pandha and Thapliyal have discussed the effect of male hormone on the renal sex segment of castrated males of the lizard *Calotes versicolor*. In another paper, they have discussed the hypophysectomy in Indian garden lizard, *Calotes versicolor*.

Kashyap and Nigurkar have described the blood vascular system of *Riopa guentheri*. Rastogi and Tilak have described the palate and hyobranchial elements of certain lizards. Shah and Patel have studied the myology of the chelonian pectoral appendage. Srivastava, R. K. has studied the structure and development of the chondrocranium of the orbitotemporal region of *Varanus*.

(d) Aves

Abdulali has given a list of birds of the Andaman and Nicobar islands and noted four new races of birds. Biswas has listed the birds of Nepal.

Bhatnagar has studied the effect of sex hormones on growth, food consumption, feed efficiency and secondary sexual characters during first eight weeks in Rhode Island red chicks. Pandha and Thapliyal have studied the effect of thyroidectomy upon the testes of Indian spotted munia, *Uroloncha punctulata*. Bose, Chinoy and George have studied certain biochemical differences in the cellular organisations of the pectoralis muscle of fowl. George and Naik have studied the cyclic changes in the thyroid of the migratory starling, *Sturnus roseus*. In another paper, they have studied the cycle, histological and histochemical changes in the pancreas in relation to blood glucose levels in the migratory starling, *S. roseus*. Abdulali has discussed the food and other habits of the greater flamingo in India.

Jaitly has studied the structure and behaviour of chromosomes of *Streptopelia tranquebarica*.

Raj has studied the communal breeding in the white-headed babbler, *Turdoides affinis* (Jerdon).

(e) Mammalia

Ghosh has described a new species of rats, *Rattus niviventer monticola*. Prakash has discussed the taxonomical and ecological account of the mammals of Rajasthan.

Garg has discussed the significance of palate index in Chiroptera. Singh and Patel have studied the osteology of skull of goat. Kurup has discussed the growth changes in the skull of the Indian langur, *Presbytis entellus* (Dufresne).

Naik, Bhatia, Baxi and Naik have made hematological study of Indian spotted deer. Prakash has studied the cytomorphology of adrenal gland of Indian desert gerbille. In another paper he has discussed the ecotoxicology and control of the Indian desert gerbille, *Meriones hurrianae* (Jerdan).

Mandal has studied the behaviour of the rhesus monkeys (*Macaca mulatta* Zimmerman) in the Sundarbans.

II. BIBLIOGRAPHY OF INDIAN ZOOLOGY FOR 1964

1. Abdulali, H. 1964. Ornithological notes of a second trip to the Gulf of Kutch.—*J. Bombay nat. Hist. Soc.*, Bombay, **60**, pp. 703-708.
2. Abdulali, H. 1964. Miscellaneous notes ; 7. Occurrence of the large whiterumped swift—*Apus pacificus leuconyx* (Blyth) in Bombay.—*J. Bombay nat. Hist. Soc.*, Bombay, **60**, pp. 731-732.
3. Abdulali, H. 1964. On the food and other habits of the greater flamingo (*Phoenicopterus roseus* Pallas) in India. —*J. Bombay nat. Hist. Soc.*, Bombay, **61** (1), pp. 60-68.
4. Abdulali, H. 1964. Do psittacids other than lorikeets sleep upside down? —*J. Bombay nat. Hist. Soc.*, Bombay, **61** (1), p. 184.
5. Abdulali, H. 1964. Four new races of birds from the Andaman and Nicobar Islands.—*J. Bombay nat. Hist. Soc.*, Bombay, **61** (2), pp. 410-417.
6. Abdulali, H. 1964. Notes on Indian birds. I—*Ceyxerithacus rufidorsus* Strickland, in the Sikkim terai, eastern Himalayas: an addition to the Indian avifauna.—*J. Bombay nat. Hist. Soc.*, Bombay, **61** (2), pp. 439-440.
7. Abdulali, H. 1964. Notes on Indian birds. 2-Races of *Sterna albifrons* Pallas, in India and Pakistan.—*J. Bombay nat. Hist. Soc.*, Bombay, **61** (2), pp. 440-445.
8. Abdulali, H. 1964. Some notes on the painted partridge *Francolinus pictus* (Jardine & Selby) around Bombay.—*J. Bombay nat. Hist. Soc.*, Bombay, **61** (2), pp. 446-449.
9. Abdullah, M. 1964. New nearctic eurygeniini (Coleoptera, Anthicidae, Pediliinae).—*Ann. Mag. nat. Hist.*, London, (13) **7** (74), p. 81.
10. Abdullah, M. 1964. The immature stage of South Indian *Cryphaeus* (Coleoptera: Tenebrionidae).—*Proc. R. ent. Soc. Lond.*, London, **39** (10-12), pp. 153-156.
11. Abraham, E. V. and Padmanabhan M. D. 1964. Bionomics and control of cutworms (*Agrotis* spp.) on hill crops in Madras state.—*Madras agric. J.*, Coimbatore, **51** (2), p. 88.
12. Acharji, M. N. 1964. Zoological results of the Indian Cho-Oyu Expedition (1958) in Nepal. Part 4. Reptilia.—*Rec. Indian Mus.*, Delhi, **59** (3), pp. 239-240, 1 pl.
—Adaval, S. C. 1964.—See Chhabra, R. S., Adaval, S. C., Khurana, J. S. and Mukherji, D.R. 1964.
13. Adolph, C. 1964. A note on juvenile specimen of *Argyrops spinifer* (Forsk.)—*J. mar. biol. Ass. India*, Mandapam, **6** (2), pp. 317-319.
—Agarwal, G. P. 1964.—See Agarwal, O. P. and Agarwal, G. P. 1964.
14. Agarwal, K. K. and Rao, S. B. V. 1964. Studies on chronic respiratory disease of poultry in India.—*Indian Poult. Gaz.*, Izatnagar, **48** (3), pp. 92-96.
15. Agarwal, M. M. 1964. Studies of forms of Aphelinidae (Hymenoptera-Chalcidoidea) collected at Aligarh (India)—I.—*Proc. Indian Acad. Sci. Bangalore*, **59** B (5), pp. 263-286.
16. Agarwal, M. M. 1964. Studies of forms of Aphelinidae (Hymenoptera-Chalcidoidea) collected at Aligarh (India)—II.—*Proc. Indian Acad. Sci.*, Bangalore, **60** B (5), pp. 315-335.
17. Agarwal, O. P. 1964. To compare the effect of replacement of groundnut cake with mustard cake in layer ration on age first egg laid, hatchability and egg production throughout one year of laying.—*Indian vet. J.*, Madras, **41** (11), pp. 751-753.
18. Agarwal, O. P. and Agarwal, G. P. 1964. Compare the growth rate in chicks by using meal as substitute for fish meal in chick starter ration.—*Indian Poult. Gaz.*, Izatnagar, **48** (3), pp. 82-85.
19. Agarwal, P. N. 1964. The innervation of eye

- muscles in *Ptyas mucosus* Linn.—*Vestn. Ceskosl. Zool. Spolec.*, Praha, **28**, pp. 164-166.
20. Agarwal, P. N. and Ausat, A. 1964. A new bait for the control of cockroaches, *Periplaneta americana* Linn.—*Labdev. J. Sci. Tech.*, Kanpur, **2** (1), p. 79.
- Agarwal, P. N. 1964.—See Khalsa, H. G., Wal, Y. C. and Agarwal, P. N. 1964.
21. Agarwal, R. A. and Siddiqi, Z. A. 1964. Sugarcane pests. pp. 149-186. In: *Entomology in India 1938-1963*.—New Delhi (Entom. Soc. India).
22. Agarwal, R. A. and Vijayalakshmi, U. 1964. Records of two tarsonemid mites on *Saecharum* and *Erianthus* species.—*Indian J. Sugar Cane Res. Devel.*, New Delhi, **8** (4), pp. 429-431.
23. Agarwala, S. B. D. 1964. Termites. pp.359-383. In: *Entomology in India 1938-1963*—New Delhi (Entom. Soc. India).
- Agarwal, S. C. 1964.—See Sharma, P. L., Agarwal, S. C. and Bhalla, O. P. 1964.
- Agrawal, H. C. 1964.—See Pant, R. and Agrawal, H. C. 1964.
- Agrawal, N. S. 1964.—See Khare, B. P. and Agrawal, N. S. 1964.
24. Agrawal, R. P. 1964. Feeding appendages and the alimentary canal of *Talitrus saltator* Montagu.—*Agra Univ. J. Res. (Sci.)*, Agra, **13**(2), pp. 147-160.
25. Aggarwal, T. D. 1964. Diagnosis of hepatic amoebiasis.—*Brit. med. J.*, London, 1964, No. 5389, p. 1045.
26. Agrawal, V. 1964. A trematode, *Prosotocus mastacembeli* n. sp. (Subfamily Prostocinae Yamaguti, 1958) from the intestine of a fresh water fish *Mastacembelus armatus* (Lacep.). from Lucknow.—*Proc. Helminth. Soc. Wash.*, Washington, **31** (2), pp. 219-222.
27. Agrawal, V. 1964. On a new trematode, *Postorchigenes indica* sp. nov. from the small intestine of *Hemidactylus frenatus*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 472.
28. Agrawal, V. 1964. On a new trematode, *Podocotyle gurnardi* sp. nov. from the intestine of a gurnard fish (*Pulchella gurnardia*).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 472.
29. Agrawal, V. 1964. On a new nematode, *Procamlanus (P.) buckleyi* sp. nov. (Family: Camallanidae Railliet and Henry, 1915) from the stomach of a freshwater fish, *Heteropneustes fossilis*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, Pt. 3 (Abstracts), p. 471.
30. Agrawal, V. 1964. On a new trematode, *Lyperosomum stunkardi* sp. nov. from the intestine of a bird, *Acridotheres tristis* (Myna).—*Indian J. Helminth.*, Lucknow, **16** (1), pp. 1-4
31. Agrawal, V. 1964. Some new trematodes from fresh water fishes of Lucknow.—*Indian J. Helminth.*, Lucknow, **16** (2), pp. 82-99.
32. Agrawal, V. 1964. On a trematode, *Helicometra indica* n. sp. from the intestine of the gurnard fish, *Trigla gurnardus*.—*Proc. Helminth. Soc. Wash.*, Washington, **31** (2), pp. 216-218.
33. Agrawal, V. P. 1964. Functional morphology of the stomach of *Caprella linearis* (L.).—*Curr. Sci.*, Bangalore, **33** (20), pp. 618-619.
34. Agrawal, V. P. and Bala, V. 1964. Morphology and physiology of alimentary canal of *Rita rita* (Ham.).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 456-457.
35. Agrawal, V. P. 1964. A study of the influence of substrate and enzyme concentration on the activity of caecal amylase of *Orchestia gammarella* Pallas.—*Enzymologia*, Hague, **25** (1962), pp. 173-177.
36. Agrawal, V. P. 1964. Studies on the physiology of digestion in *Orchestia gammarella*.—*Proc. zool. Soc. Lond.*, London, **143**, pp. 133-141.
37. Agrawal, V. P. 1964. Determination of optimum

- pH for the activity of caecal carbohydrases of the amphipod *Orchestia gammarella*.—*Proc. zool. Soc. Lond.*, London, **143**, pp. 545-551.
38. Agrawal, V. P. 1964. Effect of temperature on the activity of caecal amylase of the *Orchestia gammarella* Pallas.—*Enzymologia*, Den Haag, **25**, pp. 178-181.
39. Agrawal, V. P. 1964. Functional morphology of the stomach of *Corophium volutator* Pallas.—*J. Linn. Soc. Lond. (Zool.)*, London, **45** (303) [1963], pp. 47-52.
40. Agrawal, V. P. and Goel, A. P. 1964. Physiology of the alimentary canal of the fresh water prawn *Macrobrachium dayanum* (Henderson).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 456.
41. Agrawal, V. P. and Goel K. A. 1964. The respiratory behaviour of *Potamon martensi* Woodmason.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, Pt. 3 (Abstracts), pp. 455-456.
42. Agrawal, V. P. and Singh, H. M. 1964. Studies on the physiology of digestion in *Notopterus notopterus* (Pallas).—*Zool. Jb. Physiol.*, Jena, **70** (4), pp. 547-558.
43. Agrawal, V. P., and Singh, H. M. 1964. Functional morphology of the rectal caecum of *Notopterus notopterus* Pallas.—*Curr. Sci.*, Bangalore, **33** (2), pp. 53-54.
- Ahluwalia, S. S. 1964.—See Pande, B. P. and Ahluwalia, S. S. 1964.
44. Ahmad, M. 1964. The external morphology of the sweet potato weevil, *Cylas formicarius elegantulus* (Summers).—*Pakist. J. sci. Res.*, Lahore, **6**, pp. 203-223.
45. Ahmad, N., Keeling, J. E. D. and Wahid, A. 1964. Clinical trial of two bephenium hydroxynaphthoate preparations against hook-worm and round worm in West Pakistan.—*Amer. J. trop. Med.*, Baltimore, **13** (5), p. 693.
46. Ahmad, N-U-D. and Mirza, M. R. 1964. Some fishes from the Kurram river near Parachinar.—*Pakist. J. Sci.* Lahore, **16**, pp. 44-46.
47. Ahmad, N-U-D. and Mirza, M. R. 1964. Hill stream fishes of Kaghan and Swat.—*Pakist. J. Sci.*, Lahore, **16**, pp. 63-68.
- Ahmad, M. R. 1964.—See Gupta, A. B. and Ahmad, M. R. 1964.
- Ahmad, R. 1964.—See Davies, R. G. and Ahmad R. 1964.
48. Ahmed, A. and Khan, A. M. 1964. Factors influencing larval hatching in the root-knot nematodes, *Meloidogyne incognita* (Kofoid and White, 1919), Chitwood, 1949 and *M. javanica* (Treub, 1885), Chitwood, 1949. I. Effect of temperature and hydrogenion concentration.—*Indian Phytopath.*, New Delhi, **17** (2), pp. 98-101.
49. Ahmed, A. and Khan, A. M. 1964. Factors influencing larval hatching in the root-knot nematode, *Meloidogyne incognita* (Kofoid and White, 1919) Chitwood, 1949. II. Effect of root laechates and certain chemicals.—*Indian Phytopath.*, New Delhi, **17** (2), pp. 102-109.
50. Ahmed, M. 1964. On the phylogenetic position of *Indotermes* with description of a new species (Isoptera, Termitidae).—*Ann. Mag. nat. Hist. Lond.*, London, (13) **6** (67) [1963], pp. 395-399.
51. Ahuja, S. K. 1964. Salinity tolerance of *Gambusia affinis*.—*Indian J. exp. Biol.*, New Delhi, **2**, pp. 9-11.
- Aikat, B. K. 1964.—See Pavri, K. M., Banerjee, G., Anderson, C. R. and Aikat, B. K. 1964.
- Alagarswami, K. 1964.—See Durve, V. S. and Alagarswami, K. 1964.
52. Alam, M. Z. and Wadud, M. A. 1964. On the biology of litchi mite, *Aceria litchi* Keifer (Eriophyidae, Acarina) in East Pakistan.—*J. Sci.*, **15** [1963], pp. 232-240, figs. 1-8.

53. Alexander, C. P. 1964. New or little known species of Asiatic Tipulidae (Diptera). I.—*Trans. Amer. ent. Soc.*, Washington, 90 (2), pp. 205-234.
54. Alexander, C. P. 1964. New or little known species of exotic Tipulidae (Diptera). XI.—*Proc. R. ent. Soc. Lond.*, London, 33B(9-10), pp. 151-156.
55. Alexander, C. P. 1964. New or little known Tipulidae from Eastern Asia (Diptera), LII.—*Philippine J. Sci.*, Manila, 92 (3) [1963], pp. 383-417.
56. Alexander, C. P. 1964. New or little-known Tipulidae from Eastern Asia (Diptera), LIII.—*Philippine J. Sci.*, Manila, 93 (1), pp. 77-130.
57. Alexander, C. P. 1964. New or little-known Tipulidae from Eastern Asia (Diptera), LIV.—*Philippine J. Sci.*, Manila, 93 [2], pp. 277-324.
58. Alexander, C. P. 1964. New or little-known Tipulidae from Eastern Asia (Diptera). 55.—*Philippine J. Sci.*, Manila, 93 (3), p. 427.
59. Alexander, C. P. 1964. Undescribed species of crane flies from the Himalaya mountains (Diptera : Tipulidae). IX.—*J. N. Y. ent. Soc.*, New York, 72, pp. 168-173.
60. Alexander, C. P. 1964. New exotic crane-flies (Tipulidae : Diptera). Part VIII.—*Ent. News*, Philadelphia, 75 (1), pp. 15-24.
61. Alexander, C. P. 1964. New exotic crane flies (Tipulidae : Diptera). Part IX.—*Ent. News*, Philadelphia, 75 (3), pp. 57-65.
62. Alfred, E. R. 1964. Notes on a re-examination of some Bleeker type specimens of Indo-Malayan fresh-water fishes. Part 2. Abramidinae and Rasborinae.—*Bull. nat. Mus. Singapore.*, Singapore No. 32, pp. 128-134.
63. Ali, M. H. 1964. New record of *Apanteles leptaura* C., parasitising *Terastia meticulosalis* G. N., in India.—*Curr. Sci.*, Bangalore, 33 (10), p. 317.
64. Ali, S. 1964. The BNHS/WHO bird migration study Project-4. Activities from 13. 9. 1963 to 23. 3. 1964.—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (1), pp. 99-107.
65. Ali, S. M. 1964. Some studies on *Pulvinaria cellulosa* Green, a mealy scale of mango in Bihar, India.—*Indian J. Ent.*, New Delhi, 26 (3), pp. 361-362.
66. Alikunhi, K. H. and Sukumaran, K. K. 1964. Preliminary observations on Chinese carps in India.—*Proc. Indian Acad. Sci.*, Bangalore, 60 B (3), pp. 171-178.
67. Allen, G. A. 1964. Indian blue peafowl *Pavo cristatus*.—*Game Bird Breeders Gaz.*, London, 13 (12), pp. 9-15.
68. Alwar, V. S. and Lalitha, C. M. 1964. Feather mites from the common house crow (*Corvus splendens*) Viillot in Madras.—*Indian vet. J.*, Madras, 40 [1963], pp. 803-804.
- Alwar, V. S. 1964.—See Rao, S. R., Hiregaudar, L. S. and Alwar, V. S. 1964.
69. Amonkar, S. V. and Freitas, Y. M. 1964. Bacteria associated with the alimentary canal of the Indian rat flea *Xenopsylla cheopis* Roths.—*Indian J. Microbiol.*, Bombay, 4 (1-4), pp. 74-79.
70. Amonkar, S. V. and Freitas, Y. M. 1964. Production of antibiotic and vitamin B 12 like substances by bacteria isolated from the alimentary canal of the Indian rat flea *Xenopsylla cheopis* Roths.—*Indian J. Microbiol.*, Bombay, 4 (1-4), pp. 80-87.
71. Amonkar, S. V. and Freitas, Y. M. 1964. Edibility of Chromogenic bacteria isolated from the alimentary canal of the Indian rat flea *Xenopsylla cheopis* Roths by four species of free living amoebae.—*Indian J. Microbiol.*, Bombay, 4 (1-4), pp. 88-91.
72. Anantaraman, S. 1964. Juvenile *Echinocephalus uncinatus* (Molin 1858) in the marine gastropod *Hemifusus pugilinus* (Born) with notes on the genus *Echinocephalus* (Nematoda : Gnathostomidae).—*Ann. Mag. nat. Hist.*, London, (13) 7 (74), pp. 101-105.

73. Ananthakrishnan, N. R. 1964. A short note on the use of systemic insecticide for the control of *Helopeltis* in tea.—*Adm. Rep. scient. Dep. (Tea Sect.) Un. Prs' Ass. South India 1963-1964*, Coonoor, pp. 85-86.
74. Ananthakrishnan N. R. and Krishnamurthy, H. S. 1964. Further studies on the control of flushworm of tea.—*Adm. Rep. scient. Dep. (Tea Sect.) Un. Prs' Ass. South India 1963-1964*, Coonoor, pp. 87-88.
75. Ananthakrishnan N. R. and Krishnamurthy, H. S. 1964. Evaluation of insecticides for the control of the tea thrips *Scirtothrips bispinosus*.—*Adm. Rep. scient. Dep. (Tea Sect.) Un. Prs' Ass. South India 1963-1964*, Coonoor, pp. 89-92.
76. Ananthakrishnan, N. R. and Krishnamurthy, H. S. 1964. Field tests with some new acaricides for the control of red spider, *Oligonychus coffeae* and purple mite (*Calacarus carinatus*).—*Adm. Rep. scient. Dep. (Tea Sect.) Un. Prs' Ass. South India, 1963-1964*, Coonoor, pp. 93-95.
77. Ananthakrishnan, N. R. and Krishnamurthy, H. S. 1964. Some investigations on mist-blowing of pesticides for the control of purple mite and thrips on tea.—*Adm. Rep. scient. Dept. (Tea Sect.) Un. Prs' Ass. South India, 1963-1964*, Coonoor. pp. 96-99.
78. Ananthakrishnan, T. N. 1964. Thysanopterologica Indica I.—*Ent. Tidskr.*, Stockholm, **85** (1-2), pp. 99-120.
79. Ananthakrishnan, T. N. 1964. Thysanopterologica Indica—II.—*Ent. Tidskr.*, Stockholm, **85** (3/4), pp. 213-235.
80. Ananthakrishnan, T. N. 1964. A contribution to our knowledge of the Tubulifera (Thysanoptera) from India.—*Opusc. ent.*, Lund, **25** (Suppl.) pp. 1-120.
- Anderson, A. A. 1964.—See De Silva, P. H. D. and Anderson, A. A. 1964.
- Anderson, C. R. 1964.—See Pavri, K. M., Anderson, C. R. and Singh, K. R. P. 1964.
- Anderson, C. R. 1964.—See Singh, K. R. P., Pavri, K. M. and Anderson, C. R. 1964.
81. Anderson, J. A. 1964. A report on the gecko, *Terrapelis fasciata* (Blyth 1853).—*J. Bombay nat. Hist. Soc.*, Bombay, **60** (1), pp. 161-171.
82. Anonymous, 1964. Pest of sugarcane.—*Madras agric. J.*, Coimbatore, **51** (3), pp. 139-140
83. Anonymous, 1964. The mango hopper.—*Madras agric. J.*, Coimbatore, **51** (3), p. 140.
84. Anonymous, 1964. Unesco South Asia science co-operation office, New-Delhi courses in plant physiology and soil biology.—*Curr. Sci.*, Bangalore, **33** (14), p. 447.
85. Anonymous, 1964. The Marine observer's Log. Turtle, Indian Ocean Water snakes, Indian waters.—*Mar. Obs.*, London, **34** (203), pp. 15-16.
86. Anonymous, 1964. New hypothesis on earliest man.—*Curr. Sci.*, Bangalore, **33** (14), p. 443.
87. Anonymous, 1964. Control the pests of cashewnuts.—*Madras agric. J.*, Coimbatore, **51** (1), p. 35.
88. Anonymous, 1964. Find out the hidden enemy—the nematode.—*Madras agric. J.*, Coimbatore, **51** (1), p. 36.
89. Anonymous, 1964. How to take soil sample for finding out nematode attack?—*Madras agric. J.*, Coimbatore, **51** (1), p. 36.
90. Anonymous, 1964. *Bibliography of Indian Entomology* (1952-61), 279 pp. New Delhi (Indian council agric. Res.) Bibliogr. Ser. No. 9.
91. Anonymous, 1964. The Zoological Survey of India.—*Souvenir Vol., Combined 51st and 52nd Sess. Indian Sci. Congr. Assoc.*, Calcutta, pp. 242-249.
92. Ansari, J. A. and Basir, M. A. 1964. Monograph on the histological anatomy of *Setaria cervi* (Rudolphi, 1819) (Nematoda : Filarioidea).—*Indian J.*

- Helmith.*, Lucknow, Monographic supplement, pp. 1-85.
- Ansari, J. A. 1964.—See Khan, N. H. and Ansari, J. A. 1964.
93. Anwar, C. M. 1964. Study of resistance of musk melon varieties against the infestation of *Dacus cucurbitae* Coq. (in Pakistan).—*Pakist. J. sci. Res.*, Lahore, **16** (3), pp. 154-160.
94. Apte, B. K. and Chaudhury, R. R. 1964. Effect of ultra lente insulin administration in rats.—*Indian J. Physiol. Pharmacol.*, New Delhi, **8** (3), pp. 127-136.
95. Arnaud, P. H. (Jr.) and Wirth, W. W. 1964. A name list of world culicoides, 1956-1962. (Diptera : Ceratopogonidae).—*Proc. ent. Soc. Wash.*, Washington, **66** (1), pp. 19-32.
96. Arora, G. L. 1964. Mating behaviour and speciation in bruchids.—*Proc. Comb. 51st & 52nd Indian Sci. Cong.*, Calcutta, Pt. 3 (Abstracts), pp. 499-500.
97. Arora, S. P. and Gupta, B. S. 1964. Study of interrelationship amongst sodium, potassium and protein in the serum of buffaloes and goats.—*J. vet. Anim. Husb. Res.*, New Delhi, **8**, pp. 15-19.
98. Arora, S. P. and Gupta, B. S. 1964. Some factors related to first lactation yield of murrh buffaloes.—*J. vet. Anim. Husb. Res.*, Delhi, **8**, pp. 34-38.
99. Arora, S. P. and Gupta, B. S. 1964. Cases of thiamin deficiency in chicks.—*J. vet. Anim. Husb. Res.*, Delhi, **8** pp. 107-109.
100. Arya, H. C. 1964. Changes induced by nucleic acids in nucleic acid contents of *Phyloxera* gall and grape stem single cell clones in tissue culture.—*Indian J. exp. Biol.*, New Delhi, **2**, pp. 44-48, 3 figs.
101. Ashraf, M. 1964. Walnut weevil in Swat and Kaghan valleys.—*Tech. Bull. Commonw. Inst. biol. Contr.*, Farnham Royal, Bucks, No. 4, p. 65.
102. Ashraf, M. 1964. Wood wasps in West Pakistan.—*Tech. Bull. Commonw. Inst. biol. Contr.*, Farnham Royal, Bucks, No. 4, p. 66.
103. Asthraf, M. 1964. Effect of certain insecticides on the histological structure of the muscles of *Drosicha stebbingi* (Gr.).—*Pakistan J. sci. Res.*, Lahore, **16**, pp. 47-51.
- Ashraf, M. 1964.—See Yosii, R. and Ashraf, M. 1964.
- Asthana, V. S. 1964.—See Saxena, R. P., Asthana, V. S. and Bisht, K. S. 1964.
104. Atwal, A. S. and Pajni, H. R. 1964. Preliminary studies on the insecticidal properties of drupes of *Melia azedarach* against caterpillars of *Pieris brassicae* L. (Lepidoptera : Pieridae).—*Indian J. Ent.*, New Delhi, **26** (2), pp. 221-227.
105. Atwal, A. S., Sidhu, A. S. and Chahal, B. S. 1964. Some of the factors that limit the efficacy of endrin spray against the sugarcane gurdaspur borer, *Bisselia steniellus* (Hampson) (Lepidoptera : Pyralidae).—*J. Res. Punjab agric. Univ.*, Ludhiana, **1** (1), pp. 67-73.
- Atwal, A. S. 1964.—See Sethi, S. L. and Atwal, A. S. 1964.
106. Auffmanberg, W. 1964. Notes on the courtship of land tortoise *Geochelone travancorica* (Boulenger).—*J. Bombay nat. Hist. Soc.*, Bombay, **61** (2), pp. 247-253.
107. Avasthy, P. N. and Chaudhary, J. P. 1964. Morphology of pupa of the green borer of sugarcane, *Raphimotopus ablutellus* Zell.—*Indian J. Sugarcane Res. Dev.*, New Delhi, **8**, pp. 271-273.
- Ausat, A. 1964.—See Agarwal, P. N., and Ausat, A. 1964.
108. Awadhiya, R. P. and Pandi, C. N. 1964. Pyloric obstruction by rubber nipples in a tiger-cub.—*J. vet. Anim. Husb. Res.*, New Delhi, **8**, pp. 113-114.

- Awadhya, R. P. 1964.—See Pandit, C. N., Awadhya, R. P. and Dhodapkar, B. S. 1964.
109. Ayyappa, P. K., Perti, S. L. and Wal, Y. C. 1964. A life history study of the black carpet beetle, *Attagenus alferii* Pic. (Coleoptera : Dermestidae).—*Indian J. Ent.*, New Delhi, **26** (3), pp. 275-280.
110. Babu, K. S. 1964. Through conducting systems in ventral nerve cord of centipedes.—*Z. vergl. Physiol.*, Berlin, **49** (2), pp. 114-129.
- Babu, P. C. S. 1964.—See David, B. V., Menon, P. P. and Babu, P. C. S. 1964.
- Backus, R. H. 1964.—See Clarke, G. L. and Backus, R. H. 1964.
111. Badami, V. C. and David, A. 1964. Preliminary observations on the successful inducement of breeding of *Catla catla* (Hamilton).—*Curr. Sci.*, Bangalore, **33** (10), pp. 310-312.
- Bafort, J. 1964.—See Fain, A. and Bafort, J. 1964.
112. Bagchi, M. K., Gupta, K. C. and Singh, G. S. 1964. Studies on mechanism of histamine binding in mammalian tissues.—*Indian J. Physiol. Pharmacol.*, New Delhi, **8** (1), pp. 100-103.
113. Bahadur, J. 1964. The development of the rectal pad in *Dysdercus koenigi* (Hemiptera : Pyrrhocoridae).—*Curr. Sci.*, Bangalore, **33** (12), pp. 370-371.
- Bahadur, K. 1964.—See Perti, O. N., Bahadur, K. and Pathak, H. D. 1964.
114. Baid, I. 1964. Neoteny in the genus *Artemia*.—*Acta Zool.*, Stockholm, **45** (1-2), pp. 167-177.
115. Baid, I. 1964. Preliminary notes on crustacean fauna of Sambhar lake.—*Sci. & Cult.*, Calcutta, **30** (3) pp. 153-154.
116. Baid, I. C. 1964. Lipoid bodies under different conditions of diet in the intestinal epithelium of a mammal, *Funambulus pennanti* Wroughton.—*Experientia*, Basel, **20** (10), pp. 580-581.
117. Bajpai, R. N. 1964. Leaf hopper delphacid.—*Indian Fng.*, New Delhi, **14** (2), p. 25.
- Bal, D. V. 1964.—Palekar, V. C., Santhakumaran, L. N. and Bal, D. V. 1964.
118. Bal, H. (Mrs.) 1964. Effects of copper sulphate poisoning in white rats.—*Naturwissenschaften*, Berlin, **51** (6), p. 139.
- Bala, V. 1964.—See Agrawal, V. P. and Bala, V. 1964.
119. Balasubramanian, C. and Janakiraman, R. 1964. Influence of microclimatic factors on the incidence of spotted bollworms in MCU 1. Irrigated cotton at Coimbatore.—*Madras agric. J.*, Coimbatore, **51** (2), p. 88.
120. Balasubramanian, M. and Rangaswami, G. 1964. Studies on host range and histopathology of root-knot infections caused by *Meloidogyne javanica*.—*Indian Phytopath.*, New Delhi, **17** (2), pp. 126-132.
121. Baltazar, C. R. 1964. *Erioslethus* Morley and a new polysphinctine genus (Ichneumonidae, Hymenoptera).—*Pacific Insects*, Honolulu, **6** (2), p. 398.
122. Banerjee, B. 1964. Biannual pest survey (Jan-June, 1964) in tea.—*Two & a Bud.*, Cinnamara, Assam, **11** (3), pp 54-56.
123. Banerjee, B. 1964. Cytochemical localization of alkaline phosphatase during the early embryogenesis of *Odontotermes redemanni* (Wasmann).—*Naturwissenschaften*, Berlin, **51** (18), p. 445.
- Banerjee, G. 1964.—See Pavri, K. M., Banerjee, G., Anderson, C. R. and Aikat, B. K. 1964.
124. Banerjee, M. R. 1964. Functional properties of the acentric chromosome fragments of mouse leukemia cells.—*Exp. Cell. Res.*, New York, **34**, pp. 351-359.
125. Banerjee, S. N. 1964. Paddy pests. pp 92-98. In : *Entomology in India 1938-1963*.—New Delhi (Entom. Soc. India).

126. Banerjee, S. N. and Pramanik, L. M. 1964. Outbreak of *Euchrysops cnejus* (Fabr.) on golden gram, *Phascolus aureus* in West Bengal.—*Sci. & Cult.*, Calcutta, 30 (10), p. 507.
127. Banerji, S. K. 1964. On a rational criterion for assigning batch number to processed products of shrimps.—*Fish. Technol.*, Ernakulam, 1 (2), pp. 171-175.
128. Banerji, S. K. 1964. Some considerations in the study of pelagic fish stocks with special reference to Indian mackerel, *Rastrelliger kanagurta*.—*Proc. Symp. Scombroid Fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (2), pp. 565-567.
- Bano, A. 1964.—See Majumder, S. K. and Bano, A. 1964.
129. Basheer, M. and Jayaraj, S. 1964. Cashewnut pests, pp. 261-266. In : *Entomology in India 1938-1963*.—New Delhi (Entom. Soc. India).
- Basir, M. A. 1964. See Ansari, J. A. and Basir, M. A. 1964.
130. Bassett, T. H. 1964. A visit to the high range, Kerala.—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (2), pp. 431-432.
131. Basu, A. C. and Pramanik, L. M. 1964. Notes on the control of granivorous birds causing seed-loss of germination.—*Sci. & Cult.*, Calcutta, 30, pp. 297-298.
132. Basu, A. N. 1964. New genera and species of aphids from the Darjeeling District, India (Homoptera : Aphididae).—*J. Linn. Soc. (Zool.)*, London, 45, pp. 223-243, 1 pl.
133. Basu, A. N. 1964. Studies on two new mites of the family Tetranychidae (genus *Tetranychus*).—*Proc. zool. Soc.*, Calcutta, 16 (1) [1963], pp. 221-224.
134. Basu, B. D. 1964. Observations on two new species of *Lychas*.—*J. Bengal nat. Hist. Soc.*, Darjeeling, 32, pp. 99-103.
135. Basu, B. D. 1964. Dignosis of two new species of *Pistius* (Thomisidae : Arachnida).—*J. Bengal nat. Hist. Soc.*, Darjeeling, 32, pp. 104-109.
136. Basu, B. D. 1964. Morphology of an Indian spider of the family Thomisidae (Araneae : Arachnida).—*Sci. & Cult.*, Calcutta, 30, pp. 154-155.
137. Basu, D. 1964. Proper ty of encystment in *Amoebae* subjected to centrifugal force.—*Sci. & Cult.*, Calcutta, 30 (9), pp. 462-463.
138. Basu, P. C., Singh, N. N. and Singh, N. 1964. Potentiation of activity of diaphenylsulfure and pyrimethamine against *Plasmodium gallinaceum* and *Plasmodium cynomolgi bastianelli*.—*Bull. World Hlth. Org.*, Geneva, 31, pp. 699-705.
139. Basu Choudhury, J. C. 1964. Field experiments on the choice of oviposition sites of two species of *Chorthippus* (Family : Acrididae).—*Agra Univ. J. Res. Sci.*, Agra, 13 (1), pp. 1-14.
140. Batra, H. N. 1964. The population, behaviour, host specificity and development potential of fruit flies bred at constant temperature in winter.—*Indian J. Ent.*, New Delhi, 26 (2), pp. 195-206.
141. Batra, H. N. 1964. Value of clensel as a chemical attractant and preliminary studies on population fluctuations and movement of fruit flies in the orchards.—*Indian J. agric. Sci.*, New Delhi, 34 (1), pp. 28-37.
- Batra, H. N. 1946.—See Wadhi, S. R. and Batra, H. N. 1964.
142. Batra, L. R. 1964. Insect-fungus blister galls of *Solidago* and *Aster*.—*J. Kans. ent. Soc.*, Manhattan, Kans., 37, pp. 227-234.
143. Batra, S. W. T. 1964. Behaviour of the social bee *Lasioglossum zephyrum*, within the nest (Hymenoptera : Halictidae).—*Ins. Sociataux*, Paris, 11, pp. 159-186.
- Behura, B. K. 1964.—See Varma, R. K. and Behura, B. K. 1964.

144. Belsare, D. K. 1964. Seasonal changes in the overy of *Ophiocephalus punctatus* Bloch.—*Indian J. Fish.*, Mandapam, 9A (1) [1962], pp. 140-154.
145. Belyaeva, N. V. 1964. Distribution of planktonic Foraminifera in water and on the floor in Indian Ocean.—*Tud. Inct. Oheanol. Moskva*, Leningrad, 68, pp. 12-33. [Russian ; English Summary].
146. Belyaeva, N. V. 1964. Distribution of planktonic Foraminifera in the Indian Ocean.—*Vop. Mikropaleont.*, Moskva, 7, pp. 209-222. [In Russian].
147. Bennet, P. S. 1964. *Euthynnus affinis* (Cantor) in the Vizhingam fisheries.—*Proc. Symp. Scombroid fishes. Mar. biol. Ass. India.*, Mandapam, ser. 1 (2) pp. 708-711.
148. Bennet, P. S. 1964. On *Bomolochus sardinellae* sp. n. (Copepoda, Cyclopoida) parasitic on *Sardinella albella*.—*J. mar. biol. Ass. India*, Mandapam Camp, 6 (1), pp. 84-88.
149. Bensam, P. 1964. On certain gonadial abnormalities met with in the Indian oil sardine, *Sardinella longiceps* Val.—*J. mar. biol. Ass. India*, Mandapam Camp, 6 (1), pp. 135-141.
150. Bennet, P. S. 1964. On an abnormal ray from Vizhingam.—*J. mar. biol. Ass. India*, Mandapam Camp, 6 (2), pp. 317-318.
151. Beotra, I. R. and Gupta, M. L. 1964. Effect of electrolytes on the spontaneous rhythmicity of rabbit-duodenum.—*Indian J. Physiol. Pharmacol.*, New Delhi, 8 (3), pp. 195-200.
152. Berlioz, J. 1964. Observations ornithologiques a Ceylon.—*Oiseaux*, Verviers, 34, pp. 117-199.
153. Bhaduri, A. K. and Roychoudhury, D. N. 1964. Biochemical assay of hemolymph, heart-fluid and femoral fluid of adult female cockroach (*P. americana*).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, Pt. 3 (Abstracts), pp. 457-458.
154. Bhagwat, S. S. 1954. A record of a double monster in a chick.—*Indian vet. J.*, Madras, 41 (11), p. 740.
155. Bhagwat, S. V. 1964. Serological evidence of *Leptospira pomona* infection in pigs in India (Aurangabad).—*Indian vet. J.*, Madras, 41 (12), pp. 792-796.
- Bhalla, O. P. 1964.—See Sharma, P. L., Agarwal, S. C. and Bhalla, O. P. 1964.
156. Bhalla, R. C., Sengar, D. P. S. and Jain, G. C. 1964. Biometry of the genital tract of buffalocows.—*Indian vet. J.*, Madras, 41 (5), pp. 327-331.
157. Bhalla, R. C. and Sharma, G. L. 1964. Occurrence of hyaline cartilage in the goats heart.—*Indian vet. J.*, Madras, 41 (12), pp. 779-787.
- Bhamburkar, M. W. 1964.—See Chatterji, S., Sethi, G. R., Bhamburkar, M. W. and Deshmukh, M. G. 1964.
158. Bhargava, A. K., Mehrotra, P. N. and Banerjee, S. 1964. Serum proteins and their variation with sex, pregnancy, rut and infection, biochemical studies on Indian camel.—*Indian J. exp. Biol.*, New Delhi, 2 (1), pp. 52-54.
159. Bhargava, R. P., Variyar, M. C., Sharma, K. S. and Tuteja, K. S. 1964. Further studies on perfusion of isolated frog's heart with modified ringer solutions (glucose ringer, maltose-ringer and lactose-ringer).—*Indian J. Physiol. Pharmacol.*, New Delhi, 8 (4), pp. 232-236.
- Bhargava, S. C. 1964.—See Mathur, P. N. and Bhargava, S. C. 1964.
- Bhatia, B. B. 1964.—See Pande, B. P., Bhatia, B. B. and Dubey, J. P. 1964.
160. Bhatia, D. R. and Mital, V. P. 1964. Role of persistent insecticides in treating egg-laid grounds of the desert locust (*Schistocerca gregaria* Forsk.) and effect of cultivation on their toxicity.—*Indian J. Ent.*, New Delhi, 26 (2), pp. 241-243.

161. Bhatia, D. R. and Singh, C. 1964. Locusts and their control. pp. 297-315. In : *Entomology in India 1938-1963*.—New Delhi (Entom. Soc. India).
162. Bhatnagar, D. S. 1964. Effect of sex hormones on on growth, food consumptions, food efficiency and secondary sexual characteristics during first eight week in Rhode Island red chicks.—*J. vet. Anim Husb. Res.*, Delhi, 8, p.p 20-28.
163. Bhatnagar, D. S. 1964. Physiological response of poultry to climatic stress in relation to egg production and weight of the egg.—*J. vet. Anim. Husb. Res.*, Delhi, pp. 39-52.
164. Bhatnagar, P. L. 1964. Fat of certain carbohydrates in the gut of *Oxycarenus hyalinipennis* Costa (Heteroptera : Lygaeidae).—*Naturwissenschaften*, Berlin, 51 (1), p. 17.
165. Bhatnagar, P. L. 1964. Cytology of enzyme secretion in *Oxycarenus hyalinipennis* Coasta.—*Naturwissenschaften*, Berlin, 51 (7), p. 174.
166. Bhatnagar, R. D. S. 1964. A termite-predaceous earwig from Kashmir.—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, Pt. 3 (Abstracts), p. 484.
167. Bhatnagar, R. D. S. 1964. The morphology of the male and female terminalia and external genitalia of the earwig, *Labidura riparia* (Pallas) (Dermaptera, Labiduridae).—*Entomologist*, London, 97, pp. 106-112.
168. Bhatnagar, R. D. S. 1964. The life-history, growth and transformation in the earwig *Labidura riparia* (Pallas) (Dermaptera : Labiduridae).—*Res. Bull. Panjab Univ. Sci. (N. S.)*, Chandigarh, 14, pp. 225-229.
169. Bhatnagar, R. D. S. and Sadana, G. L. 1964. Spider fauna of the family Lycosidae from Chandigarh.—*Proc. Combd. 51st & 52nd Indian Sci. Congr.* Calcutta, Pt. 3 (Abstracts), p. 487.
170. Bhatnagar, R. D. S. and Sadana, G. L. 1964. The functional anatomy of the male and female external genitalia of the wolf spider *Lycosa chaperi* Simon (Lycosidae : Araneida).—*Res. Bull. Panjab Univ. Sci. (N. S.)*, Chandigarh, 14 [1963], pp. 207-214.
171. Bhatnagar, R. D. S. and Singh, K. I. 1964. The reproductive system of *Labidura riparia* (Pallas) (Labiduridae : Dermaptera).—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, Pt. 3 (Abstracts), p. 478.
172. Bhatnagar, S. N. and Sahni, D. N. 1964. Studies on the Odonata (Anisoptera) of Kumaon region.—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, Pt. 3 (Abstracts), p. 478.
173. Bhatnagar, S. P. and Sahni, D. N. 1964 External morphology of *Anax parthenope* Selys (Aeshnidae : Odonata).—*Agra Univ. J. Res. Sci.*, Agra, 13 (2), pp. 71-87.
174. Bhatnagar, S. P. and Sahni, D. N. 1964. Dragonflies (Zygoptera) from Kumaon.—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, Pt. 3 (Abstracts), pp. 477-478.
175. Bhatt, P. L., Vyas, A. P. and Kohli, R. N. 1964. Congenital malformation of head in calves. A record of three cases—*Indian vet. J.*, Madras, 41 (11), pp. 736-739.
176. Bhatt., V. S. and Siddiqui, W. A. 1964. Four new species of Myxosporidia from the Indian fresh water fish *Ophicephalus punctatus* Bloch.—*J. Protozool*, Lancaster, 11, pp. 341-316.
- Bhatt, V. S. 1964.—See Qasim, S. Z. and Bhatt, V. S. 1946.
177. Bhattacharjee, D. C. 1964. Nail in the gut of a cuckoo.—*Indian vet. J.*, Madras, 41 (11), pp. 766-767.
178. Bhattacharjee, M. L. 1964. Preliminary report on the anthelmintic properties of neguvon on hookworm and large round worm of dogs.—*Indian vet. J.*, Madras, 41 (12), pp. 809-814.
- Bhattacharya, B. K. 1954.—See Sen, A. B. and Bhattacharya, B. K. 1964.

179. **Bhattacharya, N. C. and Chowdhury, A. B.** 1964. Experimental transmission of filarial infection (*Wuchereria bancrofti*) in steroid treated *Aedes aegypti*.—*Bull. Calcutta Sch. trop. Med.*, Calcutta, 12 (1), pp. 5-6.
180. **Bhattacharya, S., Chowdhury, T. M. and Acharya, A. K.** 1964. Observations on oestrus cycle in five breeds of Indian dairy heifers.—*Indian vet. J.*, Madras, 41 (8), pp. 503-507.
- Bhattacharya, S.** 1964.—See **Gupta, S., Som, T. and Bhattacharya, S.** 1964.
181. **Bhattacharyya, M. M.** 1964. Six legged monster in a calf.—*Indian vet. J.*, Madras, 41 (11), p. 739.
182. **Bhattacharyya, N. K. and Mullick, D. N.** 1964. Effects of drenching with magnesium carbonate suspension on the body weight and on magnesium and cholesterol content in serum of rabbits receiving basal diet supplemented by 15% ghee.—*Curr. Sci.*, Bangalore, 33 (16), pp. 490-491.
183. **Bhattacharyya, N. K. and Mullick, D. N.** 1964. A study on the biochemistry of gonads in relation to the reproduction in rats.—*Bull. natn. Inst. Sci. India*, New Delhi, No. 27, pp. 51-55.
184. **Bhattacharyya, S. K.** 1964. Studies in Indian mites (Acarina : Mesostigmata).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 487.
185. **Bhattacharjee, N. S. and Menon, M. G. R.** 1964. Bionomics, biology and control of *Hymenia recurvalis* (Fabricius) (Pyrilidae : Lepidoptera).—*Indian J. Ent.*, New Delhi, 26 (2), pp. 176-183.
186. **Bhattacharjee, R. C.** 1964. Taking venom from the bees.—*New Scientist*, London, 22 (388), p. 237.
- Bhattacharjee, S.** 1964.—See **Mookerjee, S. and Bhattacharjee, S.** 1964.
187. **Bhimasenarao, M.** 1964. Electrophoretic properties of the non-micellular proteins of buffalo milk as compared with those of cow milk.—*Nature*, London, 201 (4925), pp. 1217-1218.
- Bhombore, S. R.** 1964.—See **Srivastava, H. M. L., Bhombore, S. R. and Roy, R. G.** 1974.
188. **Bhowmik, H. K.** 1964. On a new species *Eyprepocnemis* (Insecta : Orthoptera : Acrididae), from India.—*J. Bengal nat. Hist. Soc.*, Darjeeling, 32 (2), pp. 89-92.
189. **Bhowmick, H. K.** 1964. A new species of grasshopper, *Chlorizeina roonwali* sp. nov., (Orthoptera : Acrididae), from India.—*J. Bengal nat. Hist. Soc.* Darjeeling, 32 (2), pp. 93-96.
190. **Bhuiyan, A. L.** 1964. Fishes of Dacca.—*Publ. Asiatic Soc Pakistan*, Lahore, No. 13, pp. 1-148.
- Bhuiyan, A. L.** 1964.—See **Timm, R. W. and Bhuiyan, A. L.** 1964.
191. **Bhushana Rao, K. S. P. and Ramaprasad, T. N. C.** 1964. A note on *Stegoalpheon kempi* Chopra.—*Curr. Sci.*, Bangalore, 33 (19), pp. 588-589.
192. **Bindra, O. S. and Mehra, C. K.** 1964. A note on host preference by *Athalia proxima* Klug., the mustard sawfly.—*Indian J. Ent.*, New Delhi, 26 (i3), pp. 284-288.
193. **Birat, R. B. S.** 1964. Growing menace of rats in Bihar.—*Allahabad Fmr.*, Allahabad, 38 (6), pp. 267-268.
194. **Birstein, J. A. and Vinogradov, M. E.** 1964. The pelagic amphipods gammarids of the northern part of the Indian Ocean.—*Trud. Inst. Okeanol. Moskva*, Leningrad, 65, pp. 152-196.
- Bisht, K. S.** 1964.—See **Saxena, R. P., Asthana, V. S. and Bisht, K. S.** 1964.
195. **Biswas, B.** 1964. The birds of Nepal. Part II.—*J. Bombay nat. Hist. Soc.*, Bombay, 60 (3), pp. 638-654.
196. **Biswas, B.** 1964. Comments on Ripley's "A synopsis of the birds of India and Pakistan".—*J. Bombay nat. Hist. Soc.*, Bombay, 60 (3), pp. 679-687.
197. **Biswas, B.** 1964. An instance of testicular abnormality in a bird.—*Sci. & Cult.*, Calcutta, 30, pp. 559-560.
198. **Biswas, S.** 1964. A new species of the cladoceran genus *Latona* Straus, 1823 [Crustacea : Cladocera : Sidaidae] from Rajasthan, India.—*Proc. zool. Soc.*, Calcutta, 17 (2), pp. 149-152.
- Bohl, W. H.** 1964.—See **Christensen, G. C., Bump, G. and Bohl, W. H.** 1964.

- Bokdawala, F. D. 1964.—See George, J. C. and Bokdawala, F. D. 1964.
199. Bonnell, B. 1964. A modern investigation of the adhesive apparatus of echeineid fishes.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p.4 95.
- Boral, M. C. 1964.—See Deb, C., Boral, M. C. and Sarkar, C. 1964.
200. Borchsenius, N. S. 1964. New genera and species of scale insects (Homoptera, Coccidae, Diaspididae) from Transcaucasia, Central and Eastern Asia.—*Ent. Rev.*, New York, 43 (1), pp. 71-82.
201. Borchsenius, S. 1964. Notes on the Coccoidea of India. I. A new genus and three new species of Leucaspidiini (Diaspididae).—*Rev. d'Ent. U. S. S. R.*, Moscow, 43 (4), pp. 864-872.
202. Borooah, S. K. 1964. Elements of Indian stratigraphy: i-vi, 1-207, i-vii, pls. 1-12. Dattsons: Nagpur, 1962.
203. Bose, A. 1964. Studies on the inducing principles in kidney development of chick.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 451.
204. Bose, A. 1964. Inhibition of lens induction by chloramphenicol.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 452.
205. Bose, A. 1964. Hypochord in the anurans.—*Experientia*, Basel, 20, pp. 493-494.
206. Bose, A. and Chatterjee, A. 1964. Interference on the level of organizer action.—*Naturwissenschaften*, Berlin, 51 (10), pp. 249-250.
207. Bose, A. and Chatterjee, A. 1964. Interference on the level of organizer action.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 452.
208. Bose, B. C. and Saifi, A. Q. 1964. Observations on the action of bretylium tosylate and adenosine triphosphate on the isolated frog heart.—*Curr. Sci.*, Bangalore, 33 (4), pp. 110-112.
209. Bose, B. C., Vijayvargiya, R., Bhagwat, A. W. and Roy, N. M. 1964. Observations on the effects of purines and ATP on heart.—*Curr. Sci.*, Bangalore, 33 (17), pp. 526-527.
210. Bose, D. A. C., Chinoy, N. J. and George, J. C. 1964. Studies on the structure and physiology of the flight muscles of birds. 10. Certain biochemical differences in the cellular organisation of the fowl pectoralis.—*Pavo*, Baroda, 2 (1), pp. 61-64 6 pls.
211. Bose, K. C. and Bose, S. K. 1964. "Nuclear extrusions in certain fishes. Part 1. *Chela bacailag* Ham."—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 442-443.
212. Bose, K. C., Bose, S. K. and Prasad, R. 1964. Morphology and histology of the alimentary canal of *Lepidocephalichalichthys guntea* (Ham.).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 494.
213. Bose, K. C. and Mehrotra, P. N. 1964. On the development of right ovaries in certain birds.—*Proc. nat. Acad. Sci. India*, Allahabad, 34B (3), pp. 313-315.
214. Bose, K. C. and Sinha, P. B. 1964. On the determination of hydrogen-ion concentration in the alimentary canals of heteropteran insects.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 454.
- Bose, K. C. 1964.—See Mehrotra, P. N. and Bose, K. C. 1964.
215. Bose, S., Coutinho, W. G. and Ranadive, K. J. 1964. Demonstration of G 2 period and mitotic time in a mouse sarcoma cell line (MF S8) by autoradiography.—*Indian J. exp. Biol.*, New Delhi, 2 (4), pp. 167-172.
- Bose, S. M. 1964.—See Dhar, S. C. and Bose, S. M. 1964.
216. Boursin, C. 1964. Noctuidae Trifinae. Zweiter Beitrag zur Kenntnis der Fauna der Noctuidae von Nepal (Beitrag zur Kenntnis der "Noctuidae von Nepal" (Beitrag zur Kenntnis der "Noctuidae Trifinae" (146). Lepidoptera der Deutschen

- Nepal-Expedition 1955. Teil II.—*Veroff. zool. Stsamml. Munch.*, Munich, 8, pp. 3-40, 23 pls.
217. Brahmachary, R. L. 1964. Free amino acid in the egg fluid and embryos of *Pila*.—*Experientia*, Basel, 20 (3), pp. 133-134.
218. Brahmachary, R. L. 1964. Free amino acids in *Limnaea*. III.—*Experientia*, Basel, 20 (3), p. 134.
219. Brahmachary, R. L. and Reverberi, G. 1964. On the action of chromomycin on the eggs and embryos of *Ciona intestinalis*.—*Experientia*, Basel, 20, p. 621.
220. Brahmachary, R. L. and Reverberi, G. 1964. Effects of chromomycin A3 on the embryonic development of *Ciona intestinalis*.—*Acta Embryol. Morph. exp.*, 7, pp. 180-190.
221. Breuning, S. 1964. Nelle Lamiden aus der sammlung des Zoologischen museums der Humboldt-Universitat Zu Berlin 2 teil (Col ; Ceramb).—*Dtsch. Ent. Z.*, Berlin, 11 (4-5), pp. 445-448.
222. Breuning, S. 1964. Revision der Apomecynini der asiatischen und australischen region (Coleoptera : Cerambycidae).—*Ent. Abh. Ber. Mus. Tierk.*, Dresden, 30, pp. 1-528.
- Brito-Babapulle, L. A. P. 1964.—See Jayasinghe, J. B., Fernando, S. D. A. and Brito-Babapulle, L. A. P. 1964.
- Brown, K. F. 1964.—See Siddiqi, M. R. and Brown, N. F. 1964.
223. Bruyns, W. F. J. M. and Voous, K. H. 1964. Notes on sea-birds. 7. White-faced Storm Petrels (*Pelagodroma marina*) in the Indian Ocean.—*Ardea*, Wageningen, 52, pp. 223-224.
224. Buckley, J. J. C. 1964. The problem of *Gastrodiscooides hominis* (Lewis and Mc Connell, 1876) Leiper, 1913.—*J. Helminth.*, London, 38 (1/2), pp. 1-6.
- Bump, G. 1964.—See Christensen, G. C., Bohl, W. H. and Bump, G. 1964.
225. Butani, D. K. 1964. Effect of temperature and humidity on the biology of *Trichogramma evanescens* of *Odontotermes gurdaspurensis* Holmg. and Holny (Isoptera : Termitidae : Macrotermiidae).—*Indian J. Ent.*, Madras, No. 5, pp. 7-16.
226. Butani, D. K. 1964. A new crop.—*Indian Hort.*, New Delhi, India.
227. Butani, D. K. 1964. Know thy enemies.—*Shree Herald—Ikshu Sandesh*, Delhi, 6 (3), pp. 1-9.
228. Butani, D. K. 1964. Sugarcane leafhopper *Pyrilla perpusilla* Walker—a review.—*Indian J. Sug. Cane Res.*, New Delhi, 9 (1), pp. 60-75.
229. Butani, D. K. 1964. Anatomy of larva of *Chilo zonellus* Swinhoe (Pyralididae : Lepidoptera).—*Labdev. J. Sci. Tech.*, Kanpur, 2 (3), pp. 161-163.
230. Butani, D. K. and Hashmi, M. H. A. 1964. Effect of insecticides on *Tetrastichus pyrillae* Crawford—an egg parasite of sugarcane leaf-hopper.—*Labdev J. Sci. Tech.*, Kanpur, 2 (1), pp. 67-68.
- Butani, D. K. 1964.—See Maini, N. S., Nijhawan, H. L. and Butani, D. K. 1964.
- Butani, D. K. 1964.—See Singh, A. and Butani, D. K. 1964.
- Butani, D. K. 1964.—See Sahani, V. M. and Butani, D. K. 1964.
- Butani, D. K. 1964.—See Singh, A. and Butani, D. K. 1964.
- ### C
231. Caprites, J. M. 1964. Studies on Idiocerinae leafhoppers : II. The Indian and Philippine species of *Idiocerus* and the genus *Idioscopus* (Homoptera : Cicadellidae).—*Proc. ent. Soc. Wash.*, Washington, 66, pp. 89-100.
232. Cave, A. J. E. 1964. The thymus gland in three genera of rhinoceros.—*Proc. zool. Soc. Lond.*, London, 142, pp. 73-83, 4 pls., 3 figs.
233. Chacko, M. J. 1964. The term "superparasitism" insect parasitology.—*Curr. Sci.*, Bangalore, 33 (21), pp. 641-642.
234. Chacko, P. I. and Murthy, P. S. S. 1964. Conditions of existence in twenty pearl banks in the Gulf

- Bokdawala, F. D. 1964.—See George, J. C. 1964.
Bokdawala, F. D. 1964.
199. Chakravarty, D. K. and Roychoudhury, D. N. 1964. Seasonal fluctuation in the population of soil arthropods in relation to some chemical properties of the soil.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 498.
236. Chakraborty, D. M. Production of bradycardia and arrhythmia with nerium adorum on cats.—*Indian med. J.*, Calcutta, 61 (11), pp. 341-345.
- Chakravarty, A. K. 1964.—See Mookerjee, S. and Chakravarty, A. K. 1964.
237. Chakravarty, B. and Deb, C. 1964. Carbohydrate metabolism in carbon tetrachloride intoxication, a histochemical and biochemical study.—*J. exp. med. Sci.*, Calcutta, 8 (3), pp. 59-64.
238. Chakravarty, B. and Deb, C. 1964. Histochemical changes in liver in altered carbohydrate metabolism produced by para-aminosalicylate.—*J. exp. med. Sci.*, Calcutta, 8 (3), pp. 76-81.
- Chakravarty, B. 1964.—See Deb, C. and Chakravarty, B. 1964.
- Chakravarty, M. M. 1964.—See Maiti, P. K., Chakravarty, M. M. and Roy, H. N. 1964.
- Chakravarty, S. K. 1964.—See Sarkar, J. K., Chatterjee, S. N., Chakravarty, S. K. and Mitra, A. C. 1964.
239. Chakravorty, K. P. and Sadhu, D. P. 1964. Histochemical studies of the hormone stimulated oviduct of *Columba livia*. *Bull. natn. Inst. Sci. India*, New Delhi, No. 27, pp. 56-60.
240. Champakamalini, A. V. 1964. Effects of sodium barbitone on oestrus cycle in albino rats.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 502.
241. Chand, K. 1964. Life cycle of *Cotugnia digonopora* (Pasquale, 1890) Diamare 1893, and role of ants in taeniasis in poultry.—*J. Res. Punjab agric. Univ.*, Ludhiana, 1 (1), pp. 93-100.
242. Chander, S. and Sharma, D. D. 1964. A case of papilloma in urinary bladder of a female dairy calf.—*Indian vet. J.*, Madras, 41 (5), pp. 362-364.
243. Chandra, P. R. 1964. Lower Permian Bryozoa from Kashmir and their palaeo-ecology.—*Int. Geol. Congr.*, 22nd (Abstrs), p. 112.
244. Chandra-Bose, D. A. and George, J. C. 1964. Studies on the structure and physiology of the flight muscles of birds. 11. Cellular organisation and distribution of fat and succinic dehydrogenase in the pectoralis of some pasocrinis.—*J. Anim. Morph. Physiol.*, Baroda, 11 (1), pp. 90-96.
245. Chandra-Bose, D. A. and George, J. C. 1964. Studies on the structure and physiology of the flight muscles of birds. 12. Observations on the structure of the pectoralis and supracoiordeus of the ruby-throated humming bird.—*Pavo*, Baroda, 2 (2), pp. 111-114.
246. Chandra, R. 1964. A preliminary account of the distribution and abundance of fish larvae in the Hooghly estuary.—*Indian J. Fish.*, Mandapam, 9A (1), [1962], pp. 48-70.
247. Chandra, T. and Shanmugasundaram, E. R. B. 1964. Terminal amino-acids of the haemoglobin of Indian cow.—*Curr. Sci.*, Bangalore, 33 (22), pp. 680-681.
248. Chandu, K. and Pillai, G. B. 1964. Rhinoceras beetle—a major menace to coconut cultivation.—*Wild. Crops*, London, 16 (1), pp. 20-24.
- Chandy, M. 1964.—See Sharma, M. S. and Chandy, M. 1964.
- Chatterjea, J. B. 1964.—See Ray, H. N., Chaudhuri, R. N. and Chatterjea, J. B. 1964.
249. Chatterjee, A. 1964. Diffusion studies of bovine plasma albumin at 25° with the help of jamin interference optics.—*J. Amer. Chem. Soc.*, Easton, Pa, 86 (18), pp. 3640-3642.
- Chatterjee, A. K. 1964.—See Pant, S. C., Rao, B. R. J. and Chatterjee, A. K. 1964.
250. Chatterjee, B. K. 1964. Studies on the lethal does of Folidol-E 605 against jute stem weevil, *Apion corchori* Marshall, with reference to its occurrence on the two kinds of jute cultivated in West Bengal.—*Pflsch. Nachr. Bayer.*, Leverkusen, 17 (2) pp. 57-67.

251. Chatterjee, A. and Deb, C. 1964. Role of ascorbic acid on the uterotrophic activity of estrogen.—*Acta anat.*, Basel, **56**, pp. 308-312.
252. Chatterjee, C. and Dey, P. K. 1964. Effect of few neuroleptic phytochemical agents on the serotonin content in mouse brain.—*Naturwissenschaften*, Berlin, **51** (19), p. 466.
253. Chatterjee, N. 1964. The histochemical demonstration of haemoglobin and haemosiderins in the growing oocytes of a frog.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 440.
254. Chatterjee, N. 1964. On the growing eggs of a mammal.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 447-448.
255. Chatterjee, N. 1964. On the nature of nutrient materials of the growing oocytes of the fish.—*Curr. Sci.*, Bangalore, **33** (5), pp. 145-147.
256. Chatterjee, N. 1964. A new mode of nutrition of the growing oocytes of the fish and of the frog.—*Cellule*, Lierre, **4**, pp. 337-342.
257. Chatterjee, P. N. and Sebastian, V. O. 1964. Notes on the outbreak of the sap-sucker, *Oregma bambusae* in new forest and measures taken to control them.—*Indian For.*, Dehra Dun, **90** (1), pp. 30-31.
258. Chatterjee, P. N. and Thakur, M. L. 1964. New species of *Angulitermes* from North India (Isoptera : Termitidae : Termitinae).—*J. Bombay nat. Hist. Soc.*, Bombay; **61** (2), pp. 348-353.
259. Chatterjee, P. N. and Thakur, M. L. 1964. Revision of the termite genus *Microtermes* Washmann (Isoptera : Termitidae : Macrotermitinae) from the Indian region.—*Indian For. Rec.* (Ent. N. S.), Delhi, **10** (11), pp. 219-260.
260. Chatterjee, P. N. and Thakur, M. L. 1964. Contribution to the knowledge of the systematics of Himalayan (North Western) termite fauna. II. Descriptions of *Microcerotermes rambanensis* sp. nov. (Isoptera : Termitidae : Amitermitinae) from Kashmir.—*Bull. Ent.*, Madras, No. 5, pp. 1-6.
261. Chatterjee, P. N. and Thakur, M. L. 1964. Redescription of *Odontotermes gurdaspurensis* Holmg. and Holny (Isoptera : Termitidae : Macrotermitinae).—*Bull. Ent.*, Madras, No. 5, pp. 7-16.
262. Chatterjee, P. N. and Thapa, R. S. 1964. A new species of the genus *Grallatotermes* from India (Isoptera : Termitidae : Nasutitermitinae).—*Indian For.*, Dehra Dun, **90** (4), pp. 210-214.
263. Chatterjee, P. N. and Thapa, R. S. 1964. *Speculitermes chadaensis* sp. n. from India (Isoptera : Termitidae : Amitermitinae).—*Indian For.*, Dehra Dun, **90** (8), pp. 514-516.
264. Chatterjee, P. N. and Thapa, R. S. 1964. Insect pests of fast growing tree species. I. Preliminary investigation on poplar stem and root borer, *Apriona cinerea* Chevrolat (Coleoptera, Lamidae) in New Forest.—*Indian For.*, Dehra Dun, **90** (10), pp. 681-687.
265. Chatterjee, P. N. and Thapa, R. S. 1964. Recent epidemic of sal borer, *Hoplocerambyx spinicornis* Newm., in South Manda Division, Madhya Pradesh and recommendations for control.—*Indian For.*, Dhera Dun, **90** (11), pp. 777-781.
266. Chatterjee, S. 1964. Nuclear extrusion in x-irradiated amoeba.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstract), p. 442.
267. Chatterjee, S. C. 1964. Comparative study of the haemagglutination and bioassay procedures for the assay of guinea pig anti-diphtheria and anti-tetanus sera.—*Indian J. med. Res.*, Calcutta, **52** (12), pp. 1241-1249.
268. Chatterjee, S. C. and Ray, C., H. N. 1964. Electron microscopic studies on the food vacuole and gullet of *Paramoecium multimicronucleatum*.—*Proc. natn. Inst. Sci. India*, Allahabad, **30B**, pp. 166-174.
- Chatterjee, S. N. 1964.—See Sarkar, J. K. Chatterjee, S. N., Chakravarty, S. K. and Mitra, A. C. 1964.
269. Chatterjee, A. K. 1964. Tertiary foraminifera from Andamans. —*Indian Miner.*, Calcutta, **16** (1963), p. 306.
270. Chatterjee, S., Sethi, G. R., Bhamburkar, M. W.

- and Deshmukh, M. G. 1964. Labellig of the adults of *Chilo partellus* Swinhoe (*C. zonellus*), the stalk borer of maize and jowar with radioactive phosphours (P 32).—*Curr. Sci.*, Bangalore, 32 (21), pp. 652-653.
- Chattopadhyay, A. K. 1964.—See Chaudhuri, D. K. Das, K. K. and Chattopadhyay, A. K. 1964.
271. Chatteraj, A. N. and Sharma, V. P. 1964. Weight loss in *Periplaneta americana* (L.) with the application of diffeant insecticides. —*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 480—481.
- Chatteraj, A. N. 1964.—See Sharma, V. P. and Chatteraj, A. N. 1954.
272. Chaturvedi, R. N. 1964. Death by cold of commercial carps in Delhi.—*J. Bombay nat. Hist. Soc.*, Bombay, 61, pp. 200—203.
273. Chaturvedi, Y. 1964. Taxonomic status of *Tadarida tragata* (Dobson) [Chiroptera : Molossidae].—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (2), pp. 432—437, 1. pl.
274. Chaudhary, J. P. and Khanna, S. S. 1964. Occurrence of *Blissus gibbus* F. in sugarcane.—*Indian. Sug. Cane Res. Develop.*, New Delhi, 8 (4), p. 427.
- Chaudhary, J. P. 1964.—See Avasthy, P. N. and Chaudhary, J. P. 1964.
275. Chaudhuri, D. K. and Das, K. K. 1964. On the structure of the stink gland and the biochemical nature of their secretion in *Chrysocores stollii* (Heteroptera : Pentatomidae).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, pt. 3 (Abstracts), pp. 475—476.
276. Chaudhuri, D. K., Das, K. K. and Chattopadhyay, A. K. 1964. On the histopathological changes caused by some inorganic insecticides applied as stomach poisons against *Periplaneta americana* (Linn.).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstract), p. 482.
277. Chaudhuri, D. K. and Ghosh, P. K. 1964. A further contribution on the biochemical nature of the stink glands of *Chrysocoris stollii* Wolf. (Heteroptera : Pentatomidae).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 453—454.
278. Chaudhuri, D. K. and Mitra, S. K. 1964. On the systematics of a new species of Nycteribiidae (Diptera : Pupipara).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 472.
279. Chaudhuri, R. P. and Naithani, R. C. 1964. Resistance to BHE in the cattle tick *Boophilus micropleus* (Can.) in India.—*Bull. ent. Res.*, London, 55 (3), pp. 405—410.
- Chaudhuri, R. R. 1964.—See Apte, B. K. and Chaudhuri, R. R. 1964.
280. Chaudhuri, S. K. 1964. On living lung-fishes.—*J. Bengal nat. Hist. Soc.*, Darjeeling, 32, pp. 114—118.
281. Chaudhuri, S. K. 1964. Migration of birds and its problems.—*J. Bengal nat. Hist. Soc.*, Darjeeling, 33 (1), pp. 166—178.
282. Chaudhuri, B. and Roychoudhury, D. N. 1964. Effect of malathion on the crop of *Periplaneta americana* (L.) (Insecta : Dictyoptera).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 414.
283. Chauhan, V. D. 1964. On a new species of sargassum from Porbandar, India.—*J. mar. biol. Ass. India*, Mandapam, 6 (2), pp. 226—227.
- Chawla, M. L. 1964.—See Mookherjee, P. B. and Chawla, M. L. 1964.
- Chawla, S. S. 1964.—See Subbarao, B. R. and Chawla, S. S. 1964.
284. Cheema, M. A. 1964. Taxonomic study of fruit flies of Lyallpur belonging to genus *Dacus*.—*Pakistan J. Sci.*, Lahore, 16, pp. 299—306.
- Cherian, K. M. 1964.—See Vallayathan, N. V., Cherian, K. M. and George, J. C. 1964.
285. Cheriyan, P. V. 1964. On the occurrence of the anemone *Phytocoeleopsis ramunni* Panikkar in the Cochin backwater.—*Curr. Sci.*, Bangalore, 32 (21), p. 658.

286. Cheriyan, P. V. 1964. Seasonal occurrence of wood-boring organisms in the Cochin harbour.—*J. Timb. Dry. Preserv. Ass. India*, Dehra Dun, 10 (4), pp. 3-9.
287. Chetram, Khanna, N. D., Singh, D. P. and Prabhu, S. S. 1964. Studies on camel blood antigenic factors detected through cattle blood-group reagents.—*Indian J. vet. Sci.*, Delhi, 34 (4), pp. 232-241.
289. Chhabra, R. S., Adaval, S. C., Klurana, J. S. and Mukherji, D. R. 1965. Haematologic studies of the normal adult Indian goat erythrocytes, haemoglobin, packed cell volume (PCV), mean corpuscular haemoglobin (MCH) and mean corpuscular haemoglobin concentration (MCHC) in normal male goat.—*J. vet. Anim. Husb. Res.*, New Delhi, 8, pp. 59-61.
290. Chhabra, R. S., Mehta, R. K., Garg, L. C. and Lalchand. 1964. Feeding of *Cissus quadrangularis* and rise of calcium in blood serum.—*J. vet. Anim. Husb. Res.*, New Delhi, 8, pp. 53-55.
291. Chhappgar, B. F. 1964. Occurrence of the oblong sunfish [*Banzania truncata* (Ratzius)] in Bombay waters.—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (2), pp. 453-455.
292. Chhappgar, B. F. 1964. A monster of the spotted duck-billed ray, *Aetobatus narinari*.—*Copeia*, New York, No. 3, pp. 587-589.
293. Chhappgar, B. F. and Deshmukh, S. K. 1964. Further records of lobsters from Bombay.—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (1), pp. 203-207.
- Chhotani, O. B., 1964.—See Roonwal, M. L. and Chhotani, O. B. 1964.
294. Chidambaranathan, A. and Rangaswami, G. 1964. Effect of plant root exudates on the egg masses and larvae of tree root-knot nematodes.—*Curr. Sci.*, Bangalore, 33 (23), pp. 724-725.
295. Chi-Kun, Y. 1964. Notes on the new subfamily Tridactylophaginae (Strepsiptera: Halictophagidae).—*Act. Ent. Sinica*, Peking, 13 (4), pp. 610-613.
296. Chinoy, N. J. and George, J. C. 1964. Cellular organization and certain histophysiological features of the avian abdominal musculature.—*Pavo*, Baroda, 2 (1), pp. 12-25.
297. Chitnis, P. S. 1964. Some studies on the cannibalism in the larvae of the blowfly, *Chrysomia rufifacies* Macq. (Diptera).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.* Calcutta, pt., 3 (Abstracts), p. 473.
298. Chitray, B. B. 1964. Functional anatomy of the digestive organs of freshwater teleosts: Part III—Alimentary canal of *Eutropichthys vacha* (Ham.) (Siluroidea: Schilbeidae).—*Proc. nat. Acad. Sci. India*, Allahabad, 34B (2), pp. 62-72.
299. Chopra, R. N. 1964.—Notes on some lizards of Poona.—*J. Univ. Poona (Sci. Tech. Sec.)*, Poona, 28, pp. 43-48.
300. Chopra, R. N. 1964. Observations on the egg-laying of the fanthroated lizard *Sitana ponticeriana* Cull.—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (1), pp. 190-191.
301. Choudhuri, D. K. 1964. Some aspects of the three species of the genus *Onychiurus* (Collembola).—*Proc. nat. Acad. Sci. India*, Allahabad, 34B (3), pp. 249-255.
302. Choudhuri, D. K. 1964. Taxonomic observations on the British species of the *Armatus* and *Fimetarius* groups of the genus *Onychiurus* (Collembola: Onychiuridae).—*Proc. nat. Acad. Sci. India*, Allahabad, 34B (3), pp. 260-282.
303. Choudhuri, D. K. 1964. A study on the haemocytes of a species of the genus *Tristria* (Acrididae: Catantopinae).—*Indian J. Ent.*, New Delhi, 26 (1), pp. 33-42.
304. Choudhury, D. K. and Mukherje, A. B. 1964. On the taxonomy of new parasitic mite of the genus *Leiodinychus* Berlese 1217 [Uropodidae: Mesostigmata].—*Proc. zool. Soc.*, Calcutta, 17 (1), pp. 27-34.
- Choudhury, J. C. B. 1964.—See Singh, P. and Choudhury, J. C. B. 1964.
305. Choudhury, S. N. 1964. Sericulture and parasitology.—*Proc. zool. Soc.*, Calcutta, 17 (1), pp. 47-54.

306. Christopher, J. and Ramarao, P. 1964. A case of cavernous haemangioma in a chicken.—*Indian vet. J.*, Madras, 41 (4), pp. 252-260.
307. Christensen, G. C. 1964. The Imperial Sandgrouse in the Thar Desert of India.—*Occ. Pap. Biol. Soc. Nevada*, No. 2 (1963), pp. 1-7.
308. Christensen, G. C., Bohl, W. H. and Bump, G. 1964. A study and review of the common Indian Sandgrouse and the Imperial Sandgrouse.—*Spec. scient. Rep. U. S. Dept. Int. Fish. Wildl. Serv.*, Washington, No. 84, pp. 1-71.
309. Clarke, G. L. and Kelly, M. G. 1964. Variation in transparency and in bioluminescence on longitudinal transects in the western Indian Ocean.—*Bull. Inst. Ocean Org.*, Monaco, 64 (1319), pp. 1-20.
310. Clay, T. 1964. Geographical distribution of the Mallophaga (Insecta).—*Bull. Brit. Orn. Cl.*, London, 84 (1), pp. 14-16.
311. Clegg, M. T. 1964. Neural control of reproduction in sheep (abstract).—*Bull. natn. Instn. Sci. India*, New Delhi, No. 27, p. 19.
312. [Convener]. 1964. Marine biological association of India. Symposium on Crustacea (Cochin—January 1965).—*Crustaceana*, Leiden, 7 (1), p. 80.
313. Coe, R. L. 1964. Diptera from Nepal. Syrphidae.—*Bull. Brit. Mus. (Nat. Hist.) Ent.*, London, 15, pp. 255-290, 12 figs.
- Dalaya, V. P. 1964.—See Dorge, S. K. and Dalaya, V. P. 1964.
314. Dalela, R. C. 1964. Gustatory cutaneous organs of *Rhynchobdella aculeata* (Bloch).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 496.
315. Damodar, P. and Perti, S. L. 1964. Toxicity of chlorinated turpentine to flies and mosquitoes.—*Indian J. Ent.*, New Delhi, 26 (2), pp. 223-230.
316. Damodar, P., Perti, S. L. and Agarwal, P. N. 1964. The toxicity of solvent extract of the fungus, *Macrosporium* sp. to flies and mosquitoes.—*Indian J. Ent.*, New Delhi, 26 (1), pp. 110-112.
317. Dang, K. and Pant, J. C. 1964. A qualitative analysis of the free amino acids in the developmental stages of several insects.—*Indian J. Ent.*, New Delhi, 26 (3), pp. 268-274.
- Dang, K. 1964.—See Pant, N. C., Pant, J. C. and Dang, K. 1964.
- Dangwal, A. K. 1964.—See Varma, C. P. and Dangwal, A. K. 1964.
318. Daniel, A. and Ghosh, A. 1964. On some Polychaetes from little Andamans.—*Curr. Sci.*, Bangalore, 33 (8), p. 249.
319. Daniel, A. and Ghosh, A. 1964. A new cirripede of the subgenus *Megabalanus* from the stomatopod (*Squilla* sp.) from Madras.—*Ann. Mag. nat. Hist. Lond.*, London, (13) 6 (68) [1963], pp. 477-479.
320. Daniel, J. C. 1964. Field guide to the amphibians of Western India.—*J. Bombay nat. Hist. soc. Bombay*, 60 (2), pp. 690-702.
321. Daniel, J. C. and Shull, E. M. 1964. A list of the reptiles and amphibians of the Surat Dangs, South Gujarat.—*J. Bombay nat. Hist. Soc.*, Bombay, 60, pp. 737-743.
322. Daniel, J. C. and Selukar, T. G. 1964. Occurrence of the fungoid frog *Rana malabarica* (Bibr.) at Jagdalpur, Bastar district, M. P.—*J. Bombay nat. Hist. Soc.*, Bombay, 60, pp. 743-744.
323. Daniel, J. C. and Verma, K. K. 1964. Occurrence of the Ceylon Kaloula, *Kaloula pulchra taprodanica* H. W. Parker (Family Microhylidae) at Jagdalpur, Bastar district, M. P.—*J. Bombay nat. Hist. Soc.*, Bombay, 60, pp. 744-745.
- Daniel, J. C. 1964.—See Grandison, A. G. and Daniel, J. C. 1964.
- Dargan, K. S. 1964.—See Singh, A., Butani, D. K. and Dargan, K. S. 1964.
324. Das, A. R. K. 1964. Breeding biology of *Nectarini asiatica* (Batham).—*Pavo*, Baroda, 2 (3), pp. 71-83.
325. Das, B. C. 1964. Effects of exogenous avian and mammalian gonadotrophins on gonadal responses in immature and hypophysectomized female

- chickens (*Gallus domesticus*).—*Bull. natn. Inst. Sci. India*, New Delhi, No. 27, pp. 41-50.
326. Das, D. N., Mohanti, G. C. and Mohapatra, S. C. 1964. Lumbar paralysis in goats—a case record.—*Indian vet. J.*, Madras, 41 (3), pp. 227-233.
- Das K. K. 1964.—See Chaudhuri, D. K., Das, K. K. and Chattopadhyay, A. K. 1964.
- Das, K. K. 1964.—See Chaudhuri, D. K. and Das, K. K. 1964.
327. Das, P. K. and Roy, D. N. 1964. Electrocardiographic observations in cockroach (*Periplaneta americana* Linn.).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 461.
328. Das, S. M. 1964. Observations on gonad condition and breeding season in some fishes of North India.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 495.
329. Das, S. M. 1964. I. The functional morphology of the urinogenital organs of *Ophiocephalus marulius* Hamilton.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, Pt. 3 (Abstracts), p. 494.
330. Dasgupta, B. 1964. Some uses of acridine orange in the study of parasitology.—*Proc. zool. Soc.*, Calcutta, 17 (7), pp. 101-123.
- Dasgupta, D. R. 1964.—See Prasad, S. K. and Dasgupta, D. R. 1964.
331. Dasgupta, J. 1964. Submicroscopic morphology of *Euglena gracilis* Klebs.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 441-442.
332. Dasgupta, J. 1964. Submicroscopic morphology of *Euglena gracilis* Klebs.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 466.
333. Dasgupta, J. 1964. The cytology of *Cybister limbatus*, *Gymnopleurus koengii*, *Aulacophora* and *Alcides* sp. (Insecta : Coleoptera).—*Proc. zool. Soc.*, Calcutta, 16 (1) [1963], pp. 123-134.
334. Dasgupta, S. K. 1964. *Culicoides (Trishecodes) anophelis* Edwards [Insecta : Diptera : Ceratopogonidae] as an ectoparasite of insect vectors.—*Proc. zool. Soc.*, Calcutta, 17 (1), pp. 1-20.
335. Dasgupta, S. K. 1964. Mermithid infections in two nematoceran insects.—*Curr. Sci.*, Bangalore, 33 (2), p. 55.
- Dasgupta, S. K. 1964.—See Sen, P. and Dasgupta, S. K. 1964.
336. Dasgupta, S. R., Maiti, A., Sen, P. B. and Datta-Chaudhuri, B. 1964. Comparative studies on the structural variations of vertebrate skeletal myoneural junctions.—*J. exp. med. Sci.* Calcutta, 8 (3), pp.86-102.
- Dass, B. 1964.—See Satija, R. C. and Dass, B. 1964.
337. Datt, N. 1964. Distribution of major pests of jute in the Indian Union.—*Proc. zool. Soc.*, Calcutta. 17 (2), pp. 125-133.
338. Datta, N. C. 1964. Observation on the musculature of the pelvic girdle of *Mugil corsula* Ham. *Sci. & Cult.*, Calcutta, 30, pp. 401-403.
339. Dattagupta, A. K. and Menon, P. K. B. 1964. Morphology and histology of the males of *Acanthobonellia*.—*Proc. R. Soc. Edinburgh*, London, 58B (4), pp. 267-276.
340. Datta-Munshi, J. S. 1964. Chloride cells in the gills of fresh-water teleosts.—*Quart. J. micr. Sci.*, London, 105, pp. 79-89.
341. David, A. L. 1964. Insecticidal control of the bhendi leafhopper, *Empoasca devastans* D.—*Madras agric. J.*, Coimbatore, 51 (1), pp. 21-23.
342. David, A. L., Kalyanaraman, V. M. and Narayanaswamy, P. S. 1964. Distribution, status and seasonal variations in population density of the pests of sugarcane in Madras State.—*Indian J. Sug. Cane Res. Develop.*, New Delhi, 8 (4), pp. 367-377.
343. David, B. V., Menon, P. P. and Babu, P. C. S. 1964. *Hyalospila leuconeurella* Ragonot, a new fruit borer pest of mango in South India.—*Sci. & Cult.*, Calcutta, 30 (9), p. 464.
344. David, B. V. and Radha, N. V. 1964. The castor white-fly, *Trialeurodes ricini* Misra and its control.—*Madras agric. J.*, Coimbatore, 51 (2), pp. 90-91.

345. David, B. V. and Sundarababu, P. C. 1964. Preliminary investigations on the varietal incidence and control of the mango nut weevil, *Cryptorhynchus mangiferae* Fabr.—*Madras agric. J.*, Coimbatore, 51 (2), p. 91.
- David, B. V. 1964.—See Rangarajan, A. V. and David, B. V. 1964.
- David, B. V. 1964.—See Vijayaraghavan, S., Kalyanaraman, V. M. and David, B. V. 1964.
346. David, H. 1964. Occurrence of aphids as pests of sugarcane.—*Indian J. Sug. cane Res. Develop.* Delhi, 9 (1), p. 53.
347. David, H. and Kalra, A. N. 1964. White grub damage to sugarcane crop in Hospet area of Mysore State.—*Indian J. Sug. cane Res. Develop.* Delhi, 8 (4), pp. 428.
348. David, S. K. 1964. A note on *Heliothis armigera* H. & *Agromyza obtusa* M. affecting red gram pods and their control.—*Madras agric. J.*, Coimbatore, 51 (2), p. 90.
349. Davies, R. G. and Ahmad, R. 1964. The orthocone nautiloides of the Kala Limestone and the probable age of the Swabi Formations.—*Geol. Bull. Punjab Univ.*, Chandigarh, No. 3 (1963), pp. 1-5, 2 figs.
350. Davis, T. A. 1964. Breeding behaviour in *Ropalidia varigata*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 498-499.
351. Dayal, H. M., Saxena, B. N. and Nigam, S. S. 1964. Eradication of mites from fungal culture collections.—*Indian J. exp. Biol.*, New Delhi, 2, pp. 62-64.
352. Deb, C. and Boral, M. C. 1964. Hepatic parenchymal cell and nuclear volume and binucleated cells in hibernating toad (*Bufo melanostictus*).—*Naturwissenschaften*, Berlin, 51, pp. 543-544.
353. Deb, C., Boral, M. C. and Sarkar, C. 1964. Measurement of hepatic parenchymal cell and nuclear volume in different classes of vertebrates.—*Anat. Res.*, Philadelphia, 148 (3), pp. 499-502.
354. Deb, C. and Chakravarty, B. 1964. Effect of carbon tetrachloride intoxication on the liver of toad (*Bufo melanostictus*).—*Experientia*, Basel, 20 (10), pp. 548-549.
355. Deb, C. and Sarkar, C. 1964. Histochemical study on the distribution of acid alkaline phosphatases in liver of different classes of vertebrates.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstract), p. 441.
- Deb, C. 1964.—See Chakravarty, B. and Deb, C. 1964.
- Deb, C. 1964.—See Chatterjee, A. and Deb, C. 1964.
356. Delacour, M. J. 1964. Pheasants.—*Bull. Brit. Orn. Cl.*, London, 84 (6), pp. 97-98.
357. Deo, P. G. 1964. Roundworms of poultry.—*Indian Coun. Agric. Res.*, New Delhi, p. 146.
- Deo, P. G. 1964.—See Sahai, B. N. and Deo, P. G. 1964.
- Deo, P. G. 1964.—See Saxena, S. N. and Deo, P. G. 1964.
358. Deodikar, G. B. 1964. Tentative proposals for the expansion of research activities in bee keeping in India during the third five year plan.—*Indian Bee J.*, Delhi, 25, pp. 1-4.
359. Deodikar, G. B. 1964. Survey of Nilgiri and Kodaikanal hills for locating a regional research station.—*Indian Bee J.*, Delhi, 25, pp. 16-18.
360. Deorani, V. P. S. 1964. Preliminary histopathological observations on giga-tocotyliasis in buffaloes.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 470.
361. Deorani, V. P. S. and Dutt, S. C. 1964. The histopathological observations on the micro-coeliasis lesions in sheep.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 469-470.

362. Deoras, P. J. 1964. Rats and their control. pp. 407-418. In: *Entomology in India 1938-1963*.—New Delhi (*Ent. Soc. India*).
363. Deraniyagala, P. E. P. 1964. The beaked large scombroids of Ceylon.—*Symp. scombroid fishes. mar. biol. Ass. India*, Mandapam, Ser. 1 (1), pp. 441-442.
364. Deraniyagala, P. E. P. 1964. A comparison of the cephalic scalation of *Dermochelys coriacea* with that of the Cheloniidae (Reptilia, Testudinata).—*Senckenberg. biol.*, Frankfurt, **45**, pp. 349-352.
365. Desai, R. N. 1964. Atavism in the arterial system of *Rana tigrina* Daud.—*Naturwissenschaften*, Berlin, **51** (13), pp. 321-322.
366. Desai, R. N. and Kumar, D. 1964. Method of fitting constants and weighted squares of means to study the effect of season calving on production traits in murrh buffaloes.—*Indian vet. J.*, Madras, **41** (4), pp. 275-280.
- Desai, R. N. 1964.—See Sharma, S. C. and Desai, R. N. 1964.
- Desai, R. N. 1964.—See Uttangi, J. C. and Desai, R. N. 1964.
367. Desai, V. B. and Sirsi, M. 1964. The effect of abrus precatorius on pregnancy of mice.—*Curr. Sci.*, Bangalore, **33** (19), pp. 585-587.
- Desai, V. G. 1964.—See Sane, C. R., Kaikini, A. S., Deshpande, B. R., Koranne, G. S. and Desai, V. G. 1964.
- Deshmukh, M. G. 1964.—See Chatterji, S., Sethi, G. R., Bhamburkar, M. W. and Deshmukh, M. G. 1964.
368. Deshmukh, S. 1964. Epizoic associates of Bombay spiny lobster *Panulirus polyphagus* (Herbst).—*J. Bombay nat. Hist. Soc.*, Bombay, **60** (1), pp. 150-160., 1 pl.
- Deshpande, K. K. B. 1964.—See Tembe, V. B. and Deshpande, K. K. B. 1964.
- Deshpande, P. 1964.—See Simha, S. S. and Deshpande, P. 1964.
369. De Silva, P. H. D. and Anderson, A. A. 1964. A record of *Dinobdella ferox* (Blanchard) (Hirudidae, Hirudinea) taken from the nasal cavity of man.—*Ann. trop. Med. Parasit.*, Liverpool, **58**, pp. 1-2, 1 pl.
370. Dev, B. 1964. Stone formation (lithiasis) in the nephridial bladders of the common Indian cattle leech, *Hirudinaria granulosa* (Savigny).—*Nature*, London, **202** (4928), p. 208.
371. Dev, B. 1964. Excretion and osmoregulation in the leech, *Hirudinaria granulosa* (Savigny).—*Nature*, London, **202** (4930), p. 414.
372. Dev, B. 1964. Alkaline phosphatase in the nephridial bladder of the Indian leech, *Hirudinaria granulosa* (Savigny).—*Curr. Sci.*, Bangalore, **33** (4), pp. 114-115.
373. Dev, B. 1964. On the functional anatomy of the nephridia of the Indian leech *Hirudinaria granulosa* (Savigny).—*Acta anat.*, Basel, N. York, **59**, pp. 327-332.
374. Dev, B. 1964. Histochemical localization of adenosinetriphosphatase in the testicular and pretesticular nephridia of the Indian leech *Hirudinaria granulosa* (Savigny).—*Z. Zellforsch. mikrosk. Anat.*, Berlin, Wien, **63**, pp. 913-920, 10 figs.
375. Dev, B. 1964. On the histochemical localization of alkaline phosphatase and its physiological significance in the testicular nephridia of the Indian leech, *Hirudinaria granulosa* (Savigny).—*J. Histochem. Cytochem.*, Baltimore, **12** (5), pp. 311-314.
376. Dev, H. N. 1964. Preliminary studies on the biology of the Assam thrips, *Scirtothrips dorsalis* Hood on tea.—*Indian J. Ent.*, New Delhi, **26** (2), pp. 184-194.
377. Devendraprasad 1964. Effect of temperature on the eggs of *Strongyloides papillosus* (Rhabditidae, Nematoda).—*Ann. Zool.*, Agra, **4** (6), pp. 53-60.

378. Devi, A., Patil, F. V. and Sarkar, N. K. 1964. The variation of adenosine triphosphate and adenosine triphosphatase in *Tribolium confusum* Duval at the different stages of its life cycle.—*Experientia*, Basel, 20, pp. 17-19.
379. Devi, R. V. 1964. Cannibalism in *Frontonia leucas* Ehr.—*J. Protozool.*, Lancaster, 11, pp. 304-307.
380. Devito, J. L., Ruch, T. C. and Patton, H. D. 1964. Analysis of residual weight discriminatory ability and evoked cortical potentials following section of dorsal columns in monkeys.—*Indian J. Physiol. Pharmac.*, New Delhi, 8 (3), pp. 117-126.
381. Dey, P. K. and Ghosh, K. K. 1964. Villalstonine : its effect on the reproductive system of white rats.—*Naturwissenschaften*, Berlin, 51 (15), pp. 364-365.
- Dey, P.K. 1964.—See Chatterjee, C. and Dey, P.K. 1964.
- Dhanda, M. R. 1964.—See Saxena, S. P. and Dhanda, M. R. 1964.
382. Dhanda, V. 1964. *Haemaphysalis nepalensis* Hoogstraal, 1962 (Ixodoidea : Ixodidae), systematic position based on description of the nymph, and new host and locality records.—*J. Parasit.*, Lancaster, 50 (6), pp. 783-785.
383. Dhanda, V. 1964. Description of immature stages of *Haemaphysalis howletti* (Ixodoidea : Ixodidae) and description of adults.—*J. Parasit.*, Lancaster, 50, pp. 459-465, figs. 1-18.
384. Dhanda, V. and Ramachandra Rao, T. 1964. A report on a collection of ixodid ticks made in the North East Frontier Agency, India.—*Indian J. med. Res.*, New Delhi, 52 (11), pp. 1139-1153, 2 pls.
385. Dhar, S. C. and Bose, S. M. 1964. Studies on the specificity of crystalline protease of *Asperigillus parasiticus* on B—Chain of oxidised insulin and bovine serum albumin.—*Enzymologia*, Den Haag, 28 (2), p. 89.
386. Dharmakumarsinhji, R. S. 1964. The common sheld-duck, *Tadorna tadorna* (Linnaeus) on the Shetrunji river.—*Pavo*, Baroda, 2 (1), p. 65.
387. Dharmakumarsinhji, R. S. 1964. Red munia, *Estrilda amandava* (Linnaeus) in Saurashtra.—*Pavo*, Baroda, 2 (1), p. 65.
388. Dharmakumarsinhji, R. S. 1964. Some observations on the small Indian Pratincole (*Glareola lactea* Temminck) and other waders breeding in Bhavnagar, Saurashtra, Gujarat State.—*Pavo*, Baroda, 2 (1), pp. 1-11, 5 pls.
389. Dhingra, M. M. and Gupta, S. K. 1964. Abomasal herniation in a bullock.—*J. vet. Anim. Husb. Res.*, Delhi, 8, pp. 115-116.
390. Dhingra M. M. and Nakra, S. K. 1964. Successful repair of complete division of superficial and deep digital flexor tendons in a cow.—*J. vet. Anim. Husb. Res.*, Delhi, 8, pp. 110-112.
391. Dhodapkar, B. S., Pandit, C. N. and Awadhiya, R. P. 1964. Note on the lesions produced by ova *Schistosoma indicum* in caprine liver.—*J. vet. Anim. Husb. Res.*, Delhi, 8, pp. 117-118.
392. Dhulkhed, M. H. 1964. Observations on the food and feeding habits of the Indian oil sardine *Sardinella longiceps* Val.—*Indian J. Fish.*, Mandapam, 9A (1)[1962], pp. 37-47.
393. Digveerendrasinhji, M. S. 1964. Occurrence of the rusty spotted cat *Felis rubiginosa* Geoffroy in South Gujarat.—*J. Bombay nat. Hist. Soc.*, Bombay, 60 (1), p. 179.
394. Dikshith, T. S. S. 1964. Chromosome behaviour in *Laccifer lacca* (Kerr.), Lacciferidae—Coccoidea.—*Cytologia.*, Tokyo, 29 (3), pp. 337-345.
395. Dikshith, T. S. S. 1964. Chromosome number and sperm structure of the yellow lac insect, *Laccifer lacca* (Kerr.), Lacciferidae—Coccoidea.—*Indian J. Ent.*, New Delhi, 26 (1), pp. 127-129.
396. Dikshith, T. S. S. 1964. Spermatogenesis in *Laccifer lacca* (Kerr.), (Lacciferidae : Coccoidea)—a correction.—*Indian J. Ent.*, New Delhi, 26 (3), pp. 367-369.

397. Dimanani, P. 1964. Variation in form, orientation and mode of attachment of the cirriped, *Octolasmis stella* (Ann.) symbiotic on the gills of lobster.—*J. Anim. Ecol.*, Oxford, **33** (2), pp. 357-362.
398. Dinamani, P. 1964. Burrowing behaviour of *Dentalium*.—*Biol. Bull.*, Woods Hole, **126**, pp. 28-32, 1 fig.
399. Dinamani, P. 1964. Feeding in *Dentalium Conspicuum*.—*Proc. Malac. Soc. Lond.*, Oxford, **36** (1), pp. 1-5.
- Dissanaik, A. S. 1964.—See Jayasinghe, J. B., Fernando, S. D. A. and Dissanaik, A. S. 1964.
- Dissanaik, A. S. 1964.—See Ratnavale, W. D. and Dissanaik, A. S. 1964.
400. Dogra, G. S. and Tandon, B. K. 1964. Adaptation of certain histological techniques in situ demonstration of the neuro-endocrine system of insects and other animals.—*Quart. J. micr. Sci.*, London, **105** (4), pp. 455-466.
401. Dollfus, R. P. and Simha, S. S. 1964. Spéciatin d'un distome du genre *Astiotrema* A. Looss 1900, d'un chelonien de l'Inde.—*Bull. Mus. Hist. nat.*, Paris, (2) **36**, pp. 262-267, 1 fig.
402. Dominic, C. J. 1964. On the testicular asymmetry in some Indian birds.—*Proc. zool. Soc.*, Calcutta, **16** (1) [1963], pp. 141-146.
403. Dorai Raj, B. S. 1964. Diversity of crab muscle fibres innervated by a single motor axon.—*J. cell. comp. Physiol.*, Philadelphia, **64** (1), pp. 41-53.
404. Dorge, S. K. and Dalaya, V. P. 1964. Studies on cabbage leaf miner (*Liriomyza brassicae* Riley).—*Curr. Sci.*, Bangalore, **33** (18), pp. 560-562.
405. Doss, A. M. 1964. On the occurrence of carbohydrate in the epicuticle of spiders.—*Curr. Sci.*, Bangalore, **33** (17), pp. 530-531.
- Dronamratu, K. R. 1964.—See Spurway, H., Dronamratu, K. R. and Jayakar, S. D. 1964.
406. Drake, C. J. and Livingstone, D. 1964. Two new species of lacebugs from India (Hemiptera : Tingidae).—*Gr. Basin Nat.*, Provo, **24**, pp. 27-30.
407. Drake, C. J. and Quadri, M. A. H. 1964. A new species of lacebug from Pakistan (Hemiptera : Tingidae).—*Proc. biol. Soc.*, Washington, **77**, pp. 247-250.
408. D'souza, M. E. A. 1964. Effect of sodium barbitone on the male reproductive organs in albino rats.—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 501.
409. Dubash, P. J. and Ganti, S. S. 1964. Earthworms and amino-acids in soil.—*Curr. Sci.*, Bangalore, **33** (7), pp. 419-420.
410. Dubey, J. P. 1964. On some helminths parasitic in Indian domestic duck. (*Anas platyrhynchos domesticus*).—*Indian J. Helminth.*, Lucknow, **16**(1), pp. 33-34.
411. Dubey, J. P. 1964. A note on helminthic nodules in local piglets.—*Curr. Sci.*, Bangalore, **33** (11), pp. 340-342.
412. Dubey, J. P. and Pande, B. P. 1964. A note on some helminths of the wild duck (*Anas poecilorhyncha*).—*Indian J. Helminth.*, Lucknow, **16** (1), pp. 27-32.
413. Dubey, J. P. and Pande, B. P. 1964.—On helminthic lesions encountered in the alimentary canal of the Indian wild cat (*Felis chaus*).—*Agra Univ. J. Res. (Sci.)*, Agra, **13** (3), pp. 169-184.
414. Ducker, G. 1964. Colour vision in Mammals.—*J. Bombay nat. Hist. Soc.*, Bombay, **61** (3), pp. 572-586.
415. Durve, V. S. 1964. Molluscs and polychaete worms causing damage to the edible oyster, *Crassostrea gryphoides* (Schlotheim).—*Curr. Sci.*, Bangalore, **33** (6), p. 181.
416. Durve, V. S. 1964. A note on the food of the oyster, *Crassostrea gryphoides* (Schlotheim).—*Curr. Sci.*, Bangalore, **33** (14), pp. 434.
417. Durve, V. S. 1964. Preliminary observations on the seasonal gonadal changes and spawning in the clam, *Meretrix casta* (Chemnitz) from the marine fish farm.—*J. mar. biol. Ass. India*, Mandapam, **6** (2), pp. 241-248.

418. Durve, V. S. 1964. On the percentage edibility and the index of condition of the oyster *Crassostrea gryphoides* (Schlotheim).—*J. mar. biol. Ass. India*, Mandapam, 6 (1), pp. 128-134.
419. Durve, V. S. and Alagaraswami, K. 1964. An incidence of fish mortality in Athankarai estuary near Mandapam.—*J. Mar. biol. Ass. India*, Mandapam Camp, 6 (1), pp. 147-150.
420. Dutt, B. and Vasudevan, B. 1964. Preliminary report on clinical syndromes and pathological lesions in milk letany in calves.—*Indian J. vet. Sci.*, New Delhi, 34, pp. 15-21.
421. Dutt, B. and Vasudevan, B. 1964. Effect of feeding only dry roughage diet on hill bulls II. Histopathological changes in cardiovascular system and other tissues.—*Indian vet. J.*, Madras, 41 (3), pp. 192-196.
422. Dutt, M., Singh, S. P. and Singh, S. B. 1964. Prediction of lactation yield on part yields in Haryana cattle.—*Indian vet. J.*, Madras, 41 (4), pp. 273-275.
423. Dutt, N. 1964. Jute pests. pp. 59-71. In : *Entomology in India 1938-1963*.—New Delhi (Entom. Soc. India).
424. Dutt, N. 1964. When ramie is visited by the mealy bug.—*Indian Fmg.*, New Delhi, 14 (2), pp. 9-10, 24.
425. Dutt, N. 1964. Distribution of the major pests of jute in the Indian Union.—*Proc. zool. Soc.*, Calcutta, 17 (2), pp. 125-133.
426. Dutt, N. H. G. 1964. The yolk-nucleus in the oocytes of *Anabas scandens* (Teleostei).—*Quart. J. Micr. Sci.*, London, 105 (3), pp. 349-352.
427. Dutt, S. C. and Srivastava, H. D. 1964. Studies on the life history of *Orientobilharzia turkistanicum* (Skryabin, 1913) Dutt and Srivastava, 1955 (Preliminary report).—*Curr. Sci.*, Bangalore, 33 (24), pp. 752-753.
- Dutt, S. C. 1964.—See Deorani, V. P. S. and Dutt, S. C. 1964.
428. Dutta, A. K. 1964. Zoological results of the Indian Cho-Oyu Expedition (1958) in Nepal. Part 2. The collecting Stations.—*Rec. Indian Mus*, Delhi, 59 (3), pp. 225-234.
429. Dutta, A. K. 1964. Zoological results of the Indian Cho-Oyu Expedition (1958) in Nepal. Part 6. Pisces (in part).—*Rec. Indian Mus.*, Delhi, 59 (3), pp. 245-252.
- Dutta, A. K. 1964.—See Menon, A. G. K. and Dutta, A. K. 1964.
- Dutta, K. C. 1964.—See Tewari, J. P., Dutta, K. C. and Mishra, S. S. 1964.
- Dutta-Chaudhuri, R. 1964 —See Sarkar, H. L. and Dutta-Chaudhuri, R. 1964.
430. Dwivedi, S. N. 1964. Ecologie, morphologie et biologie comparees des deux especes du genre *Lepidorhombus* L. *megastoma* (Donovan) et *L. boscii* (Risso). Etude de leurs races et populations. —*Rev. Trav. Inst. Peches marit.*, Paris, 28, pp. 321-399.

E

431. Eapen, K. J., Srivastava, P. N. and Razanasir, M. M. 1964. Relationship between some seminal constituents in buffalo semen.—*Indian vet. J.*, Madras, 41 (4), pp. 284-286.
432. Edward, J. C. and Misra, S. L. 1964. *Criconemoides magnoliae* n. sp. and *C. juniperi* n. sp. (Nematoda : Criconematidae) from Kumaon region, Uttar Pradesh, India.—*Nematologica*, Leiden, 10 (1), pp. 95-100.
433. Edward, J. C. and Misra, S. L. 1964. *Hemicriconemoides consmunis* n. sp. and *H. litchi* n. sp. (Nematoda : Criconematidae), from Uttar Pradesh, India.—*Nematologica*, Leiden, 9 (3) [1963], pp. 405-411.
434. Ekanayake, U. B. M. 1964. Preventive measures in the control of the red weevil pest.—*Ceylon Cocon. Plrs. Rev.*, Lunuwila, 3 (2), pp. 45-46.

435. Endregat, E. 1964. Helminths and helminthic diseases in Assam.—*Indian vet. J.*, Madras, **41** (8), pp. 538-542.
436. Evans, G. O and Till, W. M. 1964. A new species of *Dermanyssus* and a redescription of *Steatonyssus superans* Zemskaya (Acari: Mesostigmata).—*Acarologia*, Paris, **6**, pp. 624-631, figs. 1-10.
- F
437. Fain, A. and Bafort, J. 1964. Les acariens de la famille Cytoditidae (Sarcoptiformes) description de sept especes nouvelles.—*Acarologia*, Paris, **6**, pp. 504-528.
438. Fernando, C. H. 1964. A guide to the freshwater fauna of Ceylon. Supplement I.—*Bull. Fish. Res. Stn.*, Ceylon, **16** (1) (1963), pp. 29-38, 2 figs.
- Fernando, C. H. 1964.—See Karim, A. and Fernando, C. H. 1964,
- Fernando, W. W. D. 1964.—See Jayasinghe, J. B., Fernando, S. D. A. and Fernando, W. W. D. 1964.
439. Fernando, S. D. A. 1964. Therapy of ascariasis in dogs and cats with 3-31 Diethylthiadicarbocyanine Iodide.—*Indian vet. J.*, Madras, **41** (11), pp. 740-747.
- Fernando, S. D. A. 1964.—See Jayasinghe, J. B., Brito-Babapulle, L. A. P. and Fernando, S. D. A. 1964.
- Fernando, S. D. A. 1964.—See Jayasinghe, J. B., Fernando, W. W. D., and Fernando, S. D. A. 1964.
440. Fot-dar, D. N. 1964. On the morphology of *Rhabdias bufonis* (Schrank, 1788) Stiles and Hassal, 1905 from *Bufo viridis* in Kashmir and review of previous work on some amphibian species of the genus.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 470-471.
- Freitas, Y. M. 1964.—See Amonkar, S. V. and Freitas, Y. M. 1964.
- G
441. Ganapati, P. N., Narasimhamurti, C. C. and Shanthakumari, K. 1964. A new haplosporidian parasite *Coelosporidium schmackeriae* from the body cavity of a marine copepod *Schmackeria serricudata*.—*Proc. Indian Acad. Sci.*, Bangalore, **60B**, pp. 309-314.
442. Ganapati, S. V. 1964. A hydrobiological study of the river Coorem in Madras, South India, with special reference to fisheries.—*Arch. Hydrobiol.*, Stuttgart, **60**, pp. 200-224.
443. Gangrade, G. A. 1964. Losses to tur (*Gajanus cajan*) by *Melanacromyza obtusa* Malloch.—*Indian J. Ent.*, New Delhi, **26** (3), pp. 364-365.
444. Gangrade, G. A. 1964. Female reproductive organs of *Necrocia sparares* Westwood (Phasmidae: Phasmida).—*Entomologist*, London, **97**, pp. 201-208.
445. Ganguli, N. C., Sud, S. K. and Bhalrao, V. R. 1964. N-terminal amino acids of buffalo milk caseins.—*Indian J. dairy. Sci.*, Bangalore, **17** (4), pp. 119-123.
446. Ganguly, R. N. and Ghosh, M. R. 1964. Coccoids of Tripura.—*Indian J. Ent.*, New Delhi, **26** (3), pp. 358-359.
447. Ganguly, B. 1964. Movement in amoeboid cells of different sponges and its significance in aggregation.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstract), p. 450.
- Ganguly, B. 1964.—See Mukherjee, S. and Ganguly, B. 1964.
448. Ganguly, D. N. and Nag, A. C. 1964. Functional morphology of the pectoral girdle and the acrenial myomeric musculature of a bathonic teleostean fish *Ophichthys boro*.—*Anat. Anz.*, Leipzig, **115** (5), p. 405.
449. Ganguly, D. N. and Nag, A. C. 1964. On the organisation of the myomeric musculature of some benthonic teleostean fishes with special reference to the functional morphology.—*Anat. Anz.*, Leipzig, **115**, pp. 418-446.

450. Ganguly, D. N. and Nanda, D. K. 1964. Histological studies on the corpora allata of the female cockroach *Periplaneta americana* (Linn.).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, Pt. 3 (Abstracts) pp. 484-485.
452. Ganguly, D. N., Sarkar, S. P. and Mitra, B. 1964. On the biology of *Ophiocephalus stewartii* Playfair.—*Proc. zool. Soc.*, Calcutta, **16** (1) [1963], pp. 195-200.
453. Ganguly, G. 1964. Anatomy of the larval salivary glands of *Simulium ornatum* (Diptera) and cocoon spinning by the pharate pupa.—*Patna Univ. J.*, Patna, **19** (2), pp. 57-66.
- Ganti, S. S. 1964.—See Dubash, P. J. and Ganti, S. S. 1964
454. Ganguly, G. 1964. Notes on the anatomy and histology of the larva of *Ceroplatus testaceus*, Dalm.—*Patna Univ. J.*, Patna, **19** (4), pp. 1-8 1 pl.
455. Garg, B. L. 1964. The cranial osteology of the mouse tailed bat, *Rhinopoma hardwickei hardwickei* Gray. Part II. (Microchiroptera, Rhinopomatidae).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 492.
456. Garg, B. L. 1964. The cranial osteology of *Cynopterus sphinx gangeticus* Anderson. Part I—(Megachiroptera, Pteropodidae).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 488-489.
457. Garg, B. L. 1964. The skull of *Taphozous kachensis kachensis*, Dobson. Part III—(Microchiroptera, Emballonuridae).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, pt. 3 (Abstracts), p. 438.
458. Garg, B. L. 1964. On the significance of palate index in Chiroptera.—*J. Anim. Morph. Physiol.*, Baroda, **11**, pp. 309-311.
- Garg, L. C. 1964. See Chhabra, R. S., Mehta, R. K., Garg, L. C. and Lanchand, 1964.
459. Garg, S. P. and Sharma, G. L. 1964. Comparative histopathological studies on rabbits infected with lapinised and caprinised rinderpest virus.—*Indian vet. J.*, Madras, **41** (11), pp. 719-728.
460. Gee, E. P. 1964. The Indian wild ass : a survey, February 1962.—*J. Bombay nat. Hist. Soc.*, Bombay, **60**, pp. 516-529.
461. Gee, E. P. 1964. The wild life of India. London (Collins) 1964, pp. 1-192, 76 pls.
462. Gee, E. P. 1964. The origin of life.—*Agra Univ. J. Res. (Sci.)*, Agra, **12** (2) [1963], pp. 1-47, 9 figs.
463. George, J. C. and Bokdawala, F. D. 1964. Cellular organisation and fat utilization in fish muscle.—*J. Anim. Morph. Physiol.*, Baroda, **11** (1), pp. 124-132.
464. George, J. C. and Chinoy, N. J. 1964. Cytochemical evidence for nuclear origin of lipids in cultured muscle cells, a basis for a concept of genetic control in lipid synthesis.—*J. Anim. Morph. Physiol.*, Baroda, **11** (1), pp. 105-118.
465. George, J. C. and Iype, P. T. 1964. Fatty acid oxidation by breast muscle homogenates of a migratory starling.—*Pavo*, Baroda, **2**(3), pp. 84-87.
466. George, J. C. and Naik, D. V. 1964. Cyclic changes in the thyroid of the migratory starling, *Sturnus roseus* (Linnaeus).—*Pavo*, Baroda, **2** (1), pp. 37-47, 8 pls.
467. George, J. C. and Naik, D. V. 1964. Cyclic histological and histochemical changes in the pancreas in relation to blood glucose levels in the migratory starling, *Sturnus roseus* (Linnaeus).—*Pavo*, Baroda, **2** (2), pp. 88-95.
468. George, J. C. and Nair, K. S. S. 1964. Quantitative study of changes in fat and glycogen during metamorphosis of the dermestid beetle *Anthrenus vorax* Waterhouse.—*J. Anim. Morph. Physiol.*, Baroda, **11** (1), pp. 162-172.

469. George, J. C., Susheela, A. K. and Vallyathan, N. V. 1964. Histochemical evidence for biochemical differentiation and regional specialization in the pectoralis muscle of the house sparrow.—*Pavo, Baroda*, 2 (2), pp. 115-119.
470. George, J. C. and Vallayathan, N. V. 1964. Lipase and succinic dehydrogenase activity of the particulate fractions of the breast muscle homogenate of the migratory starling *Sturnus roseus* in the pre-migratory and post-migratory periods.—*J. Cell. comp. Physiol.*, Philadelphia, 63, pp. 381-391.
- George, J. C. 1964.—See Chandra-Bose, D. A. and George, J. C. 1964.
- George, J. C. 1964.—See Khinoy, N. J. and George, J. C. 1964.
- George, J. C. 1964.—See Naik, D. V. and George, J. C. 1964.
- George, J. C. 1964.—See Susheela, A. K. and George, J. C. 1964.
- George, J. C. 1964.—See Vallayathan, N. V., Cherman, K. M. and George, J. C. 1964.
- George, J. C. 1964.—See Vallyathan, N. V. and George, J. C. 1964.
- George, K. C. 1964.—See George, M. J. and George, K. C. 1964.
- George, K. C. 1964.—See Sebastian, M. J. and George, K. C. 1964.
- George, K. C. 1964.—See Venkataraman, G. and George, K. C. 1964.
471. George, M. J. 1964. Anatomy of the crab, *Nep- tunus sanguinolentus* Herbst, 4. Reproductive system and embryological studies.—*J. Madras Univ.*, Madras, 33 (3), pp. 289-304.
472. George, M. J. 1964. On the breeding of penaeids and the recruitment of their postlarvae into the backwaters of Cochin.—*Indian J. Fish.*, Mandapam, 9 A(1) [1962], pp. 110-116.
473. George, M. J. 1964. Studies on infestation of *Pistia stratiotes* Linn. By the caterpillar of *Namanga pectinicornis* Hymphs, a noctuid mnth, and its effects on *Mansonioides* breeding.—*Indian J. Malar.*, Delhi, 17 (2-3) [1963], pp. 149-155.
474. George, M. J. 1964. On the occurrence of *Metapenaeus burkenroadi* Kubo (Family : Penaeidae, Decapoda) in Indian waters.—*J. mar. biol. Ass. India*, Mandapam, 6 (2), pp. 313-314.
475. George, M. J. and George, K. C. 1964. On the occurrence of the caridean prawn *Thalassocaris lucida* (Dana) in the stomach of *Neothunnus-macropodus* (Temminck and Schlegel) from the Arabian sea.—*J. mar. biol. Ass. India*, Mandapam 6 (1), pp. 171-172.
476. George, P. C. 1964. Our current knowledge on the food and feeding habits of the Indian mackerel, *Rastrelliger kanagurta* (Cuvier).—*Symp. Scom- broid fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (2), pp. 569-573.
477. George, P. C. and George, M. J. 1964. On the location of a possible spawning area for the peneid prawn, *Metapenaeus monoceros fabricius* off Cochin.—*Curr. Sci.*, Bangalore, 33 (8), pp. 251-252.
478. George, P. V. 1964. Notes on migrant birds of north Bihar.—*J. Bombay nat. Hist Soc.*, Bombay, 61 (2), pp. 370-384.
479. George, Y. R. 1964. Redescription of *Suphaeroma Iriste* Heller, woodboring isopod from South East coast of India.—*J. Timb. Dry. Preserv. Ass. India*, Dehra Dun, 10 (4), pp. 12-16.
480. Ghai, S. 1964. Mites. pp. 385-396. In : *Entomology in India 1938-1963*. New Delhi (Entom. Soc. India).
- Ghani, M. A. 1964.—See Syed, R. A., Qureshi, M. and Ghani, M. A. 1964.
481. Ghauri, M. S. K. 1964. New fig leaf-hopper (Homoptera : Cicadelloidea) from India with redescription of allied species under new genera.—*Ann. Mag. nat. Hist. Lond.*, London, (13) 6 (68) [1963], pp. 465-475.

482. Ghauri, M. S. K. 1964. A new species of *Empoasca* Walsh (Homoptera : Cicadelloidea) attacking tea in Argentina.—*Ann. Mag. nat. Hist.*, London, (13) 7, pp. 189-192.
483. Ghauri, M. S. K. 1964. A new genus based on *Orosius moculatus* Pruthi and generic re-assignment of some Pruthi's species of Cicadelloidea (Auchenorrhyncha : Homoptera).—*Ann. Mag. nat. Hist. Lond.*, London, (13) 6 (69) [1963], pp. 559-563.
484. Ghauri, M. S. K. 1964. The male genitalia of *Phalix titan* Fennah (Homoptera : Tettigometridae).—*Proc. R. ent. Lond.*, London, (B) 33, pp. 53-55.
485. Ghosal, B. C. 1964. Observations on the therapeutic actions of the indigenous plant *Solanum nigrum* in the treatment of ascites in dog.—*J. vet. Anim. Husb. Res.*, New Delhi, 8 pp. 121-125.
486. Ghose, K. C. 1964. The kidneys of two land-snails [Mollusca : Pulmonata].—*Proc. zool. Soc.*, Calcutta, 17 (2), pp. 159-167.
487. Ghose, K. C. 1964. Morphogenesis of the pericardium and heart, kidney and ureter, and gonad and gonoduct in the giant land snail, *Achatina fulica* Bowdich.—*Proc. zool. Soc.*, Calcutta, 16 (1) [1963], pp. 201-204.
488. Ghose, K. C. 1964. The structures of the heart of *Achatina fulica* and *Macrochlamys indica* and pace-maker mechanism and refilling of the auricle in *A. fulica* with a discussion on the same in gastropods.—*Philippine J. Sci.*, Manila, 93 (2), pp. 219-229.
- Ghose, K. K. 1964.—See Dey, P. K. and Ghose, K. K. 1964.
489. Ghose, R. K. 1964. A new rat of the genus *Rattus* Fischer, 1803 [Mammalia] from Darjeeling district, West Bengal, India.—*Proc. zool. Soc.*, Calcutta, 17 (2), pp. 193-197.
- Ghose, A. 1964.—See Daniel, A. and Ghose, A. 1964.
- Ghosh, A. 1964.—See Southwick, C. H., Ghose, A. and Louch, C. D. 1964.
490. Ghosh, A. K. and Raychaudhuri, D. N. 1964. A preliminary account of bionomics and taxonomy of aphids from Assam.—*J. Asiat. Soc.*, Calcutta, (4) 4 (3-4) [1962], pp. 101-114.
- Ghosh, K. K. 1964.—See Pillay, T. V. R. and Ghosh, K. K. 1964.
- Ghosh, M. R. 1964.—See Ganguli, R. N. and Ghosh, M. R. 1964.
491. Ghosh, P. K. 1964. Haematological investigations in Rajasthani breed of sheep. 1. Blood haemoglobin levels.—*Indian vet. J.*, Madras, 41 (7), pp. 459-462.
492. Ghosh, P. K., Purohit, K. G. and Prakash, I. 1964. Studies on the effects of prolonged water deprivation on the Indian desert gerbil, *Meriones hurrianae*.—*Euvion, Physiol. in Arid Conditions Proc. Lucknow Symp.* (1962). Unesco, Paris. 1964, pp. 301-306.
- Ghosh, P. K. 1964.—See Chaudhuri, D. K. and Gohsh, P. K. 1964.
493. Ghosh, S. K. 1964. Isecticidal control of termite, *Microtermes* sp. (Macrotermitinae, Termitidae, Isoptera) damaging wheat crop.—*Indian Agric.*, Calcutta, 8 (2), pp. 88-91.
494. Ghosh, S. M. and Hati, A. K. 1964. Studies on the biological control of mosquitoes.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 479-480.
495. Ghosh, S. M. and Hati, A. K. 1964. *Oedogonium princeps* (Chlorophyceae-Oedogoniaceae) an useful agent for biological control of *Anopheline* larva.—*Sci. & Cult.*, Calcutta, 30 (9), pp. 461-462.
- Gibbs, C. J. 1964.—See Shah, K. V., Gilotra, S. K., Gibbs, C. J. and Rozeboom, L. E. 1964.
496. Giese, A. C., Krishnaswamy, S., Vasu, B. S. and Lawrence, J. 1964. Reproductive and biochemical studies on a sea urchin, *Stomopneustes variolaris* from Madras harbour.—*Comp. Biochem. Physiol.*, London, 13, pp. 369-380.

497. Gill, B. S. 1964. A procedure for the indirect haemagglutination test for the study of experimental *Trypanosoma evansi* infections.—*Ann. trop. Med. Parasit.*, Liverpool, **58** (4), pp. 473-480.
- Gill, J. S. 1964.—See Swarup, G., Sethi, C. L. and Gill, J. S. 1964.
- Gilotra, S. K. 1964.—See Shah, K. V., Gilotra, S. K., Gibbs, C. J. and Rozeboom, L. E. 1964.
498. Godavari Bai, S., Krishnamurthi, K. and Majumder, S. K. 1964. Malathion for stored product insect control.—*Inst. Pest Control.*, London, **6** (6) pp. 9-10.
- Goel, K. A. 1964.—See Agrawal, V. P. and Goel, K. A. 1964.
499. Goil, M. M. 1964. Physiological studies on trematodes lipid fractions in *Gastrophylax crumenifer*.—*Parasitology*, London, **54** (1), pp. 81-86.
500. Goil, M. M. 1964. Physiological studies on trematodes. Some trace elements and their possible role.—*J. Anim. Morph. Physiol.*, Baroda, **11** (1), pp. 228-232.
501. Goil, M. M. 1964. Physiological studies on trematodes : calcium, magnesium and phosphorus content.—*Parasitology*, London, **54**(3), pp. 567-570.
502. Gomez, R. 1964. Autotomy and regeneration in the crab, *Paratellusa hydrodromous*.—*J. Anim. Morph. Physiol.*, Baroda, **11** (1), pp. 97-104.
- Goodey, J. B. 1964.—See Siddiqi, M. R. and Goodey, J. B. 1964.
503. Gopalakrishna, A. 1964. Post-partum pregnancy in the Indian fruit bat—*Rousettus leschenaulti* (Desm.).—*Curr. Sci.*, Bangalore, **33**(18), pp. 558-559.
504. Gopalakrishnan, C. A. 1964. Congenital anomaly—cleft palate.—*Indian vet. J.*, Madras, **41**(1), pp. 734-735.
505. —Deleted.
506. Gopalakrishnan, V. and Pal, R. N. 1964. Advancements in the study of parasites of migratory fishes.—*Proc. zool. Soc.*, Calcutta, **17** (1), pp. 63-66.
507. Gopalakrishnan, V. 1964. Recent developments in the prevention and control of parasites of fishes cultured in Indian waters.—*Proc. zool. Soc.*, Calcutta, **17** (1), pp. 95-100.
508. Gopinath, K. 1964. Larval characters of *Amyosoma zeuzerae* Rohwer.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 446.
509. Gorai, A. K. 1964. Male genitalia in *Anisops bouvieri* Kirk. (Heteroptera : Notonectidae).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 482-483.
510. Gorai, A. K. 1964. Plastron in *Anisops bouvieri* Kirk. (Heteroptera, Notonectidae).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 483-484.
511. Gorai, A. K. and Raychoudhuri, D. N. 1964. Food and feeding habits of *Anisops bouvieri* Kirk. (Heteroptera : Notonectidae).—*J. Asiat. Soc.*, Calcutta, (4) **4** (3-4) [1962], pp. 135-140.
512. Goswami, S. B. 1964. The effect of thyroxine and PMS hormones on the weights of some endocrine glands and on the histology of the thyroid and the testes of buffalo bulls (*Bubalus bubalis*).—*Bull. natn. Inst. Sci. India*, New Delhi, No. 27, pp. 32-39.
- Goverdhan, M. K. 1964.—See Trapido, H., Goverdhan, M. K., Rajagopalan, P. K. and Rebello, M. J. 1964.
513. Gobindan, T. K. 1964. Assessment of quality of ice-stored prawns.—*Sci. & Cult.*, Calcutta, **30** (5), pp. 246-248.
514. Govindan, T. K. 1964. Studies on ice-stored prawns.—*Indian J. Fish.*, Mandapam, **9B** (1) [1962], pp. 7-15.
- Govindu, H. C. 1964.—See Yeraguntian, R. C. and Govindu, H. C. 1964.

515. Gowda, S. S. 1964. Fossil fish ossiculiths from the cenomanian of South India.—*Ecl. geol. Helv.*, Lausanne, **57** (2), pp. 743-746.
516. Grandison, A. G. C. and Daniel, J. C. 1964. Description of a new species of toad (Anura : Bufonidae) from Satara dist., Maharashtra, India.—*J. Bombay nat. Hist. Soc.*, Bombay, **61** (1), pp. 192-194, 2 pls.
517. Grewal, M. S. 1964. Studies on the blood parasites of the white throated munia, *Lonchura malabarica* (Linnaeus). The status of *Haemoproteus wenyoni* Sergent, 1948 [Protozoa : Sporozoa].—*Proc. zool. Soc.*, Calcutta, **17** (1), pp. 24-26.
518. Grewal, M. S. 1964. Studies on the blood-parasites of the white-throated munia, *Uroloncha malabarica* Linnaeus. (A) *Trypanosoma avium* Danilewsky, 1885. (B) *T. delhiense* sp. nov.—*Indian J. Malar.*, Delhi, **17** (1963), pp. 55-64.
519. Grewal, M. S. 1964. Experimental infection of the Punjab red-vented bulbul, *Pycnonotus cafer intermedius* Blyth, with *Plasmodium (Relictum) praecox* Grassi and Feletti, 1890 [Protozoa : Sporozoa].—*Proc. zool. Soc.*, Calcutta, **17** (1), pp. 89-94.
- Grewal, P. P. S. 1964.—See Raghava Rao, K. V. and Grewal, P. P. S. 1964.
- Groschke, A. C. 1964.—See Purohit, M. S. and Groschke, A. C. 1964.
520. Grover, P. 1964. Studies on Indian gall-midges. X. Five notable genera of the subfamily Lestremiinae. XI. Two new genera and six new species of Indian Porricondyliini (Cecidomyiidae : Diptera).—*Marcellia*, Strasbour, **31**, fasc. 2 (1963), pp. 108-141, 7 pls., fasc. 3, 189-229, 7 pls.
521. Gruneberg, H. 1964. Genetical research in an area of high natural radioactivity in South India.—*Nature*, London, **204** (4955), pp. 222-224.
- Guha, D. K. 1964.—See Sastri, V. V., Mohan, M. and Guha, D. K. 1964.
522. Guharoy, S. and Mukherjee, G. D. 1964. Use of Mahalanobis D^2 statistics in phase discrimination in desert locust males.—*Sankhya*, Calcutta, **26** (3/4), pp. 237-252.
- Guharoy, S. 1964.—Roonwal, M. L. and Guharoy, S. 1964.
523. Gulhati, K. S. 1964. Occurrence of binuclear oocytes in the Bidder's organ of male toad, *Bufo melanostictus* (Schneid.).—*Naturwissenschaften*, Berlin, **51** (4), p. 93.
524. Gulhati, K. S. 1964. The occurrence of hermaphroditism in the common Indian toad, *Bufo melanostictus* (Schneid.).—*Sci. & Cult.*, Calcutta, **30**, pp. 155-156.
525. Gundurao, H. R. and Mazumder, S. K. 1964. Intergranular space as a limiting factor for the growth of pulse beetles.—*J. econ. Ent.*, Baltimore, **57** (6), pp. 1013-1014.
526. Gunther, W. C. 1964. Oxygen uptake in heat stressed chick embryos.—*Proc. Indian Acad. Sci.*, Bangalore, **73**, pp. 261-266.
527. Gupta, A. B. and Ahmad, M. R. 1964. Some experimental observations on the use of *Scenedesmus obliquus* (Turpin) Keutzing by *Puntius ticto* (Hamilton) and *Trichogaster fasciatus* Day.—*Labdev J. Sci. Tech.*, Kanpur, **2** (3), p. 203.
- Gupta, A. N. 1964.—See Nath, O. and Gupta, A. N. 1964.
528. Gupta, A. P. 1964. Scent-apparatus morphology of *Leptocoris cortalis* H. S. (Heteroptera : Coreidea), with comments on glandular secretions in Heteroptera.—*J. N. Y. ent. Soc.*, New York, **72**, pp. 144-151, 3 figs.
529. Gupta, A. P. 1964. Musculature and mechanism of the mymphat scent-apparatus of *Riptortus linearis* H. S. (Heteroptera : Alydidae) with comments on the number, variation and homology of the abdominal scent glands in other Heteroptera.—*Proc. ent. Soc.*, Washington, **66**, pp. 12-18, 7 figs.

530. Gupta, B. B. 1964. Locomotion and some postures in the Indian hedgehogs.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 497.
531. Gupta, B. B. 1964. A note about the ecology of Pilani (Rajasthan) and the exoadaptations of Indian hedgehogs, *Paraechinus micropus micropus* Blyth and *Hemiechinus auritus collaris* Hardwickii and Gray.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 497.
532. Gupta, B. K. and Pandit, C. N. 1964. Transmission studies on a mucosal type disease in buffaloes.—*J. vet. Anim. Husband. Res.*, Delhi, 8, pp.62-67.
- Gupta, B. N. 1964.—See Mahadevan, V. and Gupta, B. N. 1964.
- Gupta, B. S. 1964.—See Arora, S. P. and Gupta, B. S. 1964.
533. Gupta, C. S. 1964. Studies on the ecology and population pattern of *Oecophylla smaragdina*, Fabr. (Formicidae : Hymenoptera) during spring in Hardwar.—*Agra. Univ. J. Res. (Sci.)*, Agra, 13 (2), pp. 59-66.
534. Gupta, D. P. 1964. Experimental acute inflammation in rabbits.—*Curr. med. Pract.*, Bombay, 8 (12), pp. 714-744.
535. Gupta, D. P. 1964. Studies on the neurosecretory cells of *Dysdercus koengii* Fabr.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 462.
536. Gupta, M. L. 1964. Chromosome number and sex chromosome mechanism in fifteen species of the Indian praying mantids.—*Curr. Sci.*, Bangalore, 33 (12), pp. 369-370.
537. Gupta, M. L. 1964. Study of the pressure mechanism of the intestinal stretch receptors in dogs.—*Indian J. Physiol. Pharmacol.*, New Delhi, 8 (4), pp. 214-2116.
538. Gupta, N. K. 1964. On a new variety of *Paramonostomum microstomum* Moghe, 1931, from the intestine of the red-wattled lapwing—*Lobivanellus indicus* (Boddart).—*Res. Bull. Panjab Univ. Sci.*, Chandigarh, 14 (3/4) [1963], pp. 175-178.
539. Gupta, N. K. 1964. On a new species of the genus *Apharyngostrigea* Ciurca, 1927, from the digestive tract of *Ardeola gravii* (Sykes) —a bird of agricultural importance.—*Res. Bull. Panjab Univ. Sci.*, Chandigarh, 14 (3/4) [1963], pp. 179-182.
540. Gupta, N. K. 1964. On *Cyclocoelum elongatum* Harrah, 1921, and remarks on the synonymy of *Cyclocoelum* (C.) *obliquum* Harrah, 1921.—*Res. Bull. Panjab Univ. Sci.*, Chandigarh, 14 (3/4) [1963], pp. 183-185.
541. Gupta, N. K. 1964. On *Paramphistomum epicitum* Fischhaeder, 1904, a parasite of the farm animals in the Panjab.—*Res. Bull. Panjab Univ. Sci.*, Chandigarh, 14, (3/4) [1963], pp. 307-311.
542. Gupta, R. 1964. *Schwartzitrema angingi* sp. nov. from the Indian darter, *Anhinga melanogaster* Pennant, with a remark on the taxonomic position of the genus *Schwartzitrema* (Vigueras, 1940) Vigueras, 1941 (Trematoda : Strigeidae).—*Rev. Biol. trop.*, Costa Rica, 12 (1), pp. 75-79.
543. Gupta, R. 1964. On *Stephanopora nigerica* sp. nov., with a brief review of the genus *Stephanopora* Odhner, 1902 (Trematoda : Echinostomatidae).—*Zool. Anz.*, Leipzig, 170 (1963), pp. 117-130.
544. Gupta, R. 1964. Four new species of the genus (*Holostephanus*) Szidat, 1936 from Indian birds, with a brief review of the genus (Trematoda : Cyathocotylidae).—*Rev. Biol. trop.*, Costa Rica, 12 (1) pp, 81-95.
545. —Deleted.
546. Gupta, S., Moulic, S. K., Chatterjee, D. P. and Bhattacharya, S. 1964. Effects of antibiotics on growing pigs.—*Proc. zool. Soc.*, Calcutta, 17 (2), pp. 199-206.
547. Gupta, S., Som, T. and Bhattacharya, S. 1964. Studies on gestation length in black Bengal goats.—*Indian vet. J.*, Madras, 41 (10), pp. 668-672.
548. Gupta, S. P. 1964. On a new trematode *Neogana ottoi* sp. n. from the intestine of *Uromastix hardwickii*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.* Calcutta, pt. 3 (Abstracts), p. 468.
549. Gupta, S. P. 1964. A new trematode, *Encylobrephus lucknowensis* sp. nov. from the intestine of a

- freshwater tortoise, *Hardella thurgi*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts) p. 468.
550. Gupta, S. S., Bhargava, R. P. and Khattri, M. K. 1964. Effects of phenformin (DBI) on the survival time of rats subjected to rarefied atmosphere simulating high altitude.—*Curr. Sci.*, Bangalore, 33 (24), pp. 749-750.
- Gupta, V. J. 1964.—See Sahni, M. R. and Gupta, V. J. 1964.
551. Gupta, V. K. 1964. Taxonomic assessment of types of Ichneumonidae in Forest Research Institute, Dehra Dun, India (Hymenoptera: Ichneumonidae).—*Pacific Insects*, Honolulu, 6 (2), pp. 231-233.
552. Gupta, V. K. 1964. Taxonomic identity of two ichneumonid parasites of *Plutella maculipennis* (Curt.) in Australia.—*Mushi*, Fukuoka, 31, pp. 37-38.
553. Gupta, V. K. 1964. Occurrence of *Amauromorpha accepta schoenobii* Viereck (Hymenoptera, Ichneumonidae) as a parasite of the paddy stem borer, *Schoenobius incertulas* in India.—*Indian J. Ent.*, New Delhi, 26 (1), pp. 109-110.
554. Gupta, V. K. 1964. Further notes on the distribution and hosts of *Isotima javensis*, an Ichneumonid parasite of the top borer of sugarcane *Scirpophaga nivella* (Hymenoptera, Ichneumonidae).—*Indian J. Ent.*, New Delhi, 26 (2), pp. 252-254.
555. Gupta, V. K. 1964. *Agathis festiva* Muesebeck, a new braconid parasite of the lac predator, *Holcocero pilverea* in India (Insecta, Hymenoptera, Braconidae).—*Curr. Sci.*, Bangalore, 33 (7), p. 220.
556. Gupta, V. P. 1964. Hitherto unrecorded taeniid tape worm of cat.—*Agra Univ. J. Res. (Sci.)*, Agra, 13 (2), pp. 49-51.
557. Gupta, V. P. and Pande, B. P. 1964. On the heterophyid genus *Haplorchis* Looss, 1899 in Indian dog with a brief note on the species reported from other hosts.—*Agra Univ. J. Res. (Sci.)*, Agra, 13 (3), pp. 161-168.
558. Gupta, Y. 1964. Chromosomal studies in some Indian Lepidoptera.—*Chromosoma*, Berlin, 15 (5), pp. 540-561.
559. Gurumurti, V. and Mohiuddin, G. 1964. Some observations on the coryzasyndrone in fowls in Andhra Pradesh.—*Indian vet. J.*, Madras, 41 (3), pp. 174-180.
- ## H
560. Hakim, Z. M. 1964. Comparative anatomy of the cervix and thorax of the adult Odonata.—*Indian J. Ent.*, New Delhi, 26 (2), pp. 152-175.
561. Haldar, D. P. 1964. A simple medium for soil protozoa.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 455-466.
562. Haldar, D. P. and Chakravarty, M. M. 1964. Cytochemical studies on three species of termite flagellates.—*Proc. zool. Soc.*, Calcutta, 17 (1), pp. 77-84.
- Handa, S. M. 1964.—See Sharma, G. P., Ramparshad and Handa, S. M. 1964.
563. Haque, A. F. M. 1964. Some late Cretaceous smaller foraminifera from West Pakistan.—*Mem. geol. Surv. Pakist.*, Karachi, 2 (3) (1962), pp. 1-33.
564. Hardy, D. E. 1964. Diptera from Nepal. The fruit flies (Diptera: Tephritidae).—*Bull. Brit. Mus. (nat. Hist.) Ent.*, London, 15, pp. 145-170, 38 figs.
565. Hartmann, G. 1964. Asiatische Ostracoden. Systematische und zoogeographische Untersuchungen.—*Int. Rev. Hydrobiol. Syst. Beih.*, No. 3, pp. 1-155, 64 pls.
566. Hasan, R. and Jafri, A. K. 1964. A physico-chemical analysis of ripe, unspawned eggs of some fresh water teleosts.—*Proc. Indian Acad. Sci.*, Bangalore, 60B, pp. 1-11.
- Hasan, R. 1964.—See Qasim, S. Z. and Hasan, R. 1964.

- Hashmi, M. H. A. 1964.—See Butani, D. K. and Hashmi, M. H. A. 1964.
- Hashmi, S. S. 1964.—See Tufail, M. and Hashmi, S. S. 1964.
567. Hasan, S. A. 1964. Maturity of gonads, spawning and seasonal variations in the population of marine male and female oysters of Karachi coast.—*Pakist. J. scient. Res.*, Lahore, **16**, pp. 141-145.
568. Hassan, Z. 1964. Investigation into the intestinal helminth load in local goats.—*Indian vet. J.*, Madras, **41** (8), pp. 543-546.
569. Hati, A. K. and Ghosh, S. M. 1964. Morphological abnormalities in anopheles and culex-mosquitoes.—*Bull. Calcutta Sch. trop. Med.*, Calcutta, **12** (4), pp. 170-171.
570. Hattangady, S. R., Vaidya, V. G. and Jamkhedkar, P. P. 1964. Disturbance in sensus staticus accompanied with unilateral facial paralysis in a horse.—*Indian vet. J.*, Madras, **41** (7), pp. 490-492, 1 pl.
571. Hennig, W. 1964. Muscidae.—*Flieg. Pal. Reg.*, Stuttgart, **253**, pp. 1057-1110.
572. Hill, J. E. 1964. Occurrence of the European free-tailed bat, [*Tadarida teniotis* (Rafinesque)] (Chiroptera : Molossidae) in India.—*J. Bombay nat. Hist. Soc.*, **60** (1963), pp. 723-725.
573. Himmatsinhji, M. K. 1964. Additions to the birds of Kutch : *Mønarcha azurea* (Boddaert) and *Muscicapa thalassina* Swainson.—*J. Bombay nat. Hist. Soc.*, Bombay, **61** (2), pp. 449-450.
574. Himmatsinhji, M. K. 1964. Miscellaneous notes. 9. Re-appearances of the hair crested or spangled, drongo [*Dicrurus hottentottus* (Linn.)] in Kutch.—*J. Bombay nat. Hist. Soc.*, Bombay, **60**, p. 734.
575. Himmatsinhji, M. K. 1964. Miscellaneous notes. II. Occurrence of the black headed cuckoo-shrike [*Coracina melanoptera* (Ruppel) in Kutch.—*J. Bombay nat. Soc.*, Bombay, **60**, p. 735.
- Hiregaudar, L. S. 1964.—See Rao, S. R., Alwar, V. S. and Hiregaudar, L. S. 1964.
- Hoogstraal, H. 1964.—See Trapido, H. and Hoogstraal, H. 1964.
576. Huque, H. 1964. Role of atomic energy in insect study and control.—*Agric. Pakistan*, Karachi, **13** (4), pp. 77-80.
577. Husain, K. O. and Singh, S. N. 1964. A study on inheritance of some economic characters and their relative importance for selection in white leghorn breed. Part I. Heritability of age and weight at sexual maturity and number and weight of eggs in white leghorn.—*Indian vet. J.*, Madras, **41** (5), pp. 336-343.
578. Husain, K. O. and Singh, S. N. 1964. A study on inheritance of some economic characters and their relative importance for selection in white leghorn breed. Part II. Genetic and phenotypic correlations between age and body weight at sexual maturity, egg production in first ninety days and average egg weight in white leghorn pullets.—*Indian vet. J.*, Madras, **41**(7), pp. 478-485.
579. Husain, K. Z. 1964. House crow's nest in a house.—*Bull. Brit. Orn. Cl.*, London, **34** (1), pp. 9-11.
- Husain, Z. 1964.—See Siddiqi, M. R. and Husain, Z. 1964.
- Hussain, M. 1964.—See Khan, M. Q. and Hussain, M. 1964.
- I
580. Ichhponaji, J. S. and Sidhu, G. S. 1964. The digestion of cellulose by rumen micro-organisms.—*Indian vet. J.*, Madras, **41**(7), pp. 467-475.
581. Ichikawa, A. L. and Kawakatsu, M. 1964. Report on freshwater planarian from North-East Nepal.—*Zool. Mag.*, Tokyo, **73**, pp. 27-31, 3 figs.
582. [India] 1964. *Entomology in India : 1938-1963* 1-529 pp.—New Delhi (*Entom. Soc. India*).

583. [India] 1964. Insects encountered in handling of food grains and their control. *Leaflet Grain storage Res & Train. Inst. (Hapur)*, (Govt. India Min. Food & Agric.), New Delhi, No. 1, 1-14 pp.
584. Inglis, C. M. 1964. Birds of the Duars. Order Coraciiformes, suborder Pici, Family Picidae, Subfamily Picinae.—*J. Bengal nat. Hist. Soc.*, Darjeeling, 32, pp. 68-73.
585. Ipe, M. I. 1964. On the anatomy of the final instar larva of *Melanagromyza obtuse* (Malloch), a pest on the developing seeds of *Cajanus indicus* (Agromyzidae : Diptera).—*Agra Univ. J. Res. (Sci.)*, Agra, 13 (3), pp. 59-72.
- Iype, P. T. 1964.—See George, J. C. and Iype, P. T. 1964.
- J
586. Jackson, M. C. A. 1964. Miscellaneous notes. 8. Occurrence of the black capped Kingfisher [*Halycon pileata* (Boddaert)] near Madurai, Madras State.—*J. Bombay nat. Hist. Soc.*, Bombay, 60, p. 733.
587. Jacob, P. D. 1964. Note on parasitological interest.—*Kerala Vet.*, Trichur, 2 (3-4), p. 116.
588. Jacob, P. D., Pably, E. P., Georgekutty, P. T. and Iyer, R. P. 1964. Microfilariae in a domestic fowl.—*Kerala Vet.*, Trichur, 2 (3-4) pp. 72-74.
589. Jacob, S. et al 1964. Effect of aureomycin on the behaviour of certain free amino acids in oil sardine (*Sardinella longiceps*) held in ice storage.—*Kerala Vet.*, Trichur, 1 (2), pp. 164-167.
- Jafri, A. K. 1964.—See Hasan, R. and Jafri, A. K. 1964.
590. Jagannathan, V. 1964. Microbiological assay of vitamin B12 in the blood and liver of bullocks.—*Indian vet. J.*, Madras, 41 (11), pp. 748-751.
- Jagannatharao, B. R. 1964.—See Sastry, M. V. A., Mangain, V. D. and Jagannatharao, B. R. 1964.
591. Jain, N. C. 1964. Studies on corynebacterium pyogenes mastitis in goats. II. The effect of toxin on the udder.—*Indian vet. J.*, Madras, 41 (8), pp. 516-520.
592. Jain, S. L., Robinson, P. L. and Roychowdhury, T. K. 1964. A new vertebrate found from the Triassic of the Deccan, India.—*Quart. J. geol. Soc. Lond.*, London, 120, pp. 115-124.
593. Jairajpuri, M. S. 1964. *Rotylenchus sheri* n. sp. (Nematoda : Tylenchida) from North India.—*Nematologica*, Leiden, 9 (3) pp. 381-385.
594. Jairajpuri, M. S. 1964. *Longidorella opisthodetphus* n. sp. (Nematoda : Dorylaimidae) from India.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 468.
595. Jairajpuri, M. S. 1964. On *Pratylenchidae crenicauda* Winslow, 1958 (Nematoda : Pratylenchinae) from Srinagar (Kashmir), India.—*Curr. Sci.*, Bangalore, 33 (11), p. 339.
596. Jairajpuri, M. S. 1964. Studies on Campyloidae and Leptonchidae (Nematoda : Dorylaimoidea) with description of *Basirotyleptus basiri* n. gen., n. sp. from India.—*Proc. helm. Soc. Wash.*, Washington, 31 (1), pp. 59-64.
597. Jairajpuri, M. S. 1964. Studies on Nygellidea n. fam. and *Belonidiridae* Thorne, 1939 (Nematoda : Dorylaimoidea) with description of ten new species from India.—*Proc. helm. Soc. Wash.*, Washington, 31 (2), pp. 173-187.
598. Jairajpuri, M. S. 1964. *Criconema taylora* n. sp. (Nematoda : Criconematidae) from South India.—*Nematologica*, Leiden, 10 (1), pp. 108-110.
599. Jairajpuri, M. S. 1964. Studies on the genus *Proleptonchus* Lordello, 1955 (Dorylaimoidea : Leptonchidae) with description of two new species from India.—*Nematologica*, Leiden, 10 (1), pp. 116-120.

600. **Jairajpuri, M. S.** 1964. *Criconemoides basili* nom. nov. [Syn. *Criconemoides goodeyi* Jairajpuri. (1963) preoccupied].—*Nematologica*, Leiden, **10**, pp. 183.
601. **Jairajpuri, M. S.** 1964. Intra-uterine egg development in *Aphelenchus avenae*.—*Nematologica*, Leiden, **10** (1), p. 183.
602. **Jairajpuri, M. S.** 1964. *Leptonema thornei* n. gen. et. n. sp. (Nematoda : Dorylaimoidea) from India.—*Nematologica*, Leiden, **10** (3), pp. 399-402.
603. **Jairajpuri, M. S.** 1964. Three new species of the genus *Tylencholaimus* de Man, 1876 (Nematoda : Dorylaimoidea) from India.—*Nematologica*, Leiden, **10**, pp. 512-518, 2 figs.
604. **Jairajpuri, M. S.** 1964. *Dorella mira* n. sp. (Nematoda : Dorylaimoidea) from India.—*Proc. helm. Soc. Wash.*, Washington, **31** (2), pp. 222-224.
605. **Jairajpuri, M. S. and Siddiqi, A. H.** 1964. On a new nematode genus *Nordia* (Dorylaimoidea : Nordiana n. subfam.) with remarks on the genus *Longidorella* Thorne, 1939.—*Proc. helm. Soc. Wash.*, Washington, **31** (1), pp. 1-9.
606. **Jairajpuri, M. S. and Siddiqi, A. H.** 1964. *Enchodelus macroroides* (Steniner, 1914) Thorne, 1939 (Nematoda : Dorylaimoidea).—*Curr. Sci.*, Bangalore, **33** (4), p. 116.
607. **Jairajpuri, M. S. and Siddiqi, A. H.** 1964. Interspecificity in *Tyleptus striatus*.—*Nematologica*, Leiden, **10** (1), pp. 182-183.
608. **Jaiswal, G. P.** 1964. A review of the genus *Lyperosomum* Looss, 1899, with the description of a new species of the subgenus *Brachylecithum* (Strom, 1940) Jaiswal, 1957.—*Zool. Jb. Syst.*, Jena, **91** (2), pp. 403-410.
609. **Jaitly, P.** 1964. Studies on the structure and behaviour of chromosomes of *Streptopelia tranquebarica* (Hermann).—*Proc. nat. Acad. Sci. India*, Allahabad, **34B** (2), pp. 173-178.
610. **James, M. T.** 1964. Diptera from Nepal. The blowflies (Diptera : Calliphoridae).—*Bull. Brit. Mus. (nat. Hist.) Lond. Ent.*, London, **15**, pp. 171-179.
- Jamkhedkar, P. P.** 1964.—See Murkibhavi, G. R., Jamkhedkar, P. P. and Kulkarni, P. E. 1964.
611. **Jangi, B. S.** 1964. Sensory physiology of the anal legs of centipedes.—*Curr. Sci.*, Bangalore, **33** (8), pp. 237-238.
- Jawanda, J. S.** 1964.—See Sethi, S. L., Jawanda, J. S. and Atwal, A. S. 1964.
612. **Jay, P.** 1964. Mother infant relations in langurs, pp. 282-304 7 figs. In : Rheingold, H. L. [Ed.]. Maternal behavior in mammals. N. Y. & London (John Wiley & Sons, Inc.) 1963.
613. **Jayakar, S. D. et al.** 1964. Abnormal cells built by the wasp *Eumenes esuriens* Fabr. : Vespoidea.—*J. Bombay nat. Hist. Soc.*, Bombay, **61** (1), pp. 208-210.
614. **Jayakar, S. D. and Spurway, H.** 1964. Winter diapause in the squalter wasps, *Antodynerus flavescens* (Fabr.) and *Chalybion bengalense* (Dahlb) (Vespoidea and Sphecoidea).—*J. Bombay nat. Hist. Soc.*, Bombay, **61** (3), pp. 662-667.
615. **Jayakar, S. D. and Spurway, H.** 1964. Bimodality of laying hatching times in *Testudo elegans* Schrepff (Chelonia).—*Nature*, London, **204**, p. 603.
- Jayakar, S. D.** 1964.—See Vandell, A. and Jayakar, S. D. 1964.
616. **Jayangourdar, I. (Mrs.)** 1964. A bio-ecological study of Nugginkari lake in Dharwar, Mysore state, South India.—*Hydrobiologia*, Den Haag, **23** (3-4), pp. 515-532.
617. **Jayaraj, S. and Basheer, M.** 1964. Biological observations on the castor leaf hopper, *Empoasca flavescens* Fabr. (Jassidae : Homoptera)—*Madras agric. J.*, Coimbatore, **51** (2), p. 89.
618. **Jayaraj, S. and Basheer, M.** 1964. External anatomy of the castor leafhopper, *Empoasca flavescens* Fabr. (Jassidae : Homoptera).—*Madras agric. J.*, Coimbatore, **51** (2), pp. 88-89.

619. Jayaraj, S. and Basheer, M. 1964. An analysis of the effects of weather factors upon the population of *Empoasca devastans* Dist. on bhendi (*Abelmoschus esculentus* Moench.)—*Madras agric. J.*, Coimbatore, 51 (2), p. 90.
620. Jayaram, K. C. and Majumdar, N. 1964. Siluroid fishes of India, Burma and Ceylon. 15. Fishes of the genus *Chaca* Gray.—*Proc. zool. Soc.*, Calcutta, 17 (2), pp. 177-181.
621. Jayaram, K. C. and Majumdar, N. 1964. Collection of fish from the Kameng Frontier Division, N. E. F. A.—*J. Bombay. nat. Hist. Soc.*, Bombay, 61 (2), pp. 264-280.
622. Jayaraman, M. S., Krishnan, R. and Sethumadhvan, Y. 1964. Outbreak of salmonellosis in guinea-pigs due to *Salmonella weltevreden*.—*Indian vet. J.*, Madras, 41 (10), pp. 675-681.
623. Jayasinghe, J. B. 1964. Promazine hydrochloride (sparine) on cardiac function and its use as a tranquilliser in captive wild animals.—*Ceylon vet. J.*, Colombo, 12, pp. 15-17.
624. Jayasinghe, J. B. 1964. Electrocardiograms of zoo animals. II. Leopard and Wallaby.—*Ceylon vet. J.*, Colombo, 12, pp. 21-23
625. Jayasinghe, J. B. 1964. Electrocardiographic evidence of cardiac hypertrophy in a hare infected with filarial worm *Brugia (Brugiella) buckleyi*.—*Ann. trop. Med. Parasit.*, Liverpool, 58, pp. 328-332.
626. Jayasinghe, J. B. and Fernando, S. D. A. 1964.—Some reptilian electrocardiograms.—*Ceylon vet. J.*, Colombo, 12, pp. 43-46.
627. Jayasinghe, J. B., Fernando, S. D. A. and Brito-Babapulle, L. A. P. 1964. The electrocardiographic patterns of *Elephas maximus*—the elephant of Ceylon.—*Brit. vet. J.*, London, 119 [1963], pp. 559-564, 2 figs.
628. Jayasinghe, J. B., Fernando, S. D. A. and Dissanaiké, A. S. 1964. Electrocardiographic evidence of cardiac hypertrophy in a hare infected with filarial worm *Brugia (Brugiella) buckleyi*.—*Ann. trop. Med. Parasit.*, Liverpool, 58, pp. 328-332, 4 figs.
629. Jayasinghe, J. B., Fernando, S. D. A. and Fernando, W. W. D. 1964. Promazine hydrochloride (sparine) on cardiac function and its use as a tranquilliser in captive wild animals.—*Ceylon vet. J.*, Colombo, 12, pp. 15-17.
630. Jayasinghe, J. B., Fernando, S. D. A. and Fernando, W. W. D. 1964. Electrocardiograms of zoo animals. II. Leopard and Wallaby.—*Ceylon vet. J.*, Colombo, 12, pp. 21-23, 1 fig.
631. Jedlicka, A. 1964. Neue Carabiden aus Indian (Coleoptera—Carabidae).—*Ent. Arb. Mus. Frey.*, Munchen, 15 (2), pp. 305-318.
632. Derath, I. 1964. Red nucleus in the mice, monkey and man.—*Indian J. Physiol. Pharmacol.*, New Delhi, 8 (3), pp. 143-148.
- Jha, B. N. 1964.—See Mishra, H. R., Prasad, J. N. and Jha, B. N. 1964.
633. Jhingran, V. G., David, A. and Ray, P. 1964. Death by cold of fish in the river Gundak, India.—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (1), pp. 195-200.
634. Jhingran, V. G. and Jena, S. 1964. Recovery of a tagged mullet, *Lizatroschelli* (Bleeker), about a year after tagging in Chilka lake, India.—*Sci. & Cult.*, Calcutta, 30 (9), pp. 464-466.
635. Jindal, M. N. and Saha, D. S. 1964. Anti-coagulant activity of accnocoumarin in experimental animals.—*Indian J. Physiol. Pharmacol.*, New Delhi, 8 (1), pp. 72-79.
636. John, B. and Quraishi, H. B. 1964. Studies on *Periplaneta americana*. IV. Pakistani populations.—*Heredity*, London, 19 (1), pp. 147-156, 1 pl.
637. Johnson, P. T. 1964. The hoplopleurid lice of the Indo-Malayan subregion (Anoplura: Hoplopleuridae).—*Misc. Publ. ent. Soc. Amer.*, College Park, Md, 4, pp. 68-102.

638. Johnston, A. 1964. Host list of insects recorded in the South East Asia and Pacific region. *Hevea brasiliensis* Rubber.—*Tech. Docum. FAO. Plant Prot. Comm. S. E. Asia*, No. 7. 2nd edn. [pt. 2], pp. 4-8 multigraph. Bangkok, [A revision : of B. A. E. A50 423].
639. Jolly, M. S., Subba Rao, S. and Krishnaswami, S. 1964. Effect of plane of inclination on egg laying by *Bombayx mori* L.—*Indian J. exp. Biol.*, New Delhi, 2, pp. 162-166.
- Jolly, M. S. 1964.—See Sengupta, K., Jolly, M. S. and Krishnaswami, S. 1964.
640. Jones, S. 1964. Central Marine Fisheries Research Institute Oceanographic station list.—*Indian J. Fish.*, New Delhi, 9A (1) [1962], pp. 213-432.
641. Jones, S. 1964. Notes on animal associations. 4. The starfish, *Pentaceros hedemanni* (Lutken) and the hesionid polychaete, *Podarke angustifrons* (Grube).—*J. mar. biol. Ass. India*, Mandapam, 6 (2), pp. 249-250.
642. Jones, S. 1964. A preliminary survey of the common tuna bait fishes of Minicoy and their distribution in the Laccadive Archipelago.—*Symp. Scombroïd fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (2), pp. 643-630.
643. Jones, S. 1964. On the introduction of tilapia (*Tilapia mossambica* Peters) as a tuna live-bait in the island of Minicoy in the Indian Ocean.—*Symp. Scombroïd fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (2), pp. 691-692.
644. Jones, S. 1964. The phenomenal fish mortality in the Arabian Sea in 1957. A speculation on the possible identity of the species concerned.—*Symp. Scombroïd fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (2), pp. 713-718.
645. Jones, S. and Kumaran, M. 1964. Eggs, larvae and juveniles of Indian scombroïd fishes.—*Symp. Scombroïd fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (1), pp. 343-378.
646. Jones, S. and Kumaran, M. 1964. Distribution of larval bill fishes (Xiphiidae and Istiophoridae) in the Indo-Pacific with special reference to the collections made by the Danish "Dana" Expedition.—*Symp. Scombroïd fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (1), pp. 483-498.
647. Jones, S. and Kumaran, M. 1964. On the occurrence of the fishes of the family Schindleriidae in the Indian Ocean.—*Curr. Sci.*, Bangalore, 33 (5), p. 145.
648. Jones S. and Kumaran, M. 1964. Notes on eggs, larvae and juveniles of fishes from Indian waters. XII. *Myripristis murdjan* (Forsk.) and XIII *Holecentrus* sp.—*Indian J. Fish.*, Mandapam, 8A (1) [1962], pp. 155-167.
649. Jones S. and Kumaran, M. 1964. On the genus *Schindleria* Giltay from the Indian Ocean.—*J. mar. biol. Ass. India*, Mandapam, 6 (2), pp. 257-264.
650. Jones, S. and Kumaran, M. 1964. New records of fishes from the seas around India. Part-1.—*J. mar. biol. Ass. India*, Mandapam, 6 (2), pp. 285-306.
651. Jones, S. and Silas, E. G. 1964. A systematic review of the scombroïd fishes of India.—*Symp. Scombroïd fishes. Mar. biol. Ass. India*, Mandapam Ser. 1 (1), pp. 1-105.
652. Jones, S. and Silas, E. G. 1964. Mackerel from the Andaman Sea.—*Symp. Scombroïd fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (1), pp. 255-282.
653. Jose, K. V. 1964. The morphology of *Acanthobonellia pirotanensis* n. sp. a Bonellia from the gulf of Kutch, India.—*J. Morph.*, Philadelphia, 115 (1), pp. 53-68.
654. Joseph, A. N. T. 1964. A new species of *Stenocranus* : *S. ajmerensis* sp. nov. (Araeopidea : Fulgoroidea : Homoptera).—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (2), pp. 460-462.
655. Joseph, K. J. 1964. Supplementary reproductives (Neotenic) from a colony of *Microcerotermes fletcheri* Holmg. and Holmg. (Isoptera, Termitidae).—*Curr. Sci.*, Bangalore, 33 (2), pp. 54-55.

656. Joseph, K. J. 1964. A proposed revision of the classification of the fig insects of the families Agaonidae and Torymidae (Hymenoptera).—*Proc. R. ent. Soc. Lond.*, London, **33B**, pp. 63-66.
657. Joseph, K. J. and Mathad, S. B. 1964. A new genus of termitophilous Atelurinae (Thysanura : Nicoletidae) from India.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 479.
658. Joseph, K. M. and Sebastian, A. V. 1964. The effect of mesh size on the fishing efficiency of sardine gill nets.—*Kerala vet.*, Trichur, **1** (2), pp. 180-182.
659. Joshee, A. K. 1964. Larval trombiculid mites parasitic on Bombay rats.—*J. biol. Sci.*, Bombay, **7** (1), pp. 45-50.
660. Joshi, G., Shrestha, S. L. and Darsie, R. F. 1964. First record of *Anopheles kochi* Donitz. 1901 in Nepal (Diptera : Culicidae).—*Bull. Indian Soc. Malar. Commun. Dis.*, Delhi, **1** (3-4), pp. 135-139.
661. Joshi, H. C. 1964. Cannibalism in *Lasioderma serricornis* Fabr.—*Indian J. Ent.*, New Delhi, **26** (1), pp. 122-123.
662. Joshi, H. C. and Srivastava, B. K. 1964. Insect intercepted in the processed food bari in storage.—*Bull. Grain Technol.*, Hapur, **2** (4), pp. 115-123.
- Joshi, V. K. 1964.—See Purohit, B. L., Sardeshpande, P. D. and Joshi, V. K. 1964.
663. Joslin, J., Fletcher, H. and Emlen, J. 1964. A comparison of the responses to snakes of laboratory and wild reared rhesus monkeys.—*Animal Behaviour*, London, **12** (2&3), pp. 348-352.
664. Jotwani, M. G. and Sircar, P. 1964. Studies on the extent of insect damage and germination of seeds. I. Germination of pea seeds by *Callosobruchus maculatus* (Fabricius).—*Indian J. Ent.*, New Delhi, **26** (1), pp. 130-133, 1 pl.
- Jotwani, M. G. 1964.—See Pradhan, S. and Jotwani, M. G. 1964.
- Jotwani, M. G. 1964.—See Prasad, S. K., Jotwani, M. G. and Dasgupta, D. R. 1964.

K

665. Kadam, K. 1964. Tracheation of the nymphal wing-pads of *Labidura riparia* Pall. var., *inermis* Brunner (Dermaptera).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 476.
666. Kaiser, M. N. and Hoogstraal, H. 1964. The Hyalomma ticks (Ixodoidea, Ixodidae) of Pakistan, India and Ceylon, with keys to subgenera and species.—*Acarologia*, **6** (2), pp. 257-286.
667. Kaikini, A. S. and Puranik, J. K. 1964. Intersexuality in goats (*Capra hircus* L.).—*Indian vet. J.*, Madras, **41** (12), pp. 815-819.
- Kaikini, A. S. 1964.—See Sane, C. R., Kaikini, A. S., Deshpande, B. R., Koranne, G. S. and Desai, V. G. 1964.
- Kala, P. 1964.—See Pande, B. P., Singh, P. P. and Kala, P. 1964.
- Kalode, M. B. 1964.—See Pant, N. C. and Kalode, M. B. 1964.
668. Kalra, A. N. and Chaudhary, J. P. 1964. Assessment of losses by sugarcane pests-loss caused by top borer of sugarcane.—*Indian J. Sug. Cane Res. Dev.*, New Delhi, **8** (3), pp. 261-264.
669. Kalara, A. N., Chaudhary, J. P. and Gupta, M. C. 1964. Efficacy of telodrin, a new chlorinated hydrocarbon insecticide against some of the sugarcane pests.—*Indian J. Sug. Cane Res. Dev.*, New Delhi, **9** (1) pp. 23-26.
- Kalra, A. N. 1964.—See David, H. and Kalra, A. N. 1964.
- Kalyanaraman, V. M. 1964.—See Vijayaraghavan, S., Kalyanaraman, V. M. and David, B. V. 1964.

670. Kamat, N. D. 1964. The euglenophyceae of Bombay.—*J. biol. Sci.*, Bombay, 7 (1), pp. 8-14.
671. Kanagasuntheram, R. and Kanan, C. V. 1964. The chondocranium of a 19 mm. C. R. length embryo of *Galago senegalensis senegalensis*.—*Acta. Zool., Stockh.*, Stockholm, 45 (1-2), pp. 107-121.
672. Kanakaraj, S. R. and Rao, M. A. 1964. Effect of tonicity of milieu on ovulation in the skipper frog, *Rana cyanophlyctis* (Schn.) in vitro.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 463-464.
- Kanakaraj, S. R. 1964.—See Sarkar, H. B. D., Kanakaraj, S. R. and Rao, M. A. 1964.
- Kanta, S. 1964.—See Raj, B. K., Lal, R. and Kanta, S. 1964.
- Kanan, C. V. 1964.—See Kanagasuntheram, R. and Kanan, C. V. 1964.
673. Kanungo, K. 1964. Disappearance of blood from the gut of engorged *Echinolaelaps echidninus* (Acarina : Laelaptidae).—*Ann. ent. Soc. Amer.*, Maryland, 57, pp. 427-428, fig. 1.
674. Kanungo, K. and Naegele, J. A. 1964. The haemocytes of the acarid mite *Caloglyphus berlesi* (Mich. 1903).—*J. Insect Physiol.*, London, 10, pp. 651-655, figs. 1-22.
675. Kanungo, M. S. and Patnaik, B. K. 1964. Ascorbic acid in relation to aging in the rat : uptake and concentration.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 458.
676. Kapadia, Z. S., Master, R. W. P. and Srinivasa Rao, S. 1964. Immunological studies in telson extracts of Indian and Egyptian scorpion venoms.—*Indian J. exp. Biol.*, New Delhi, 2, pp. 75-77, figs. 1-4.
677. Kapoor, S. 1964. Nutritional studies on *Rhizopertha dominica* F. (Bostrychidae : Coleoptera.) I. Effects of various natural foods on larval development.—*Indian J. Ent.*, New Delhi, 26 (3), pp. 289-295.
- Kapoor, S. 1964.—See Pant, N. C. and Kapoor, S. 1964.
678. Kapur, A. P. 1964. Zoological results of the Indian Cho-Oyu Expedition (1958) in Nepal. Part 9. Insecta.—*Rec. Indian Mus.*, Delhi, 59 (3), pp. 269-303, 2 pls.
679. Kar, A. B., Chandra, H. and Das, R. P. 1964. Response of the genital organs of prepuberal male rhesus monkeys to 3 : 5 : 3 : triiodothyronine (Abstract).—*Bull. natn. Inst. Sci. India*, New Delhi, No. 27, p. 40.
680. Kar, A. B. and Kamboj, V. P. 1964. Effect of an intrauterine device on gestation in rats.—*Indian J. exp. Biol.*, New Delhi, 2 (4), pp. 229-232.
681. Kar, A. B. and Kamboj, V. P. 1964. Spermatozoal disintegration in rats with an intra vas deferens device.—*Indian J. exp. Biol.*, New Delhi, 2 (4), p. 240.
682. Kar, N. C., Chatterjee, G. C. and Ghosh' N. C. 1964. Observations on the biosynthesis of L-ascorbic acid in rats under the influence of certain drugs.—*Sci. & Cult.*, Calcutta, 30 (1), pp. 51-52.
683. Karandikar, K. R. and Paranjape, S. Y. 1964. Studies on the semi-aquatic grasshopper.—*J. Univ. Poana (Sci. & Tech.)*, Poona, No. 26, pp. 33-56.
- Kareem, A. A. 1964.—See Muthukrishan, T. S. and Kareem, A. A. 1964.
- Karthi, K. N. K. 1964.—See Tholasilingam, T., Venkataraman, G. and Karthi, K. N. K. 1964.
- Karthi, K. R. 1964.—See Thomas, M. M. and Karthi, K. R. 1964.
684. Kashyap, H. V. and Nigwekar, V. B. 1964. The blood vascular system of *Riopa guentheri* (Peters). Reptilia : Sauria.—*Proc. Indian Acad. Sci.*, Bangalore, 59B, pp. 195-210.
685. Kasinathan, S. 1964. Fat and sex in bivalve molluscs.—*Curr. Sci.*, Bangalore, 33(8), pp. 248-249.

686. Kasinathan, S. 1964. A study of alloxan-induced "diabetes" in the estuarine clam, *Meretrix casta* (Chemnitz).—*Proc. Indian Acad. Sci.*, Bangalore, 59B, pp. 318-327, 2 figs.
687. Kasinathan, S. and Vijayaraghvan, S. R. 1964. Effect of insulin on the amino nitrogen content of free amino-acids in the blood and foot of *Meretrix casta* (Chemnitz).—*Curr. Sci.*, Bangalore, 33 (9), pp. 276-277.
688. Katagihallimath, S. S. and Bhat, P. K. 1964. Preliminary observations on the effect of some common modern insecticides on the eggs of *Heliothis armigera* Hb.—*Coll. agric. Mag.*, Dharwar, 17 (1), pp. 45-48.
689. Katiyar, J. C. and Pande, B. P. 1964. *Schistosoma indicum* infection in liver and large intestine of donkey (*Equus asinus*)—A histological study.—*Agra Univ. J. Res. (Sci.)*, Agra, 13 (3), pp. 155-160.
690. Katiyar, R. D. and Garg, R. K. 1964. Thiabendazoles as anthelmintic of outstanding efficiency.—*Indian vet. J.*, Madras, 41 (12), pp. 803-809.
691. Katiyar, R. N. 1964. Bibliography on the genus *Chilo* Zincken (Lepidoptera, Pyralidae).—*Beitr. Ent.*, Berlin, 14 (1-2), pp. 125-154.
- Kaur, K. 1964.—See Sud, B. N., Satija, R. C. and Kaur, K. 1964.
692. Kavathekar, Y. T. and Kangude, G. M. 1964. Production of freeze-dried avianized rabies vaccine (flury-strain low egg passaged) for prophylactic vaccinations in dogs. I. Testing the immunizing value of the vaccine in mice.—*J. vet. Anim. Husband. Res.*, Delhi, 8, pp. 74-79.
- Kawakatsu, M. 1964.—See Ichikawa, A. L. and Kawakatsu, M. 1964.
693. Kazimi, S. K. and Ghani, M. A. 1964. A preliminary annotated list of predators of mites in West Pakistan.—*Techn. Bull. Commonw. Inst. biol. Contr.*, Farnham Royal, Bucks, 4, pp. 67-75.
- Keeling, J. E. D. 1964.—See Ahmad, N., Keeling, J. E. D. and Wahid, A. 1964.
- Kelly, M. G. 1964.—See Clarke, G. L. and Kelly, M. G. 1964.
694. Kevan, D. K. M. *et al.* 1964. A new genus of Pyrgomorphidae (Orthoptera; Acridoidea) from Burma.—*Nor. Nat.*, Philadelphia, 363, pp. 1-7.
695. Kevan, D. K. McE. 1964. A new species of *Ramakrishnaia* Bolivar, 1918, from South India and a related new genus (Orthoptera: Pyrgomorphidae).—*Can. Ent.*, Ottawa, 96, pp. 1497-1504.
696. Kevan, D. K. McE. and Singh, A. 1964. Preliminary diagnoses of a new genus and a new subgenus of Orthacridini (Orthoptera: Pyrgomorphidae) from South India.—*Entomologist*, London, 97, pp. 173-176.
- Kewalramani, H. G. 1964.—See Savant, K. B. and Kewalramani, H. G. 1964.
697. Khajuria, H. 1964. Zoological results of the Indian Cho-Oyu Expedition (1958) in Nepal. Part 3. Mammals.—*Rec. Indian Mus.*, Delhi, 59 (3), pp. 235-237.
698. Khalsa, H. G., Wal, Y. C. and Agarwal, P. N. 1964. Insecticidal properties of *Abrus precatorius* Linn. and *Nerium odorum* Soland.—*Indian J. Ent.*, New Delhi, 26 (1), pp. 113-115.
699. Khan, A. A. and Gupta, B. N. 1964. Compound fracture of femur in a pup and its repair.—*Indian vet. J.*, Madras, 41 (5), pp. 359-361.
700. Khan, A. M., Ahmed, A. and Saxena, S. K. 1964. Attractiveness of excised roots of plants to root-knot nematode, *Meloidogyne incognita* (Kofoid & White) Chitwood.—*Indian J. exp. Biol.*, New Delhi, 2 (4), pp. 208-210.
- Khan, A. M. 1964.—See Ahmed, A. and Khan, A. M. 1964.
701. Khan, E. 1964. *Boleodorus mirus* n. sp. (Tylenchida: Boleodorinae n. subfam.) from Kufri, Simla

- (H. P.) India, with a key to the species of the genus *Boleodorus* Thorne, 1941.—*Zool. Anz.*, Leipzig, 173 (5), pp. 336-341.
702. Khan, E. 1964. *Enchodorella*, a new nematode genus in the family Dorylaimidae with description of *E. perveeni* n. sp.—*Labdev J. Sci. Tech.*, Kanpur, 2 (1), pp. 49-51.
703. Khan, E. 1964. *Longidorus afzali* n. sp. and *Xiphinema arcum* n. sp. (Nematoda : Longidoridae) from India.—*Nematologica*, Leiden, 10 (2), pp. 313-318.
704. Khan, E. and Basir, M. A. 1964. On a new species *Paurodontus neosimilis* (Nematoda : Paurodontinae) from Gorakhpur, U. P., India—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 469.
705. Khan, E. and Basir, M. A. 1964. A new nematode species, *Boleodorus abnormus* n. sp., from soil around "leechi" roots in Dehra Dun.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (abstracts), p. 469.
706. Khan, E. and Basir, M. A. 1964. *Boleodorus impar* n. sp. (Nematoda : Tylenchidae) from India.—*Proc. helm. Soc. Wash.*, Washington, 31 (2), pp. 187-190.
707. Khan, E. and Khan, S. H. 1964. *Longidorella impar* n. sp. (Nematoda : Longidorinae) from North India.—*Zool. Anz.*, Leipzig, 173 (5), pp. 345-347.
708. Khan, M. A. 1964. The possible factors controlling the secretion of invertase in the digestive tract of *Locusta migratoria* L. following emergence.—*Proc. Camb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 457.
709. Khan, M. A. 1964. Studies on the secretion of digestive enzymes in *Locusta migratoria* L. II. Invertase activity.—*Ent. exp. appl.*, Amsterdam, 7, pp. 125-130.
710. Khan, M. A. 1964. Proteolytic activity in the digestive tract of the water scorpion *Laccotrephes maculatus* Fabr. (Nepidae : Hemiptera).—*Ent. exp. appl.*, Amsterdam, 7, pp. 335-333.
711. Khan, M. A. 1964. Histological changes related to the secretion of digestive enzymes in the mid-gut and caeca of *Locusta migratoria* L. (Orthoptera : Acrididae).—*Proc. R. ent. Soc. Lond.*, London., 39A, pp. 118-124, 1 pl.
712. Khan, M. Q. 1964. Pests of oilseeds. pp. 267-271. In : *Entomology in India 1938-1963*.—New Delhi (Entom. Soc. India).
713. Khan, M. Q. and Husain, M. 1964. Predatory insects on mildew fungi, *Phyllactinia subspiralis* (Salmon) Blumer on *Dulbergia sissoo*.—*Andhra agric. J.*, Bapatla, 11 (1), pp. 26-27.
714. Khan, M. Q. and Hussain, M. 1964. Natural control of *Laphygma exiqua* by a *Mermis* sp. (Nematoda).—*Indian J. Ent.*, New Delhi, 26 (1), pp. 124-125.
715. Khan, N. H. and Ansari, J. A. 1964. DDT—resistance hazard in the Indian houseflies, *Musca domestica nebulosa* and *Musca domestica vicina*.—*Botyu-Kagaku*, Tokyo, 29 (2), pp. 15-18.
- Khan, N. H. 1964.—See Rahman, S. J. and Khan, N. H. 1964.
- 715a. Khan, N. (Md.) and Brunson, C. C. 1964. A study on relationship of specific gravity with fat content in broiler carcasses.—*Indian vet. J.*, Madras, 41 (4), pp. 264-267.
716. Khan, S. H. 1964. *Criconemoides siddiqii* n. sp. (Nematoda : Criconematidae) from North India.—*Zool. Anz.*, Leipzig, 173 (5), pp. 342-344.
717. Khan, S. H. 1964. *Sakia typica* n. g., n. sp. (Nematoda : Neotylenchidae) from North India.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 467.
718. Khan, S. H. and Basir, M. A. 1964. Two new species of the genus *Helicotylenchus* Steiner, (Nematoda : Hoplolaimidae) from India.—*Proc. helm. Soc. Wash.*, Washington, 31 (2), pp. 199-202.
719. Khandelwal, O. P. and Rastogi, M. G. 1964. Sensory canals and related dermal bones of the

- head in *Mystus seenghala*.—*Agra Univ. J. Res. (Sci.)*, Agra, **13** (1), pp. 121-129.
720. Khandker, N. A. 1964. Marine fisheries of Pakistan. I. Present Status. II. Problems of the fishing industry.—*Pakist. J. Sci.*, Lahore, **15** [1963], pp. 214-216, & 257-261, 2 figs.
721. Khanna, M. L. and Nirula, K. K. 1964. Breeding potatoes for resistance to root-knot nematode.—*Curr. Sci.*, Bangalore, **33** (10), p. 314.
- Khanna, N. D. 1964.—See Chetram, Khanna, N. D., Singh, D. P. and Prabhu, S. S. 1964.
722. Khanna, S. 1964. The maxillary glands of *Dysdercus koenigii* (Fabr.) (Hemiptera : Pyrrhocoridae).—*Naturwissenschaften*, Berlin, **51** (5), pp. 119-120.
723. Khanna, S. 1964. The digestive system of *Dysdercus koenigii* (Fabr.) (Hemiptera : Pyrrhocoridae).—*Indian J. Ent.*, New Delhi, **26** (1), pp. 46-61.
724. Khanna, S. S. and Pant, M. C. 1964. Digestive tract and the feeding habits of some teleostean fishes.—*Agra Univ. J. Res. (Sci.)*, Agra, **13** (1), pp. 15-30.
- Khanna, S. S. 1964.—See Chaudhary, J. P. and Khanna, S. S. 1964.
725. Khare, B. P. 1964. Insect fauna of Jobner goodowns and seasonal variation in occurrence.—*Bull. Grain Tech.*, Hapur, **1** (4) [1963], pp. 87-96.
726. Khare, B. P. and Agrawal, N. S. 1964. Rodent and ant burrows as sources of insect innoculum in the threshing floors.—*Indian J. Ent.*, New Delhi, **26** (1), pp. 97-102.
- Khare, R. D. 1964.—See Srivastava, A. S., Singh, D. R., Pandey, B. P., Khare, R. D. and Saxena, H. P. 1964.
727. Khare, S. G., Khurana, J. S. and Bhatnagar, D. S. 1964. Effect of appetisers and limestone on growth of white leghorn chicks.—*J. vet. Anim. Husb. Res.*, Delhi, **8**, pp. 29-33.
728. Khattar, N. 1964. Cephalic musculature of *Schizodactylus monstrosus* Don. (Orthoptera).—*J. Morph.*, Philadelphia, **115** (1), pp. 121-134.
729. Khattar, N. 1964. Cephalic musculature of *Schizodactylus monstrosus* Don. (Orthoptera).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 479.
730. Khattar, N. 1964. Morphology of the head capsule and mouth parts of *Platyrhopalus dentcornis* Donov. (Coleoptera, Adephaga, Paussidae).—*J. Anim. Morph. Physiol.*, Baroda, **10**, pp. 89-100, 7 figs.
731. Khatoon, N. (Miss.) 1964. Alkaline phosphatase activity in the digestive organs of the larva of *Utetheisa pulchella* L. and *Spodoptera mauritia* B. (Lepidoptera).—*Naturwissenschaften*, Berlin, **51** (19), p. 470.
732. Khot, N. S. 1964. Studies on Indian Erythraeoidea (Acarina). Series 3. Mites of the subfamily Leptinae Southcott.—*Acarologia*, Paris, **6**, pp. 681-689, pls. 9-13.
- Khurana, J. C. 1964.—See Chhabra, R. S., Adaval, S. C., Khurana, J. S. and Mukherji, D. R. 1964.
- Khurana, J. S. 1964.—See Khare, S. G., Khurana, J. S. and Bhatnagar, D. S. 1964.
733. Kimmins, D. E. 1964. On the Trichoptera of Nepal.—*Bull. Brit. Mus. (nat. Hist.) Ent.*, London, **15**, pp. 33-55.
- Kling, A. 1964.—See Orbach, J. and Kling, A. 1964.
734. Kingh, B. H. 1964. A new fossil locality in Swat, West Pakistan.—*Geol. Bull. Panjab Univ.*, Chandigarh, No. **1** [1961], p. 65.
- Kodama, K. 1964.—See Tsntomu, K. and Kodama, K. 1964.
735. Kohli, K. R. 1964. Migration of colonies to the mustard fields of Haldwani area in Uttar Pradesh.—*Indian Bee J.*, Delhi, **25**, p. 21.

- Kholi, R. N. 1964.—See Bhatt, P. L., Vyas, A. P. and Kohli, R. N. 1964.
- Kholi, R. N. 1964.—See Singh, R., Rathore, S. S. and Kholi, R. N. 1964.
736. Kripalani, M. B. 1964. Zoological results of the Indian Cho-Oyu Expedition (1958) in Nepal. Part 5. Amphibia.—*Rec. Indian Mus*, Delhi, 59 (3), pp. 241-244, 1 pl.
- Krishnakumari, M. K. 1964.—See Majumder, S. K., Krishnakumari, M. K. and Krishnarao, J. K. 1964.
737. Krishnamoorthy, R. V. and Swami, K. S. 1964. Subcellular electrical characteristics of amphibian muscle. I. Effects of experimentation in gastrocnemius muscle.—*J. Anim. Morph. Physiol.*, Baroda, 11 (1), pp. 219-227.
738. Krishnamoorthy, R. V. and Swami, K. S. 1964. Subcellular electrical characteristics of amphibian muscle. II. Colloidal changes in polarised gastrocnemius muscle.—*J. Anim. Morph. Physiol.*, Baroda, 11 (1), pp. 280-284.
- Krishnamoorthy, R. V. 1964.—See Swami, K. S. and Krishnamoorthy, R. V. 1964.
739. Krishnamurthy, B. S., Kalra, R. L. and Keshavalu, P. G. 1964. Some observations on the evaluation of dichloroves for the control of mosquitoes.—*Indian J. Malar.*, Delhi, 17 (2-3) [1963], pp. 123-130.
- Krishnamurthy, G. V. G. 1964.—See Singh, K., Shah, H. M., Krishnamurthy, G. V. G. and Patel, G. G. 1964.
- Krishnamurthy, H. S. 1964.—See Ananthakrishnan, T. N. and Krishnamurthy, H. S. 1964.
740. Krishnamurthy, K., Godavaribai, S. and Kaishnakumari, M. K. 1964. Studies on malathion for stored product insect control. III. Effect of malathion residues in diets on rats.—*Indian J. exp. Biol.*, New Delhi, 2 (4), pp. 232-234.
741. Krishnamurthy, V. G. 1964. Corpuscles of stannius in *Colisa lalia* (Hamilton—Buchanan).—*Naturwissenschaften*, Berlin, 51(14), pp. 344-345.
742. Krishnamurthy, B. S., Achuthan, C., Ramarao, T. S., Chandrabas, R. K. and Krishnaswami, A. K. 1964. Part III. Comparative evaluation of D. D. T., B. H. C. and diazinon water dispersible powder and dust formulations against rat-fleas in villages near Kolar town (Mysore).—*Indian J. Malar.*, Delhi, 17 (2-3), pp. 205-214.
- Krishnamurthy, K. N. 1964.—See Tripathi, V. R. and Krishnamurthy, K. N. 1964.
743. Krishnamurthy Rao, B. H. and Krishnamurthy, C. 1964. Studies on varietal resistance to the attack of paddy gall-fly, *Pachytiplosis oryzae* W. M.—*Andhra agric. J.*, Bapatla, 11 (4), pp. 137-143.
744. Krishnan, G. 1964. Components of the epicuticle of some arthropods.—*Indian J. exp. Biol.*, New Delhi, 2 (4), pp. 176-177.
745. Krishnan, G. 1964. Histochemical observations on a protein component of the cuticle of *Apus sudanicus*.—*Zool. Anz.*, Leipzig, 172 (2), pp. 151-156.
746. Krishnan, G. and Rajulu, G. S. 1964. Mode of hardening of the cuticle of *Machilis variabilis* (Apterygota: Thysanura).—*Curr. Sci.*, Bangalore, 33 (21), pp. 639-640.
747. Krishnan, G. and Rajulu, G. S. 1964. Studies on the cuticle of a annectant symphyliid, *Polyxenella krishmani* together with observations on its phylogenetic significance.—*Z. Naturf.*, Wiesbaden, 196, pp. 640-645, figs. 1-3.
- Krishnan, Y. S. 1964.—See Purkayastha, B. K. and Krishnan, Y. S. 1964.
748. Krishnaswami, A. K., Singh, N. N. and Chandrabas, R. K. 1964. Part II. Rats and rat-fleas.—*Indian J. Malar.*, Delhi, 17 (2-3) [1963], pp. 193-203.
- Krishnaswami, S. 1964.—See Sengupta, K., Jolly, M. S. and Krishnaswami, S. 1964.

749. Kukla, A. S. and Seshadri, T. R. 1964. Synthetic analogues of plant insecticides.—*Curr. Sci.*, Bangalore, 33 (20), pp. 607-610.
750. Kulkarni, P. E., Murkibhavi, G. R. and Hattangady, S. R. 1964. "Vallergan" (trimeprazine tartrate) as an anti pruritic agent in canine dermatoses.—*Indian vet. J.*, Madras, 41 (11), pp. 758-762.
- Kulkarni, P. E. 1964.—See Murkibhavi, G. R., Jamkhedkar, P. P. and Kulkarni, P. E. 1964.
- Kulkarni, S. M. 1964.—See Malhotra, C. P. and Kulkarni, S. M. 1964.
751. Kumar, A. C. 1964. A note on the occurrence of *Heterodera cacti* (Nematoda : Heteroderidae) from Mysore.—*Curr. Sci.*, Bangalore, 33 (17), p. 534.
- Kumar, D. 1964.—See Desai, R. N. and Kumar, D. 1964.
752. Kumar, R. 1964. On some internal organs in Enicocephalidae, Leptopodidae and Ochteridae (Hemiptera).—*Proc. R. Soc. Qd.*, Brisbane, 75, pp. 39-44.
753. Kumar, R. 1964. On the structure and function of the so-called ejaculatory reservoir in Pentatomoidea (Hemiptera : Heteroptera).—*Proc. R. Soc. Qd.*, Brisbane, 75, pp. 51-65.
754. Kumar, R. 1964. Anatomy and relationships of Thaumastocoridae (Hemiptera : Cimicoidea).—*J. ent. Soc. Qd.*, Brisbane, 3, pp. 48-51.
755. Kumaran, M. 1964. Observations on the food of juveniles of *Scomberomorus commerson* (Lacepede) and *S. guttatus* (Bloch. and Schneider) from Vizhingam, west coast of India.—*Symp. Scombroid fishes. Mar. biol. Ass. India, Mandapam, Ser. 1 (2)*, pp. 586-590.
756. Kumaran, M. 1964. Studies on the food of *Euthynnus affinis affinis* (Cantor), *Auxis thazard* (Lacepede), *Auxis thynnoides* Bleeker and *Sarda orientalis* (Temminck and Schlegel).—*Symp. Scombroid fishes. Mar. biol. Ass. India, Mandapam, Ser. 1 (2)*, pp. 599-606.
- Kumaran, M. 1964.—See Jones, S. and Kumaran, M. 1964.
757. Kumari, V. 1964. The heart of *Clupisoma garua* (Ham.), *Bagarius bagarius* (Ham.) and *Amphipnous cuchia* (Ham.).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 491-493.
- Kumarswami, T. 1964.—See Seshadri, A. R. and Kumarswami, T. 1964.
758. Kumbkarni, C. G. 1964. Cytological studies in Hymenoptera : Part I—Cytology of parthenogenesis in the honey bee, *Apis dorsata*.—*Indian J. exp. Biol.*, New Delhi, 2, pp. 65-68, 1 pl.
759. Kundu, G. G. and Sharma, V. K. 1964. *Bracon* spp. (Braconidae, Hymenoptera) parasitizing the grub of *Trachys pacifica* Kerr. (Buprestidae : Coleoptera), leaf miner of jute, *Corchorus* sp.—*Indian J. Ent.*, New Delhi, 26 (3), pp. 369-370.
760. Kundu, H. L. 1964. Notes on observations on the behaviour of social wasp *Polistes hebraeus* Sauss. (Vespidae : Hymenoptera).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 498.
761. Kundu, H. L. 1964. Studies on insects with light-traps. A list of orthopteran insects that visit light-traps.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 474.
762. Kurian, C. V. 1964. On the occurrence of the deep-water prawn *Penaeopsis rectacutus* (Spence Bate) off the Kerala coast.—*Curr. Sci.*, Bangalore, 33 (7), pp. 216-217.
763. Kurup, G. U. 1964. Growth changes in the skull of the Indian langur, *Presbytis entellus* (Dufresne) (Primates : Cercopithecidae).—*Mammalia*, Paris, 28, pp. 169-182, 2 pls.
764. Kurup, N. G. 1964. The incretory organs of the eye-stalk and brain of the porcelain crab, *Petrolisthes cinctipes* Randall (Reptantia :

- Anomura).—*Gen. Comp. Endocrinol.*, New York, 4, pp. 99-112.
765. Kurup, N. G. 1964. The intermolt cycle of an anomuran *Petrolisthes cinctipes* Randall (Crustacea : Decapoda).—*Biol. Bull.*, Woods Hole, 127, pp. 97-107.
766. Kurup, N. G. 1964. A study of the digestive tract of four Indian gymnocerate Hemiptera.—*Ann. ent. Soc. Am.*, Baltimore, 57, pp. 200-209.
- Kurup, P. 1964.—See Oommen, P. K. and Kurup, P. 1964.
767. Kushwaha, K. S. 1964. Estimate of damage caused by the lissora weevil, *Baris cordiae* Marshal (Insecta : Curculionidae), a pest in Rajasthan and its control. [Abstract].—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, p. 99 (Original full paper in *Sci. & Cult.*, 25, p. 603, April, 1960).
768. Kushwaha, K. S. 1964. Some observations on the biology and external morphology of the lissora weevil, *Baris cordiae* Marshal (Insecta : Curculionidae), a serious pest around Udaipur (Rajasthan). [Abstract]. *Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 100-101 (Original full paper in *Proc. 1st All India Congr. Zool.* (Jabalpur, 1959), pt. 2, pp. 498-509).
769. Kushwaha, K. S. 1964. A note on infestation of termites (Insecta : Isoptera) around Udaipur (Rajasthan). (Abstract).—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 105-107. (Original full paper in *Sci. & Cult.*, 26, pp. 39-40, July 1960).
770. Kushwaha, K. S. 1964. A note on termites (Insecta : Isoptera) infesting sugarcane crop in Rajasthan [Abstract].—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 107-108. (Original full paper in *Sci. & Cult.*, Calcutta, 26, pp. 39-40).
771. Kushwaha, K. S. 1964. The beetle fauna (Insecta : Coleoptera) of soil in four small areas in Allahabad (U. P., India). (Abstract).—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 114-115. (Original full paper in *Rec. Indian Mus.*, Delhi, 59 (1 & 2), pp. 171-182).
772. Kushwaha, K. S. 1964. Common lepidopteran fauna of Udaipur including several common pests of Rajasthan together with brief notes on their infestation. (Abstract).—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, p. 117. (Original paper in *Proc. 47th Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 455, 1960).
773. Kushwaha, K. S. 1964. Chaetotaxy of the soldier, worker and alate of the termite *Odontotermes obesus* (Rambur).—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 123-125. (Original full paper in *Curr. Sci.*, 28, pp. 415-417, October 1959).
774. Kushwaha, K. S. 1964. Taxonomic differentiation in three species of *Odontotermes* (Isoptera, Termitidae) as based on chaetotaxy.—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 125-135. (Original full paper in *Unesco Intern. Symp. Termites in Humid Trop.* (Delhi, 1960), pp. 55-62).
775. Kushwaha, K. S. 1964. A technical survey for sericulture in Rajasthan.—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2 (Abstract), pp. 136-137. (Original full paper in *Maize*, Udaipur, pp. 43-50).
776. Kushwaha, K. S. 1964. External morphology of the termite *Odontotermes (Odontotermes) obesus* (Rambur) (Isoptera : Termitidae). Part 1. Soldier. (Abstract).—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 137-138 (Original paper in *Rec. Indian Mus.*, Delhi, 54 (3/4), pp. 209-227).
777. Kushwaha, K. S. 1964. External morphology of the termite *Odontotermes (Odontotermes) obesus* (Rambur) (Isoptera : Termitidae). Part 2. Alate and worker [Abstract].—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 139-140 (Original full paper in *Rec. Indian Mus.*, Delhi, 54 (3 & 4), pp. 229-250, 1960).
778. Kushwaha, K. S. and Jain, S. K. 1964. Studies on frequency of pest infestation in Udaipur. I. Maize (fodder) borers, *Chilo zonellus* (Swin.),

- C. partellus* (Swin.) and *Sesamia inferens* (Walk.)—*Univ. Udaipur Res. Stud.*, Udaipur, 1 [1963], pp. 1-4, 1 pl.
779. Kushwaha, K. S. and Jain, S. K. 1964 Studies on frequency of pest infestation in Udaipur. II—On the frequency of lucerne weevil, *Hypera variabilis* (Herbst.) (Coleoptera : Curculionidae) infesting lucerne crop in Rajasthan.—*Univ. Udaipur Res. Stud.*, Udaipur, 1 [1963], pp. 84-86.
780. Kushwaha, K. S. and Jain, S. K. 1964. On some forage insect pests of Rajasthan.—*Univ. Udaipur Res. Stud.*, *Souven. Vol.*, Udaipur, 2, pp. 113-114. (Original full paper in *All India Congr. Zool.*, Varanasi, 1962, pp. 75-76).
781. Kushwaha, K. S. and Sharma, L. S. 1964. Some common beetle predators (Insecta : Coleoptera) of Udaipur (Rajasthan), with brief notes on their seasonal occurrence and habitat.—*Univ. Udaipur Res. Stud.*, *Souven. Vol.*, Udaipur, 2, p. 116 (Original full paper in *Proc. 48th Indian Sci. Cong.*, Calcutta, pt. 3 (Abstracts), p. 427, 1961).
782. Kushwaha, K. S. and Sharma, L. S. 1964. Some common insect pests of vegetable crops in the state of Rajasthan with brief notes on their infestation.—*Univ. Udaipur Res. Stud.*, *Souven. Vol.*, Udaipur, 2, pp. 108-109 (Original paper in *Proc. 38th Indian Sci. Congr.*, pt. 3 (Abstracts), Calcutta, p. 428, 1961).
783. Kushwaha, K. S., Sharma, J. C. and Sharma, L. S. 1964. Control of the lissora fruit weevil, *Baird cordiae* Marshal (Insecta : Curculionidae) in Rajasthan.—*Univ. Udaipur Res. Stud.*, *Souven. Vol.*, Udaipur, 2, pp. 102-103 (Original full paper in *Curr. Sci.*, 31, p. 281).
784. Kushwaha, K. S., Sharma, J. C. and Sharma, L. S. 1964. Preliminary trials in the control of the maize borers, *Chilo zonellus* (Swin.) and *Sesamia inferens* (Wlk.) in Rajasthan.—*Univ. Udaipur Res. Stud.*, *Souven. Vol.*, Udaipur, 2, pp. 110-112. (Original full paper in *Curr. Sci.*, 30, pp. 266-267).
785. Kushwaha, K. S., Sharma, J. C. and Sharma, L. S. 1964. On the mango shoot borer, *Chlumetia transversa* Walker (Lepidoptera : Noctuidae), a serious pest in Rajasthan.—*Indian J. Ent.*, New Delhi, 26 (1), pp. 115-117.
786. Kushwaha, K. S., Sharma, J. C. and Sharma, L. S. 1964. Common lepidopteran fauna of Udaipur (Rajasthan). Part 1. Butterflies.—*Univ. Udaipur Res. Stud.*, *Souven. Vol.*, Udaipur, 2, pp. 118-122. (Original full paper in *Indian J. Ent.*, New Delhi, 25 (2), pp. 141-146.)
787. Kushwaha, K. S., Sharma, J. C., Sharma, L. S. and Pathak, P. K. 1964. A note on *Cosmopteryx phaeogastra* Meyrick. (Insecta : Lepidoptera), infesting bean creepers in Rajasthan.—*Univ. Udaipur Res. Stud.*, *Souven. Vol.*, Udaipur, 2, pp. 103-105, 2 pls. (Original full paper in *Indian J. Ent.*, New Delhi, 23 (4), December, 1961, pp. 279-281).
788. Kushwaha, K. S., Sharma, L. S. and Pathak, P. K. 1964. On the mango shoot borer, *Chlumetia transversa* Walker (Lepidoptera : Noctuidae), a serious pest in Rajasthan.—*Univ. Udaipur Res. Stud.*, *Souven. Vol.*, Udaipur, 2, pp. 109-110. (Original paper in *Proc. 50th Indian Sci. Congr.*, pt. 3 (Abstracts), Calcutta, pp. 525-526, 1963).
789. Kushwaha, K. S., Sharma, J. C., Sharma, L. S. and Pathak, P. K. 1964. Field trials in the control of mustard aphid, *Lipaphis erysimi* (Kalt.) in Rajasthan.—*Univ. Udaipur Res. Stud.*, *Souven. Vol.*, Udaipur, 2, pp. 112. (Original full paper in *Proc. 50th Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 52 [1963]).
790. Kushwaha, N. S. 1964. Heritability and repeatability of calving interval in sahiwal dairy cattle.—*Kanpur agric. Coll. J.*, Kanpur, 24 (1), pp. 23-26.

L

791. Lahiri, A. R. and Roychoudhury, D. N. 1964. Some biochemical constituents in the central nervous system and endocrine glands of cockroach (*Periplaneta americana* Linn.)—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 456.

792. Lahiry, D. 1964. Rate of cell contact in sponges as influenced by X-rays.—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 450.
- Lahiry, N. L. 1964.—See Subrahmanyam, V., Lahiry, N. L., Moorjany, M. N., Nair, R. B. and Krishnaswamy, M. A. 1964.
793. Lakhotia, R. L., Bhargava, A. K. and Mehrotra, P. N. 1964. The normal ranges of some blood constituents of the Indian camel.—*Vet. Record.*, London, 76 (4), pp. 121-122.
794. Lakra, P., Singh, S. P. and Shrivastava, V. K. 1964. Some observations on the implantation of *Setaria digitata* (V. Linstow, 1906) in rabbits: migration of the adult worms into the urinary bladder.—*Indian vet. J.*, Madras, 41 (3), pp. 199-201.
795. Lakshmi, M. S. and Sherbet, G. V. 1964. The effect of chloroacetophenone on reacting ectoderm in induction in the chick embryo.—*Naturwissenschaften*, Berlin, 51 (3), pp. 64-65.
796. Lakshmi, M. S. and Sherbet, G. V. 1964. A study of the effects of trypan blue injected into amphibian zygotes.—*Wilhelm Roux Arch. Ent. Wickl. Mech. Org.*, Berlin, 155 (4), pp. 424-428.
- Lakshmi, M. S. 1964.—See Sherbet, G. V. and Lakshmi, M. S. 1964.
- Lakshmiraghavan, S. 1964.—See Sreenivasan, A., Soundarraaj, R. and Lakshmiraghavan, S. 1964.
797. Lakshminarayana, K. V. 1964. The Indian hive bee, *Apis indica* Fabr. (Hymenoptera) and *Sapindus emarginatus* Vahl., with a note on *Acarapic woodi* (Rennie) (Acarina).—*J. Bombay nat. Hist. Soc.*, Bombay, 60 (3), pp. 749-750.
798. Lal, B. 1964. Morphological, histological and histochemical studies of the pituitary gland of *Civrhina mrigala* (Hamilton).—*Proc. Indian Acad. Sci.*, Bangalore, 59B, pp. 297-317.
799. Lal, B. S. 1964. Vegetable pests. pp. 187-211. In: *Entomology in India, 1938-1963*—New Delhi (Entom. Soc. India).
800. Lal, K. 1964. New records of hosts and new records of distribution of the parasite *Theronia zebra* Vollenhven (Hymenoptera: Ichneumonidae).—*Indian J. Ent.*, New Delhi, 26 (3), pp. 359-360.
801. Lal, K. 1964. Revised description of *Xanthopimpla emaculata* Szepliget (=*Xanthopimpla immaculata* Morley) in the light of paratypes of Morley of the genus *Xanthopimpla* Saussure (Hymenoptera: Ichneumonidae).—*Indian J. Ent.*, New Delhi, 26 (1), pp. 43-45.
802. Lal, M. B., Bhatnagar, A. N. and Kaile, R. K. 1964. Studies on the morphology and histology of the digestive tract and associated structures of *Chagunius chaguniae* (Hamilton).—*Proc. nat. Acad. Sci. India*, Allahabad, 34 (2), pp. 160-172.
- Lal, R. 1964.—See Peswani, K. M. and Lal, R. 1964.
- Lal, R. 1964.—See Rai, B. K., Kanta, S. and Lal, R. 1964.
803. Lalchand, 1964. Survey of poultry practise and production.—*J. vet. Anim. Husb. Res.*, New Delhi, 8, pp. 1-8.
- Lalchand, 1964.—See Chhabra, R. S., Mehta, R. K., Garg, L. C. and Lalchand, 1964.
- Lalitha, C. M. 1964.—See Alwar, V. S. and Lalitha, C. M. 1964.
804. Lalithakumar, H., Dorle, A. K., Sirsi, M. and Govindarajan, V. 1964. Observations on the effect of areca tannis on rat uterus.—*Indian J. Pharm.*, Benaras, 26 (10), pp. 268-269.
805. Lall, M. B. 1964. Air-bladder and the weberian ossicles of *Terputitora* (Hamilton).—*Agra Univ. J. Res.*, Agra, 13 (2), pp. 107-111.
806. Lari, F. A. 1964. Notes on records of Haemosporidea (Sporozoa: Protozoa) in Pakistan.—*Proc. Intern. Congr. Zool.*, Washington, 16 (5), p. 159.

807. Latif, M. A. 1964. An Upper Cretaceous limestone in the Hazara District.—*Geol. Bull. Panjab Univ.*, Chandigarh, 3 [1963], pp. 5-7.
808. Latif, M. A. 1954. Some related groups of pelagic Foraminifera in the Paleocene-Eocene of the Rakhi Nala, West Pakistan.—*Geol. Bull. Panjab Univ.*, Chandigarh, 3 [1963], pp. 19-24.
809. Lehri, G. K. 1964. An instance of hermaphroditism in the catfish, *Clarias batrachus* (Linn.).—*Curr. Sci.*, Bangalore, 33 (17), pp. 529-530.
810. Lekshmy, A. (Miss), Govindan, T. K. and Pillai, V. K. 1964. Studies on the quality of dry prawn.—*Indian J. Fish.*, New Delhi, 9B (1) [1962], pp. 1-6.
811. Lekshmy, A. (Miss), Govindan, T. K. and Pillai, V. K. 1964. Storage characteristics of frozen prawns in relation to quality assessment.—*Indian J. Fish.*, New Delhi, 9B (1) [1962], pp. 58-70.
812. Levi, C. 1964. Spongiaries des zones bathyale, abyssale et hadale.—*Galathea Rep.*, Copenhagen, 7, pp. 63-112, 10 pls., 62 figs.
813. Lodha, K. R. 1964. The toxic effects of DDT, DMDT, gamma-BHC and Co-Ral against the various stages of the stable fly.—*Univ. Udaipur Res. Stud. Souven. Vol.*, Udaipur, 2, pp. 147-151 (Original full paper in *Indian vet. J.*, Madras, 39 (4), 1962, pp. 213-218).
814. Lodha, K. R. 1964. Study of the life-cycle of the stable fly *Stomoxys calcitrans* (Linnaeus, 1758).—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 151-157. (Original full paper in *Indian vet. J.*, Madras, 38 (11), 1961, pp. 541-547).
815. Lodha, K. R. and Chaudhary, A. L. 1964. Some observations on the morphology and pathogenicity of the larva of *Cephalopina titillator* (Syn: *Cephalopsis titillator* Clark 1816, *Cephtomyia maculata*, Wiedemann 1830) in camels in Rajasthan, India.—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 158-162, (Original full paper in *Ceylon vet. J.*, Colombo, 10 (4), pp. 136-139).
- Louch, C. D. 1964.—See Southwick, C. H., Ghosh, A. and Louch, C. D. 1964.
816. Luther, G. 1964. On the shedding of gill raker processes in grey mullets.—*J. mar. biol. Ass. India*, Madapain, 6 (2), pp. 251-256.
- Madhavan, N. 1964.—See Rao, D. S. and Madhavan, N. 1964.
817. Mahadevan, V. and Gupta, B. N. 1964. Comparison of two mineral mixtures by a feeding trial on Haryana calves.—*Indian vet. J.*, Madras, 41 (5), p. 355.
- Mahajan, S. C. 1964.—See Sharma, V. D. and Mahajan, S. C. 1964.
818. Mahajan, C. L. 1964. On the ability of *Glyptothorax telchitta* (Hamilton) to survive outside water.—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (2), pp. 459-460.
819. Mahender, M. and Purushotham, N. P. 1964. Observations on blood cellular elements in asses (*Equus asinus*).—*Indian vet. J.*, Madras, 41 (8), pp. 525-528.
820. Mahdihassan, S. 1964. Lac colonies in the second larval stage.—*Zool. Anz.*, Leipzig, 173 (5), pp. 347-360.
821. Mahdihassan, S. 1964. *Lakshadia communis* the wild lac-insect.—*Z. angew. Ent.*, Berlin, 53, pp. 310-319.
822. Mahdihassan, S. 1964. Lac insects before the first moult and their sex identification.—*Z. angew. Ent.*, Berlin, 54, pp. 458-467.
823. Mainardi, D. 1964. Early experience and sexual selection in *Drosophila melanogaster*.—*Ann. Zool.*, Agra, 4 (11), pp. 119-122.
- Maiti, A. 1964.—See Palit, M. M. and Maiti, A. 1964.
824. Maimi, N. S., Nijhawan, H. L. and Butani, D. K. 1964. Physiological factors governing resistance of Brassica crops to aphid attack.—*Indian Oilseeds J.*, Hyderabad, 8 (2), pp. 143-145.

825. Maiti, P. K., Chakravarty, M. M. and Ray, H. N. 1964. Observations on the nucleic acids in different phases of development in the species of *Myxosporidia* [Protozoa : Sporozoa].—*Proc. zool. Soc.*, Calcutta, 17 (1), pp. 55-62.
826. Maitra, A. and Chakravarty, M. M. 1964. Studies on some cytochemical substances of a freshwater hypotrichid ciliate, *Euplotes* sp.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstract), pp. 440-441.
827. Majumder, S. K. and Bano, A. 1964. Toxicity of calcium phosphate to some pests of stored grain.—*Nature*, London, 202 (4939), pp. 1349-1360.
828. Majumder, S. K., Krishnakumari, M. K. and Krishna Rao, J. K. 1964. Malathion as a repellent for rats.—*Curr. Sci.*, Bangalore, 33 (7), pp. 212-213.
829. Malaise, R. 1964. New genera and species of the subfamily Blennocampinae (Hym. Tenthred.).—*Entomol. Ts.*, Stockholm, 85 (1-2), pp. 20-39.
830. Malakar, M. C. 1964. Bound ascorbic acid in the blood of different species.—*Naturwissenschaften*, Berlin, 51 (4), p. 88.
831. Malhotra, C. P. and Kulkarni, S. M. 1964. A new record of *Rangeenilac* on *Diospyros tomentosa* Roxb. N. O. Ebenaceae.—*Indian J. Ent.*, New Delhi, 26 (1), pp. 119-120.
832. Mallick, B. B. 1964. *Salmonella enteritidis* var. *jena* causing mortality in brooder house chicks.—*Indian vet. J.*, Madras, 41 (7), pp. 439-441.
833. Mangain, V. D. and Rao, B. R. J. 1964. A note on the orbitolines from Dras, Jammu & Kashmir state.—*Indian M.ner.*, Calcutta, 16 [1962], pp. 184-186.
- Mangain, V. D. 1964.—See Rao, B. R. J., Sastry, M. V. A. and Mangain, V. D. 1964.
- Mangain, V. D. 1964.—See Sastry, M. V. A., Mangain, V. D. and Jagannatha Rao, B. R. 1964.
- Mammen, M. L. 1964.—See Ssngh, D. and Mammen, M. L. 1964.
834. Mandal, A. K. 1964. Behaviour of the rhesus monkeys (*Macaca mulatta* Zimmerman) in the Sundarbans.—*J. Beng. nat. Hist. Soc.* Darjeeling, 33 (1), pp. 153-165.
835. Mandal, A. K. and Chakravarty, M. M. 1964. Studies on some aspects of avian Coccidia (Protozoa : Sporozoa). 1. A new species of *Dorisiella* from the Indian tree pie, *Crypsirina vagabunda* (Latham)—*Proc. zool. Soc.*, Calcutta, 16 (1) [1963], pp. 147-151.
836. Mandal, A. K. and Chakravarty, M. M. 1964. Studies on some aspects of avian Coccidia [Protozoa : Sporozoa]. 2. Five new species of *Isozpora* Schneider, 1881.—*Proc. zool. Soc.*, Calcutta, 17 (1), pp. 35-46.
837. Mondal, D. N. 1964. Nitrogenous fertilisers from brackish water fish ponds ammonium or nitrate form.—*Indian J. fish.*, New Delhi., 9A (1) [1962], pp. 123-134.
838. Mani, M. S. 1964. *Ecology of plant galls*.—xii+434 pp., 9 pls.—The Mague (W. Junk Publ.).
839. Manna, G. K. and Medda, J. N. 1964. On the origin of multiple sex-chromosome mechanism in two trisomatid *Mantid religiosa* L. and *Tenodera superstitiosa* (Fabr.).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 437-438.
840. Manna, G. K. and Parida, B. B. 1964. "Effect of colchicine on the meiotic cells of the male grasshopper, *Spathosternum prasiniferum*"—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. (Abstracts), p. 438.
841. Manna, G. K. and Raychaudhuri, R. 1964. A cytological study of the gryllid, *Euscyrtes* sp. from a different population.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 437.
842. Manna, G. K. and Talukdar, M. 1964. Chromosomal polymorphism in the guinea-pig, *Cavia porcellus*.—*Experientia*, Basel, 20 (6), pp. 324-325.

843. Marathe, K. V. 1964. A study of the effect of fertilizers on the subterranean algal flora of paddy field soils from Karjat.—*J. Univ. Bombay (N. S.)*, Bombay, 31 (5), pp. 1-10.
844. Marathe, K. V. and Navalkar, B. S. 1964. A study on the effect of fertilizers and manures on the subterranean algal flora of paddy field soils.—*J. Univ. Bombay (N. S.)*, Bombay, 31 (5), pp. 11-17.
845. Marathe, V. B. and Suterwala, S. K. 1964. The development of chondrocranium in *Tylosurus crocodilus* (Lesueur).—*J. Univ. Bombay (N. S.)*, Bombay, 31 (3 & 5), pp. 61-74.
- Marathe, V. B. 1964.—See Meenakshisudaram, P. T. and Marathe, V. B. 1964.
- Mariamma, T. 1964.—See Pillai, N. K. and Mariamma, T. 1964.
- Marwaha, P. 1964.—See Sud, B. N. and Marwaha, P. 1964.
846. Marks, P. 1964. Variation and evolution in *Orbitoides* from the Cretaceous of the Rakhi Nala, West Pakistan.—*Geol. Bull. Punjab Univ.*, Chandigarh, 2 [1962], pp. 15-29.
847. Master, R. W. P. 1964. Some interesting aspects of venoms.—*J. biol. Sci.*, Bombay, 7, pp. 68-77.
848. Master, R.W.P. and Rao, S. S. 1964. Starch-gel electrophoresis of venoms of Indian krait and saw-scaled viper and identification of enzymes and toxins.—*Toxicon*, 2, p. 85.
- Master, R. W. P. 1964.—See Kapadia, Z. S., Srinivasa Rao, S. and Master, R. W. P. 1964.
849. Mathew, D. N. 1964. Observation on the breeding habits of the bronze winged jacana [*Metopidius indicus* Latham].—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (2), pp. 295-302.
850. Mathew, D. N. and Ambedkar, V. C. 1964. A bird study trip to the Laccadive Islands.—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (1) pp. 185-190.
851. Mathur, A. C. and Minaxi, A. (Miss) 1964. Pests of medicinal plants. pp. 273-277. In: *Entomology in India, 1938-1963*.—New Delhi (Entom. Soc. India).
852. Mathur, A. C. and Srivastava, J. B. 1964. *Epilachna vigintioctopunctata* F. (Coccinellidae: Coleoptera) as a defoliator of some solanaceous medicinal plants.—*Indian J. Ent.*, New Delhi, 26 (2), p. 246.
- Mathur, L. M. L. 1964.—See Srivastava, B. K. and Mathur, L. M. L. 1964.
- Mathur, L. P. 1964.—See Sahni, M. R. and Mathur, L. P. 1964.
853. Mathur, P. N. and Bhargava, S. C. 1964. The heart of *Suncus murinus*.—*Proc. Indian Acad. Sci.*, Bangalore, 60 B, pp. 264-272.
854. Mathur, P. N., Mathur, V. D. and Tandon, S. P. 1964. Optical recording of kimsis in avian skulls.
- Pavo, Baroda, 2 (2), pp. 96-104.
- Mathur, R. L. 1964.—See Prasad, N., Mathur, R. L. and Sehgal, S. P. 1164.
855. Mathur, R. N. 1964. Forest entomology. pp. 437-455. In: *Entomology in India, 1938-1963*.—New Delhi (Entom. Soc. India).
856. Mathur, U. B. 1964. On the occurrence of a crab *Palaeocarpilius macrocheilus* from the Tertiary deposits of Kutch, western India.—*Indian Miner.*, Calcutta, 17 [1963], p. 195.
857. Mazak, V. 1964. A note on the lion's mane.—*Z. Saugtiertierk.*, Berlin, 29, pp. 124-127.
- Mazumder, S. K. 1964.—See Gondurao, H. R. and Mazumder, S. K. 1964.
858. McCann, C. 1964. A further record of Blainville's beaked whale, *Mesoplodon densirostris* (Blainville) from the Indian ocean cetacea.—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (1), pp. 179-181.

859. Medda, J. 1964. A landscape of cell proliferation in differentiating central nervous system of chick.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 451.
- Medda, J. N. 1964.—See Manna, G. K. and Medda, J. N. 1964.
860. Meenakshisundaram, P. T. and Marathe, V. B. 1964. Food and feeding habits of the Indian herring, *Ilisha filigera* (Val.).—*J. Univ. Bombay* (N. S.), Bombay, 31 (5), pp. 53-60.
861. Mehdiratta, R. C. 1964. Geology of India, Pakistan and Burma. Atma Ram & Sons, Delhi, 1962: i-vii, 1-203.
- Mehra, C. K. 1964.—See Bindra, O. S. and Mehra, C. K. 1964.
862. Mehrotra, K. N. 1964. Keto acids in the haemolymph of *Dysdercus koenigii* Fabr.—*Experientia*, Basel, 20 (7), pp. 383-384.
863. Mehrotra, P. N. 1964. On the structure of the pygidial gland of *Oxytelus sordidus* Cam. (Coleoptera, Staphylinidae, Oxytelini).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 478.
864. Mehrotra, P. N. 1964. On the functional maturation of sperms in the epididymis of birds.—*Proc. nat. Acad. Sci. India*, Allahabad, 34 B (3), pp. 316-322.
865. Mehrotra, P. N. and Bose, K. C. 1964. On the functional anatomy of the epididymis of *Copsychus saularis* (Aves, Passeres, Turdidae).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 490-491.
866. Mehrotra, P. N. and Mullick, D. N. 1964. Studies on physiological reactions of sheep. I. Seasonal variations in the pulse rate, respiration rate and body temperature.—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, (Abstracts) pp. 163-168. (Original full paper in *Indian J. vet. Sci.*, New Delhi, 29 (4), pp. 57-61, December, 1959).
867. Mehrotra, P. N. and Mullick, D. N. 1964. Studies on physiological reactions of sheep. II. Seasonal variations in the blood composition.—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2 (Abstracts), p. 169. (Original full paper in *Indian J. vet. Sci.*, New Delhi, 29 (4), pp. 62-72, 1959).
868. Mehrotra, P. N. and Mullick, D. N. 1964. Seasonal variation in the feed and water intake of normal sheep.—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 170-174. (Original full paper in *Indian J. vet. Sci.*, New Delhi, 30 (1), pp. 30-33, 1960).
869. Mehta, N. D., Patel, T. B., Majamdar, V. G. and Banerjee, A. N. 1964. An out break of malaria in the Bavli forest area of Surat district in Gujarat State.—*Bull. Indian Soc. Malar. Commun. Dis.*, Delhi, 1 (1/2), pp. 41-48.
- Mehta, R. K. 1964.—See Chhabra, R. S., Mehta, R. K., Garg, L. C. and Lalchand, 1964.
870. Mehta, V. S., Prakash, A. H. A. and Singh, M. 1964. Gestation period in camels.—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 192-195 (Original full paper in *Indian vet. J.*, Madras, 39 (7), pp. 387-389, 1962).
871. Menon, A. G. K. 1964. Freshwater aquarium fishes of India. The carp minnows (Cyprinidae).—*The Aquarium*, Norriston, 33 (2), pp. 19-21.
872. Menon, A. G. K. 1964. A review of Satpura Hypothesis.—*Sci. & Cult.*, Calcutta, 30 (4), pp. 177-178.
873. Menon, A. G. K. 1964. Monograph of the cyprinid fishes of the genus *Garra* Hamilton.—*Mem. Indian Mus.*, New Delhi, 14 (4), pp. 173-260.
874. Menon, A. G. K. and Dutta, A. K. 1964. Zoological results of the Indian Cho-Oyu Expedition (1958) in Nepal. Part 7. *Psilorhynchus pseudechenus*, a new cyprinid fish from Nepal.—*Rec. Indian Mus.*, Delhi, 59 (3), pp. 253-255, 2 pls.
875. Menon, A. G. K. and Ramarao, K. V. 1964. Notes on three rare fishes.—*Ann. Zool.*, Agra, 4 (5), pp. 47-51.

- Menon, K. K. P. 1964.—See Pradhan, M. J., Sekharan, K. V. and Menon, K. K. P. 1964.
- Menon, M. G. R. 1964.—See Bhattacharjee, N. S. and Menon, M. G. R. 1964.
- Menon, M. G. R. 1964.—See Rajasekhara, K., Chatterji, S. and Menon, M. G. R. 1964.
876. Menon, P. K. B., Dattagupta, A. K. and Johnson, P. 1964. Report on the Bonellids (Echiura) collected from the Gulf of Kutch and Port Blair (Andaman Island).—*Ann. Mag. nat. Hist.*, London, (13) 7 (73), pp. 49-57.
- Menon, P. K. B. 1964.—See Dattagupta, A. K. and Menon, P. K. B. 1964.
- Menon, P. P. 1964.—See David, B. V., Menon, P. P. and Basu, P. C. S. 1964.
- Minaxi, A. (Miss). 1964.—See Mathur, A. C. and Minaxi, A. (Miss). 1964.
- Mirza, M. R. 1964.—See Ahmad, N-U-D. and Mirza, M. R. 1964.
877. Mishra, A. 1964. Studies on survival of *Leptospira pomana* in body fluids and tissues outside the animal host.—*Indian vet. J.*, Madras, 41 (7), pp. 446-453.
878. Mishra, H. R., Prasad, J. N. and Jha, B. N. 1964. A study on variations in heritability estimates in tharparkar cattle.—*Indian vet. J.*, Madras, 41 (5), pp. 332-335.
879. Mishra, M. 1964. Modification and economisation of Singh's method of fat test.—*Indian vet. J.*, Madras, 41 (5), pp. 352-355.
- Mishra, S. S. 1964.—See Tewari, J. P., Dutta, K. C. and Mishra, S. S. 1964.
880. Misra, A. and Misra, S. N. 1964. Preliminary report on *Erythrina indica* as an anthelmintic against *Ascaridia galli*.—*Indian vet. J.*, Madras, 41 (10), pp. 691-693.
881. Misra, B. and Panda, S. N. 1964. Observations on the significance of positive brucella reaction in fowl sera.—*Indian vet. J.*, Madras, 41(3), pp. 181-185.
882. Misra, D. N. 1964. Photographing birds.—*Indian For.*, Dehra Dun, 90 (7), pp. 473-476, 2 pls.
883. Misra, J. N. 1964. Physiology of digestion in termites.—*Indian For.*, Dehra Dun, 90 (3), pp. 131-136.
- Misra, S. L. 1964.—See Edward, J. C. and Misra, S. L. 1964.
- Misra, S. N. 1964.—See Misra, A. and Misra, S. N. 1964.
- Mital, V. P. 1964.—See Bhatia, D. R. and Mital, V. P. 1964.
884. Mithel, M. 1964. Cranial nerves of *Mystus seenghala* (Sykes).—*Agra Univ. J. Res. (Sci.)*, Agra, 13 (1), pp. 67-78.
- Mitra, A. C. 1964.—See Sarkar, J. K., Chatterjee, S. N., Chakravarty, S. K. and Mitra, A. C. 1964.
885. Mitra, B. 1964. Preliminary studies on the collection of spawn, the nature of the trade and the condition of water of the river Hooghly.—*Indian Agric.*, Calcutta, 8 (2), pp. 82-86.
- Mitra, B. 1964.—See Ganguly, D. N., Sarkar, S. P. and Mitra, B. 1964.
886. Mitra, J. and Mookerjee, S. 1964. Radiation tolerance in *Hydra*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 448-449.
887. Mitra, N. K. and Sengupta, P. C. 1964. Laryngeal paralysis caused by trieresyl phosphate in the chicken.—*Bull. Calcutta Sch. trop. Med.*, Calcutta, 12 (4), pp. 175-177.
- Mitra, S. K. 1964.—See Chaudhuri, D. K. and Mitra, S. K. 1964.

- Mohan, M. 1964.—See Sastri, V. V., Guha, D. K. and Mohan, M. 1964.
888. Mohanraj, G. and Saxena, A. P. 1964. On the introduction into India of some Tachinid parasites of sugarcane moth borers.—*Tech. Bull. Commonw. Inst. Biol. Centr., Farnham Royal, Bucks, No. 4*, pp. 43-61.
- Mohanty, G. C. 1964.—See Das, D. N., Mohanty, G. C. and Mohapatra, S. C. 1964.
- Mohapatra, K. N. 1964.—See Panda, N. C. and Mohapatra, K. N. 1964.
- Mohiuddin, G. 1964.—See Gurumurti, V. and Mohiuddin, G. 1964.
889. Mohiuddin, A. 1964. The jejunal villi of the adult white rat during fat absorption.—*Acta anat., Basel*, 59, pp. 201-211.
890. Monie, A. S. 1964. Demonstration of a peroxidase in the swim bladder of *Ophiocephalus striatus* (Bloch.).—*Naturwissenschaften, Berlin*, 51 (7), p. 169.
891. Mookerjee, A. and Mookerjee, S. 1964. Observations on the isolated DNA from *Hydra*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr., Calcutta*, pt. 3 (Abstracts), p. 443.
- Mookerjee, S. 1964.—See Mitra, J. and Mookerjee, S. 1964.
892. Mookerjee, S. 1964. Descending column of cells in *Hydra*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr., Calcutta*, pt. 3 (Abstracts), pp. 449-450.
893. Mookerjee, S. and Bhattacharjee, S. 1964. Role of endoderm in hypostome regeneration.—*Proc. Comb. 51st & 52nd Indian Sci. Congr., Calcutta*, pt. 3 (Abstracts), p. 448.
894. Mookerjee, S. and Chakravarty, A. K. 1964. Interface in the body wall of *Hydra*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr., Calcutta*, pt. 3 (Abstracts), p. 446.
895. Mookerjee, P. B. 1964. Stored grain pests. pp. 317-330. In : *Entomology in India 1938-1963*, New Delhi (Entom. Soc. India).
896. Mookerjee, P. B. and Chawla, M. L. 1964. Effect of temperature and humidity on the development of *Collosobruchus maculatus* Fab., a serious pest of stored pulses.—*Indian J. Ent.*, New Delhi, 26 (3), pp. 345-351.
897. Mookerjee, P. B., Sharma, G. C. and Tuli, S. 1964. Effect of post-treatment temperature on the susceptibility of the khapra (*Trogoderma granarium* Everts) grubs to pyrethrins.—*Indian J. Ent.*, New Delhi, 26 (2), pp. 215-220.
- Moorjani, M. N. 1964.—See Subrahmanyam, V., Lahiry, N. L., Moorjani, M. N., Nair, R. B. and Krishnaswamy, M. A. 1964.
- Moulic, S. K. 1964.—See Gupta, S., Moulic, S. K., Chatterjee, D. P. and Bhattacharjee, S. 1964.
898. Mukerjee, T. D. 1964. Telodrin (isobenzan) for the control of cockchafer grubs (on tea estates in India).—*Two & a Bud, Cinnamara*, 11 (1), pp. 25-27.
899. Mukerji, G. P. 1964. External anatomy of the mature larva of *Epilachna ghryosomalina* Zimm.—*Proc. Comb. 51st & 52nd Indian Sci. Congr., Calcutta*, pt. 3 (Abstracts), p. 474.
- Mukherje, A. B. 1964.—See Choudhury, D. K. and Mukherje, A. B. 1964.
900. Mukherjea, P. 1964. Microscopic observations of the recurrent laryngeal nerve of bovine.—*Indian vet. J.*, Madras, 41 (8), pp. 532-538.
901. Mukherjee, D. P. 1964. Effect of PH and buffer composition of the fixative and period prior to fixation on the abnormalities of bull spermatozoa.—*Indian J. vet. Sci.*, New Delhi, 33, pp. 178-186.
902. Mukherjee, R. P. 1964. *Glaphyrostomum indicum* n. sp. (Brachylaemidae ; Trematoda) from pigeons.—*Indian J. Helminth.*, Lucknow, 16 (1), pp. 52-55.
903. Mukherjee, R. P. 1964. Two new cestodes from

- Passeriformes birds.—*Indian J. Helminth.*, Lucknow, 16 (1), pp. 65-70.
904. Mukherjee, S. and Ganguly, B. 1964. Contact reaction of cells in sponge aggregation.—*Roux Arch. Entw. Mech. Organ*, Leipzig, 155 (5), pp. 525-534.
- Mukherji, D. R. 1964.—See Chhabra, R. S., Adaval, S. C., Kuranja, J. S. and Mukherji, D. R. 1964.
905. Mukherji, M. and Sen, P. 1964. Argentaflin granules in toad kidney tubules.—*J. Histochem. Cytochem.*, London, 12, pp. 337-340.
906. Mukundan, M. 1964. Achievements of the campaign for the control of the groundnut red hairy caterpillar, *Amsacta albirtriga* M. in Madurai division (Madras State).—*Madras agric. J.*, Coimbatore, 51 (2), pp. 46-49.
907. Mulherkar, L. and Rao, K. V. 1964. Effect of diethylbarbituric acid on the uptake of calcium during the development of the shell of *Planorbis exustus*.—*Naturwissenschaften*, Berlin, 51 (9), p. 225.
908. Mulherkar, L., Rao, V. K. and Suryavamshi, G. V. 1964. Study of the development of lens in *Microphtyla ornata*.—*J. Anim. Morph. Physiol.*, Baroda, 11 (1), pp. 45-50.
- Mulherkar, L. 1964.—See Vasudeva Rao, K. and Mulherkar, L. 1964.
- Mullick, D. N. 1964.—See Bhattacharyya, N. K. and Mullick, D. N. 1964.
909. Munshi, J. S. D. 1964. 'Chloride cells' in the gills of freshwater teleosts.—*Quart. J. micr. Sci.*, London, 105 (1), pp. 79-89.
910. Murkibhavi, G. R., Jamkhedkar, P. P. and Kulkarni P. E. 1964. "Livoderm" in the treatment of thermal burns in buffaloes.—*Indian vet. J.*, Madras, 41 (7), pp. 485-489.
911. Murkibhavi, G. R. et al. 1964. Some congenital abnormalities. Congenital external hydrocephalus in a litter of Doherman pinscher.—*Indian vet. J.*, Madras, 41 (11), pp. 732-734.
912. Murty, A. V. S. and Varma, P. U. 1964. The hydrographical features of the waters of Palk Bay during March, 1963.—*J. mar. biol. Ass. India*, Mandapam, 6 (2), pp. 207-216.
- Murthy, P. S. S. 1964.—See Chacko, P. I. and Murthy, P. S. S. 1964.
- Murti, N. N. 1964.—See Rangnekar, M. P. and Murti, N. N. 1964.
913. Mustafa, M. and Naidu, M. B. 1964. Chemical sterilization of *Dysdercus cingulatus* F. (red cotton bug).—*Indian J. exp. Biol.*, New Delhi, 2 (1), pp. 55-56.
914. Muthukrishnan, T. S. and Kareem, A. A. 1964. *Cardiococcus castiloae* (Green) (Coccidae : Homoptera) on *Tamarindus indicus* in South India.—*Madras agric. J.*, Coimbatore, 51 (9), pp. 201-202.

N

915. Nadakal, A. M. 1964. Studies on plant-parasitic nematodes of Kerala. III. An additional list of plants attacked by root-knot nematode, *Meloidogyne* sp. (Tylenchoidea : Heteroderidae).—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (2), pp. 467-469.
916. Nadakal, A. M. 1964. Studies on plant parasitic nematodes of Kerala. IV. Host range, seasonal variations and summer fallow survival of zingiber root-knot nematode, *Meloidogyne incognita* (Kofoid & white) Chitwood.—*Indian J. exp. Biol.*, New Delhi, 2 (4), pp. 203-207.
917. Nadakal, A. M. and Thomas, N. 1964. Studies on plant-parasitic nematodes of Kerala. II. A list of plants attacked by root-knot nematode, *Meloidogyne* sp.—*Curr. Sci.*, Bangalore, 33 (8), pp. 247-248.
- Nadkerny, N. T. 1964.—See Shull, E. M. and Nadkerny, N. T. 1964.
- Naegele, J. A. 1964.—See Kanungo, K. and Naegele, J. A. 1964.

- Nag, A. C. 1964.—See Ganguly, D. N. and Nag, A. C. 1964.
918. Nagabhushanam, A. K. and Dhulkhed, M. H. 1964. On a standard whale on the south Kanara coast.—*J. mar. biol. Ass. India*, Mandapam, 6 (2), pp. 323-325.
919. Nagabhushanam, R. 1964. Physiology of the red chromatophores of *Gelasimus annulipes* (Arthropoda : Crustacea).—*Indian J. exp. Biol.*, New Delhi, 2, pp. 69-71.
920. Nagabhushanam, R. 1964. The comparative physiology of the crustacean pigmentary effectors. X. Endocrine control of the melanophores of the crab, *Metopograpsus messor*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 455.
921. Nagabhushanam, R. 1964. Chromatophorotropin in the visceral ganglia of the bivalve mollusc, *Meretrix casta* (Chemnitz).—*Sci. & Cult.*, Calcutta, 30, pp. 203-204, 1 fig.
922. Nagabhushanam, R. 1964. Notes on the occurrence of peroxidase in the crystalline style of the mollusc, *Martesia striata* Linn.—*Sci. & Cult.*, Calcutta, 30, pp. 355-356.
923. Nagabhushanam, R. 1964. Notes on the neurosecretory cells in the nervous system of the mussel, *Modiolus demissus* (Mollusca : Lamellibranchiata).—*Curr. Sci.*, Bangalore, 33 (1), pp. 20-21.
924. Nagabhushanam, R. 1964. Neurosecretory changes in the nervous system of the oyster, *Crassostrea virginica* induced by various experimental conditions.—*Indian J. exp. Biol.*, New Delhi, 2, pp. 1-4, 3 figs.
925. Nagabhushanam, R. 1964. Effect of removal of neurosecretory cells on spawning in the mussel, *Modiolus demissus* (Mollusca : Lamellibranchiata).—*Curr. Sci.*, Bangalore, 33 (7), pp. 215-216.
926. Nagabhushanam, R. 1964. Cytological and cytochemical studies on the neurosecretory cells in the mollusc *Tegulus plebius* (Solander).—*Nucleus*, Calcutta, 7, pp. 11-14, 2 figs.
927. Nagabhushanam, R. 1964. Physiology of the red chromatophores of the shrimp, *Alpheus malabaricus*.—*Broteria Ser. Cienc. nat.*, Lisboa, 33, pp. 133-142.
928. Nagabhushanam, R. and Rangarao, K. 1964. Responses of the black chromatophores of the prawn *Metapenaeus monoceros* to light and temperature.—*J. Anim. Morph. Physiol.*, Baroda, 11 (1), pp. 192-198.
929. Nagabhushanam, R. and Sarojini, R. 1964. Physiology of the proximal retinal pigment of the crayfish, *Procambrus*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstract), p. 459.
930. Nagabhushanam, R. and Sarojini, R. 1964. Physiology of the proximal retinal pigment of the cray fish, *Procambrus clarki* (Arthropoda : Crustacea).—*Indian J. exp. Biol.*, New Delhi, 2, pp. 72-74.
931. Nagabhushanam, R. and Swrnamayee, T. 1964. Neurosecretory cells in the central nervous system *Ariophanta ligulata*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 454.
- Nagaicha, B. B. 1964.—See Stroyan, H. L. G. and Nagaicha, B. B. 1964.
932. Nagarcenkar, R. S. 1964. Effect of cottonseed feeding on the fat percentage of milk and milk yield of buffaloes.—*J. Univ. Poona (Sci. & Tech.)*, Poona, No. 26, pp. 143-147.
933. Nagarcenkar, R. S. and Bhattacharya, P. 1964. Relationship of certain pelt characteristics with canary colouration of wool.—*Indian J. vet. Sci.*, New Delhi, 34 (4), pp. 242-252.
934. Naik, D. V. and George, J. C. 1964. Certain cyclic histological changes in the testis of the migratory starling, *Sturnus roseus* (Linnaeus).—*Pavo*, Baroda, 2 (1), pp. 48-54, 7 pls.
935. Naik, D. V. and George, J. C. 1964. Histochemical demonstration of changes in the activity of alkaline and acid phosphatases in the adrenal of the migratory starling.—*J. Histochem. Cytochem.*, London, 12, pp. 772-776.

936. Naik, M. V. 1964. Observations on the treatment of external wounds in large animals with T. C. F. livoderm.—*Indian vet. J.*, Madras, **41** (12), pp. 829-832.
937. Naik, R. M. 1964. Breeding season of the Indian robin *Saxicoloides fulicata* (Linnaeus) within the Baroda university campus.—*Pavo*, Baroda, **2** (1), pp. 65-67.
938. Naik, R. M. and Naik, S. 1964. Rete-type vascularity of the buccopharyngeal wall in the house swift.—*Pavo*, Baroda, **2** (2), pp. 105-110.
- Naik, S. 1964.—See Naik, R. M. and Naik, S. 1964.
939. Naik, S. N., Bhatia, H. M., Baxi, A. J. and Naik, P. V. 1964. Hematological study of Indian spotted deer (*Axis deer*).—*J. exp. Zool.*, Philadelphia, **155** (3), pp. 231-236.
- Nair, C. P. A. 1964.—See Patil, M. R., Ramamirtham, C. P., Varma, P. U. and Nair, C. P. A. 1964.
- Nair, C. P. A. 1964.—See Ramamirtham, C. P. add Nair, C. P. A. 1964.
940. Nair, K. K. and Muthe, P. T. 1964. Effect of ribonuclease on the incorporation of Ca 45 into the regenerating membrane of *Planorbis* sp.—*J. Anim. Morph. Physiol.*, Baroda, **11** (1), pp. 119-123.
941. Nair, K. P. D., Iyer, R. P. and Venugopalan, A. 1964. An out break of gastroenteritis in civet cats.—*Indian vet. J.*, Madras, **41** (11), pp. 753-765.
942. Nair, K. S. S. and George, J. C. 1964. A histological and histochemical study of the larval fat body of *Anthrenus vorax* Waterhouse (Dermestidae, Coleoptera).—*J. Ins. Physiol.*, London, **10** (3), pp. 509-517, 10 pls.
943. Nair, M. R. G. K. 1964. Pests of coconut. pp. 72-82. In: *Entomology in India, 1938-1963*.—New Delhi (Entom. Soc. India).
944. Nair, M. R. G. K. and Mohandas, N. 1964. A new insect pillager [*Carvalhoia arecae* Miller & China] of *Areca* crops in Kerala, India.—*Indian Fmg.*, New Delhi, **13** (10), p. 10.
945. Nair, N. B. 1964. Structure and physiology of the timber borer, *Bankia indica*, circulatory and excretory system.—*J. Anim. Morph. Physiol.*, Baroda, **11** (1), pp. 51-57.
946. Nair, P. V. and Sharma, H. D. 1964. On the arteria laryngotrachealis of the geckos.—*Sci. & Cult.*, Calcutta, **30** (1), pp. 46-47.
- Nair, R. B. 1964.—See Subrahmanyam, V., Lahiry, N. L., Moorjani, M. N., Nair, R. B. and Krishnaswamy, M. A. 1964.
- Nair, R. S. 1964.—See Satyanarayana, V. V. and Nair, R. S. 1964.
- Nakra, S. K. 1964.—See Dhingra, M. M. and Nakra, S. K. 1964.
- Nanda, D. K. 1964.—See Ganguly, D. N. and Nanda, D. K. 1964.
947. Narang, G. D., Mehta, R. K. and Garg, L. C. 1964. Evolution of seeds of *Butea frondosa* as anthelmintic against *Ascaridia galli*.—*J. vet. Anim. Husband. Res.*, Delhi, **8**, pp. 56-58.
948. Narasimhamurti, C. C. 1964. Nuclear division in *Entamoeba invadens* Rodhain, 1934.—*Parasitology*, Cambridge, **54** (1), pp. 95-104.
949. Narasimhamurti, C. C. 1964. Observations on the gregarine *Ratundula gammari* (Diesing, 1859) Goodrich, 1949.—*Parasitology*, Cambridge, **54** (1), pp. 195-199.
- Narasimhamurti, C. C. 1964.—See Ganapati, P. N., Narasimhamurti, C. C. and Shanthakumari, K. 1964.
- Narayan, K. G. 1964.—See Prasad, H. and Narayan, K. G. 1964.
950. Narayana, J. V., and Rao, P. P. 1964. A preliminary survey of disease-position among pigs in Andhra Pradesh. A viral disease position among large whites.—*Indian vet. J.*, Madras, **41** (8), pp. 520-523, 1 pl.

951. Narayana, J. V., Rao, P. R., Christopher, J. and Sastry, G. A. 1964. Pulmonary aspergillosis in a murrh buffalo.—*Indian vet. J.*, Madras, **41** (8), pp. 523-525, 1 pl.
952. Narayana, S. and Rathore, A. 1964. Skin follicle and wool characteristics of seven breeds of Rajasthan sheep.—*Univ. Udaipur Res. Stud.*, Udaipur, **1** [1963], pp. 89-90.
953. Narayanan, C. H. 1964. An experimental analysis of peripheral nerve pattern development in the chick.—*J. exp. Zool.*, Philadelphia, **156**, pp. 49-60.
954. Narayanan, C. H. and Wenger, B. S. 1964. An experimental study of peripheral nerve pattern development in the chick.—*Anat. Rec.*, Philadelphia, **148**, pp. 316-317.
955. Narayanarao, P. L. and Gopalakrishnamurthy, K. 1964. Treatment of nasal schistosomiasis in cattle.—*Indian vet. J.*, Madras, **41** (4), pp. 289-293.
956. Nath, O. and Gupta, A. N. 1964. A new species (*Schwartzitrema dumbeli* sp. nov.) of trematode (Digenea) from the intestine of snake darter, *Anhinga melanogaster* from India.—*Proc. nat. Acad. Sci. India*, Allahabad, **34B** (3), pp. 306-308.
- Navalkar, B. S. 1964.—See Marathe, K. V. and Navalkar, B. S. 1964.
957. Nayar, C. K. G. 1964. Morphometric studies on the rotifer *Brachionus calyciflorus* Pallas.—*Curr. Sci.*, Bangalore, **33**, pp. 469-470.
958. Nayar, J. L. 1964. Thoracic morphology of *Balioptera argentata* (Opomyzidae : Cyclorrhapha : Diptera).—*Agra Univ. J. Res. (Sci.)*, Agra, **13** (3), pp. 97-106.
959. Nayar, J. L. 1964. External morphology of head capsule of *Syrphus balteatus* De Geer (Syrphidae : Diptera).—*Indian J. Ent.*, New Delhi, **26** (2), pp. 135-151.
960. Nayar, J. L. 1964. Thoracic morphology of *Syrphus balteatus* De Geer (Syrphidae : Diptera).—*Indian J. Ent.*, New Delhi, **26** (3), pp. 255-267.
961. Nayar, J. L. and Tandon, S. K. 1964. A study of the genitalia of *Liriomyza subpusilla* (Mallock) (Agromyzidae : Cyclorrhapha : Diptera).—*Agra Univ. J. Res. (Sci.)*, Agra, **13** (3), pp. 73-78.
962. Nayar, K. K. 1964. Endocrinology of reproduction in insects.—*Bull. natn. Inst. Sci. India*, New Delhi, No. 27, pp. 28-31.
963. Nayar, S. and Pandalai, K. R. 1964. Neurohypophysial structure and the problem of neurosecretion in the garden lizard *Calotes versicolor*.—*Anat. Anz.*, Jena, **114** (3), pp. 270-278.
964. Nayyar, R. P. 1964. Karyotype studies in seven species of *Cyprinidae*.—*Genetica*, 'S Gravenhage', **35** (1), pp. 95-104.
965. Nayyar, R. P. 1964. The yolk nucleus of fish oocytes.—*Quart. J. micr. Sci.*, London, **105** (3), pp. 353-358.
- Negi, S. 1964.—See Prabhu, S. S., Premnarain, Negi, S., Joshi, C. and Singh, H. P. 1964.
966. Neelakantan, K. K. 1964. A protective device among wild elephants.—*J. Bombay nat. Hist. Soc.*, Bombay, **61** (2), p. 438.
967. Niazi, I. A. 1964. Probable induction of chondrogenesis by the spinal cord tissue in the Ammo-coetes.—*Experientia*, Basel, **20** (12), pp. 682-683.
968. Niazi, I. A. 1964. Probable morphogenetic and inductive role of the spinal cord in cyclostomes.—*Proc. Combd. 51st & 52nd Indian Sci. Cong.*, Calcutta, pt. 3 (Abstracts), pp. 452-453.
- Nigam, S. S. 1964.—See Dayal, H. M., Saxena, B. N. and Nigam, S. S. 1964.
- Nigwekar, V. B. 1964.—See Kashyap, H. V. and Nigwekar, V. B. 1964.
- Nijhawan, H. L. 1964.—See Maini, N. S., Butani, D. K. and Nijhawan, H. L. 1964.
969. Nilakantan, P. R. and Dhanda, M. R. 1964. Studies on blackquarter. 1. Isolation and study of the

- causal agent.—*Indian J. vet. Sci.*, New Delhi, 34 (4), pp. 232-236.
970. Nirmal, H. B. 1964. Neurosecretory cells in the fresh water crab, *Paratelphusa jacquemontii* (Rathbun).—*J. biol. Sci.*, Bombay, 7 (1), pp. 15-21.
971. Nirula, K. K. and Kumar, R. 1964. New host records of the root knot nematodes.—*Nematologica*, Leiden, 10 (1), p. 184.
972. Noble, A. 1964. Abnormality in the portunid crab *Neptunus (Neptunus) sanguinolentus* Herbst.—*J. mar. biol. Ass. India*, Mandapam, 6 (2), pp. 312-313.
973. Nolan, T. B. 1964. Geological Survey research 1964. Paleozoic reef discovery in West Pakistan.—*Prof. Pap. U. S. geol. Surv.*, Washington, 501A 1964, A 128.
- O
974. Oldroyd, H. 1964. Diptera from Nepal. Asilidae.—*Bull. Brit. Mus. (nat. Hist.) Ent.*, London, 15 pp. 239-264, 19 figs.
- Oldroyd, H. 1964.—See Theodor, O. and Oldroyd, H. 1964.
975. Oommen, P. K. and Kurup, P. 1964. Protein and amino acid contents and physiological properties of the venom of the South Indian scorpion, *Heterometrus scaber*.—*Indian J. exp. Biol.*, New Delhi, 2, pp. 78-80, fig 1.
976. Orbach, J. and Kling, A. 1964. The stunaped tailed Macaque : a docile Asiatic monkey.—*Animal Behaviour*, London, 12 (2 & 3), pp. 343-347.
- P
- Padmanabhan, K. G. 1964.—See Pillai, N. K. and Padmanabhan, K. G. 1964.
- Padmanabhan, M. D. 1964.—See Abraham, E. V. and Padmanabhan, M. D. 1964.
- Pajni, H. R. 1964.—See Atwal, A. S. and Pajni, H. R. 1964.
- Pal, R. N. 1964.—See Gopalkrishnan, V. and Pal, R. N. 1964.
977. Palekar, V. C., Santhakumaran, L. N. and Bal, D. V. 1964. Preliminary note on the Teredinidae of Bombay coast.—*J. Timb. Dry Preserv. Ass. India*, Dehra Dun, 10 (3), pp. 11-13.
978. Palit, M. M. and Maiti, A. 1964. Studies in the locomotion of gastropod molluscs under the variable ambient conditions.—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 496-497.
979. Panda, N. C. and Mohapatra, K. N. 1964. Floor space requirement for rhode island red laying hens.—*Indian vet. J.*, Madras, 41 (4), pp. 280-284.
- Pandalai, K. R. 1964.—See Nayar, S. and Pandalai, K. R. 1964.
980. Pande, B. P. 1964. Veterinary entomology. pp. 457-462. In : *Entomology in India, 1938-1963*. New Delhi (Entom. Soc. India).
981. Pande, B. P. and Ahluwalia, S. S. 1964. Observations on *Onchocerca* infection of the ligamentum nuchae in Indian buffalo.—*Brit. vet. J.*, London, 120 (3), pp. 132-137.
982. Pande, B. P., Bhatia, B. B. and Dubey, J. P. 1964. On the development of free-living stages of *Amidostomum skrjabini*—a pathogenic nematode in domestic duck.—*Curr. Sci.*, Bangalore, 33 (9) pp. 278-279.
983. Pande, B. P., Bhatia, B. B., Dubey, J. P. and Srivastava, K. M. N. 1964. Study on eimerian schizonts from clinical cases of coccidiosis in lambs.—*Indian J. Microbiol.*, Calcutta, 4 (1-4), pp. 67-73.
984. Pande, B. P., Bhatia, B. B. and Rai, P. 1964. On a strigeid metacercaria from *Heteropneustus fossilis* Bloch. (Singhi).—*Proc. natn. Acad. Sci. India*, Allahabad, 34B (3), pp. 245-248.

985. Pande, B. P. and Rai, P. 1964. Observations on a gasterostome metacercaria from *Bagarius bagarius*.—*Curr. Sci.*, Bangalore, 33 (2), pp. 685-686.
986. Pande, B. P., Singh, P. P. and Kala, P. 1964. On a small sized eimerian schizont in the colon of kid. —*Indian J. Microbiol.*, Calcutta, 4 (1-4), pp. 92-95.
- Pande, B. P. 1964.—See Srivastava, S. C. and Pande, B. P. 1964.
987. Pandey, A. K. 1964. Ectopic thyroid follicles in the head kidney of a cyprinid teleost, *Garra lamata* (Ham. Buch.).—*J. Vikram Univ.*, Ujjain, 8 (1 & 3), pp. 95-96.
- Pandey, B. P. 1964.—See Srivastava, A. S., Singh, D. R., Pandey, B. P., Khare, R. D. and Saxena, H. P. 1964.
988. Pandha, S. K. and Thapliyal, J. P. 1964. Effect of male hormone on the renal sex segment of castrated males of the lizard, *Calotes versicolor*.—*Copeia*, New York, No. 3, pp. 579-581.
989. Pandha, S. K. and Thapliyal, J. P. 1964. Hypophysectomy in Indian garden lizard, *Calotes versicolor*.—*Naturwissenschaften*, Berlin, 51 (8), pp. 201-202.
990. Pandha, S. K. and Thapliyal, J. P. 1964. Effect of thyroidectomy upon the testes of Indian spotted munia, *Uroloncha punctulata*.—*Naturwissenschaften*, Berlin, 51 (8), p. 202.
991. Pandit, C. N., Awadhiya, R. P. and Dhodapkar, B. S. 1964. Ovarian granulosa cell tumour in a hen.—*J. vet. Anim. Husb. Res.*, Delhi, 8, pp. 119-120.
992. Pandit, C. N. and Tiwari, A. K. 1964. Case of intussusception in a hen.—*J. vet. Anim. Husb. Res.*, Delhi, 8, pp. 126-127.
- Pandit, C. N. 1964.—See Awadhiya, R. P. and Pandit, C. N. 1964.
- Pandit, C. N. 1964.—See Dhodapkar, B. S., Pandit, C. N. and Awadhiya, R. P. 1964.
- Pandit, C. N. 1964.—See Gupta, B. K. and Pandit, C. N. 1964.
- Pandit, C. N. 1964.—See Tiwari, A. K. and Pandit, C. N. 1964.
- Pant, J. C. 1964.—See Dang, K. and Pant, J. C. 1964.
- Pant, J. C. 1964.—See Pant, N. C., Pant, J. C. and Dang, K. 1964.
993. Pant, N. C. 1964. Entomology in India 1938-63.—*Indian J. Ent.* (Silver Jubilee Number), New Delhi, pp. 1-529.
994. Pant, N. C. and Kalode, M. B. 1964. Pests of wheat, maize and millets, pp. 279-292. In: *Entomology in India, 1938-1963*. New Delhi (Entom. Soc. India).
995. Pant, N. C. and Kapoor, S. 1964. A note on the nutritional behaviour of the larvae of greater waxmoth, *Galleria mellonella* L. (Lepidoptera, Pyralidae).—*Indian J. Ent.*, New Delhi, 26 (1), pp. 125-127.
996. Pant, N. C., Pant, J. C. and Dang, K. 1964. Studies on the relative response of *Chilo zonellus* (Swinhoe) to the leaf factors of some maize varieties.—*Indian J. Ent.*, New Delhi, 26 (3), pp. 257-358.
997. Pant, R. and Agrawal, H. C. 1964. Free amino acids of the haemolymph of some insects.—*J. Ins. Physiol.*, London, 10 (3), pp. 443-446.
998. Pant, S. C. 1964. Lower Tertiary formations of Simla and Garhwal Himalays.—*Indian Miner.*, Calcutta, 16 [1963], p. 306.
999. Pant, S. C., Rao, B. R. J. and Chatterjee, A. K. 1964. A note on the radiolarians from Havlock Islands, Ritchie's Archipelago, Andaman Islands.—*Indian Miner.*, Calcutta, 16 [1962], pp. 72-73.
- Pant, S. C. 1964.—See Sastry, M. V. A., Rao, B. R. J. and Pant, S. C. 1964.

1000. Pargaonker, V. N. 1964. Leptospirosis in sheep and goats in Andhra Pradesh.—*Indian vet. J.*, Madras, 41 (7), pp. 441-445.
- Parida, B. B. 1964.—See Manna, G. K. and Parida, B. B. 1964.
1001. Parithar, N. S. and Verma, R. D. 1964. A case of histiocytoma in the nasal cavity of a dog.—*Indian vet. J.*, Madras, 41 (11), pp. 728-730.
1002. Pascoe, E. H. 1964. *A Manual of the Geology India and Burma* (3rd Ed.). Vol. 3. XXIV+1345—2130 pp., 20 pls., 1 front p., 1 map in pocket.—Delhi (Manager of Publs., Govt. of India).
1003. Pasha, S. M. K. 1964. A note on the pancreas and the digestive enzymes of fish.—*Curr. Sci.*, Bangalore, 33 (17), pp. 521-529.
1004. Pasha, S. M. K. 1964. The anatomy and histology of the alimentary canal of an omnivorous fish *Mystus (Macrones) gulis* (Ham.).—*Proc. Indian Acad. Sci.*, Bangalore, 59B, pp. 211-221.
1005. Pasha, S. M. K. 1964. The anatomy and histology of the alimentary canal of a herbivorous fish *Tilapia mossambica* (Peters).—*Proc. Indian Acad. Sci.*, Bangalore, 59B, pp. 340-349.
1006. Pasha, S. M. K. 1964. The anatomy and histology of the alimentary canal of a carnivorous fish *Megalops cyprinoides* (Brouss).—*Proc. Indian Acad. Sci.*, Bangalore, 60B, pp. 107-115.
- Pasternak, F. A. 1964.—See Sokolova, M. N. and Pasternak, F. A. 1964.
1007. Pasternak, T. A. 1964. The deep-sea Pennatularians and Anlipatharians obtained by R/S "Vitjaz" in the Indian Ocean and the resemblance between the faunas of Pennatularians of the Indian Ocean and the Pacific.—*Trud. Inst. Okeanol. Moskva*, Leningrad, 60, pp. 183-215.
1008. Patel, B. and Patel, S. 1964. Studies on the haemoglobin of anadara species (marine lamellibranchs).—*J. Anim. Morph. Physiol.*, Baroda, 11 (1), pp. 143-161.
- Patel, B. 1964.—See Unni, L. K. and Patel, B. 1964.
1009. Patel, G. A., Katarki, H. V. and Thombare, M. V. 1964. Insecticidal trials for the control of pink bollworm, *Pectinophora gossypiella* (Saunders).—*Indian Cott. Gr. Rev.*, Bombay, 18 (5), pp. 294-304.
1010. Patel, H. K., Patel, R. C. and Patel, V. C. 1964. Record of some new insect-pests of different crops, ornamental plants, weeds and stored products in Gujarat State.—*Indian J. Ent.*, New Delhi, 26 (3), pp. 365-367.
- Patel, H. K. 1964.—See Patel, V. C., Patel, H. K. and Patel, R. C. 1964.
1011. Patel, M. R. and Singh, J. 1964. Cataract operation in a dog.—*J. vet. Anim. Husb. Res.*, Delhi, 8, pp. 104-106.
- Patel, M. R. 1964.—See Singh, J. and Patel, M. R. 1964.
- Patel, R. C. 1964.—See Patel, V. C., Patel, H. K. and Patel, R. C. 1964.
1012. Patel, R. M. and Desai, M. V. 1964. A possible biological control of root-knot nematodes.—*Plant Disease Reporter*, Washington, 48 (3), pp. 167-168.
- Patel, V. B. 1964.—See Shah, R. V. and Patel, V. B. 1964.
1013. Patel, V. C., Patel, H. K. and Patel, R. C. 1964. Effect of various recent insecticides on the bark borer (*Indarbela* sp.) of road side trees in Gujarat.—*Indian J. Ent.*, New Delhi, 26 (1), pp. 103-106.
- Patel, V. C. 1964.—See Patel, H. K., Patel, R. C. and Patel, V. C. 1964.
- Pathak, H. D. 1964.—See Perti, O. N., Bahadur, K. and Pathak, H. D. 1964.
- Pathak, S. 1964.—See Sharma, T. and Pathak, S. 1964.

- Patil, F. V. 1964.—See Devi, A., Patil, F. V. and Sarkar, N. K. 1964.
1014. Patil, M. R., Ramamirtham, C. P., Varma, C. P., and Nair, C. P. A. 1964. Hydrography of the west coast of India during the pre-monsoon period of the year 1962.—*J. mar. biol. Ass. India*, Mandapam, 6 (1), pp. 151-166.
1015. Patnaik, B. K. and Singh, S. N. 1964. Serum calcium level in *Funambulus pennanti* (Wroughton) in relation to sex and body weight.—*Indian J. exp. Biol.*, New Delhi, 2, p. 113.
1016. Patnaik, M. M. 1964. A note on setarid infection in buffalo.—*Indian J. Helminth.*, Lucknow, 16 (1), pp. 44-47.
1017. Patnaik, M. M. 1964. A note on the identity and pathogenicity of the immature stages of *Paramphistomum (Explanatum) explanatum* (Creplin, 1847) Nasmark, 1937 in buffalo.—*Indian J. Helminth.*, Lucknow, 16 (1), pp. 48-51, 1 pl.
1018. Patnaik, M. M. 1964. Observations on the comparative anthelmintic efficiency of organophosphorus compounds and synergized phenothiazine against *Strongyloides papillosus* (Wedl.) in calves.—*Brit. vet. J.*, London, 120 (1), pp. 21-24.
1019. Patnaik, M. M. 1964. On the synonymy of *Oesophagostomum bhandarai* with *Oesophagostomum asperum*.—*Indian vet. J.*, Madras, 41 (4), pp. 271-272.
1020. Patnaik, M. M. 1964. A note on the helminth parasites on the black buck (*Antelope cervicapra*).—*Curr. Sci.*, Bangalore, 33 (6), p. 180.
1021. Patnaik, M. M. 1964. A note on bubaline stephanofilaria in Orissa.—*Indian vet. J.*, Madras 41 (7), 262-266.
1022. Pattanayak, S. 1964. Microfilaria in domestic rats (*Rattus rattus rattus*) in Kerala state, India.—*Curr. Sci.*, Bangalore, 33 (16), pp. 489-490.
1023. Pattanayak, S. 1964. Filaria infection in cows.—*Bull. Indian Soc. Malar. Commun. Dis.*, Delhi, 1 (3-4), pp. 165-167.
- Paul, H. S. 1964.—See Sohi, G. S. and Paul, H. S. 1964.
1024. Paulpandian, A. 1964. Cyclic ventilation movement in the common cockroach, *Periplaneta americana*.—*Curr. Sci.*, Bangalore, 33 (13), pp. 404-405.
1025. Pavri, K. M., Anderson, C. R. and Sing, K. R. P. 1964. An outbreak of rabies in horses near Poona, India.—*Curr. Sci.*, Bangalore, 33 (11), pp. 329-330.
1026. Pavri, K. M., Banerjee, G., Anderson, C. R. and Aiket, B. K. 1964. Virological and serological studies of cases of haemorrhagic fever in Calcutta, material collected by the Institute of Post-graduate Medical Education and Research, Calcutta.—*Indian J. med. Res.*, New Delhi, 52 (7), pp. 692-697.
- Pavri, K. M. 1964.—See Singh, K. R. P., Pavri, K. M. and Anderson, C. R. 1964.
1027. Perraju, A., Subrahmanyam Naidu, K. P. and Venkatarami Raddi, G. P. 1964. Occurrence of coremata in certain Lepidoptera.—*Andhra agric. J.*, Bapatla, 11 (5), pp. 228-230.
1028. Perti, O. N., Bahadur, K., Pathak, H. D. 1964. Origin of living systems.—*Agra. Univ. J. Res.*, Agra, 13 (2), pp. 197-223.
1029. Perti, S. L., Chadha, B. D., Dixit, R. S. and Agarwal, P. N. 1964. Effect of temperature and humidity on the susceptibility of flour beetles to insecticides.—*Def. Sci. J.*, Delhi, 14 (3) pp. 271-276.
- Perti, S. L. 1964.—See Ayyappa, P. K., Perti, S. L. and Wal, W. C. 1964.
- Perti, S. L. 1964.—See Damodar, P. and Perti, S. L. 1964.
1030. Perumal, M. C. and Sreeram, V. 1964. Certain observations on a two-seam and a four-seam trawl used in off-shore fishing at Cochin.—*Indian J. Fish.*, New Delhi, 9B (1) [1962], 71-83.
1031. Peswani, K. M. and Lal, R. 1964. Estimation of loss of brinjal fruits caused by shoot and fruit

- börer, *Leucinodes orbonalis* Guence.—*Indian J. Ent.*, New Delhi, 26 (1), pp. 112-113.
1032. Peters, W. L., Gillies, M. T. and Edmunds, G. F. 1964. Two new genera of mayflies from the Ethiopian and Oriental regions (Ephemeroptera : Leptophlebiidae).—*Proc. R. ent. Soc. Lond.*, London, 33B (7-8), pp. 117-124.
1033. Phillips, W. W. A. 1964. The birds of the Maldive Island, Indian Ocean.—*J. Bombay nat. Hist. Soc.*, Bombay, 60, pp. 546-584.
1034. Phillips, W. W. A. 1964. Some observations on the fauna of the Maldive Islands. Part VII. Butterflies.—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (2), pp. 396-401.
- Phookan, D. P. 1964.—Tandon, G. S., Shukla, R. C. and Phookan, D. P. 1964.
- Pillai, G. B. 1964.—See Chandy, K. and Pillai, G. B. 1964.
- Pillai, K. J. 1964.—See Swarup, G. and Pillai, K. J. 1964.
1035. Pillai, N. K. 1964. Copepods parasitic on south Indian fishes : family Anthosomidae-1.—*J. Bombay nat. Hist. Soc.*, Bombay, 60, pp. 665-670.
1036. Pillai, N. K. 1964. Copepods parasitic on south Indian fishes : Family Anthosomidae-2.—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (1), pp. 46-59.
1037. Pillai, N. K. 1964. Report on the Mysidacea in collections of the Central Marine Fisheries Research Institute, Mandapam Camp, South India —Part I.—*J. mar. biol. Ass. India*, Mandapam, 6 (1), pp. 1-41.
1038. Pillai, N. K. 1964. A miscellaneous collection of copepods parasitic on south Indian fishes.—*J. mar. biol. Ass. India*, Mandapam, 6 (1), pp. 61-83.
1039. Pillai, N. K. 1964. On the occurrence of *Podophthalmus vigil* (Fabricius) [Decapoda : Crustacea] on the west coast of India.—*J. mar. biol. Ass. India*, Mandapam, 6, pp. 169-170.
1040. Pillai, N. K. 1964. Isopod parasites of Indian Mysids.—*Ann. Mag. nat. Hist. Lond.*, London, (13) 6 (72) [1963], pp. 739-743.
1041. Pillai, N. K. 1964. Parasitic isopods of the family Cynnothoidae from south Indian fishes.—*Parasitology*, London, 54 (2), pp. 211-223.
1042. Pillai, N. K. 1964. A redescription of the copepod *Papulina minor* M. S. Wilson.—*Zool. Anz.*, Leipzig, 171, pp. 237-242.
1043. Pillai, N. K. 1964. South Indian marine isopods.—*J. Univ. Bombay (N. S.)*, Bombay, 31, pp. 100-112.
1044. Pillai, N. K. and Mariamma, T. 1964. On a new lepidomysid from India.—*Crustaceana*, Leiden, 7 (2), pp. 113-124.
1045. Pillai, N. K. and Padmanabhan, K. G. 1964. A redescription of *Papalina brevicauda* M. S. Willson (Copepoda : Caligoida) with observations on the genus *Diphyllogaster* Brian.—*J. Univ. Bombay (N. S.)*, Bombay, 31, pp. 91-99.
8046. Pillai, R. S. 1964. Four species of *Caridina* from Travancore, including a new variety.—*J. mar. biol. Ass. India*, Mandapam, 6 (1), pp. 42-47.
1047. Pillay, K. K. 1964. On the occurrence of *Podophthalmus vigil* (Fabricius) [Decapoda : Crustacea] on the west coast of India.—*J. mar. biol. Ass. India*, Mandapam, 6 (1), p. 169.
1048. Pillay, S. R. 1964. Maturation and spawning of the hilsa, *Hilsa ilisha* (Hamilton), of the Saurashtra coast.—*Proc. natn. Inst. Sci. India*, Delhi, 30B, pp. 1-14.
1049. Pillay, T. V. R. and Ghosh, K. K. 1964. The bag net fishery of the Hooghly Matlah estuarine system (West Bengal).—*Indian J. Fish.*, New Delhi, 9A (1) [1962], pp. 71-99.
1050. Pingale, S. V. 1964. Progress in handling of grain in storage in India. pp. 331-351. In : *Entomology in India, 1938-1963*.—New Delhi (Entom. Soc. India).

1051. Ping-Yuan, W. 1964. Occurrence of Indian meal moth, *Plodia interpunctella* (Hubner) as a new field pest of jujube in Peking with notes on its biology.—*Act. Ent. Sinica*, Peking, **13** (4), pp. 628-631.
1052. Ponnuswami, M. K. 1964. The mustard aphid and its control with modern insecticides.—*Pl. Prot. Bull.*, New Delhi, **12** (1-4) [1960], pp. 43-45.
1053. Pont, A. C. 1964. The Mollissima subgroup of *Fannia* Desvoidy, with the description of a new species from Burma and a revised key to species (Diptera : Muscidae).—*Ann. Mag. nat. Hist.*, London, (13) **7** (84), pp. 757-767.
1054. Powell, A. N. W. 1964. The gaur or Indian bison.—*J. Bengal nat. Hist. Soc.*, Darjeeling, **32**, pp. 73-80.
1055. Powell, A. N. W. 1964. The Himalayan black bear.—*J. Bengal nat. Hist. Soc.*, Darjeeling, **32**, pp. 81-88.
1056. Powell, A. N. W. 1964. The Markhor.—*J. Bengal nat. Hist. Soc.*, Darjeeling, **33**, pp. 116-131.
1057. Powell, A. N. W. 1964. The goral.—*J. Bengal nat. Hist. Soc.*, Darjeeling, **33**, pp. 132-135.
1058. Powell, A. N. W. 1964. The phia.—*J. Bengal nat. Hist. Soc.*, Darjeeling, **33**, pp. 136-142.
1059. Powell, A. N. W. 1964. The muntjac or barking deer.—*J. Bengal nat. Hist. Soc.*, Darjeeling, **33**, pp. 143-148.
1060. Powell, A. N. W. 1964. The musk deer.—*J. Bengal nat. Hist. Soc.*, Darjeeling, **33**, pp. 149-152.
1061. Prabhu, S. S., Premnarain, Degi, S., Joshi, C. and Singh, H. P. 1964. Studies in *Drosophila* egg. 2. Two-way selection for egg production in *Drosophila melanogaster*.—*J. Anim. Morph. Physiol.*, Baroda, **11** (1), pp. 199-218.
- Prabhu, S. S. 1964.—See Chetram, Khanna, N. D., Singh, D. P. and Prabhu, S. S. 1964.
1062. Prabhu, V. K. K. 1964. Regeneration of connective bodies of the neurosecretory system of *Fonespeltis splendidus* Verhoeff (Myriapoda : Diplopoda).—*Indian J. exp. Biol.*, New Delhi, **2**, 5-8, figs. 1-5.
1063. Pradhan, L. B. and Reddy, C. V. G. 1964. Fluctuations in mackerel landing at Calicut in relation to hydrographical factors.—*Indian J. Fish.*, New Delhi, **9A** (1), [1962], pp. 100-109.
1064. Pradhan, M. J. 1964. A preliminary account of the flat fishes (Heterosomata) found along the Bombay coast.—*J. Bombay nat. Hist. Soc.*, Bombay, **61** (2), pp. 456-459.
1065. Pradhan, M. J., Sekharan, K. V. and Menon, K. K. P. 1964. On the occurrence of *Laputa cingalensis* Fraser-Brunner, in Indian waters.—*J. mar. biol. Ass. India*, Mandapam, **6** (2), pp. 314-315.
1066. Pradhan, S. 1964. Assessment of losses caused by insect pests of crops and estimation of insect population. pp. 17-58. In : *Entomology in India, 1938-1963*, New Delhi (Entom. Soc. India).
1067. Pradhan, S. 1964. Some thoughts on speciation in insects.—*Indian J. Ent.*, New Delhi, **26** (1), pp. 76-77.
1068. Pradhan, S. and Jotwani, M. G. 1964. History of entomology in India. Pp. 1-16. In : *Entomology in India, 1938-1963*, New Delhi (Entom. Soc. India).
1069. Pradhan, S., Jotwani, M. G. and Sarup, P. 1964. Relative efficacy of different insecticides to the grubs of singhara beetle, *Galerucella birmanica* Jacoby (Chrysomelidae : Coleoptera).—*Indian J. Ent.*, New Delhi, **26** (1), pp. 92-96.
- Pradhan, S. 1964.—See Srivastava, P. D., Kumar, S. S., Bhambhurkar, M. W. and Pradhan, S. 1964.
1070. Prakash, A. and Sarma, A. H. V. 1964. On the occurrence of 'red water' phenomenon on the west coast of India.—*Curr. Sci.*, Bangalore, **33**, pp. 68-70.
1071. Prakash, A. and Singh, V. 1964. Normal parturition in camels.—*Univ. Udaipur Res. Stud.*, *Souven.*

- Vol.*, Udaipur, 2, pp. 195-197. (Original full paper in *Indian vet. J.*, Madras, 39 (10), pp. 551-553, 1962).
- Prakash, A. 1964.—See Singh, V. and Prakash, A. 1964.
- Prakash, A. H. A. 1964.—See Mehta, V. S., Prakash, H. A. A. and Singh, M. 1964.
1072. Prakash, I. 1964. Eco-toxicology and control of the Indian desert gerbille, *Meriones hurrianae* (Jerdon). II. Breeding season, litter size, and post natal development.—*J. Bombay nat. Hist. Soc.*, Bombay, 60 (1), pp. 142-149, 1 pl.
1073. Prakash, I. 1964. Eco-toxicology and control of Indian desert gerbille.—*Indian For.*, Dehra Dun, 90 (8), pp. 517-528.
1074. Prakash, I. 1964. Cyto-morphology of adrenal gland of Indian desert gerbille.—*J. anat. Soc. Indian*, Allahabad, 13 (2), pp. 96-97.
1075. Prakash, I. 1964. Seed preferences of desert rodents.—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 497-498.
1076. Prakash, I. 1964. Rodent pests as factor of desertization in India.—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 499.
1077. Prakash, I. 1964. Some vertebrate pests in the Rajasthan desert.—*Indian For.*, Dehra Dun, 90 (2), pp. 107-112.
1078. Prakash, I. 1964. Taxonomical and ecological account of the mammals of Rajasthan desert.—*Ann. Arid. Zone*, Jodhpur, 2, pp. 150-161.
1079. Prakash, R. 1964. Studies on the innervation of the heart of the house sparrow, *Passer domesticus*.—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 493.
- Pramanik, L. M. 1964.—See Banerjee, S. N. and Pramanik, L. M. 1964.
- Pramanik, L. M. 1964.—See Basu, A. C. and Pramanik, L. M. 1964.
1080. Prasad, H. and Narayan, K. G. 1964. Two new species of *Eimeria* of antelopes.—*Acta vet. hung.*, Budapest, 13, pp. 163-167.
1081. Prasad, H. and Srivastava, C. P. 1964. Duck diseases in India with a note on an outbreak of coli-bacillosis in Bihar.—*Indian vet. J.*, Madras, 41 (12), pp. 787-792.
- Prasad, I. B. 1964.—See Singh, O. N., Prasad, J. N. and Prasad, I. B. 1964.
1082. Prasad, J. 1964. Development of chondrocranium in tropical rattle snake or cascabel.—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 453.
1083. Prasad, J. 1964. Cardio-innervation, heart and specialised conducting (connecting) system in Indian heron.—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), 498.
1084. Prasad, J. 1964. On the pneumatic osteolysis in the Indian wild-boar.—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 491.
- Prasad, J. N. 1964.—See Mishra, H. R., Prasad, J. N. and Jha, B. N. 1964.
- Prasad, J. N. 1964.—See Singh, O. N., Prasad, J. N. and Prasad, I. B. 1964.
1085. Prasad, K. N. 1964. Fossil vertebrates from Gujarat.—*Indian Miner.*, Calcutta, 18 (1), p. 92.
1086. Prasad, K. N. 1964. Miocene vertebrates from Cutch district, Gujarat, India.—*Bull. geol. Soc. India*, Calcutta, 1 (2), pp. 9-12.
1087. Prasad, K. N. 1964. Upper Miocene anthropoids from the Siwalik beds of Haritalyangar, Himachal Pradesh, India.—*Palaeontology*, London, 7, pp. 124-134.

1088. Prasad, K. N. and Satsangi, P. P. 1964. Note on the mandible of *Hexaprotodon sivalensis* from the Siwaliks of Punjab.—*Bull. geol. min. metall. Soc. India*, Calcutta, 31, pp. 1-6.
1089. Prasad, L. M., Dey, J. M. and Deb, J. C. 1964. Fuller and better utilisation of dry and wet salted goat skins.—*J. Indian Leather technol. Ass.*, Calcutta, 12 (9), p. 355.
- Prasad, M. R. N. 1964.—See Sundarraj, B. I. and Prasad, M. R. N. 1964.
1090. Prasad, S. K. 1964. Plant parasitic nematodes. pp. 397-406. In : *Entomology in India 1938-1963*, New Delhi (Entom. Soc. India).
1091. Prasad, S. K. and Dasgupta, D. R. 1964. Plant parasitic nematodes associated with roses in Delhi.—*Indian J. Ent.*, New Delhi, 26 (1), pp. 120-122.
1092. Prasad, S. K. and Dasgupta, D. R. 1964. Varietal susceptibility of commercial tomatoes to the attack of root-knot nematodes, *Meloidogyne* spp.—*Indian J. Ent.*, New Delhi, 26 (2), pp. 235-237.
1093. Prasad, S. K., Jotwani, M. G. and Dasgupta, D. R. 1964. Nematicidal potentialities of some insecticides listed against the larvae of the root-knot nematode, *Meloidogyne javanica* (Treub, 1885) Chitwood, 1949.—*Indian J. Ent.*, New Delhi, 26 (2) pp. 231-234.
1094. Prasad, V. 1964. Mites, a problem for crop growers.—*Mag. Stud. Union Ranchi agric. College*, Ranchi, 4, pp. 19-20.
1095. Premkumar, V. K. 1964. A new species of sand-crab of the genus *Ocypoda* Fabricius, 1798 [Crustacea : Decapada : Brachyura], from the Coromandel coast, India.—*Proc. zool. Soc.*, Calcutta, 17 (2), pp. 153-157, 1 pl.
1096. Premvati. 1964. Some observations on the embryonation of eggs of *Haterakis galtinae* at different temperatures.—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 453.
1097. Purkayastha, B. K. and Krishnan, Y. S. 1964. Determination of optimum amount of brood lac requirement for crop inoculations and proper time of harvesting for maximising yield on *Palas* in the Baisakhi season.—*Indian Agric.*, Calcutta, 8 (1), pp. 55-60.
1098. Purohit, B. L., Sardeshpande, P. B. and Joshi, K. V. 1964. Renal carcinoma in a cat.—*Indian vet. J.*, Madras, 41 (12), pp. 796-798.
- Purohit, K. G. 1964.—See Ghosh, P. K., Purohit, K. G. and Prakash, I. 1964.
1099. Purohit, M. S. and Groshke, A. C. 1964. The effect of streptomycin on the pantothenic acid requirement of the chicks.—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 175-184.
1100. Purohit, M. S. and Rathore, S. S. 1964. The spleen of the camel in comparison to that of an ox.—*Univ. Udaipur Res. Stud. Souven. Vol.*, Udaipur, 2, pp. 184-186, 1 pl. (Original full paper in *Indian vet. J.*, Madras, 35 (12), pp. 605-607, 1958).
1101. Purohit, M. S. and Rathor, S. S. 1964. The thyroid gland of the camel in comparison to that of an ox.—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 186-187. (Original full paper in *Indian vet. J.*, Madras, 35 (12), pp. 607-608, 1958).
1102. Purohit, M. S. and Rathor, S. S. 1964. Stomach of the camel in comparison to that of the ox.—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 188-192, 2 pls. (Original full paper in *Indian vet. J.*, Madras, 39 (11), pp. 604-608, 1962).
- Purushotham, N. P. 1964.—See Mahender, M. and Purushotham, N. P. 1964.
1103. Puttanna, C. R. 1964. Acrosome reaction in *Rhysida lithobioides*.—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 444-445.
1104. Puttanna, C. R. 1964. Role of supernumeraries in the population dynamics of *Orthacris ruficornis* (Family : Acrididae).—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 445-446.

1105. Puttarudriah, M. and Sastry, K. S. S. 1964. Incidence of the coconut caterpillar, *Nephantis serinopa* Meyr, in Bangalore.—*Curr. Sci.*, Bangalore, 33 (11), p. 340.

Q

1106. Qadri, S. S. and Rao, T. B. 1964. On a new flagellate *Polymastix periplanete* from the common cockroach *Periplaneta americana*.—*Riv. Parassit.*, Rome, 24 [1963], pp. 153-158.
1107. Qasim, S. Z. and Bhatt, V. S. 1964. Occurrence of growth zones on the opercular bones of the freshwater murrel, *Ophiocephalus punctatus* Bloch.—*Curr. Sci.*, Bangalore, 33 (1), pp. 19-20.
1108. Qasim, S. Z. and Hasan, R. 1964. Evolutionary significance of the neurohumoral control of cardiac rhythm in vertebrates.—*Sci. & Cult.*, Calcutta, 30, pp. 202-203.
- Qasim, S. Z. 1964.—See Qayyum, A. and Qasim, S. Z. 1964.
1109. Qayyum, A. and Qasim, S. Z. 1964. Studies on the biology of some freshwater fishes. Part I.—*Ophiocephalus punctatus* Bloch.—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (1), pp. 74-98.
1110. Qayyum, A. and Qasim, S. Z. 1964. Studies on the biology of some freshwater fishes. 2. *Barbus stigma* (Cuv. & Val.).—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (2), pp. 330-347.
1111. Qureshi, M. R. 1964. A field-key to the identification of fishes Order Perciformes. Part I.—Suborder Percoidei (families Lutjanidae, Lobotidae, Gerridae).—*Scientist*, Harrow, 7, pp. 20-36.
- Qureshi, M. R. 1964.—See Syed, R. A., Qureshi, M. R. and Ghani, M. A. 1964.

R

- Rabindra Kumar, 1964.—See Niruia, K. K. and Rabindra Kumar, 1964.

—Radha, N. V. 1964.—See David, B. V. and Radha, N. V. 1964.

1112. Raghava Rao, K. V. and Grewal, P. P. S. 1964. A note on some interesting sedimentary structures in the Siwalik formations of Doon Valley, Uttar Pradesh.—*Curr. Sci.*, Bangalore, 33, pp. 244-246, 3 figs.
1113. Raghupthiramireddy, S. and Swami, K. S. 1964. On the occurrence of a heme pigment in the stomach of the amphibious snail, *Pila globosa*.—*Curr. Sci.*, Bangalore, 33 (16), pp. 495-496.
- Rahalkar, P. W. 1964.—See Thirumalachar, M. J., Radhakrishnan, C. V., Padhye, A. A., Manrai, M., Gopalakrishnan, K. S. and Rahalkar, P. W. 1964.
1114. Rahman, S. J. and Khan, H. H. 1964. Inheritance of dieldrinresistance in *Musca domestica nebulosa*.—*Botyu-kagaku*, Tokyo, 29 (2), pp. 19-21.
1115. Rahman, S. J., Riaz, N. and Khan, N. H. 1964. The sensitivity of *Musca domestica nebulosa* F. and *M. domestica vicina* Macq. to DDT, BHC and dieldrin as shown by dosage-mortality curves.—*Bull. ent. Res.*, London, 55 (2), pp. 355-365.
- Rai, H. 1964.—See Sarkar, H. L. and Rai, H. 1964.
1116. Rai, B. K., Kanta, S. and Lal, R. 1964. Effect of piperonyl butoxide on the toxicity of some pesticides to the palm mite, *Raoiella indica* Hirst (Tenuipalpidae : Acarina).—*Proc. natn. Inst. Sci. India*, N. Delhi, 29B [1963], pp. 608-612, figs. 1-6.
1117. Rai, K. and Chatterjee, P. N. 1961. Studies on the morphology and taxonomy of Indian Bostrychidae. VI.—A new species of *Xylopertha* G. M. from north India (Coleoptera : Bostrychidae : Bostrychinae).—*Indian For.*, Dehra Dun, 90 (2), pp. 122-124.
- Rai, K. 1964.—See Thehan, K. N. and Rai, K. 1964.
1118. Rai, K. and Chatterjee, P. N. 1964. Studies on the morphology and taxonomy of Indian Bostrychidae. V.—A revision of the Indian species of

- Heterobostrychus* Lesne. (Coleoptera : Bostrychidae).—*Indian For. Res. (N. S.) Ent.*, Delhi, 10 (10), pp. 205-218.
1119. Rai, K. and Trehan, K. N. 1964. The internal anatomy of *Bagrada cruciferarum* Kirk. (Heteroptera : Pentatomidae).—*Res. Bull. (N. S.) Panjab Univ.*, Chandigarh, 15 (3-4), pp. 339-343.
- Rai, K. 1964.—See Trehan, K. N. and Rai, K. 1964.
- Rai, P. 1964.—See Pande, B. P., Bhatia, B. B. and Rai, P. 1964.
1120. Rai, S. L. 1964. Observations on the life-history of *Phyllostomum srivastavai* sp. n. (Trematoda : Gorgoderidae).—*Parasitology*, Cambridge, 54 (1), pp. 43-52.
1121. Rai, S. L. 1964. *Azygia stunkardi* sp. n. (Trematoda : Azygiidae).—*Parasitology*, Cambridge, 54 (1), pp. 53-57.
1122. Rai, S. L. 1964. Morphology and life history of *Aspidogaster indicum* Dayal, 1943. (Trematoda : Aspidogastridae).—*Indian J. Helminth*, Lucknow, 16 (2), pp. 100-141.
1123. Raj, P. J. S. 1964. Communal breeding in the whiteheaded babbler [*Turdoides affinis* (Jerdon)] in Tambaram, Madras State].—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (1), pp. 181-183.
1124. Rajagopal, A. 1964. On a new species of pycnogonid *Endeis ghaziei* from Enoore.—*Proc. Indian Acad. Sci.*, Bangalore, 57B [1963], pp. 235-238, fig. 1.
1125. Rajagopal, A. S. 1964. Two new species of marine borers of genus *Nausitora* (Mollusca : Teredinidae) from West Bengal, India.—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (1), pp. 108-118.
1126. Rajagopalan, N. 1964. Late Cretaceous and early Tertiary stratigraphy of Pondicherry, S. India.—A preliminary note.—*Bull. geol. Soc. India*, Calcutta, 1, pp. 10-12.
1127. Rajagopalan, N. 1964. Stratigraphy, micropaleontology and paleoecology of the upper Cretaceous and lower Tertiary formations of Pondicherry, South India.—*Diss. Abstr.*, Ann Arbor, 25, p. 1848.
- Rajagopalan, P. K. 1964.—See Trapido, H., Goverdhan, M. K., Rajagopalan, P. K. and Rebel, M. J. 1964.
1128. Rajalakshmi, S., Sarma, D. S. R., Leelavathi, D. E. and Sarma, P. A. 1964. Reversal of orotic acid fatty liver by actinomycin D.—*Curr. Sci.*, Bangalore, 33 (20), pp. 610-611.
1129. Rajalakshmi, S., Sarma, D. S. R. and Sarma, P. S. 1964. Mechanism of induction of orotic acid fatty liver.—*Curr. Sci.*, Bangalore, 33 (16), pp. 481-484.
- Rajari, V. G. 1964.—See Teotia, T. P. S. and Rajani, V. G. 1964.
1130. Rajapaksa, N. 1964. Survey for coelomomyces infections in mosquito larvae in the South-West coastal belt of Ceylon.—*Bull. Wld. Hlth. Org.*, Geneva, 30 (1), pp. 149-151.
1131. Rajasekhara, K., Chatterji, S. and Menon, M. G. R. 1964. Biological notes on *Psallus* species (Miridae : Hemiptera), a predator of *Taeniothrips nigricornis* Schmutz (Thripidae : Thysanoptera).—*Indian J. Ent.*, New Delhi, 26 (1), pp. 62-66.
1132. Rajasekharasetty, M. R. and Krishnamurthy, N. B. 1964. Chromosomal instability in the genus *Gastrimargus* (Family : Acrididae).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 445.
1133. Rajasekharasetty, M. R. and Puttanna, C. R. 1964. Chromosomes of *Icerya* sp. (Family : Margarodidae, Order : Homoptera).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 444.
1134. Rajasekharasetty, M. R. and Ramanamurthy, C. V. 1964. Contributions to blattid cytology : Chromosome behaviour in a meiosis of a new species of *Periplaneta*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 439-440.

- Rajasekharasetty, M. R. 1964.—See Venkatanarasimhaiah, C. M. and Rajasekharasetty, M. R. 1964.
1135. Rajbanshi, V. K. 1964. Histological study of the gustoreceptors of *Mystus vittatus*.—*Curr. Sci.*, Bangalore, 33 (13), p. 404.
1136. Rajbanshi, V. K. 1964. Note on the histological study of the lateral line sense-organs of *Mystus vittatus*.—*Curr. Sci.*, Bangalore, 33 (16) pp. 492-493.
1137. Raju, G. 1964. Observations on the food and feeding habits of the oceanic skipjack *Katsuwonus pelamis* (Linn.) of the Laccadive sea during the years 1958-59.—*Proc. Symp. Scombroid fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (2), pp. 607-625.
1138. Raju, G. 1964. Fecundity of the oceanic skipjack *Katsuwonus pelamis* (Linn.) of Minicoy.—*Proc. Symp. Scombroid fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (2), pp. 725-732.
1139. Raju, G. 1964. Studies on the spawning of the oceanic skipjack *Katsuwonus pelamis* (Linn.) in Minicoy waters.—*Proc. Symp. Scombroid fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (2), pp. 744-768.
- Raju, G. 1964.—See Thomas, P. T. and Raju, G. 1964.
1140. Rajulu, G. S. 1964. A hitherto undescribed hydro-receptor in millipedes.—*Curr. Sci.*, Bangalore, 33, pp. 249-251, figs. 1-2.
- Rajulu, G. S. 1964.—See Krishnan, G. and Rajulu, G. S. 1964.
1141. Rajya, B. S. 1964. Pathology of pneumonia and associated respiratory diseases in sheep and goats.—*Agra Univ. J. Res. (Sci.)*, Agra, 13 (3), pp. 189-192.
1142. Rakshpal, R. 1964. Free amino acids in the poison of *Vespa orientalis* Fabr. (Vespidae : Hymenoptera).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 458.
1143. Rakshpal, R. 1964. Effect of potassium on oxygen consumption and hatching of diapause and post-diapause eggs of *Gryllus pennsylvanicus* Burmeister (Orthoptera : Gryllidae).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 457.
1144. Rakshpal, R. 1964. Growth and respiration during postembryonic development of a diapause species, *Gryllus veletis* (Alexander and Bigelow) (Orthoptera : Gryllidae).—*Indian J. Ent.*, New Delhi, 36 (1), pp. 67-75.
1145. Ram, A. and Subbarao, B. R. 1964. Genus *Bracon* Fabricius (Braconidae : Hymenoptera) parasitizing a gall forming psyllid (Psyllidae : Homoptera : Hemiptera) on *Ficus glomerata*.—*Curr. Sci.*, Bangalore, 33 (17), p. 539.
1146. Ramachandra Rao, T. 1964. Vectors of dengue and chikungunya viruses : a brief review.—*Indian J. med. Res.*, New Delhi, 52 (7), pp. 719-726.
- Ramachandra Rao, T. 1964.—See Dhanda, V. and Ramachandra Rao, T. 1964.
1147. Ramakrishnan, C. and Narayanaswamy, P. S. 1964. Insecticidal control of the pulse beetle, *Burchus theobromae* L. on red gram.—*Madras agric. J.*, Coimbatore, 51 (1), pp. 30-31.
1148. Ramakrishnan, S. P., Bruce-Chwatt, L. J., Prakash, S., Chowdhury, D. S., Pattanayak, S., Singh, D. and Dhar, S. K. 1964. Selection of a strain of albino mice refractory to *Plasmodium berghei* infection.—*Bull. World Hlth. Org.*, Geneva, 31, pp. 393-397.
1149. Ramakrishnan, S. P., Krishnamurthy, B. S. and Kalra, R. L. 1964. A note on toxicity of 'dichlorovos' to insects of public health importance.—*Indian J. Malar.*, Delhi, 17 (2-3) [1963], pp. 115-118.
1150. Ramakrishnan, S. P., Krishnamurthy, B. S. and Singh, N. N. 1964. A simple technique for rapid separation of mosquito pupae (from larvae) by sudden chilling [in water at about 38°F.].—*Indian J. Malar.*, Delhi, 17 (2-3) [1963], pp. 119-121.
1151. Ramamirtham, C. P. and Nair, C. P. A. 1964.

- Variation of vertical stability parameter in surface layers of the Arabian sea off Cochin.—*J. mar. biol. Ass. India*, Mandapam, 6 (2), pp. 202-206.
- Ramamirtham, C. P. 1964.—See Patil, M. R., Ramamirtham, C. P., Varma, P. U. and Nair, C. P. A. 1964.
1152. Ramamurti, A. 1964. Performance of cross-bred progeny of Nilgiri ewes with exotic rams.—*Indian vet. J.*, Madras, 41 (3), pp. 201-205.
1153. Ramamurthi, B. N. 1964. Notes on Indian Dermaptera.—*Ann. Mag. nat. Hist. Lond.*, London, (13) 6(71) [1963], pp. 671-676.
1154. Ramamurthy, P. S. 1964. Distribution of RNA in the ooplasm of the scorpion-fly.—*Sci. & Cult.*, Calcutta, 30 (9), pp. 459-460.
1155. Ramamurthy, P. S. 1964. Intercellular bridges in the ovarian follicles of *Panorpa communis* L. (Mecoptera-Insecta).—*Curr. Sci.*, Bangalore, 33 (16), pp. 493-495.
1156. Ramamurthy, S. 1964. On a new record of *Metapenaeus stebbingi* Nobili, in Indian waters.—*J. mar. biol. Ass. India*, Mandapam, 6 (1), p. 170.
1157. Raman, K. 1964. On the location of a nursery ground of the giant prawn *Macrobrachium rosenbergii* (de Man).—*Curr. Sci.*, Bangalore, 33, pp. 27-28.
1158. Ramanadham, R., Reddy, M. P. M. and Murty, A. V. S. 1964. Limnology of the Chilka lake.—*J. mar. biol. Ass. India*, Mandapam, 6 (2), pp. 183-201.
1159. Ramanamurthy, C. V. 1964. Chromosome behaviour in the male *Pycnoscelus surinamensis* (Linn.) (Blattidae : Pauchlorinae).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 439.
1160. Ramaprasad, T. C. N. 1964. Regeneration of operculum in *Potamides cingulatus* (Gmelin) (Gastropoda : Prosobranchia).—*Curr. Sci.*, Bangalore, 33 (10), p. 310.
- Ramaprasad, 1964.—See Sharma, G. P., Ramaprasad, and Handa, S. M. 1964.
- Ramarao, K. V. 1964.—See Menon, A. G. K. and Ramarao, K. V. 1964.
1161. Ramarao, P., Christopher, J. and Sastry, G. A. 1964. Cholangiocellular carcinoma in an ewe.—*Indian vet. J.*, Madras, 41 (3), pp. 197-199.
- Ramarao, P. 1964.—See Christopher, J. and Ramarao, P. 1964.
1162. Rangarajan, A. V. 1964. *Protaetia aurichalcea* F. (Cetoniidae), a new beetle feeding on pollen stores of *Aphis indica* F.—*Indian Bee J.*, New Delhi, 26 (2), p. 26.
1163. Rangaranjan, A. V. and David, B. V. 1964. Host range and rare occurrence of insects affecting solanaceous plants in Coimbatore.—*Indian J. Ent.*, New Delhi, 26 (2), pp. 243-245.
1164. Rangaranjan, K. 1964. A new polychaete of the family Pilargidae from Palk Bay, South India.—*J. mar. biol. Ass. India*, Mandapam, 6 (1), pp. 122-127.
- Rangaranjan, K. 1964.—See Sankarankutty, C. and Rangaranjan, K. 1964.
- Rangarajan, K. 1964.—See Tampi, P. R. S. and Rangaranjan, K. 1964.
- Rangarao, K. 1964.—See Nagabhusanam, R. and Rangarao, K. 1964.
- Rangaswami, G. 1964.—See Chidambaranathan, A. and Rangaswami, G. 1964.
1165. Rangnekar, M. P. 1964. Redescription of *Hermileus longicornis* Bassett-Smith : a copepod parasitic on a fish of Bombay coast.—*J. Univ. Bombay (N. S.)*, Bombay, 31 (5), pp. 80-83.
1166. Rangnekar, M. P. and Murti, N. N. 1964. *Bomolochus decapteri* Yamaguti and *Caligus epinepneli* Yamaguti : Copepods parasitic on fishes of Bombay.—*J. Univ. Bombay (N. S.)*, Bombay, 31 (5), pp. 84-90.

1167. Rangnekar, P. G. and Murti, N. N. 1964. Some remarks on the transfer of *Caligus parvus* Bassett-Smith to the genus *Pseudocaligus*: a copepod parasite of a puffer *Tetradon oblongus* Schn.—*J. biol. Sci.*, Bombay, 7 (1), pp. 42-44.
1168. Rangnekar, P. V. and Sabnis, P. B. 1964. Blood sugar responses to glycogen and insulin administration in the frog, *Rana tigrina* and lizard, *Varanus monitor*.—*J. Anim. Morph. Physiol.*, Baroda, 11 (1), pp. 173-179.
1169. Rao, B. R. J., Mangain, V. D. and Sastry, M. V. A. 1964. A note on the Niniyur Stage of Cretaceous formations of Trichinopoly district, Madras.—*Indian Miner.*, Calcutta, 17 [1962], pp. 190-192.
- Rao, B. R. J. 1964.—See Mangain, V. D. and Rao, B. R. J. 1964.
- Rao, B. R. J. 1964.—See Pant, S. C., Chatterjee, A. K. and Rao, B. R. J. 1964.
- Rao, B. R. J. 1964.—See Sastry, M. V. A., Pant, S. C. and Rao, B. R. J. 1964.
1170. Rao, C. A. P. 1964. *Stellicomus pambanensis*, a new cyclopid copepod parasitic on starfish.—*J. mar. biol. Ass. India*, Mandapam, 6 (1), pp. 89-93.
1171. Rao, D. S. and Madhavan, N. 1964. On some pH measurements in the Arabian sea along the west coast of India.—*J. mar. biol. Ass. India*, Mandapam, 6 (2), pp. 217-221.
- Rao, K. R. 1964.—See Srivastava, G. K., Rao, K. R. and Vashney, R. K. 1964.
1172. Rao, K. P. 1964. Neurophysiological studies on an arachnid, the scorpion *Heterometrus fulvipes*.—*J. Anim. Morph. Physiol.*, Baroda, 11, pp. 133-142.
1173. Rao, K. S. 1964. Observations on the food and feeding habits of *Scomberomorus guttatus* (Bloch and Schneider) and the juveniles of *S. lineolatus* (Cuvier and Valenciennes) and *S. commerson* (Lacepede) from the Waltair coast. *Proc. Symp. Scombroid fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (2), pp. 591-598.
1174. Rao, K. S. P. B. and Ramaprasad, T. N. C. 1964. *Stegoalpheon kempfi* Chopra.—*Curr. Sci.*, Bangalore, 33 (19), pp. 588-589.
- Rao, K. V. 1964.—See Mulherkar, L. and Rao, K. V. 1964.
1175. Rao, K. V. N. 1964. Distribution of the young stages of the mackerel, *Rastrelliger kanagurta* (Cuvier) in the Indian inshore waters.—*Proc. Symp. Scombroid fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (1), pp. 469-482.
1176. Rao, K. V. N. 1964. Observations on the bionomics of the Indian mackerel, *Rastrelliger kanagurta* (Cuvier), caught in the Lawson's Bay, near Waltair, Andhra coast.—*Proc. Symp. Scombroid fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (2), pp. 574-598.
1177. Rao, K. V. N. 1964. An account of the ripe ovaries of some Indian tunas.—*Proc. Symp. Scombroid fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (2), pp. 733-743.
- Rao, M. A. 1964.—See Sarkar, H. B. D., Kanakaraj, S. R. and Rao, M. A. 1964.
- Rao, M. A. 1964.—See Sheriff, E. M. and Rao, M. A. 1964.
1178. Rao, M. R., PAL, A. K. and Razdan, M. N. 1964. Studies on some of the lipid constituents in the blood of chicken under different physiological conditions. Part 2.—*Indian vet. J.*, Madras, 41 (4), pp. 260-263.
1179. Rao, M. V. N. 1964. Nuclear behavior of *Euplotes woodruffi* during conjugation.—*J. Protozool.*, Lancaster, 11, pp. 296-304.
1180. Rao, N. K. 1964. Occurrence of the Pelecypod genus *Diploschiza* Conrad in the cretaceous rocks of Trichinopoly, India.—*Curr. Sci.*, Bangalore, 33 (5), pp. 143-145.
1181. Rao, P. K. 1964. Neurophysiological studies on an arachnid, the scorpion *Heterometrus fulvipes*.—*J. Anim. Morph. Physiol.*, Baroda, 11 (1), pp. 133-142.

- Rao, P. P. 1964.—See Narayana, J. V. and Rao, P. P. 1964.
1182. Rao, R. T. S. and Achuthan, C. 1964. Additions to the records of the anopheline fauna of Coorg district, Mysore State, India.—*Bull. Indian Soc. Malar. Commun. Dis.*, New Delhi, 1 (3-4), pp. 159-160.
- Rao, S. B. V. 1964.—See Agarwal, K. K. and Rao, S. B. V. 1964.
1183. Rao, S. R., Hiregaudar, L. S. and Alwar, V. S. 1964. Ticks of the genus *Amblyomma* occurring in India together with a description of a new species, *A. mudaliari*.—*Indian vet. J.*, Madras, 41, pp. 89-93, figs. 1-4.
1184. Rao, S. R., Hiregaudar, L. S. and Alwar, V. S. 1964. On a new species of *Lipoptena* (*L.*) *indicum* (Diptera-Pupipara, Hippoboscidae) from a barking deer (*Montiacus muntjac* Zimm.).—*Indian vet. J.*, Madras, 41 (4), pp. 267-271.
- Rao, S. S. 1964.—See Master, R. W. P. and Rao, S. S. 1964.
- Rao, T. B. 1964.—See Qadri, S. S. and Rao, T. B. 1964.
1185. Rao, V. P. 1964. Record of three insects pathogens from the far east.—*Techn. Bull. Commonw. Inst. biol. Contr.*, London, No. 4, pp. 63-64.
1186. Rao, V. P., Joshi, M. R. and Mahendar, M. 1964. Variations in the blood picture taken in the normal and splenectomised dogs after strenuous exercise.—*Indian vet. J.*, Madras, 41 (8), pp. 529-532.
1187. Rao, V. P. and Mahadeva, A. M. 1964. A new record of a tachinid parasitizing spotted bollworms in India.—*Techn. Bull. Commonw. Inst. biol. Contr.*, London, No. 4, p. 62.
1188. Rao, V. P. and Manjunath, T. M. 1964. A new record of the carabid beetle *Pheropsophus sibiricus* (Desj.) var. *desberdesi* (Maindr) as a predator of the rhinoceros beetle, *Oryctes rhinoceros* (L.) in India.—*Techn. Bull. Commonw. Inst. biol. Contr.*, London, No. 4, pp. 40-42.
1189. Rao, V. P. and Sudharo, V. 1964. *Spoggosia* (*Stomatomyia*) *bezziawa* (Bar.) a tachinid parasite of the coconut caterpillar, *Nephantis serinopa* Meyr.—*Techn. Bull. Commonw. Inst. biol. Contr.*, London, No. 4, pp. 95-112.
1190. Rao, V. P. and Rao, V. S. 1964. Two new records of predacious mites from India.—*Techn. Bull. Commonw. Inst. biol. Contr.*, London, No. 4, pp. 38-39.
- Rao, V. V. R. 1964.—See Sitaramayya, C., Subbarao, J. and Rao, V. V. R. 1964.
1191. Rao, Y. R. 1964. Some thoughts on the solitary phase of locusts. pp. 293-296. In: *Entomology in India, 1938-1963*. New Delhi, (Entom. Soc. India).
1192. Rasheed, D. A. 1964. Some calcareous foraminifera belonging to the families Rotalidae, Globigerinidae, Globorotaliidae and Anomalinidae from the Cullygoody (Dalmiapuram limestone, Trichinopoly cretaceous of South India). 3.—*J. Madras Univ.*, Madras, 33B (3), pp. 231-241.
1193. Rasheed, S. 1964. On *Hepatinema karachiensis* gen. et. sp. n. (Thelaziidae Railliet, 1916) from a marine fish of Pakistan, with a note on the genus *Filochona* (Saidov, 1954) Yamaguti, 1961.—*J. Helminth.*, London, 38 (1/2), pp. 63-76, 2 pls.
1194. Rasheed, S. 1964. An interesting ascaroid nematode from fish.—*Trans. R. Soc. trop. Med. Hyg.*, London, 58 (1), p. 2.
1195. Raski, D. J., Prasad, S. K. and Swarup, G. 1964. *Telotylenchus housei*, a new nematode species from Mysore State, India (Tylenchidae: Nematoda).—*Nematologica*, Leiden, 10 (1), pp. 83-87.
- Raski, D. J. 1964.—Swarup, G., Prasad, S. K. and Raski, D. J. 1964.
1196. Rastogi, S. C. 1964. The food pump and associated structures in *Coridius jonus* (Fabr.).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 487.

1197. Rastogi, S. C. 1964. Studies on the digestive system of *Odontopus nigricornis* Stal. (Hemiptera, Pyrrhocoridae).—*Tijdschr. Ent.*, Amsterdam, 107, pp. 265-275.
1198. Rastogi, S. C. and Tilak, R. 1964. The palate and hyobranchial elements of certain lizards.—*Anat. Anz.*, Jena, 115, pp. 345-353.
- Rastogi, S. C. 1964.—See Tilak, R. and Rastogi, S. C. 1964.
- Rathore, A. 1964.—See Narayana, S. and Rathore, A. 1964.
- Rathore, S. S. 1964.—See Purohit, M. S. and Rathore, S. S. 1964.
- Rathore, S. S. 1964.—See Singh, R., Rathore, S. S. and Kohli, R. N. 1964.
1199. Ratnavate, W. D. and Dissanaik, A. S. 1964. On the second case of human infection with *Onchocerca* (*Nochtiella*) *repens* from Ceylon.—*J. Helminth.*, London, 38, pp. 287-290, 1 fig., 1 pl.
- Rattanlal, 1964.—See Sarup, P., Singh, D. S. and Rattanlal, 1964.
1200. Rau, U. R. 1964. Mit(e)y tick of acarology.—*Armed Forces med. J. India*, Calcutta, 20 (4), pp. 213-218.
1201. Rau, U. R. 1964. Acarology studies in India. Proc. 1st int. Congr. Acarology 1963.—*Acarologia*, Paris, 6 (fasc. hors. Ser.), p. 281 (Abstract).
1202. Ray, H. N. and Banik, D. C. 1964. On a new coccidium, *Eimeria oryctolagi* n. sp., from domestic rabbit, *Oryctolagus* (*Lepus*) *cuniculus*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 465.
1203. Ray, H. N. and Banik, D. C. 1964. On a new coccidium, *Isospora canis* n. sp. from dog, *Canis familiaris*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 466-467.
1204. Ray, H. N. and Banik, D. C. 1964. Occurrence of *Iodamoeba* sp. in an Indian camel.—*Bull. Calcutta Sch. trop. Med.*, Calcutta, 12 (4), p. 170.
- Ray, H. N. 1964.—See Chatterjee, S. N. and Ray, H. N. 1964.
- Ray, H. N. 1964.—See Maiti, P. K., Chakravarty, M. M. and Ray, H. N. 1964.
1205. Ray, P. and David, A. 1964. A case of fish mortality caused by precipitation of ferric iron in the river Daha at Siwan (North Bihar).—*Indian J. Fish.*, New Delhi, 9A (1), [1962], pp. 11J-123.
1206. Ray, R. N., Chatterjee, J. B. and Chaudhuri, R. N. 1964. Observations on the resistance in HBE thalassamia disease to induced infection with *Plasmodium vivax*.—*Bull. World Hlth. Org.*, Geneva, 30, pp. 51-55.
- Raychaudhuri, D. N. 1964.—See Gorai, A. K. and Raychaudhuri, D. N. 1964.
1207. Raychaudhuri, D. N. and Ghosh, A. K. 1964. Additions to the aphid fauna of North East India.—*Zool. Meded.*, Leiden, 39, pp. 257-262, 12 figs.
- Raychaudhuri, D. N. 1964.—See Ghosh, A. K. and Raychaudhuri, D. N. 1964.
- Ray-Chaudhuri, R. 1964.—See Manna, G. K. and Ray-Chaudhuri, R. 1964.
1208. Raychaudhuri, S. P. and Chatterjee, S. N. 1964. Aphid transmission of a new mosaic streak disease of large cardamom (Abstract).—*Phytopathology*, Worcester, Mass., 53 (8), p. 904.
- Rebello, M. J. 1964.—See Trapido, H., Goverdhan, M. K., Rajagopalan, P. K. and Rebello, M. J. 1964.
1209. Reddi, O. S. and Rao, M. S. 1964. Genetic effects of cosmic radiation in *Drosophila melanogaster*.—*Nature*, London, 201 (4914), pp. 96-97.
1210. Reddiah, K. 1964. The copepod fauna of Assam (India), 1. *Neodiaptomus kamakhiae* (n. sp.) from Kamrup district.—*Crustaceana*, Leiden, 7 (3), pp. 161-166.
1211. Reddiah, K. 1964. The copepod of Assam (India). 2. Description of *Tropodiaptomus lakhimpurensis* (n. sp.).—*Crustaceana*, Leiden, 7 (4), pp. 254-258.

1212. Reddy, A. M. K. and Rao, C. G. 1964. A preliminary note on the occurrence of *Mukherjeella caprae* in a goat in Andhra Pradesh.—*Indian vet. J.*, Madras, 41 (11), pp. 730-732.
1213. Reddy, B. D. 1964. Placental weights in buffalocows.—*Indian vet. J.*, Madras, 41 (11), pp. 730-732.
- Reddy, C. V. G. 1964.—See Pradhan, L. B. and Reddy, C. V. G. 1964.
1214. Reddy, D. B. 1964. Plant protection and extension entomology. Pp. 465-476. In: *Entomology in India, 1938-1963*, New Delhi (Entom. Soc. India).
1215. Reddy, D. B., Rajagopalan, T. S. and Panikkar, M. R. 1964. *Bibliography of plant protection in India*. xiv+99 pp.—New Delhi (Indian Council Agric. Res.) Bibliogr. Ser. No. 8.
1216. Reddy, D. B., Ranganaykamma, I. and Venkataratnam, D. 1964. *Artyfechinostomum mehrai* infestation in man.—*J. trop. Med. (Hyg.)*, London, 38 (9), pp. 485-487.
1217. Reddy, P. S. and Satyendran, O. M. 1964. Ocular cysticercosis.—*Am. J. Ophthalm.*, 57 (4), pp. 664-666.
- Rege, M. S. 1964.—See Singh, V. D. and Rege, M. S. 1964.
- Reverberi, C. 1964.—See Brahmachary, R. L. and Reverberi, C. 1964.
- Riaz, N. 1964.—See Rahman, S. J., Riaz, N. and Khan, N. H. 1964.
- Rishi, K. K. 1964.—See Sharma, G. P., Ramparshad and Rishi, K. K. 1964.
1218. Roonwal, M. L. 1964. Summation of the wild life activities in India: Brief report of the Secretary General, Indian Board for Wild Life, presented to the Third Session of the Board held at New Delhi from 14th—16th February, 1958.—*Ann. Rept. Zool. Surv. India for 1957-58*, Calcutta, pp. 67-75.
1219. Roonwal, M. L. 1964. Termite measurements and indices. In: *Etudes sur les Termites Africains (Un Colog. int. UNESCO)*, Leopoldville (Univ., Lovanium), pp. 69-75.
1220. Roonwal, M. L. 1964. Review of "International Code of Zoological Nomenclature adopted by the XV International Congress of Zoology" (London, 1961).—*Indian J. Ent.*, New Delhi, 26 (3) pp. 370-371.
1221. Roonwal, M. L. 1964. Note on: International symposium on tropical deltas (Dacca, 1964).—*Sci. & Cult.*, Calcutta, 30, pp. 137-138.
1222. Roonwal, M. L. 1964. Zoological results of the Indian Cho-Oyu Expedition (1958) in Nepal. Part 1. Foreword.—*Rec. Indian Mus.*, Delhi, 59 (3), p. 323.
1223. Deleted.
1224. Roonwal, M. L. 1964. Lt. Col. R. B. Seymour Sewell.—*Sci. & Cult.*, Calcutta, 30 (4), pp. 177-178.
1225. Roonwal, M. L. (Ed. by) 1964. *Annual Report on the Zoological Survey of India for the year 1957-58* (1st April, 1957 to 31st March, 1958), 75 p. Delhi (Govt. of India).
1226. Roonwal, M. L. 1964. "Insect pathology. An Advance Treatise", Vol. 2 (ED. by E. A. Stephaus). Acad. Press, New York and London, XIV+689 pp., 1963.—*Curr. Sci.*, Bangalore, 33 (6), p. 153.
1227. Roonwal, M. L. and Bhanotar, R. K. 1964. Eye-stripes, morphometric phase variation, especially of sternum, and sexual dimorphism in South American locust, *Schistocerca gregaria* (Serville), from the Argentine.—*Proc. zool. Soc.*, Calcutta, 16 (2) [1963], pp. 169-192.
1228. Roonwal, M. L. and Bhanotar, R. K. 1964. Elytron-width and the length-width ratio as a phase character in desert locust.—*Sci. & Cult.*, Calcutta, 30 (8), p. 406.
1229. Roonwal, M. L. and Bhanotar, R. K. 1964. Phase-significance of elytronwidth and the length-width

- ratio in the desert locust.—*J. Asiatic Soc.*, Calcutta, 6 (1), pp. 33-41.
1230. Roonwal, M. L. and Bose, G. 1964. Termite fauna of Rajasthan, India.—*Zoologica*, Stuttgart, 40 (3), VI+58 pp., 5 pls.
1231. Roonwal, M. L. and Chhotani, O. B. 1964. Systematics of oriental termites. No. 7. A new termite *Odontotermes mathadi*, from India and the imago of *O. meturensis* R & C (Isoptera : Termitidae).—*Beitr. Ent.*, Berlin, 14 (1-2), pp. 45-52.
1232. Roonwal, M. L. and Chhotani, O. B. 1964. Systematics of oriental termites. No. 8. Two new species of *Speculitermes* from India.—*Indian J. agric. Sci.*, Delhi, 34 (2), pp. 120-130.
1233. Roonwal, M. L. and Guharoy, S. 1964. Growth changes variability and interrelationship of dimensional components in the mounds of the termite *Odontotermes obesus* in India.—*Proc. natn. Inst. Sci. India*, New Delhi, 30B (2), pp. 114-129.
1234. Rossel, F. 1964. Weise (Siluroidea), gesammelt von der deutschen Indian-Expedition 1955-58.—*Mitt. hamburg zool. Mus.*, Hamburg, 61, pp. 145-158, 3 figs.
- Roy, D. N. 1964.—See Das, P. C. and Roy, D. N. 1964.
- Roy, K. K. 1964.—See Ganguly, D. N. and Roy, K. K. 1964.
1235. Roy, P. R. 1964. Evolution of the forebrain, mid-brain and hind-brain in the vertebrate phylogeny.—*J. exp. med. Sci.*, New York, 8 (3), pp. 65-75.
- Roy, R. G. 1964.—See Srivastava, H. M. L., Bhombore, S. R. and Roy, R. G. 1964.
- Roychoudhury, D. N. 1964.—See Chaudhury, B. and Roychoudhury, D. N. 1964.
- Roychoudhury, D. N. 1964.—See Chakrabarti, D. K. and Roychoudhury, D. N. 1964.
- Rozeboom, L. E. 1964.—See Shah, K. V., Gilotra, S. K., Gibbs, C. J. and Rozeboom, L. E. 1964.
1236. Rui, K. N. 1964. On a comparative morphology of some leg segments of ticks.—*J. Bengal nat. Hist. Soc.*, Darjeeling, 32, pp. 109-113, figs. 1-9.
- Sadana, G. L. 1964.—See Bhatnagar, R. D. S. and Sadana, G. L. 1964.
- Sadhu, D. P. 1964.—See Chakravorty, K. P. and Sadhu, D. P. 1964.
1237. Sahai, B. N. and Deo, P. G. 1964. Studies on *Haemonchus contortus* (Rudolphi, 1803) Cobbold (1898) and *Haemonchus bispinosus* (Molin, 1860) Railliet and Henry (1909), with a note on the synonymy of *Haemonchus placei* (Place, 1893) Ransona (1911) with *H. bispinosus*.—*Indian J. Helminth.*, Lucknow, 16 (1), pp. 5-11.
1238. Sahai, R. 1964. On the cranial myology of garden lizard, *Calotes versicolor*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 491-492.
1239. Sahani, D. N. 1964. Some new species of Odonata from Kumaon Hills (India).—*Agra Univ. J. Res. (Sci.)*, Agra, 13 (3), pp. 79-86.
1240. Sahani, V. M. and Butani, D. K. 1964. Control of termites infesting cotton.—*Labdev J. Sci. Tech.*, Kanpur, 2 (1), pp. 75-76.
1241. Sahay, S. K. 1964. Kind-hearted cobra.—*Indian For.*, Dehra Dun, 90 (4), pp. 244-245.
1242. Sahani, M. R. and Gupta, V. J. 1964. Lower palaeozoic fossils from the Kashmir Himalaya.—*Curr. Sci.*, Bangalore, 33 (13), pp. 402-403.
1243. Sahni, M. R. and Gupta, V. J. 1964. Additional fossil from the lower palaeozoic of the Kashmir Himalaya.—*Curr. Sci.*, Bangalore, 33 (17), p. 527.
1244. Sahni, M. R. and Gupta, V. J. 1964. Graptolites in the Indian sub-continent.—*Nature*, London, 201, pp. 385-386, 1 fig.
1245. Sahni, M. R. and Gupta, V. J. 1964. Graptolites from the Kashmir Himalayas, also a note on the

- discovery of fossils in the Kuth quartzite.—*Nature*, London, 204, pp. 1081-1082.
1246. Saini, R. S. 1964. Some observations on the neurosecretory cells of *Aulacophora foveicollis* Luc.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 461.
1247. Saini, R. S. 1964. Some observations on the malpighian tubules of *Sphaerodema*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 476-477.
1248. Saini, R. S. 1964. Histology and physiology of the cryptoephridial system of insects.—*Trans. R. ent. Soc. Lond.*, London, 116 (14), pp. 347-392.
1249. Samaddar, J. and Sen, D. K. 1964. Rate of reproduction of *Trypanosoma evansi* in rats and its significance.—*Bengal Vet.*, 12, pp. 18-22.
1250. Samnotra, K. G. 1964. A note on the insecticide susceptibility of *Aedes vittatus* collected from Baroda city, India.—*Bull. Indian Soc. Malar. Commun. Dis.*, Delhi, 1 (1/2), pp. 57-59.
1251. Samuel, C. T. 1964. Morphology of the vertebral column in *Lactoria cornuta* (Linnaeus).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 489-490.
1252. Sandhu, J. S. and Singh, S. 1964. Studies on the control of sugarcane whitefly (*Aleurolobus barodensis* Mark) in Punjab.—*Indian J. Sug. Cmo. Res. Dev.*, New Delhi, 8 (4), pp. 361-366.
1253. Sane, C. R. Kaikini, A. S., Deshpande, B. R. Koranne, G. S. and Desai, V. G. 1964. Study of genitalia of the Murrah buffalo-cows (*Bos bubalis*).—*Indian vet. J.*, Madras, 41 (10), pp. 653-661.
1254. Sankarankutty, C. and Rangarajan, K. 1964. On a new record of *Charybdis (Goniohellenus) edwardsi* Leene & Buitendijk.—*J. mar. biol. Ass. India*, Mandapam, 6 (2), p. 311.
1255. Sankhala, K. S. 1964. Wildlife sanctuaries of Rajasthan.—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (1), pp. 27-34.
1256. Sankolli, K. N. 1964. On the occurrence of *Tnalassina anomala* (Herbst.), a burrowing crustacean in Bombay waters, and its burrowing methods.—*J. Bombay nat. Hist. Soc.*, Bombay, 60, pp. 600-605.
- Santhakumaran, L. N. 1964.—See Paikar, V. C., Santhakumaran, L. N. and Bal, D. V. 1964.
1257. Sapre, M. V. 1964. Observations on contagious ecthyma of sheep and goats.—*Indian vet. J.*, Madras, 41 (10), pp. 682-685.
1258. Sapre, S. N. 1964. A note on further observations on mucosal disease complex in Maharashtra.—*Indian vet. J.*, Madras, 41 (4), pp. 255-258.
1259. Saraswathy, M. 1964. New record of the cyclopoid copepod *Hersilliodes latericia* (Grube) from the Indian waters.—*J. mar. biol. Ass. India*, Mandapam, 6 (1), p. 173.
1260. Saraswathy, M. 1964. Shipworms from the Cochin harbour, south west coast, India.—*J. mar. biol. Ass. India*, Mandapam, 6 (2), pp. 309-310.
1261. Sarid, J. N. and Sinha, A. C. 1964. Fumigation of cardamon with some of the common fumigants.—*Bull. Grain Technol.*, Hapur, 2 (2), pp. 39-44.
- Sarkar, C. 1964.—See Deb, C. and Sarkar, C. 1964.
- Sarkar, C. 1964.—See Deb, C., Boral, M. C. and Sarkar, C. 1964.
1262. Sarkar, H. B. D., Kanakaraj, S. R. and Rao, M. A. 1964. Effect of thiourea on spawning in the skipper frog, *Rana cyanophlyctis* (Schn.).—*Curr. Sci.*, Bangalore, 33 (18), pp. 557-558.
1263. Sarkar, H. B. D. and Rao, M. A. 1964. Effect of thyroidectomy on ovulation and spawning in the skipper frog, *Rana cyanophlyctis* (Schn.) in vivo and in vitro.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 462-463.
1264. Sarkar, H. L. 1964. On the nomenclatural status of the two subgenera, *Mystus* and *Osteobagrus* of

- the genus *Mystus* Scopoli.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 495.
1265. Sarkar, H. L. 1964. The comparative study of the two cat-fishes, *Mystus* (*Osteobagrus*) *seenghala* (Sykes) and *Mystus* (*Osteobagrus*) *aor* (Hamilton). Family Bagridae.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 490.
1266. Sarkar, H. L. and Dutta-Chaudhuri, R. 1964. On the occurrence of adenoma in the gill apparatus of a trout *Salmo fario*.—*Trans. Amer. micr. Soc.*, Lancaster, 83, pp. 93-96.
1267. Sarkar, H. L. and Rai, H. 1964. The Limnology of Suraj Kund, India. 1. Physico-chemical conditions and plankton.—*Trans. Amer. micr. Soc.*, Lancaster, 83, pp. 260-266, 2 figs.
1268. Sarkar, J. K., Chatterjee, S. N., Chakravarty, S. K. and M'itra, A. C. 1964. Behaviour of mice after infection by dengue and chikungunya viruses.—*Bull. Calcutta Sch. trop. Med.*, Calcutta, 12 (4), pp. 151-152.
- Sarkar, N. K. 1964.—See Devi, A., Patil, F. V. and Sarkar, N. K. 1964.
- Sarkar, S. P. 1964.—See Ganguly, D. N., Sarkar, S. P. and Mitra, B. 1964.
1269. Sarkar, S. S. 1964. *Procyrtoceras mazardriensis* nov. sp. Un Nautilus jurassique du Baloutchistan.—*C. r. Somm. Seanc. Soc. geol. Fr.*, No. 8, p. 314 (Abstract).
- Sarma, A. H. V. 1964.—See Prakash, A. and Sarma, A. H. V. 1964.
- Sarojini, R. 1964.—See Nagabhushanam, R and Sarojini, R. 1964.
1270. Sarojini, S. 1964. A note on the chemical nature of the crustacean androgenic hormone.—*Curr. Sci.*, Bangalore, 33 (2), pp. 55-56.
1271. Sarojini, S. 1964. Effect of implantation of androgenic gland on the relative growth of abdomen in *Ocyropa platytarsis* (M. Edwards).—*Proc. Indian Acad. Sci.*, Bangalore, 59B (5), pp. 259-262.
1272. Sarup, P. Singh, D. S. and Rattan'al. 1964. Testing of pesticides against safflower aphid, *Dactynotus carthami* H. R. L. (Aphididae: Homoptera).—*Indian J. Ent.*, New Delhi, 26 (3), pp. 300-309.
- Sarup, P. 1964.—See Pradhan, S., Jotwani, M. G. and Sarup, P. 1964.
1273. Sastri, V. V. Mohan, M. and Guha, D. K. 1964. Tertiary biofacies of Kutch, Cambay and Ankleswar areas, India.—*Int. Geol. Congr. 22nd* (Abstracts), p. 126.
- Sastry, K. S. S. 1964.—See Puttarudriah, M. and Sastry, K. S. S. 1964.
1274. Sastry, M. V. A., Mamagain, V. D. and Jagannatharao, B. R. 1964. On the occurrence of *Globotruncana* in Ariyalur stage of Trichinopoly Cretaceous, South India.—*Curr. Sci.*, Bangalore, 33 (9), pp. 275-276.
1275. Sastry, M. V. A. and Rao, B. R. J. 1964. Smaller foraminifera from Nerinea Beds of Pondicherry, South India.—*Indian Miner.*, Calcutta, 17 (1963), pp. 192-194.
1276. Sastry, M. V. A., Rao, B. R. J. and Pant, S. C. 1964. A note on the occurrence of Miocene foraminifera in Northern Kathiawar.—*Indian Miner.*, Calcutta, 16 (1963), pp. 69-71.
- Sastry, M. V. A. 1964.—See Rao, B. R. J., Mamagain, V. D. and Sastry, M. V. A. 1964.
1277. Sathyanesan, A. G. 1964. The ova-diameter measurements in relation to spawning of *Barbus stigma* (Cuv. & Val.) in the river Ganges at Banaras.—*Indian J. Fish.*, New Delhi, 9A (1) [1962], pp. 197-204.
1278. Sathyanesan, A. G. and Singh, T. P. 1964. Studies on the structure of the saccus vasculosus in some freshwater fishes.—*Proc. zool. Soc.*, Calcutta, 17, pp. 169-175.

- Sathyanesan, A. G. 1964.—See Singh, T. P. and Sathyanesan, A. G. 1964.
1279. Satija, R. C. and Dass, B. 1964. Histological studies on the brain of *Onthophagus catta* (F.) (Coleoptera).—*Res. Bull. Punjab Univ. (N. S.)*, Chandigarh, **14**, pp. 231-241, 7 figs.
1280. Satija, R. C. and Dass, B. 1964. Histological studies on the brain of *Macrobrachium siwalikensis* Tiwari (Crustacea : Decapoda).—*Res. Bull. Punjab Univ. (N. S.)*, Chandigarh, **14** (3-4), pp. 245-256.
1281. Satija, R. C. and Dass, B. 1964. The status of the corpora pedunculata of *Onthophagus catta* (F.) in order Coleoptera.—*Res. Bull. Punjab Univ. (N. S.)*, Chandigarh, **14**, pp. 243-244, 1 fig.
- Satija, R. C. 1964.—See Sud, B. N., Satija, R. C. and Kaur, K. 1964.
1282. Satsangi, P. P. 1964. A note on *Chasmatosaurus* from the Panchet series of Raniganj coalfield, India.—*Curr. Sci.*, Bangalore, **33** (21), pp. 651-652.
1283. Satsangi, P. P. 1964. Preliminary note on the Siwalik vertebrates of Jammu, Udhampur and Ramnagar areas of J. and K. State.—*Indian Miner.*, Calcutta, **18** (1), p. 97.
- Satsangi, P. P. 1964.—See Prasad, K. N. and Satsangi, P. P. 1964.
1284. Satyanarayana, A. V. V. and Nair, R. S. 1964. Towing resistance of otter trawls used for shrimps from small mechanised boats.—*Fish Technol.*, Ernakulam, **1** (2), pp. 183-183.
1285. Savant, K. B. and Kewairamani, H. G. 1964. On a new record of host species of isopod parasite, *Bopyrus*.—*Curr. Sci.*, Bangalore, **33** (7), p. 217.
- Saxena, A. P. 1964.—See Mohanraj, G. and Saxena, A. P. 1964.
- Saxena, B. N. 1964.—See Dayal, H. M., Nigam, S. S. and Saxena, B. N. 1964.
1286. Saxena, H. C. and Srivastava, B. K. 1964. The effect of obandomycin on the growth of the silkworm, *Bombyx mori* Linn.—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, **2**, pp. 81-82. (Original full paper in *Sci. & Cult.*, Calcutta, **25**, pp. 538-539, March, 1960).
1287. Saxena, P. 1964. Notes on the infrabuccal sac of *Polistes hebraeus* Sauss (Hymenoptera).—*Indian J. Ent.*, New Delhi, **26** (1), pp. 107-108.
1288. Saxena, R. K. 1964. A technique of photographing small vertebrae centra as an aid to decipher the age of *Rita rita* (Ham.).—*Sci. & Cult.*, Calcutta, **30**, pp. 204-205.
- Saxena, R. N. 1964.—See Thapliyal, J. P. and Saxena, R. N. 1964.
1289. Saxena, R. P., Asthana, V. S. and Bisht, K. S. 1964. Control of swine fever outbreak at the central dairy farm, Aligarh, U. P.—*Indian vet. J.*, Madras, **41** (3), pp. 185-192.
1290. Saxena, S. and Deo, P. G. 1964. Studies on the morphology of *Moniezia denticulate* (Rudolphi, 1810) Blanchard, 1891.—*Indian J. Helminth.*, Lucknow, **16** (1) pp. 56-62.
1291. Saxena, S. N. and Deo, P. G. 1964. Studies on the efficacy of different anthelmintics against *Moniezia expansa* in sheep.—*Indian J. vet. Sci.*, New Delhi, **34** (3), pp. 152-157.
1292. Saxena, S. P. and Dhanda, M. R. 1964. Studies on staphylococcal infections in animals with special reference to the carrier problem. 2. Studies on coagulase and haemolysin production by staphylococci isolated from animal and human sources.—*J. vet. Anim. Husb. Res.*, Delhi, **8**, pp. 98-103.
1293. Schmidt, A. 1964. Die Strahlen—Drei Kielschildkrote, *Geoclemys hamiltonii* (Gray).—*Aquar. Terrar. Z.*, **17**, pp. 243-244.
1294. Schmidt, E. 1964. Libellen aus Burma, gesammelt von Dr. R. Malaise. Stockholm.—*Entomol. Ts.*, Stockholm, **85** (3-4), pp. 141-164.
1295. Schmid, F. 1964. Quelques Trichopteres asiaticques.—*Can. Ent.*, Ottawa, **96**, pp. 825-840.

- Sebastian, A. N. 1964.—See Joseph, K. M. and Sebastian, A. N. 1964.
1296. Sebastian, M. J. 1964. *Taeniocanthus dentatus* sp. nov., a copepod parasite of the fish *Bembrops caudimaculata* Steindachner.—*J. mar. biol. Ass. India*, Mandapam, 6 (1), pp. 94-97.
1297. Sebasaian, M. J. and George, K. C. 1964. *Lar-naenicus anchoviellae* n. sp. (Copepoda : Lernaecidae) parasitic on *Anchoviella bataviensis* (Hardenberg) with descriptions of its three post-larval stages.—*J. mar. biol. Assn.*, Mandapam, 6 (2), pp. 235-240.
- Sebastian, V. O. 1964.—See Chatterjee, P. N. and Sebastian, V. O. 1964.
- Sehgal S. P. 1964.—See Prasad, N., Mathur, R. L. and Sehgal, S. P. 1964.
1298. Sehgal, S. S. 1964. The skeleto-musculature of the common Indian yellow wasp, *Polistes olivaceus* (De Geer.). 1. The head and its apendages.—*Proc. zool. Soc.*, Calcutta, 16 (1) [1963], pp. 153-167.
1299. Sehgal, S. S. 1964. The skeleto-musculature of common Indian yellow wasp, *Polistes olivaceus* (De Gher). 2. The head musculature and the cephalic stomodaeum.—*Proc. zool. Soc.*, Calcutta, 17 (2), pp. 135-143.
1300. Sehgal, V. K. 1964. A new stem mining *Melanogromyza* species from India (Diptera : Agromyzidae).—*Ann. Mag. nat. Hist. Lond.*, London, (13) 6 (69) [1963], pp. 541-543.
1301. Sekhar, P. S. 1964. Pests of coffee. pp. 99-109. In : *Entomology in India 1938-1963*. New Delhi (Entom. Soc. India).
1302. Sekhar, P. S. and Sekhar, S. 1964. Investigations on thrips occurring on arabica coffee, *Coffea arabica* Linn. 1. Bionomics.—*Indian Coffee*, Bangalore, 28 (8), pp. 173-179.
1303. Sekhar, P. S. and Venkataramiah, G. H. 1964. Susceptibility of the cockchafer *Holotricha* sp., *Bacillus thuringiensis* Berliner.—*Curr. Sci.*, Bangalore, 33 (13), pp. 405-406.
- Sekharan, K. V. 1964.—See Pradhan, M. J., Sekharan, K. V. and Menon, K. K. P. 1964.
- Selukar, T. G. 1964.—See Daniel, J. C. and Selukar, T. G. 1964.
1304. Sen, A. B. and Bhattacharya, B. K. 1964. Studies on *Dipetalonema Witei* infection in albino rats.—*Indian J. Helminth.*, Lucknow, 16 (2), pp. 142-150.
1305. Sen, A. C. 1964. Biological control of the potato tuber moth, *Gnorimoschema operculella* Zell.—*Indian Agricult.*, Calcutta, 8 (1), p. 67.
1306. Sen, A. C. 1964. Studies on plant parasitic nematodes on vegetable crops.—*Proc. Zool. Soc.*, Calcutta, 17 (1), pp. 85-88.
1307. Sen, A. C. 1964. Parasitic nematodes affecting fish and toad in Ranchi district.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 467.
- Sen, D. K. 1964.—See Mamgain, V. D. and Sen, D. K. 1964.
1308. Sen, J. K. 1964. On a new species of the genus *Thomisus* Walekencser, 1805 (Thomisidae : from India).—*Sci. & Cult.*, Calcutta, 29 (12) [1963], pp. 610-612.
1309. Sen, P. 1964. Preliminary note on rice pests occurring in Haringhata farm of Kalyani University (Nadia : W. Bengal).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 475.
1310. Sen, P. and Dasgupta, S. K. 1964. Report on a collection of biting midges (Diptera : Ceratopogonidae) from a suburb of Calcutta.—*Curr. Sci.*, Bangalore, 33 (22), pp. 688-690.
- Sen, P. 1964.—See Mukherji, M. and Sen, P. 1964.

- Sen, P. B. 1964.—See Dasgupta, S. R., Maiti, A., Sen, P. B. and Dattachaudhuri, B. 1964.
1311. Sengupta, B. K. 1964. Structure of *Astero-cyclina alticostata* (Nuttall).—*Contr. Cushman. Fdn.*, Sharon, Mass., 14 [1963], pp. 95-98.
1312. Sengupta, B. K. 1964. Tertiary biostratigraphy of a part of northwestern Kutch.—*J. geol. Soc. India*, Calcutta, 5, pp. 138-158.
1313. Sengupta, K., Jolly, M. S. and Krishnaswami, S. 1964. *Serratia marcescens* Bizio as the causative agent of rangi disease in silkworm, *Bombyx mori* L.—*Indian J. Microbiol.*, Calcutta, 4 (1-4), pp. 61-62.
- Sengupta, P. C. 1964.—See Mitra, N. K. and Sengupta, P. C. 1964.
1314. Sen-Sarma, P. K. 1964. The effects of temperature and relative humidity on the longevity of pseudoworkers of *Kaloterms flavicollis* (Fabr.) (Isoptera) under starvation conditions.—*Proc. natn. Inst. Sci. India*, Delhi, 30B (5-6), pp. 300-314.
1315. Seshachar, B. R. 1974. Observations on the fine structure of the nuclear apparatus of *Biepharisma intermedium* Bhandary (Ciliate: Spirotricha).—*J. Protozool.*, Lancaster, 11, pp. 402-409.
1316. Seshachar, B. R. and Vimaia Devi, R. 1964. Cytology of *Frontonia elliptica* (Beardsley).—*Acta Protozool.*, 2 (19-29), pp. 247-256.
1317. Seshachar, B. R. and Vimala Devi, R. 1964. Observations on *Spirostomum teres* Clap.—*Acta Protozool.*, 2 (19-29), pp. 257-569.
1318. Seshadri, A. R. 1964. Histological investigations on the ring nematode *Criconemoides xenoplax* Raski, 1952 (Nematoda: Criconemotidae).—*Nematologica*, Leiden 10 (4), pp. 519-539.
1319. Seshadri, A. R. 1964. Investigations on the biology and the life cycle of *Criconemoides xenoplax* Raski, 1952.—*Nematologica*, Leiden, 10 (4), pp. 540-662.
1320. Seshadri, A. R. and Kumaraswami, T. 1964. A preliminary trial on the control of the golden nematode of potatoes (*Heterodera rostochiensis* Well, 1923) in Nilgiris.—*Madras agric. J.*, Coimbatore, 51 (2), pp. 92-93.
1321. Seshappa, G. 1964. On a case of reversal in *Cynoglossus semifasciatus* Day.—*J. mar. biol. Ass. India*, Mandapam, 6 (2), pp. 319-320.
1322. Seth, P. K. 1964. The crista sagittalis in relation to the nuchal crest in *Nycticebus coucang* (Indian slow loris).—*Am. J. Phys. Anthrap.*, Philadelphia, 22 (1), pp. 53-64.
- Sethi, A. 1964.—See Sharma, G. P., Ramprasad, and Sethi, A. 1964.
- Sethi, C. L. 1964.—See Swarup, G., Sethi, C. L. and Gill, J. S. 1964.
- Sethi, G. R. 1964.—See Chatterji, S., Sethi, G. R., Bhamburkar, M. W. and Deshmukh, M. G. 1964.
1323. Sethi, S. L. and Atwal, A. S. 1964. Influence of temperature and humidity on the development of different stages of lady-bird beetle, *Coccinella septempunctata* L. (Coleoptera: Coccinellidae).—*Indian J. agric. Sci.*, Delhi, 34 (3), pp. 166-171.
1324. Sethi, S. L., Jawanda, J. S. and Atwal, A. S. 1964. Insect pests of citrus in the Punjab. VII. Biology and control of citrus mite, *Paratetranychus citri*.—*Panjab hort. J.*, Patiala, 4 (3-4), pp. 142-144.
1325. Shafi, S. M. 1964. Morphological variations in brain of certain freshwater fishes.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 493-494.
1326. Shafi, S. M. 1964. Study of cranial nerves of *Clarius batrachus*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 495-496.
- Shah, H. M. 1964.—See Singh, K., Shah, H. M., Krishnamurty, G. V. G. and Patel, G. G. 1964.
1327. Shah, K. V., Gilotra, S. K., Gibbs, C. J. and Roze-

- boom, L. E. 1964. Laboratory studies of transmission of Chikungunya virus by mosquitoes: a preliminary report.—*Indian J. med. Res.*, New Delhi, **52** (7), pp. 692-697.
1328. Shah, R. V. and Patel, V. B. 1964. Myology of the chelonian pectoral appendage.—*J. Anim. Morph. Physiol.*, Baroda, **11** (1), pp. 58-84.
- Shah, S. M. 1964.—See Viswanath, R. and Shah, S. M. 1964.
1329. Shah, V. C. 1964. Comparative growth characteristics and nuclear morphology of amphibian tissues cultured in vitro.—*Cellule, Lierre*, **64**, pp. 383-396.
- Shanmugasundaram, E. R. B. 1964.—See Chandra, T. and Shanmugasundaram, E. R. B. 1964.
- Shanthakumari, K. 1964.—See Ganapati, P. N., Narasimhamurti, C. C. and Shanthakumari, K. 1964.
- Sharma, D. D. 1964.—See Chander, S. and Sharma, D. D. 1964.
1330. Sharma, G. P., Ramprashad and Handa, S. M. 1964. Chromosomal studies on two species of millipedes (Diplopoda : Myriapoda).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 435.
1331. Sharma, G. P., Ramparshad and Rishi, K. K. 1964. Chromosome studies on Pisces.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 438-439.
1332. Sharma, G. P., Ramparshad and Sethi, A. 1964. Chromosomal variability in the various tissues of the common toad, *Bufo*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, Pt. 3 (Abstracts), p. 439.
- Sharma, H. D. 1964.—See Nair, P. V. and Sharma, H. D. 1964.
1333. Sharma, J. C. 1964. Evolution: its evidences and process.—*Everyd. Sci.*, Chandigarh, **9** (1-2), pp. 23-25.
- Sharma, J. C. 1964.—See Kushwaha, K. S., Sharma, J. C. and Sharma, L. S. 1964.
- Sharma, L. S. 1964.—See Kushwaha, K. S., Sharma, J. C. and Sharma, L. S. 1964.
1334. Sharma, M. S. 1964. The cephalic lateral-line system in *Notopterus chitala* (Ham.).—*Copeia*, New Yourk, No. 3, pp. 530-533.
1335. Sharma, M. S. and Chandy, M. 1964. The cephalic lateral-line system in *Notopterus chitala* (Ham.).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 491.
1336. Sharma, P. L., Agarwal, S. C. and Bhalla, O. P. 1964. New record of damage to silk and milky grains of maize by blister beetles.—*Indian J. Ent.*, New Delhi, **26** (2), pp. 238-239.
1337. Sharma, P. L. and Bhalla, O. P. 1964. Codling moth in Himachal Pradesh.—*Indian J. Ent.*, New Delhi, **26** (1), pp. 129-130.
1338. Sharma, P. L. and Bhalla, O. P. 1964. A survey study of insect pests of economic importance in Himachal Pradesh.—*Indian J. Ent.*, New Delhi, **26** (3), pp. 318-331.
1339. Sharma, R. C. 1964. Observations on some insect pests of Jowar (*Sorghum vulgare*) at Ajmer.—*Bull. Ent.*, Madras, No. 5, pp. 28-30.
1340. Sharma, S. C. and Desai, R. N. 1964. Treatment of infertility in cows and buffaloes with 'Hormal'.—*Indian vet. J.*, Madras, **41** (3), pp. 222-227.
- Sharma, S. C. 1964.—See Tandon, K. K. and Sharma, S. C. 1964.
1341. Sharma, T. and Pathak, S. 1964. On the study of Chromosomes of two Indian species of Homoptera (Auchenorrhyncha).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 437.
1342. Sharma, V. D. 1964. Sutural bone in the pelvis of camel.—*Indian vet. J.*, Madras, **41** (5), pp. 347-349, 2 pls.

1343. Sharma, V. D. 1964. Pelvimetry in camel (*Camelus dromedarius*).—*Indian vet. J.*, Madras, **41** (3), pp. 212-215, 2 pls.
1344. Sharma, V. D. and Mahajan, S. C. 1964. Preservation of buffalo semen. III. Role of seminal plasma. VI. Effect of potassium ions in yolk-glucose-bicarbonate diluent.—*J. Anim. Morph. Physiol.*, Baroda, **11**, pp. 267-275.
- Sharma, V. K. 1964.—See Kundu, G. G. and Sharma, V. K. 1964.
1345. Sharma, V. P. and Chatteraj, A. N. 1964. A short note on the possible cause of weight loss in treated insects.—*Proc. Combd 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 481.
- Sharma, V. P. 1964.—See Chatteraj, A. N. and Sharma, V. P. 1964.
1346. Sher, S. A. 1964. Revision of the Hoplolaiminae (Nematoda) III. *Scutellonema* Andrassy, 1958.—*Nematologica*, Leiden, **9** (3) [1963], pp. 421-443.
1347. Sherbet, G. V. and Lakshmi, M. S. 1964. Inhibition of development of *Planorbis exustus* by cobaltous sulphate and chloramphenicol.—*Naturwissenschaften*, Berlin, **51** (5), p. 119.
1348. Sherbet, G. V. and Lakshmi, M. S. 1964. An analysis of the early development of *Planorbis exustus* using barbituric acid.—*Wilhelm Roux Arch. Entwickl.-mech. Org.*, Berlin, **155**, pp. 144-151, 1 fig.
1349. Sherbet, G. V. and Lakshmi, M. S. 1964. Inhibition of development of *Planorbis exustus* by chloramphenicol.—*Wilhelm Roux Arch. Entwickl. Mech. Org.*, Berlin, **155** (4), pp. 429-436.
1350. Sherbet, G. V. and Lakshmi, M. S. 1964. A study of the effects of some metabolic inhibitors on the formation of the shell in *Planorbis exustus*.—*Proc. Acad. Wet. Amst.*, Amsterdam, **67C**, pp. 261-272.
1351. Sherbet, G. V. and Lakshmi, M. S. 1964. A study of carbohydrate metabolism in *Planorbis exustus*.—*J. Embryol. exper. Morphol.*, **12**, pp. 15-26, 2 figs.
1352. Sheriff, E. M. and Rao, M. A. 1964. Effect of acid feeding on the induction of gastric ulcers in the toads, *Bufo melanostictus*.—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 464-465.
- Shihama, T. 1964.—See Suda, A. and Shihama, T. 1964.
1353. Shivraj Kumar, Y. 1964. Miscellaneous notes: Occurrence of the white rumped swift [*Apus pacificus* (Latham)] at Hingolgarh, Jasdan, Gujarat.—*J. Bombay nat. Hist. Soc.*, Bombay, **60**, p. 731.
1354. Shivraj Kumar, Y. 1964. New bird records for Saurashtra.—*J. Bombay nat. Hist. Soc.*, Bombay, **61** (2), pp. 446.
1355. Shrivastava, R. K. 1964. The phylogenetic and adaptational characteristics of the deltoid musculature of the Mammalia.—*Gegenbaurs Jb.*, Leipzig, **105**, pp. 544-553.
1356. Shrivastava, R. S. 1964. Study of normal morphological development of *Ophiocephalus punctatus* (Bloch.).—*J. Vikram Univ.*, Ujjain, **8** (1 & 2), pp. 61-69.
1357. Shukla, P. 1964. Seasonal variation in mulberry leaf composition and its effects on silk worm rearing.—*Indian For.*, Dehra Dun, **90** (8), pp. 547-550.
- Shukla, R. C. 1964.—See Tandon, G. S., Shukla, R. C. and Phookan, D. P. 1964.
1358. Shull, E. M. 1964. A supplementary note on a list of reptiles and amphibians of the Surat Dangs, South Gujarat.—*J. Bombay nat. Hist. Soc.*, Bombay, **61** (2), p. 452.
1359. Shuli, E. M. 1964. Supplementary note on the butterflies of South Gujarat.—*J. Bombay nat. Hist. Soc.*, Bombay, **61** (2), p. 464.
1360. Shull, E. M. and Nadkerny, N. T. 1964. Collecting moths by a mercury vapour lamp in the Srat dangs, Gujarat State.—*J. Bombay. nat. Hist. Soc.*, Bombay, **61** (2), pp. 281-294.

- Shull, E. M. 1964.—See Daniel, J. C. and Shull, E. M. 1964.
1361. Shyamala, M. B. 1964. Detoxication of benzoate by glycine conjugation in the silkworm, *Bombyx mori* L.—*J. Ins. Physiol.*, London, 10 (2), pp. 385-391.
1362. Siddiqi, A. H. and Jairajpuri, M. S. 1964. Remaeks on the genus *Oxyspirura* (Nematoda : Thelaziidae) with description of *Oxyspirura basiri* n. sp.—*Proc. helminth. Soc. Wash.*, Washington, 31 (1), pp. 89-92.
1363. Siddiqi, M. R. 1964. Studies on nematode root-rot of citrus in Uttar Pradesh, India.—*Proc. zool. Soc.*, Calcutta, 17 (1), pp. 67-76, 1 pl.
1364. Siddiqi, M. R. 1964. New records of plant and soil nematodes in India.—*Labdev J. Sci. Tech.*, Kanpur, 2 (1), pp. 73-74.
1365. Siddiqi, M. R. 1964. *Rotylenchus eximius* n. sp. (Nematoda : Hoplolaiminae) found around almond roots in Tunisia.—*Nematologica*, Leiden, 10, pp. 101-104.
1366. Siddiqi, M. R. 1964. Six new nematode species in the superfamily Dorylaimoidea from India.—*Labdev J. Sci. Tech.*, Kanpur, 2 (2), pp. 136-144.
1367. Siddiqi, M. R. 1964. *Kiphinema conurum* n. sp. and *Paralongidorus microlaimus* n. sp. with a key to the species of *Paralongidorus* (Nematoda : Longidoridae).—*Proc. helminth. Soc. Wash.*, Washington, 31 (2), pp. 133-137.
1368. Siddiqi, M. R. 1964. Four new species in the family Belondiridae (Nematoda, Dorylaimida).—*Labdev J. Sci. Tech.*, Kanpur, 2 (1), pp. 37-41.
1369. Siddiqi, M. R. 1964. *Helicotylenchus nucsonatus* n. sp. and *H. tumsiensis* n. sp. (Nematoda : Hoplolaiminae).—*Nematologica*, Leiden, 9 (3) [1963], pp. 336-390.
1370. Siddiqi, M. R. and Brown, K. F. 1964. *Helicotylenchus (sic) retusus* n. sp. (Nematoda : Hoplolaiminae) found around sugarcane roots in Negros Oriental, Philippines.—*Proc. helminth. Soc. Wash.*, Washington, 31 (2), pp. 209-211.
1371. Siddiqi, M. R. and Goodey, J. B. 1964. The status of genera and subfamilies of the Criconematidae (Nematoda) with a comment on the position of Fergusobia.—*Nematologica*, Leiden, 9 (3) [1963], pp. 363-377.
1372. Siddiqi, M. R. and Husain, Z. 1964. Three new species of nematodes in the family Hoplolaimidae found attacking citrus trees in India.—*Proc. helminth. Soc. Wash.*, Washington, 31 (2), pp. 211-215.
1373. Siddiqi, M. R. and Khan, E. 1964. *Tylencholaimellus eskei* n. sp. (Nematoda : Leptonchidae), with a key to the species of *Tylencholaimellus*.—*Nematologica*, Leiden, 10 (1), pp. 105-107.
1374. Siddiqi, M. R. and Khan, E. 1964. *Xenonchium cedari* n. g., n. sp. and *Proleptanchnus indicus* n. sp. (Nematoda : Dorylaimoidea) from North India.—*Labdev J. Sci. Tech.*, Kanpur, 2 (1), pp. 34-36.
1375. Siddiqi, M. R. and Khan, S. H. 1964. *Trichonchium* n. g. (Nematoda : Campydoridae) with description of two new species from tea soil, Assam, India.—*Nematologica*, Leiden, 9, pp. 641-645.
1376. Siddiqi, M. R. 1964. *Radopholus williamsi* n. sp. (Nematoda : Pratylencoidea) a parasite of sugarcane roots at L'etoile, Mauritius.—*Indian J. Ent.*, New Delhi, 26 (2), pp. 207-208.
- Siddiqi, Z. A. 1964.—See Agarwal, R. A. and Siddiqi, Z. A. 1964.
1377. Siddiqi, W. A. and Trager, W. 1964. Comparative bioautography of folic and folinic acids of erythrocytes and livers of normal ducks and ducks infected with malarial parasites.—*J. Parasit.*, Lancaster, 50, pp. 753-756.
- Siddiqi, W. A. 1964.—See Bhatt, V. S. and Siddiqi, W. A. 1964.
1378. Sidhu, H. S. and Singh, S. 1964. Control schedule of mustard aphid in the Punjab.—*Indian Oilseeds J.*, Hyderabad, 8 (3), pp. 237-256.

1379. Sidhu, H. S. and Singh, S. 1964. Biology of the mustard aphid *Lipaphis erysimi* (Kaltenbach) in the Punjab.—*Indian Oilseeds J.*, Hyderabad, 8 (4), pp. 348-359.
1380. Sidhu, N. S. 1964. A quantitative study of spermatozoan nucleus length in *Drosophila melanogaster* (Meig).—*Proc. R. Soc. Edinb.*, Edinburgh, 68B (4), pp. 327-335.
1381. Silas, E. G. 1964. Aspects of the taxonomy and biology of the oriental bonito, *Sarda orientalis* (Temminck & Schlegel).—*Proc. Symp. Scombroid fishes. Mar. biol. Ass. Indian*, Mandapam, Ser. 1 (1), pp. 283-308.
1382. Silas, E. G. 1964. *Cybtium croockewitii* Bleeker (1850) and *C. Koreanum* Kishinouye (1915) considered synonyms of *Scomberomorus guttatus* (Bloch and Schneider) with a redescription and annotated bibliography of *S. guttatus*.—*Proc. Symp. Scombroid fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (1), pp. 309-342.
1383. Silas, E. G. 1964. Behaviour of different species of tunas as noticed from long-line catches, with a resume of our knowledge on tuna behaviour.—*Proc. Symp. Scombroid fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (2), p. 793.
- Silas, E. G. 1964. See Jones, S. and Silas, E. G. 1964.
1384. Simha, S. S. 1964. On a new trematode, *Haplorchis solus*, from the intestine of a green tree snake, *Dryophis mycterizans*, from Hyderabad, India.—*Revta Biol. trop.*, 12 (1), pp. 1-5.
1385. Simha, S. S. 1964. A note on the genus *Xenopharynx* Nicoll, 1962, with a key to the species.—*Revta Biol. trop.*, 12 (1), pp. 7-13.
1386. Simha, S. S. 1964. On Xiphidiocercaria, *Cercaria osmaniae* sp. nov. from Hyderabad, India.—*Trans. Amer. microsc. Soc.*, Lancaster, 83, pp. 434-435.
1387. Simha, S. S. and Deshpande, P. 1964. On a new species of *Artyfechinostomum* Lane, 1915, from the intestine of the monitor lizard, *Varanus bengalensis* in Hyderabad, India.—*Z. Parasitenk.*, Berlin, 24, pp. 23-26, 2 figs.
- Simha, S. S. 1964.—See Dollfus, R. P. and Simha, S. S. 1964.
1388. Simonds, P. E. 1964. The ecology of macaques.—*Diss. Abstr.*, Ann Arbor, 24, p. 4910.
1389. Singal, D. P. 1964. On a new species of the cestode genus *Hymenolepis* Weinland 1858, from the common babbler, *Turdoides caudatus caudatus* (Dumont, 1823).—*Proc. zool. Soc.*, Calcutta, 16 (1) [1963], pp. 135-139.
1390. Singal, D. P. 1964. On a new cestode belonging to the genus *Anonchotaenia* Cohn 1900, from the house sparrow, *Passer domesticus indicus* Jardine and Selby, 1835.—*Proc. zool. Soc.*, Calcutta, 16 (1) [1963], pp. 215-219.
1391. Singh, A. 1964. Free amino acids in the haemolymph of *Chilo zonellus* Swinhoe (Pyralidae; Lepidoptera).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 455.
1392. Singh, A. 1964. Amino-acids in urine of *Grylotalpa africana* Beauvois (Orthoptera: Gryllidae).—*Curr. Sci.*, Bangalore, 33 (2), p. 52.
1393. Singh, A. 1964. Free amino acids in the haemolymph of *Grylotalpa africana* Beauvois (Orthoptera: Gryllidae).—*Indian J. Ent.*, New Delhi, 26 (3), pp. 281-283.
1394. Singh, A., Butani, D. K. and Dargan, K. S. 1964. Insect pests of cotton. II. The incidence of jassid vis-a-vis cultural and manurial practices.—*Labdev. J. Sci. Tech.*, Kanpur, 2 (2), pp. 131-133.
1395. Singh, A. and Butani, D. K. 1964. Insect pests of cotton. 3. Control of jassids by dusting.—*Indian Cott. Gr. Rev.*, Bombay, 18 (6), pp. 361-365.
1396. Singh, A. and Butani, D. K. 1964. Control of cotton jassid.—*Indian Fmg.*, New Delhi, 14 (3), pp. 9-12.

- Singh, A. 1964.—See Devan, D. K. McE., Akbar, S. S. and Singh, A. 1964.
1397. Singh, A. M. 1964. The free amino acids of the haemolymph of malathion resistant *Blattella germanica* L.—*Indian J. Ent.*, New Delhi, 26 (2), pp. 247-250.
1398. Singh, B., Singh, G. S. and Singh, S. N. 1964. A study on the relationship of clean wool yield with body weight and body size in 'Marga' ewes.—*Agra Univ. J. Res. (Sci.)*, Agra, 13 (3), pp. 13-20.
1399. Singh, C. 1964. Temperate fruit pests. pp. 213-226. In *Entomology in India 1938-1963*.—New Delhi (Entom. Soc. India).
1400. Singh, D. and Mammen, M. L. 1964. Preliminary studies on the development of microfilariae of *Dirofilaria immitis* in the haemocoel of *Aedes aegypti*.—*Bull. Indian Soc. Malar. Comm. Dis.*, Delhi, 1 (1-2), pp. 49-52.
- Singh, D. P. 1964.—See Chetram, Khanna, N. D., Singh, D. P. and Prabhu, S. S. 1964.
- Singh, D. S. 1964.—See Sarup, P., Singh, D. S. and Rattanlal, 1964.
- Singh, G. S. 1964.—See Singh, G. S. and Singh, S. N. 1964.
1401. Singh, H. 1964. Ecological studies on *Pechymerus chinensis* Linnaeus.—*Indian J. Ent.*, New Delhi, 26 (2), pp. 239-241.
- Singh, H. M. 1964.—See Agrawal, V. P. and Singh, H. M. 1964.
1402. Singh, J. and Patel, M. R. 1964. Osteology of skull of goat.—*J. vet. Anim. Husb. Res.*, Delhi, 8, pp. 80-90.
1403. Singh, K., Shah, H. M., Krishnamurty, G. V. G. and Patel, G. G. 1964. Plant parasitic nematodes found in the root zones of tobacco.—*Curr. Sci.*, Bangalore, 33 (17), pp. 531-532.
1404. Singh, K. R. P., Pavri, K. M. and Anderson, C. R. 1964. Transmission of Kyasanur forest disease virus by *Haemaphysals turturis*, *H. papuana kinneari* and *H. minuta*.—*Indian J. med. Res.*, New Delhi, 52 (6), pp. 566-573.
1405. Singh, K. S. 1964. On six new avian cestodes from India.—*Parasitology*, Cambridge, 54 (1), pp. 177-194.
1406. Singh, K. S. 1964. Parasitological survey of Kumaun region. XXIX. A new host for two species of *Heterakis* Dujardin, 1845 (Heterakidae : Nematoda).—*Indian J. Helminth.*, Lucknow, 16 (1), pp. 63-64.
- Singh, K. S. 1964.—See Srivastava, G. C. and Singh, K. S. 1964.
- Singh, M. 1964.—See Mehta, V. S., Prakash, A. H. A. and Singh, M. 1964.
1407. Singh, M. P. and Sinha, M. M. 1964. Chemical control of *Tryporyza (Schoenobius) incertellus* Wlk. (Pyralidae ; Lepidoptera).—*Allahabad Fmr.*, Allahabad, 38 (6), pp. 272-276.
- Singh, N. 1964.—See Basu, P. C., Singh, N. N. and Singh, N. 1964.
- Singh, N. N. 1964.—See Basu, P. C., Singh, N. and Singh, N. N. 1954.
1408. Singh, O. N., Prasad, J. N. and Prasad, I. B. 1964. Conception rate of Haryana and Bachaur cows under artificial breeding condition in the farm.—*Indian vet. J.*, Madras, 41 (8), pp. 513-516.
1409. Singh, O. N. 1964. Knuckled knee, a hereditary defect in tharparker cattle.—*Indian vet J.*, Madras, 41 (5), pp. 344-346, 1 pl.
1410. Singh, P. 1964. Studies on the pests of *Rauwolfia serpentina* Benth. 1.—*Indian For.*, Dehra Dun, 90 (12), pp. 839-842.
1411. Singh, P. and Choudhury, J. C. B. 1964. An endo-and ecto-parasite on *Orthacris simulans* Bolv. (Eam : Acrididae) infesting *Rauwolfia serpentina* Benth.—*Indian For.*, Dehra Dun, 90 (4), pp. 215-216.

- Singh, P. P. 1964.—See Pande, B. P. Singh, P. P. and Kala, P. 1964.
1412. Singh, R. 1964. On histochemical localization of the ground substance in the central nervous tissue of *Psittacula krameri*.—*J. Histochem. Cytochem.*, London, **12**, p. 712.
1413. Singh, R. 1964. On some lipid histochemical methods for staining myelin in birds.—*J. Histochem. Cytochem.*, London, **12**, pp. 712-713.
1414. Singh, R. 1964. Some histochemical reactions for lipids in avian nervous tissue. 1. Central nervous tissues.—*J. Histochem. Cytochem.*, London, **12**, pp. 812-820.
1415. Singh, R., Rathore, S. S. and Kohli, R. N. 1964. A note on preliminary observations on the use of some general anaesthetics in the camel.—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, **2**, pp. 198-199. (Original full paper in *Indian vet. J.*, Madras, **39** (11), pp. 614-616, 1962).
1416. Singh, R. A. and Desai, R. N. 1964. Genetic study on relative efficiency of milk production in cross-breds as compared to pure-bred Sahiwal cattle.—*Indian vet. J.*, Madras, **41** (3), pp. 169-174.
1417. Singh, S. 1964. Bee keeping. pp. 497-511. In: *Entomology in India 1938-1963*.—New Delhi (Entom. Soc. India).
1418. Singh, S. and Guram, M. S. 1964. Chemical control of aphids attacking potatoes with some newer insecticides.—*Pl. Prot. Bull.*, New Delhi, **10** (1-4) [1960], pp. 1-4.
- Singh, S. 1964.—See Sidhu, H. S. and Singh, S. 1964.
1419. Singh, S. B., 1964. Periodicity in the feeding habit of *Tomocerus longicornis* (Muller) (Collembola).—*Indian J. Ent.*, New Delhi, **26** (1), pp. 123-124.
1420. Singh, S. B., Singh, S. P. and Desai, R. N. 1964. Effect of the age at first calving and first lactation milk production in Haryana cattle.—*Indian J. vet. Sci. Anim. Husband.*, New Delhi, **34** (4), pp. 202-213.
- Singh, S. N. 1964.—See Patnaik, B. K. and Singh, S. N. 1964.
- Singh, S. N. 1964.—See Singh, B., Singh, G. S. and Singh, S. N. 1964.
- Singh, S. P. 1964.—See Dutt, M., Singh, S. P. and Singh, S. B. 1964.
1421. Singh, T. P. and Sathyanesan, A. G. 1964. Studies on the structure of the saccus vasculosus in some freshwater fishes.—*Proc. zool. Soc.*, Calcutta, **17** (2), pp. 169-175.
- Singh, T. P. 1964.—See Sathyanesan, A. G. and Singh, T. P. 1964.
1422. Singh, V. and Prakash, A. 1964. Mating behaviour in camel.—*Indian vet. J.*, Madras, **41** (7), pp. 475-477.
- Singh, V. 1964.—See Prakash, A. and Singh, V. 1964.
1423. Singh, V. D. and Rege, M. S. 1964. On the utilisation of cat-fish liver oil as a source of vitamin A.—*Curr. Sci.*, Bangalore, **33** (12), pp. 371-372.
- Singh, V. R. P. 1964.—See Srivastava, G. M. and Singh, V. R. P. 1964.
- Singh, V. S. 1964.—See Tripathi, R. L. and Singh, V. S. 1964.
- Singla, C. L. 1964.—See Sud, B. N. and Singla, C. L. 1964.
1424. Sinha, A. 1964. Action of streptomycin in relation to bipotency of *Hydra* cells.—*Proc. Combd 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 449.
- Sinha, A. C. 1964.—See Sarid, J. N. and Sinha, A. C. 1964.
1425. Sinha, A. K. 1964. Nature of an irreversible determination in the implanted material in *Hydra*.—*Indian J. exp. Biol.*, New Delhi, **2** (4), pp. 172-175.

1426. Sinha, B. M. 1964. The cranial nerves of *Wallago attu* (Bl. and Schn.).—*Proc. nat. Acad. Sci. India*, Allahabad, **34B** (2), pp. 42-48.
1427. Sinha, D. P. 1964. Occurrence of metacercariae of *Bucephalopsis* sp. (Bucephalidae, Gasterostomata, Trematoda) in a siluroid fish, *Callichrous bimaculatus* (Bloch).—*Ann. Zool.*, Agra, **4** (10), pp. 113-118.
1428. Sinha, D. P. 1964. Study of hookworm and round worm (host factor) in the rural areas of Darbhanga (Bihar).—*Indian med. Gaz.*, Calcutta, **4** (8), pp. 53-72.
1429. Sinha, P. B. 1964. A study of the chromosomes during meiosis of *Cyclopelta siccifolis* Westw.—*Proc. comdb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 436.
1430. Sinha, R. N. 1964. Effect of low temperature on the survival of some stored products.—*Acarologia*, Paris, **6**, pp. 336-341, figs. 1-2.
1431. Sinha, R. N. 1964. Ecological relationships of stored-products mites and seed borne fungi. Proc. 1st. int. Congr. Acarology 1963.—*Acarologia*, Paris, **6** (fasc. hors ser.), pp. 372-389, figs. 1-6.
- Sircar, P. 1964.—See Jotwani, M. G. and Sircar, P. 1964.
1432. Sitaramayya, C., Subbarao, J. and Rao, V. V. R. 1964. Effect of cobalt nitrate on the islets cells and blood glucose level in normal albino rats.—*Curr. Sci.*, Bangalore, **33** (3), pp. 81-82.
1433. Sivaram, S. 1964. Histochemistry of the developing adrenal gland of chick.—*Anat. Rec.*, Philadelphia, **148**, p. 336.
1434. Sivasubramaniam, K. 1964. Predation of tuna long line catches in the Indian Ocean by killer whales and sharks.—*Bull. Fish. Res. Stn. Ceylon*, Colombo, **17**, pp. 221-236.
1435. Smith, A. 1964. Effects of dichlorovos (DDVP) on the behaviour of *A. gambiae*.—*Indian J. Malar.*, Delhi, **17** (2-3) [1963] pp. 131-140.
1436. Smith, J. L. B. 1964. The clingfishes of the Western Indian Ocean and the Red Sea.—*Ichth. Bull. Rhodes Univ.*, No. 30, pp. 581-596, 6 pls., fig. 1.
1437. Sohi, G. S. 1964. Pests of cotton. pp. III-148. In: *Entomology in India 1938-1963*.—New Delhi, (Entom. Soc. India).
1438. Sohi, G. S. and Paul, H. S. 1964. Development of *Rhizopertha dominica* Fab. in relation to temperature and moisture content of the grain.—*Proc. Combd. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 484.
1439. Sokolova, M. N. and Pasternak, F. A. 1964. Quantitative distribution and trophic zonation of the bottom fauna in the Bay of Bengal and the Andaman Sea.—*Trud. Inst. Okeanol. Moskva*, Leningrad, **64**, pp. 271-296, 9 figs.
- Som, T. 1964.—See Gupta, S., Som, T. and Bhattacharya, S. 1964.
1440. Soman, P. W. 1964. Occurrence of *Sylvia minula margelanica* Stozmann at Kutch, Gujarat State.—*J. Bombay nat. Hist. Soc.*, Bombay, **61** (1), p. 184.
1441. Southwick, C. H., Ghosh, A. and Louch, C. D. 1964. A road side survey of rhesus monkeys in Bengal.—*J. Morph.*, Philadelphia, **115** (1), pp. 53-68.
1442. Southwick, C. H., Ghosh, A. and Louch, C. D. 1964. A road side survey of rhesus monkeys in Bengal.—*J. Mammal.*, Baltimore, **45**, pp. 443-448.
1443. Spurway, H., Dronamratu, K. R. and Jayakar, S. D. 1964. One nest of *Sceliphron madraspatanum* (Fabr.) (Sphecidae : Hymenoptera).—*J. Bombay nat. Hist. Soc.*, Bombay, **61** (1), pp. 1-26, 4 pls.
- Spurway, H. 1964.—See Jayakar, S. D. and Spurway, H. 1964.
1444. Sreenivasan, A. 1964. Diurnal oxygen-curve method for studying the productivity of waters.—*J.*

- mar. biol. Ass. India*, Madapam, 6 (1), pp. 167-169.
1445. Sreenivasan, A. 1964. *Tilapia mossambica* its ecology and status in Madras State, India.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts). p. 500.
1446. Sreenivasan, A. 1964. Limnology of tropical impoundments. IV. Studies on a hardwater reservoir in Madras State.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 502.
1447. Sreenivasan, A. 1964. A hydrological study of a tropical impoundment Bhabanisagar reservoir, Madras State, India for the year 1956-1961 (with 3 figs.).—*Hydrobiologia*, Hague, 24 (4), pp. 514-539.
1448. Sreenivasan, A. 1964. A hydrological study of some mountain lakes and ponds of Madras with reference to their suitability for the breeding and culture of German and English carps.—*Arch. Hydrobiol.*, Stuttgart, 60, pp. 225-240.
1449. Sreenivasan, A. 1964. The limnology, primary production and fish production in a tropical pond.—*Limnol. & Oceanogr.*, 9, pp. 391-396.
1450. Sreenivasan, A. 1964. Limnological studies and fish yield in three upland lakes of Madras State, India.—*Limnol. & Oceanogr.*, 9, pp. 564-575.
1451. Sreenivasan, A., Soundarraj, R. and Lakshmiraghavan, S. 1964. Variations in the composition of the skeletal muscle and gonads of maturing fresh water fish.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 455.
- Sreeram, V. 1964.—See Perumai, M. C. and Sreeram, V. 1964.
- Srinivasa Rao, S. 1964.—See Kapadia, Z. S., Master, R. W. P. and Srinivasa Rao, S. 1964.
- 1451a. Srinivasan, V. V. and Krishnaswamy, S. 1964. The chemical composition of *Martesia fragilis* a wood boring pholad of Madras.—*Zool. Jb. Physiol.*, Jena, 70 (4), pp. 539-546.
1452. Srivastava, A. S. 1964. Non-insect pests. pp. 419-433. In: *Entomology in India 1938-1963*—New Delhi (Entom. Soc. India).
1453. Srivastava, A. S. 1964. A review of ecology, biology and behaviour of insects in Indian since 1954.—*2nd All Indian Ent. Worker's Conf., Silver Jubilee session of the Ent. Soc. India*, New Delhi, pp. 20-22.
1454. Srivastava, A. S. 1964. Non insect pests in Indian Union and their control.—*2nd All Indian Ent. Worker's Conf., Silver Jubilee session of the Ent. Soc. India*, New Delhi, pp. 22-28.
1455. Srivastava, A. S. 1964. Recent advances in the studies on locusts, *Schistocerca gregaria* (Forsk.) with special reference to immature stages in orthopteroid group.—*Labdev J. Sci. Tech.*, Kanpur, 2 (1), pp. 8-15.
1456. Srivastava, A. S. 1964. Studies on field rats—a new method for their control.—*Labdev J. Sci. Tech.*, Kanpur, 2 (1), pp. 71-72.
1457. Srivastava, A. S., Singha, D. R., Pandey, B. P. and Saxena, H. P. 1964. Control of spotted bollworm (*Earias fabia* Stoll. and *E. insulana* Boisid).—*Labdev J. Sci. Tech.*, Kanpur, 2 (4), pp. 258-260.
1458. Srivastava, A. S. and Saxena, H. P. 1964. Taxonomy, distribution, habits, bionomics and control of rice bug, *Leptocoris varicornis* Fabricius with reference to allied species.—*Labdev J. Sci. Tech.*, Kanpur, 2 (2), pp. 122-130.
1459. Srivastava, A. S., Singh, D. R., Pandey, B. P., Khare, R. D. and Saxena, H. P. 1964. Control of Cotton jassid, *Empoasca devastans* Dist.—*Labdev J. Sci. Tech.*, Kanpur, 2 (4), pp. 260-262.
1460. Srivastava, B. K. 1964. Pests of pulse crops. pp. 83-91. In: *Entomology in India 1938-1963*.—New Delhi (Entom. Soc. India).

1461. Srivastava, B. K. and Mathur, L. M. L. 1964. Morphology and musculature of the head capsule of mature larva of *Prodenia litura* Fabr. (Lepidoptera : Noctuidae).—*Indian J. Ent.*, New Delhi, 26 (1), pp. 78-91.
1462. Srivastava, B. K., Saxena, H. C. and Sharma, J. C. 1964. Influence of dietary intake of certain insecticides on the haemoglobin and erythrocyte contents of chick blood.—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 145-146. (Original full paper in *Nature*, London, 188, p. 172, April 9, 1960).
1463. Srivastava, B. K. and Vaish, O. P. 1964. *Hemaspidoiproctus cinereus* Green. a new coxoid pest of guava.—*Indian J. Ent.*, New Delhi, 26 (1), pp. 117-118, 1 pl.
- Srivastava, B. K. 1964.—See Saxena, H. C. and Srivastava, B. K. 1964.
1464. Srivastava, B. P. 1964. Morphology of the reproductive organs of *Leucinodes orbonalis* Guen. (Lepid., Pyraustidae). Part I. The female organs (Abstract).—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, p. 142. (Original full paper in *Indian J. Ent.*, New Delhi, 22 (1), pp. 35-46, 1960).
1465. Srivastava, B. P. 1964. Morphology of the reproductive organs of *Leucinodes orbonalis* Guen. (Lepidoptera, Pyraustidae). Part II. The male organs. (Abstracts).—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, p. 143 (Original full paper in *Indian J. Ent.*, New Delhi, 22 (3), pp. 160-171, 1960).
1466. Srivastava, B. P. 1964. Biology and control of the brinjal stem borer *Euzophera perticella* Rag. (Lepidoptera, Pyralididae).—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 94-98. (Original full paper in *Madras agric. J.*, Coimbatore, 48 (11), pp. 429-433, 1961).
1467. Srivastava, B. P. 1964. Morphology of the alimentary canal of the larva of *Leucinodes orbonalis* Guen. (Lepidoptera, Pyraustidae). (Abstracts).—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, p. 141. (Original full paper in *Proc. nat. Inst. Sci. India*, New Delhi, 25B (4), pp. 188-200).
1468. Srivastava, B. P. 1964. The morphology of the nervous system of the full grown larva of *Leucinodes orbonalis* Guen. (Lepidoptera, Pyraustidae). (Abstracts).—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, p. 144. (Original full paper in *Zool. Anz.*, Leipzig, 163 (9-10), pp. 288-297, 1959).
1469. Srivastava, B. P. 1964. Studies on the digestive physiology of *Leucinodes orbonalis* Guen. (Lepidoptera, Pyraustidae). (Abstracts).—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 144-145. (Original full paper in *Univ. Rajasthan Stud.* (Biol. Sci.), Jodhpur, 5, pp. 19-29).
- Srivastava, D. S. 1964.—See Tewari, S. K. and Srivastava, D. S. 1964.
1470. Srivastava, G. C. and Singh, K. S. 1964. Histopathology and histochemistry of oesophagostomum nodule of sheep and goats.—*Indian J. vet. Sci.*, New Delhi, 34 (4), pp. 189-201.
1471. Srivastava, G. K., Rao, K. R. and Varshney, R. K. 1964. New host of lac.—*Allahabad Fmr.*, Allahabad, 38 (3), pp. 104-106.
1472. Srivastava, G. M. and Singh, V. R. P. 1964. Inter-relationship between standard length and body weight of *Cirrhina mrigala* (Hamilton).—*Proc. nat. Acad. Sci. India*, Allahabad, 34B (2), pp. 37-41.
- Srivastava, H. D. 1964.—See Dutt, S. C. and Srivastava, H. D. 1964.
1473. Srivastava, H. M. L., Bhombore, S. R. and Roy, R. G. 1964. Variations in the palpal banding of *Anopheles stephensi* Liston, 1901 (in Madras State).—*Bull. Indian Soc. Malar. commun. Dis.*, New Delhi, 1 (1-2), pp. 61-62.
- Srivastava, J. B. 1964.—See Mathur, A. C. and Srivastava, J. B. 1964.
- Srivastava, K. C. 1964.—See Tiwari, R. D. and Srivastava, K. C. 1964.

- Srivastava, K. M. N. 1964.—See Pande, B. P., Bhatia, B. B., Dubey, J. P. and Srivastava, K. M. N. 1964.
1474. Srivastava, M. C. 1964. Blood histamine.—*Labdev J. Sci. Tech.*, Kanpur, 2 (2), pp. 112-117.
1475. Srivastava, P. D., Kumar, S. S., Bhambhurkar, M. W. and Pradhan, S. 1964. An artificial diet for rearing the desert locust.—*Indian J. Ent.*, New Delhi, 26 (3), pp. 352-367.
1476. Srivastava, P. N. 1964. Effect of X-ray irradiation upon sodium excretion from the gills of goldfish, *Carassius auratus* L.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 460-461.
1477. Srivastava, P. N. 1964. Thyroid activity and radio-sensitivity relationship in goldfish, *Carassius auratus* L.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 461.
1478. Srivastava, P. N. and Tachi, C. 1964. Sodium excretion as a factor causing death in fish due to irradiation.—*Nature*, London, 202 (4938), pp. 1234-1235.
1479. Srivastava, R. C. 1964. Record of *Hexameris* sp. (Nematoda) on some species of moth borers of sugarcane in India.—*Curr. Sci.*, Bangalore, 33 (22), p. 691.
1480. Srivastava, R. K. 1964. The structure and development of the chondracanium of *Varanus*. II. The development of the orbitotemporal region.—*J. Morph.*, Philadelphia, 115 (1), pp. 97-107.
1481. Srivastava, S. C. 1964. A new host record for *Strongyloides akbari* and *Artyfechinostomum sufragryfex*.—*Indian J. Helminth.*, Lucknow, 16 (1), pp. 24-26.
1482. Srivastava, S. C. and Pande, B. P. 1964. Occurrence of aortic onchocerciasis in buffalo-calves with a note on the report in other domestic animals.—*Indian J. vet. Sci.*, New Delhi, 34 (4), pp. 222-231.
1483. Srivastava, S. C. and Pande, B. P. 1964. The intestinal thread worm *Strongyloides papillosus* (Wedl. 1856) Ransom, 1911 in young buffalo-calves—a histological study.—*Indian J. vet. Sci.*, New Delhi, 34 (4), pp. 214-221.
1484. Srivastava, S. C. and Pande, B. P. 1964. On some of the helminths and the associated lesions on Indian coot, *Fulica atra*.—*Agra Univ. J. Res. (Sci.)*, Agra, 13 (3), pp. 131-154.
1485. Srivastava, S. C. and Pande, B. P. 1964. On helminth parasites of gray musk shrew, *Crocidura caerula*.—*Indian J. Helminth.*, Lucknow, 16 (1), pp. 12-23, 1 pl.
1486. Srivastava, S. C. and Varma, M. G. R. 1964. The culture of the tick *Rhipicephalus sanguineus* (Latreille) (Ixodidae) in the laboratory.—*J. med. Ent.*, 1, pp. 154-157, figs. 1-2.
1487. Srivastava, S. R. and Tayal, J. N. 1964. In-vitro culture of tapeworms from the intestine of sheep and goat.—*Labdev J. Sci. Tech.*, Kanpur, 2 (2), pp. 151-152.
1488. Srivastava, U. S. and Srivastava, B. P. 1964. Observations on the post-embryonic development of the male reproductive organs in *Leucinodes orbonalis* Guen. (Lepidoptera : Pyraustidae).—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 83-92, 2 pls. (Original full paper in *J. Linn. Soc. Lond., Zool.*, 44 (296) april 1959).
1489. Srivastava, U. S. and Srivastava, B. P. 1964. Observations on the post-embryonic development of the female reproductive organs in *Leucinodes orbonalis* Guen. (Lepidoptera : Pyraustidae) with notes on the homology in the two sexes. (Abstract).—*Univ. Udaipur Res. Stud., Souven. Vol.*, Udaipur, 2, pp. 93-94. (Original full paper in *J. Linn. Soc. Lond., Zool.* 56, pp. 203-211, 1959).
1490. Stroyan, H. L. G. 1964. A new species of *Protrama* Baker (Aphidoidea : Traminae) from north western India.—*Indian J. Ent.*, New Delhi, 26 (2), pp. 211-214.
1491. Stroyan, H. L. G. and Nagaicha, B. B. 1964. A new subspecies of *Acrythosiphon* Mordvilko, 1914

- (Homoptera : Aphidoidea) from *Rubus ellipticus* in North India.—*Proc. R. ent. Soc. Lond.*, London, (B) 33, pp. 59-62.
1492. Subba Rao, B. R. and Chawla, S. S. 1964. A catalogue of hymenopterous parasites of rice stem borers.—*Indian J. Ent.*, New Delhi, 26 (3), pp. 332-344.
1493. Subba Rao, B. R., Prashad, B., Ram, A., Singh, R. P. and Srivatava, M. L. 1964. On some new records of parasites of *Hypera postiga* (Gyllenhal) (Coleoptera : Curculionidae).—*Curr. Sci.*, Bangalore, 33 (21), pp. 658-659.
- Subba Rao, J. 1964.—See Sitaramayya, A. C., Subba Rao, J. and Rao, V. V. R. 1964.
1494. Subba Rao, K. V. 1964. On the occurrence of *Saurida undosquamis* (Richardson) off Visakhapatnam.—*J. mar. biol. Ass. India*, Mandapam, 6 (2), pp. 265-267.
1495. Subrahmanyam, C. B. 1964. Eggs and early development of a carangid from Madras.—*J. mar. biol. Ass. India*, Mandapam, 6 (1), pp. 142-146.
1496. Subrahmanyam, V., Lahiry, N. L., Moorjani, M. N., Nair, R. B. and Krishnaswamy, M. A. 1964. Ammonia : possible use for preserving fish.—*Science*, Washington, 142 (3589), pp. 233-234.
1497. Sud, B. N. and Marwaha, P. 1964. Studies on the mid-gut of *Lepisma saccharina*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.* Calcutta, pt. 3 (Abstracts), pp. 443-444.
1498. Sud, B. N., Satija, R. C. and Kaur, K. 1964. Cytology and histochemistry of the mid-gut of *Callsobruchus analis*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 435-436.
1499. Sud, B. N. and Singal, C. L. 1964. Cytology and histochemistry of the pericardial cells of the cockroach.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 443.
1500. Sud, G. C. 1964. Observations on zoochlorellae in fresh water ciliates.—*Diss. Abstr.*, Ann Arbor, 25, pp. 3767-3768.
- Sud, S. K. 1964.—See Ganguli, N. C., Sud, S. K. and Bhalerao, V. R. 1964.
1501. Sudarsan, D. 1964. Observations on the plankton and trawler catches off Bombay.—*J. mar. biol. Ass. India*, Mandapam, 6 (2), pp. 222-225.
- Sukumaran, K. K. 1964.—See Alikunhi, K. H. and Sukumaran, K. K. 1964.
1502. Sultana, A. 1964. A new species of *Pseudaprocta* Schikhobalova 1930 from the large pied wagtail in Indian.—*Indian J. Helminth*, Lucknow, 16 (1), pp. 71-74.
1503. Sultana, A. 1964. Some new eye-worms from birds in India.—*Z. Parasitenk.*, Berlin, 23 (6), pp. 523-547.
1504. Sunbaraj, B. I. and Prasad, M. R. N. 1964. The histochemistry of the saccus vasculosus of *Notopterus chitala* (Teleostei). *Quart. J. micr. Sci.*, London, 105 (1), pp. 91-98.
1505. Sunidarrjulu, G. 1964. A hitherto undescribed hydroreceptor organ in Millipedes.—*Curr. Sci.*, Bangalore, 33 (8), pp. 249-251.
1506. Sundaram, R. K. 1964. Occurrence of *Amoebotaenla spinosa* Yamaguti 1956 in desi fowls.—*Kerala Vet.*, Trichur, 2 (3/4) [1953-64], pp. 75-78.
1507. Sundaam, R. K. Radhakrishnan, C. V. Sivasubramaniyam, M. S., Padmanabhan, R. and Peter, C. T. 1964. Studies on the life cycle of *Tetrameres mohtedai* Bhalerao and Rao 1964.—*Indian vet. J.*, Madras, 40 (1963), pp. 7-15, 5 figs.
1508. Susheela, A. K. 1964. Evidence for the longitudinal division of skeletal muscle fibres.—*Naturwissenschaften*, Berlin, 51 (16), p. 391.
1509. Susheela, A. K. and George, J. C. 1964. Fatty acid oxidation by rat diaphragm.—*J. Anim. Morph. Physiol.*, Baroda, 11 (1), pp. 180-185.

1510. Susheela, A. K. and George, J. C. 1964. Lipase activity in the bat diaphragm.—*J. Anim. Morph. Physiol.*, Boroda, 11, pp. 276-279.
- Suterwala, S. K. 1964.—See Marathe, V. B. and Suterwaia, S. K. 1964.
1511. Swami, C. K. 1964. Some notes on the alimentary canal of *Bagroda*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 473.
1512. Swami, C. K. 1964. Observations on the alimentary canal of some Heteroptera.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 485-486.
1513. Swami, C. K. 1964. Some histological observation on the ventriculus epithelium of Heteroptera.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts) p. 486.
1514. Swami, K. S. and Krishnamurthy, R. V. 1964. Enzyme activities in relation to the charge patterns in living cells.—*Arch. int. Physiol. Biochem.*, Paris, 72, pp. 373-377.
- Swami, K. S. 1964.—See Krishnamoorthy, R. V. and Swami, K. S. 1964.
1515. Swarup, G. and Pillai, K. J. 1964. Root-knot of vegetables. III. Factors affecting hatching of eggs of *Meloidogyne javanica* (Treub, 1885) Chitwood, 1949 and *M. incognita incognita* (Kofoid and White, 1919) Chitwood, 1949.—*Indian Phytopath.*, New Delhi, 17 (2), pp. 88-97.
1516. Swarup, G., Prasad, S. K. and Raski, D. J. 1964. Some *Heterodera* species from India.—*Plant Dis. Repr.*, Washington, 48 (3), p. 235.
1517. Swarup, G., Sethi, C. L. and Gill, J. S. 1964. Some records of plant parasitic nematodes in India.—*Curr. Sci.*, Bangalore, 33 (19), p. 593.
- Swarnamayee, T. 1964.—See Nagabhushanam, R. and Swarnamayee, T. 1964.
1518. Syed, R. A., Qureshi, M. and Chani, M. A. 1964. Studies on the trypetids and their natural enemies in West Pakistan. II. Ecological distribution of *Ducus dorsalis* Hend.—*Tech. Bull. Commow. Inst. biol. Contr.*, London, 4, pp. 76-80.

T

- Tachi, C. 1964.—See Srivastava, P. N. and Tachi, C. 1964.
- Talukdar, M. 1964.—See Manna, G. K. and Talukdar, M. 1964.
1519. Talwar, P. K. 1964. Studies on the food and feeding relationships of the half beak fishes (Hemirhamphidae) from the gulf of Mannar and Palk Bay.—*Indian J. Fish.*, New Delhi, 9A (1) [1962], pp. 1-9.
1520. Talwar, P. K. 1964. A contribution to the biology of the half-beak *Hyporhamphus grorgii* (Cuv. & Val.) (Hemirhamphidae).—*Indian J. Fish.*, New Delhi, 9A (1) [1952], pp. 168-196.
1521. Tampl, P. R. S. and Rangarajan, K. 1964. Some polychaetous annelids from the Andaman waters.—*J. mar. biol. Ass. India*, Mandapam, 5 (1), pp. 98-121.
1522. Tandan, B. K. 1964. Mallophaga from birds of the Indian subregion. Part VI. *Falcolipeurus Bedford*.—*Proc. R. ent. Soc. Lond.*, London, 33B (11/12), pp. 170-180.
1523. Tandan, B. K. and Singh, K. S. 1964. *Ophryocotyloides dasi* sp. n. (Cestoda : Davaineidae) from a Himalayan barbet.—*Zool. Anz.*, Leipzig, 173 (6), pp. 441-443.
- Tandan, B. K. 1964.—See Dogra, G. S. and Tandan, B. K. 1964.
1524. Tandon, G. S. Shukla, R. C. and Phookan, D. P. 1964. Comparative study of right and left vagus on the hearts of toads and dogs.—*Indian J. Physiol. Pharmacol.*, New Delhi, 8 (4), pp. 239-242.
1525. Tandon, K. K. 1964. Biology and fishery of

- "Choo Parai" *Selaroides leptolepis* (Cuvier & Valenciennes). Part III. Population studies.—*Indian J. Fish.*, New Delhi, 9A (1) [1962], pp. 30-36.
1526. Tandon, K. K. and Sharma, S. C. 1964. On the degeneration and regeneration of optic nerve fibres with return of vision in *Danio rerio* (Ham.).—*Proc. Indian Acad. Sci.*, Bangalore, 60B, pp. 287-292.
- Tandon, S. K. 1964.—See Nayar, J. L. and Tandon, S. K. 1964.
1527. Tarjan, A. C. 1964. A compendium of the genus *Tylenchorhynchus* (Tylenchidae : Nematoda).—*Proc. helm. Soc. Wash.*, Washington, 31 (2), pp. 270-280.
1528. Tasumi, M. 1964. The cheek teeth of a young Indian elephant.—*Mammalia*, Paris, 28 (3), pp. 381-396.
- Tayal, J. N. 1964.—See Srivastava, S. R. and Tayal, J. N. 1964.
1530. Tembe, V. B. and Deshpande, K. K. B. 1964. Amphipods of Bombay shores. Part 1. A preliminary note.—*J. Univ. Bombay (N. S.)*, Bombay, 31 (5), pp. 113-117.
1531. Teotia, T. P. S. 1964. Comparative morphology and anatomy of the last instar larvae of *Bracon (Microbracon) gelechia* Ashmead and *Apanteles flavipes* Cameron (Braconidae : Hymenoptera).—*Ann. Zool.*, Agra, 4 (9), pp. 73-112.
1532. Teotia, T. P. S. 1964. Lac insect. pp. 513-529. In : *Entomology in India 1938-1963*,—New Delhi (Entom. Soc. India).
1533. Teotia, T. P. S. and Rajani, V. G. 1964. Effective control of sugarcane leaf hopper (*Pyrrilla perpusilla* Wilk.) by fogging of gamma BHC in Uttar Pradesh.—*Indian J. Sug. Cane Res. & Devel.*, New Delhi, 9 (1), pp. 19-22.
1534. Tewari, H. B. 1964. On the metabolic significance of the intracellular distribution of Glucose-6-phosphate in the spinal ganglion cells of rat.—*Proc. Comb. 51st & 52nd Indian. Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 460.
1535. Tewari, J. P., Dutta, K. C. and Mishra, S. S. 1964. Preliminary pharmacological examination of *Piper chaba* Hunter.—*Labdev J. Sci. Tech.*, Kanpur, 2 (2), pp. 118-121.
1536. Tewari, S. K. and Srivastava, D. S. 1964. Studies on the development of the chondrocranium in *Rasbora daniconius* (Ham. & Buch.).—*Proc. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 447.
1537. Thakar, C. V. 1964. Preliminary survey of some parts of Akarani Mahal for establishment of beekeeping industry.—*Indian Bee J.*, New Delhi, 25, pp. 19-21.
- Thakur, M. L. 1964.—See Chatterjee, P. N. and Thakur, M. L. 1964.
- Thapa, R. S. 1964.—See Chatterjee, P. N. and Thapa, R. S. 1964.
1538. Thapar, G. S. 1964. New cercaria from Ephyrula larva of *Aurelia* sp. from Indian waters.—*Indian J. Helminth.*, Lucknow, 16 (2), pp. 75-81.
1539. Thapliyal, J. P. and Saxena, R. N. 1964. Absence of a refractory period in the common weaver bird.—*Condor*, Santa Clara, 66, pp. 199-208.
1540. Thapliyal, J. P. and Saxena, R. N. 1964. Gonadal development of the male black-headed munia under constant nine-hour (short) days.—*J. exp. Zool.*, Philadelphia, 156, pp. 153-156.
- Thapliyal, J. P. 1964.—See Pandha, S. K. (Miss.) and Thapliyal, J. P. 1964.
1541. Theodor, O. and Oldroyd, H. 1964. Hippoboscidae.—*Flieg. pal. Reg.*, Stuttgart, 247, pp. 1-32.
1542. Theodor, O. and Oldroyd, H. 1964. Hippoboscidae.—*Flieg. pal. Reg.*, Stuttgart, 250, pp. 33-56.
1543. Thirumalachar, M. J., Radhakrishnan, C. V., Padhye, A. A., Manrai, M., Gopalkrishnan, K. S.

- and Rahalkar, P. W. 1964. Oral hamycin in treating epizootic lymphangitis in horses.—*Hindustan Antibiot. Bull.*, Pimpri (Poona), 7 (2), pp. 74-78.
1544. Tholasingam, T., Venkataraman, G. and Kartha, K. N. K. 1964. On some bathypelagic fishes taken from the continental slope off the south coast of India.—*J. mar. biol. Ass. India*, Mandapam, 6 (2), pp. 268-284.
1545. Thomas, M. M. and Kartha, K. P. 1964. On the catch of a juvenile whale shark *Rhincodon typus* Smith from Malabar Coast.—*J. mar. biol. Ass. India*, Mandapam, 6 (1), pp. 174-175.
- Thomas, N. 1964.—See Nadakil, A. M. and Thomas, N. 1964.
1546. Thomas, P. J. 1964. *Cossura coasta* Kitamori (Polychaeta: Cossuridae); a new record from Indian waters.—*Curr. Sci.*, Bangalore, 33 (24), pp. 754-755.
1547. Thomas, P. M. 1964. Warehousing of agricultural commodities other than grains in India. pp. 352-358. In *Entomology in India 1938-1963*.—New Delhi (Entom. Soc. India).
1548. Thomas, P. T. 1964. Food of *Katsuwonus pelamis* (Linn.) and *Neothunnus macropterus* (Temminck and Schlegel) from Minicoy waters during the season 1960-1961.—*Proc. Symp. Scombroid fishes Mar. biol. Ass. India*, Mandapam, Ser. 1 (2), pp. 626-630.
1549. Thomas, P. T. and Raju, G. 1964. Gonadal abnormalities in Scombroid fishes.—*Symp. Scombroid fishes. Mar. biol. Ass. India*, Mandapam, Ser. 1 (2), pp. 719-724.
- Thomas, S. 1964.—See Upadhyaya, Vin. and Thomas, S. 1964.
1550. Tikader, B. K. 1964. Observation on the caecilian *Ichthyophis neddornii* Peters from Kotegehar Dist. Chikmaga-lur, Mysore (with two plates).—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (3), p. 697.
1551. Tikader, B. K. 1964. A new species of spider of the genus *Oxyptila* (family Thomisidae) from India.—*Sci. & Cult.*, Calcutta, 30, pp. 152-153, figs. a-c.
1552. Tikader, B. K. 1964. Zoological results of the Indian Cho-Oyu Expedition (1958) in Nepal. Part 8. Arachnida.—*Rec. Indian Mus.*, Delhi, 59 (3), pp. 257-267.
1553. Tikader, B. K. 1964. Marine fauna of Deogad coast (Ratnagiri Dist., Maharashtra), Part. 1. Mollusca.—*J. Poona Univ. (Sci. & Tech.)*, Poona, 28, pp. 43-48.
1554. Tilak, R. 1964. Studies on the comparative morphology of the otoliths of Indian siluroids.—*Zool. Anz.*, Leipzig, 173 (3), pp. 181-201.
1555. Tilak, R. 1964. The osteology of *Uromastix hardwickii* Gray.—*Zool. Anz.*, Leipzig, 173 (6), pp. 403-426.
1556. Tilak, R. 1964. A six-legged spider of the family Pholcidae (Arachnida).—*Sci. & Cult.*, Calcutta, 30, pp. 206-207.
1557. Tilak, R. 1964. The hyoid apparatus of *Uromastix hardwickii* Gray.—*Sci. & Cult.*, Calcutta, 30, pp. 244-246.
1558. Tilak, R. 1964. The osteocranium and the Weberian apparatus of the fishes of the family Schilbeidae (Pisces: Siluroidea).—*Proc. zool. Soc. Lond.*, London, 143 (1), pp. 1-36.
1559. Tilak, R. and Rastogi, S. C. 1962. Dermal scutes in Sauria [Reptilia].—*Proc. zool. Soc.*, Calcutta, 17 (2), pp. 183-191.
- Till, W. M. 1964.—See Evans, G. O. and Till, W. M. 1964.
1560. Timm, R. W. 1964. The nematode genus *Monhystrella* (Cobb, 1918) with a description of a marine species.—*Trans. Amer. micr. Soc.*, Lancaster, 83 (1), pp. 23-26.
1561. Timm, R. W. 1964. Nematode parasites of the coelomic cavity of earthworms. I. The genera *Synoechnema* and *Ungella*. II. The genus *Dicelis*.—*Biologia*, Lahore, 8 [1962], pp. 1-16, 2 pls.

1562. Timm, R. W. 1964. A redescription of *Dema-niella cibourgensis* Steiner, 1964 (Nematoda : Diplogasteridae).—*Biologia*, Lahore, 9 [1963], pp. 49-51, 1 fig.
1563. Timm, R. W. 1964. Nematodes of the super-family Dorylaimoidea from East Pakistan.—*Proce-helm. Soc. Wash.*, Washington, 31 (2), pp. 144-153.
1564. Timm, R. W. 1964. Observations on *Synoe-cnema* (Nematoda, Ungellidae), with a description of 2 new species.—*Pakist. J. sci. Res.*, Lahore, 11 [1959], pp. 58-62, 1 pl.
1565. Timm, R. W. and Bhuiyan, A. L. 1964. *Disco-laimium Pakistanicum* n. sp. (Nematoda : Dorylaimidae), with a key to the species of *Disco-laimium*.—*Biologia*, Lahore, 9, pp. 53-61, 1 fig.
1566. Timmermann, G. 1964. Gruppen—Revisionen bei Mallophagen. VII. Die *Pectinopygus*—Arten der Grobkormorane (Gen. *Phalacrocorax* Brisson, 1760 S. Str.).—*Mitt. hamburg Zool. Mus.*, Hamburg, 61 (Sup.), pp. 271-284.
1567. Tiwari, A. K. and Pandit, C. N. 1964. Pathology of ovine and caprine lungs. 1. Incidence and distribution of pulmonary affections in sheep and goats.—*J. vet. Sci. & Anim. Husb. Res.*, Delhi, 8, pp. 9-14.
1568. Tiwari, K. K. 1964. Occurrence of a scale interposed between the parietals and occipitals in the king cobra *Naja hummah* (Cantor).—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (2), pp. 452-453.
1569. Tiwari, K. K. 1964. A note on the freshwater prawn, *Macrobrachium altifrons* (Henderson, 1893) [Crustacea : Decapoda : Palaemonidae].—*Proc. zool. Soc.*, Calcutta, 16 (1) [1963], pp. 225-238.
1570. Tiwari, R. D. and Srivastava, K. C. 1964. Study of the component aminoacids of the proteins of the fish *Labeo rohita* at different stages of growth.—*Indian J. Fish.*, New Delhi, 9A (1) [1962], pp. 135-139.
1571. Tonapi, G. T. 1964. A note on the freshwater sponges of Poona.—*Curr. Sci.*, Bangalore, 33 (12), pp. 372-373.
- Trager, W. 1964.—See Siddiqui, W. A. and Trager, W. 1964.
1572. Trapido, H., Goverdhan, M. K., Rajagopalan, P. K. and Rebellow, M. J. 1964. Ticks ectoparasitic on monkeys in the Kyasanur forest disease area of Shimoga district, Mysore State, India.—*Amer. J. trop. Med. Hyg.*, Baltimore, 12 (5), pp. 763-772.
1573. Trapido, H. and Hoogstaal, H. 1964. *Haemaphysalis cornigera shimoga* sub. sp. n. from Southern India (Ixodoidea, Ixodidae).—*J. Parasit.*, Lancaster, 50 (2), pp. 303-310.
1574. Trapido, H., Hoogstraal, H. and Rajagopalan, P. K. 1964. *Haemaphysalis kysanurensis* sp. n. a member of the *formosensis* group in Southern India and Ceylon (Ixodoidea, Ixodidae).—*J. Parasit.*, Lancaster, 50 (2), pp. 295-302.
1575. Trapido, H., Hoogstraal, H. and Varma, M. G. R. 1964. Status and description of *Haemaphysalis P. papuna* Thorell (n. comb.) and of *H. Papuana kinneari* Warburton (n. comb.) (Ixodoidea, Ixodidae) of southern Asia and New Guinea.—*J. Parasit.*, Lawrence, 50 (1), pp. 172-188.
1576. Trapido, H., Varma, M. G. R., Rajagopalan, P. K., Singh, K. R. P. and Rebello, M. J. 1964. A guide to the identification of all stages of the *Haemaphysalis* ticks of South India.—*Bull. ent.*, London, 55, pp. 249-270, figs. 1-6.
1577. Trehan, K. N. and Rai, K. 1964. The external morphology of *Bagrada cruciferarum* Kirk. (Hemiptera : Heteroptera : Pentatomidae).—*Res. Bull. (N. S.) Punjab Univ.*, Chandigarh, 15 (3-4), pp. 331-338.
1578. Tripathi, C. 1964. Note on the geology and vertebrate fossils of Sayamalai area, Tirunelveli district, Madras.—*Rec. geol. Surv. India*, Delhi, 93 (2), pp. 256-262.
1579. Tripathi, R. L. and Singh, V. S. 1964. Effect

- of sowing date variation on the incidence of mustard aphid, *Lipaphis erysimi* Kalt. on *Brassica campestris* Var. brown and yellow, Sarson and *Brassica juncea* Rai.—*Indian J. Ent.*, New Delhi, 26 (2), pp. 251-252.
1580. Tripathi, Y. R. and Krishnamurty, K. N. 1964. Experimental fishing at the Mettur Dam, Cauvery river.—*Proc. nat. Acad. Sci. India*, Allahabad, 34B (2), pp. 87-99.
1581. Trivedi, H. S. 1964. On two metacercariae from freshwater fishes in Ujjain.—*J. Vikram Univ.*, Ujjain, 8 (1 & 3), pp. 91-94.
1582. Tufail, M. and Hashmi, S. S. 1964. Early developmental stages of *Leptodius exeratus* (Milne Edwards).—*Pakist. J. Sci. Ind. Res.*, Lahore, 7, pp. 208-210.
- Tuli, S. 1964.—See Mookherjee, P. B., Sharma, G. C. and Tuli, S. 1964.
- U
1583. Ummerkutty, A. N. P. 1964. Studies on Indian copepods. 6. The post-embryonic development of two calanoid copepods, *Pseudodiaptomus aurivilli* Cleve and *Labidocera bengalensis* Krishnaswamy.—*J. mar. biol. Ass. India*, Mandapam, 6 (1), pp. 48-60.
1584. Unni, L. K. and Patel, B. 1964. Uptake of uranium by '*Anadara granosa* L.' under laboratory conditions.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 459.
1585. Unnithan, R. R. 1964. A note on the time required for the food to pass through the alimentary canal of *Heteropneustes fossilis* (Bloch).—*Sci. & Cult.*, Calcutta, 30, pp. 404-405.
1586. Unnithan, R. V. 1964. On five new species of monogenetic trematodes parasitic on the gills of marine fishes from the south west coast of India.—*Treubia*, Bogor, 26 (3), pp. 159-178.
1587. Unnithan, R. V. 1964. Four new polyonchoineans (Monogeneoidea) parasitic on gills of marine fishes from the Indian seas.—*J. Parasit.*, Lancaster, 50 (2), pp. 241-247.
1588. Upadhaya, M. P. 1964. Hydrobiological survey of fishery waters and study of factors responsible for poor growth and survival of fingerlings and fry in tanks and nurseries of U. P. for the year 1960-61 and 1961-62.—*Progress report of the Fishery Research Laboratory, Dept. of Fisheries, U. P.* 1964.
1589. Upadhaya, V. N. and Soars, T. 1964. A characteristic feature of wing venation of *Ischiodon scutellaris* (Fabr.) (Diptera : Syrphidae).—*Indian J. Ent.*, New Delhi, 26 (2), pp. 209-210.
1590. Uttangi, J. C. and Desai, R. N. 1964. Occurrence of an actinocephalid gregarine in the larvae of the batter beetle *Dermestes vulpinus* (Fab.).—*J. Anim. Morph. Physiol.*, Boroda, 11 (1), pp. 85-89.
- V
1591. Vaid, K. M. 1964. Animal instinct and intelligence.—*Indian For.*, Dehra Dun, 50 (4), p. 228.
- Vaish, O. P. 1964.—See Srivastava, B. K. and Vaish, O. P. 1964.
1592. Vallyathan, N. V., Cherian, K. M. and George, J. C. 1964. Histochemical and quantitative changes in glycogen and phosphorylase during disuse atrophy of the pigeon pectoralis.—*J. Histochem. Cytochem.*, London, 12, pp. 721-728.
1593. Vallyathan, N. V. and George, J. C. 1964. Glycogen content and phosphorylase activity in the breast muscle of the migratory starling, *Sturnus roseus* (Linnaeus).—*Pavo*, Baroda, 2 (1), pp. 55-60.
1594. Vallyathan, N. V. and George, J. C. 1964. Effect of exercise on phosphorylase and succinic dehydrogenase levels in pigeon breast muscle.—*J. Anim. Morph. Physiol.*, Baroda, 11 (1), pp. 186-191.
- Vallyathan, N. V. 1964.—See George, J. C. and Vallyathan, N. V. 1964.

1595. Vandel, A. and Jayakar, S. D. 1964. *Proporcellio quadriseriatus* Verhoeff : an addition to the Indian fauna list.—*J. Bombay nat. Hist. Soc.*, Bombay, 61 (2), p. 463.
1596. Varma, B. K. 1964. Study on the development and structure of the male genitalia and reproductive organs of *Galerucella birmanica* Jac (Chrysomelidae : Coleoptera)—*Indian J. Ent.*, New Delhi, 26 (3), pp. 310-317.
1597. Varma, B. K. 1964. Pesticides for crop pests. pp. 477-496. In : *Entomology in India, 1938-1963*.—New Delhi (Entom. Soc. India).
1598. Varma, C. P. and Dangwal, A. K. 1964. Tertiary hystriospheraerids from India.—*Micropaleontology*, New York, 10, pp. 63-71.
1599. Varma, M. G. R. 1964. A metal capsule for experimental feeding of ixodid ticks on animals.—*Trans. R. Soc. Trop. Med. Hyg.*, London, 58, p. 5.
1600. Varma, M. G. R. 1964. The acarology of louping ill. Proc. Ist. int Congr. Acarology 1963.—*Acarologia*, Paris, 6 (fasc. hors. Ser.), pp. 241-254, figs. 1-2.
1601. Varma, M. G. R. 1964. Mites (family : Trombiculidae) parasitizing birds migrating from Africa to Europe.—*Bull. World Hlth. Org.*, Geneva, 31, pp. 411-416, figs. 1-2.
- Varma, M. G. R. 1964.—See Srivastava, S. C. and Varma, M. G. R. 1964.
- Varma, P. U. 1964.—See Murty, A. V. S. and Varma, P. U. 1964.
- Varma, P. U. 1964.—see Patil, M. R., Ramamirthan, C. P., Varma, P. U. and Nair, C. P. A. 1964.
1602. Varma, R. K. and Behura, B. K. 1964. Nitrogenous excretion in the common shore crab, *Ocypoda ceratophalma* (Pallas) (Decapoda, Crustacea).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 450.
1603. Varma, R. K. and Behura, B. K. 1964. Nitrogenous excretion in the common sand crab, *Emerita asiatica* M. Edw. (Hippidae, Decapoda, Crustacea).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 458.
1604. Varma, R. K. and Behura, B. K. 1964. Nitrogenous excretion in the common cockroach, *Periplaneta americana* L. (Blattidae, Dictyoptera, Insecta).—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), pp. 457-459.
1605. Varshney, R. K. 1964. Lower categories in animal classification.—*Allahabad Fmr.*, Allahabad, 38 (1), pp. 31-34.
1606. Varshney, R. K. 1964. Studies on chloride regulation in *Tilapia mossambica*.—*J. mar. biol. Ass. India*, Mandapam 6 (2), pp. 228-234.
- Varshney, R. K. 1964.—See Srivastava, G. K., Rao, K. R. and Varshney, R. K. 1964.
- Vasudevan, B. 1964.—See Dutt, B. and Vasudevan B. 1964.
1607. Vasudeva Rao, K. and Mulherkar, L. 1964. Effect of diethylbarbituric acid on the early development of *Planorbis exustus*.—*Proc. Acad. wet. Amst.*, Amsterdam, 67C, pp. 273-279.
1608. Vazirani, T. G. 1964. On a new species of aquatic beetle of the genus *Amphizoa* Leconte, 1853 [Insecta : Coleoptera : Amphizoidae], from Kashmir, India.—*Proc. zool. Soc.*, Calcutta, 17 (2), pp. 145-147.
1609. Vazirani, T. G. 1964. On the morphology and ecology of the larvae of *Cybister* spp. (Dytiscidae, Coleoptera).—*Bull. Ent.*, Madras, No. 5, pp. 31-48.
- Venkaiah, D. 1964. See Venkataratnam, G. and Venkaiah, D. 1964.
1610. Venkatanarasimhaiah, C. B. 1964. Contributions to the cytology of Indian scorpions. Cytology of *Palamnaeus simon*.—*Proc. Comb. 51st & 52nd Indian Sci. Congr.*, Calcutta, pt. 3 (Abstracts), p. 436.

1611. Venkatanarasimhaiah, C. B. and Rajasekarasetty, M. R. 1964. Contributions to the cytology of Indian scorpions. Chromosomal behaviour in the male meiosis of *Palamnaeus gravimanus*.—*Acarologia*, Paris, 17, pp. 195-201, pl. 1, figs: 1-19.
1612. Venkataramaiah, G. H. and Sekhar, P. S. 1964. Experiments on the control of the green bug, *Coccus viridis* Green. I. Preliminary observations on the effect of the systemic insecticides, Rogor, Metu-iso-systox Ekatin.—*Indian Coffee*, Bangalore, 28 (4), pp. 96-97, 100.
1613. Venkataraman, G. and George, K. C. 1964. On the occurrence of large concentration of file-fish off the Kerala coast, India.—*J. mar. biol. Ass. India*, Mandapam, 6 (2), pp. 321-323.
- Venkataraman, G. 1964.—See Tholasilingam, T., Venkataraman, G. 1964.
1614. Venkataraman, T. and Vasudeva Menon, P. P. 1964. Occurrence of *Sesamia inferens* Wlk., in South India on grown up sugarcane.—*Indian J. Sug. Cane Res. & Dev.*, New Delhi, 9 (1), pp. 53-54.
1615. Venkataraman, T. V. 1964. Experimental studies on superparasitism and multiparasitism in *Horogenes cerophaga* (Grav.) and *Hymenobosmina rafi* (Cam.), the larval parasites of *Plutella maculipennis* (Curt).—*Indian J. Ent.*, New Delhi, 26 (1), pp. 1-32.
- Venkataramaiah, G. H. 1964.—See Sekhar, P. S. and Venkataramaiah, G. H. 1964.
1616. Venkataratnam, A. 1964. Incidence of paracooperiasis in Andhra Pradesh.—*Indian vet. J.*, Madras, 41 (5), pp. 349-351, 1 pl.
1617. Venkataratnam, G. and Venkaiah, D. 1964. Some observations on the production characteristics of Murrah buffaloes. I. Maximum initial milk yield.—*Indian vet. J.*, Madras, 41 (3), pp. 205-211.
1618. Venkataratnam, G. and Venkaiah, D. 1964. Some observations on the production characteristics of Murrah buffaloes. II. Seasons of calving.—*Indian vet. J.*, Madras, 41 (8), pp. 507-512.
- Verma, K. K. 1964.—See Daniel, J. C. and Verma, K. K. 1964.
1619. Verma, P. S. 1964. Study of the mouth parts of *Chilomenes sexmaculata* Fabr. (Coleoptera: Coccinellidae) in relation to carnivorous habit.—*Agra Univ. J. Res. (Sci.)* Agra, 13 (2), pp. 137-146.
- Verma, R. D. 1964.—See Parihar, N. S. and Verma, R. D. 1964.
- Vijaylakshmi, U. 1964.—See Agarwal, R. A. and Vijaylakshmi, U. 1964.
1620. Vijayaraghavan, S., Kalyanaraman, V. M. and David, B. V. 1964. Aerial spraying against the red hairy caterpillar, *Amsacta albistriga* M. on groundnut in Pollachi (Madras State).—*Madras agric. J.*, Coimbatore, 51 (2), p. 92.
- Vimala Devi, R. 1964.—See Seshachar, B. R. and Vimala Devi, R. 1964.
1621. Vinogradov, M. E. 1964. Hyperiid physosomata from the northern part of the Indian Ocean.—*Trud. Inst. Okeanol. Moskva*, Leningrad, 65, pp. 107-151.
- Vinogradov, M. E. 1964.—See Birstein, J. A. and Vinogradov, M. E. 1964.
1622. Visvesvara, G. 1964. On some Gastrotricha from India with description of two new species.—*Ann. Mag. nat. Hist.*, London, (13) 6 (67), pp. 435-443.
- Voous, K. H. 1964.—See Bruyns, W. F. J. M. and Voous, K. H. 1964.
1623. Voss, E. 1964. Unbeschriebene Curculioniden aus Iran und Pakistan (Col., Curc.).—*Ent. Arab. Mus. Frey.*, Munchen, 15 (2), pp. 702-710.
- Vyas, A. P. 1964.—See Bhatt, P. L., Vyas, A. P. and Kohli, R. N. 1964.

1624. Vyas, D. K. 1964. Beak size as sex indicator in birds.—*Curr. Sci.*, Bangalore, 33 (24), pp. 753-751.

W

1625. Wadhi, S. R. 1964. Tolerance of grape cuttings to insecticidal applications.—*Indian J. Ent.*, New Delhi, 26 (3), pp. 296-299.
1626. Wadhi, S. R. 1964. A basis for the separation of stone weevil infested mango fruits from uninfested ones.—*Indian J. Ent.*, New Delhi, 26 (3), pp. 362-363.
1627. Wadhi, S. R. and Batra, H. N. 1964. Pests of tropical and subtropical fruit trees. pp. 227-260. In: *Entomology in India 1938-1963*, New Delhi (Entom. Soc. India).
1628. Wadia, D. N. 1964. The Himalaya mountains: Their age, origin and sub-crustal relations.—*Proc. natn. Inst. Sci. Indian.*, New Delhi, 30A (6), pp. 848-863.
- Wadud, M. A. 1964.—See Alam, M. L. and Wadud, M. A. 1964.
- Wahid, A. 1964.—See Ahmad, N., Keeling, J. E. D. and Wahid, A. 1964.
1629. Wa'dyasekera, P. L. D. 1964. Effects of a deaminating substance on Amoeba.—*Sci. & Cult.*, Calcutta, 30 (9), pp. 463-464.
- Wal, Y. C. 1964.—See Khalsa, G. H., Wal, Y. C. and Agarwal, P. N. 1964.
- Wal, Y. C. 1964.—See Ayyappa, P. K., Perti, S. L. and Wal, Y. C. 1964.
1630. Wattal, B. L. 1964. A note on *Aedes* survey of Calcutta following an outbreak of haemorrhagic fever in July 1963.—*Indian J. med. Res.*, New Delhi, 52 (7), pp. 710-718.
- Wenger, B. S. 1964.—See Narayan, C. H. and Wenger, B. S. 1964.
1631. Whitehead, P. J. 1964. *Xiphias platypterus* Shaw & Nodder, 1792 (Pisces): application to validate this *nomen oblitum* for the Indian Ocean sailfish (genus *Istiophorus*) Z. N. (S.) 1657.—*Bull. zool. Nom.*, London, 21, pp. 444-446.
1632. Wilson, E. O. 1964. The true army ants of the Indo-Australian area. (Hymenoptera: Formicidae: Dorylinae).—*Pacific Insects*, 6 (3), pp. 427-483.
1633. Wilson, F. D. 1964. Surgery for leiomyoma in the vagina of a bitch.—*Indian vet. J.*, Madras, 41 (4), pp. 294-295.
- Wirth, W. W. 1964.—See Arnaud, P. H. (Jr.) and Wirth, W. W. 1964.
1634. Wirth, W. W. and Delfinado, D. M. 1964. Revision of the oriental species of *Alluaudomyia* Kieffer (Diptera, Ceratopogonidae)—*Pacific Insects*, Honolulu, 6 (4), pp. 599-648, 2 pls.

Y

1635. Yaraguntian, R. C. and Govindu, H. C. 1964. Virus disease of *Dolichos lablab* var. *typicum* from Mysore.—*Curr. Sci.*, Bangalore, 33 (23), pp. 721-722.
1636. Yosii, R. and Ashraf, M. 1964. On some Collembola of West Pakistan—III.—*Pakistan J. scient. Res.*, Lahore, 16, pp. 52-58, 4 figs.

Z

1637. Zafar, A. R. 1964. On the ecology of algae in certain fish ponds of Hyderabad—India. II. Distribution of unicellular and colonial forms.—*Hydrobiologica*, Den Haag, 14, pp. 556-566.
1638. Zaka, ur-rab, M. 1964. Observations on the facial sclerites of the larva of *Papilio demoleus* L. (Lepidoptera: Papilionidae).—*Proc. R. ent. Soc. Lond.*, 39A (1-3), pp. 34-40.
1639. Zenkevitch, L. A. 1964. [New deep sea Echiurids from the Indian Ocean].—*Trud. Inst. Okeanal. Moskva*, Leningrad, 69, pp. 178-182, 3 figs. [Russian: English summary].

III. LIST OF NEW TAXA

Note :—Except in the case of species, the new taxonomic categories are indicated against each name by the words ; fam. n., g. n., subsp. n. etc.

Phylum 1. Protozoa
Class 1. Mastigophora

1. *Trypanosoma delhiense* Grewal

Class 2. Rhizopoda

2. *Goborotalia pondicherriensis* Rajagopalan
Orbiqia Mamgain (g. n.)
3. *Orbiqia drasensis* Mamgain
4. *Orbitoides fissoti compressa* Marks

Class 3. Sporozoa

5. *Actinocephalus deramestica* Uttangi
6. *Dorisiella vagabundae* Mandal & Chakravarty
7. *Eimeria impalae* Prasad & Narayan
8. *Eimeria talboti* Prasad & Narayan
9. *Eimeria oryctolagi* Ray & Banik
10. *Isospora bengalensis* Mandal & Chakravarty
11. *Isospora pycnonotae* Mandal & Chakravarty
12. *Isospora lonchurae* Mandal & Chakravarty
13. *Isospora megalaimae* Mandal & Chakravarty
14. *Isospora emberizae* Mandal & Chakravarty
15. *Isospora canis* Ray and Banik

Class 4. Cnidosporidia

16. *Coelospridium schamckeriae* Ganapati
17. *Henneguya zahoori* Bhatt & Siddiqui
18. *Myxobolus aligarhensis* Bhatt & Siddiqui
19. *Myxobolus ophicephali* Bhatt & Siddiqui
20. *Unicauda basiri* Bhatt & Siddiqui

Class 5. Ciliata

21. *Hystriosphera pseudofurcata* Varma
22. *Hystriospheraidium mineralosum jekhowskyi*
Varma (subsp. n.)

Mathurosphaera Varma (g. n.)

23. *Mathurosphaera rajivi* Varma
24. *Tenua taugourdeau* Varma

Phylum 2. Porifera
Class Demospongiae

Subclass Tetractinomorpha (Monaxonida)

25. *Suberites bengalensis* Levi

Phylum 3. Cnidaria
Class Anthozoa

26. *Umbellula monocephalus* Pastirnak

Phylum 4. Platyhelminthes

Class 1. Trematoda

27. *Amphibdella narcine* Unnithan
Anchovicola Unnithan (g. n.)
28. *Anchovicola anchoviella* Unnithan
29. *Artyfechinostomum varanum* Simha
30. *Azygia stunkardi* Rai
31. *Cercaria osmaniae* Simha
32. *Diplectanum narimeen* Unnithan
33. *Diplostomulum singhi* Pande, Bhatia & Rai
34. *Encylobrephus lucknowensis* Gupta
35. *Glaphyrostomum indicum* Mukherjee
36. *Haplorchis solus* Simha
37. *Helicometra indica* Agrawal
Heterocotyle Unnithan (g. n.)
38. *Heterocotyle thrissoclistae* Unnithan
39. *Lyperosomum stunkardi* Agrawal
40. *Lyperosomum (Brachylecithum) raoi* Jaiswal
41. *Mazocraes dussumerii* Unnithan
42. *Mazocraes trispina* Unnithan
43. *Neocalceostoma arii* Unnithan
44. *Neoganada otto* Gupta.
45. *Phyllodistomum srivastava* Rai
46. *Podocotyle gurnardi* Agrawal
47. *Postorchigenes indica* Agrawal
48. *Procamallanus (P.) buckleyi* Agrawal
49. *Prosotocus mastacembeli* Agrawal
50. *Schwartzitrema angingi* Gupta
51. *Schwartzitrema dumbeli* Nath & Gupta
Scomberocola Unnithan (g. n.)
52. *Scomberocola eyela* Unnithan
Tylosuricola Unnithan (g. n.)
53. *Tylosuricola panikkari* Unnithan

Class 2. Cestoda

54. *Anoncotaenia indica* Singh
55. *Bluterina dicruri* Singh
56. *Choanotaenia dutti* Mukherjee
57. *Choanotaenia sonati* Mukherjee
58. *Choanotaenia tandani* Singh
59. *Choanotaenia picusi* Singh
60. *Ophryocotyle indicus* Singh
61. *Ophryocotyloldes dasi* Tandon

62. *Panuwa stylicirrosa* Singh
 Phylum 5. Aschelminthes
 Class 1. Gastrotricha
63. *Polymerurus magnus* Visvesvara
 64. *Stylochaeta abarbita* Visvesvara
 Class 2. Nematoda
65. *Axonchium indicum* Siddiqi
 66. *Axonchium nitidum* Jairajpuri
 67. *Axonchium saccatum* Jairajpuri
 68. *Axonchium elegans* Jairajpuri
Basirotyleptus Jairajpuri (g. n.)
 69. *Basirotyleptus basiri* Jairajpuri
 70. *Belondira paraclava* Jairajpuri
 71. *Belondira nepalensis* Siddiqi
 72. *Belondira neortha* Siddiqi
 73. *Boleodorus mirus* Khan
 74. *Boleodorus abnormus* Khan & Basir
 75. *Boleodorus impar* Khan & Basir
Calolaimus Timm (g. n.)
 76. *Calolaimus papillatus* Timm
 77. *Criconema taylori* Jairajpuri
 78. *Criconemoides magnoliae* Edward & Misra
 79. *Criconemoides juniperi* Edward & Misra
 80. *Criconemoides siddiqi* Khan
 81. *Diphtherophora parva* Siddiqi
 82. *Discolaimius pakistanicum* Timm & Bhuiyan
Dorella Jairajpuri (g. n.)
 83. *Dorella mira* Jairajpuri
 84. *Dorylaimellus cephalus* Jairajpuri
 85. *Dorylaimellus carvatus* Jairajpuri
 86. *Dorylaimellus filiformis* Jairajpuri
 87. *Dorylaimellus longicaudatus* Jairajpuri
 88. *Dorylaimellus digitatus* Siddiqi
 89. *Dorylaimellus capitatus* Siddiqi
 90. *Dorylaimellus indicus* Siddiqi
 91. *Dorylaimellus discocephalus* Siddiqi
 92. *Dorylaimoides rusticus* Timm
 93. *Dorylaimoides lepidus* Timm
 94. *Enchodorella perveeni* Khan
 95. *Helicotylenchus tunsienensis* Siddiqi
 96. *Helicotylenchus necronatus* Siddiqi
 97. *Helicotylenchus insignis* Khan & Basir
 98. *Helicotylenchus plumariae* Khan & Basir
 99. *Helicotylenchus digitatus* Siddiqi & Husain
 100. *Helicotylenchus neofornis* Siddiqi & Husain
 101. *Hemicriconemoides conimuni* Edward & Misra
 102. *Hemicriconemoides litchi* Edward & Misra
Hepatinema Rasheed (g. n.)
 103. *Hepatinema karachiensis* Rasheed
Leptonema Jairajpuri (g. n.)
 104. *Leptonema thoria* Jairajpuri
105. *Longidorella impar* Khan & Khan
 106. *Longidorella opisthodelphis* Jairajpuri
 107. *Longidorus afzali* Khan
 Nordianaes Jairajpuri (subfam. n.)
 108. *Nordia thornei* Jairajpuri
 109. *Nordi dokhlaensis* Jairajpuri
 110. *Nordia acutis* Jairajpuri
 Nygellidae Jairajpuri (fam. n.)
 Nygellinae Jairajpuri (subfam. n.)
 Belondirinae Jairajpuri (subfam. n.)
 Swangernaes Jairajpuri (subfam. n.)
 Dorylaimellinae Jairajpuri (subfam. n.)
- ¹11. *Nygellus caudatus* Jairajpuri
 112. *Oxycirus magnus* Timm
 113. *Oxyd'rus gigus* Jairajpuri
 114. *Oxyspirura basiri* Siddiqi & Jairajpuri
 115. *Oxyspirura (Oxyspirura) cesticola* Sultana
 116. *Oxyspirura (Oxyspirura) suraiyae* Sultana
 117. *Oxyspirura (Oxyspirura) egretta* Sultana
 118. *Oxyspirura (Oxyspirura) fulica* Sultana
 119. *Oxyspirura (Oxyspirura) leiperi* Sultana
 120. *Oxyspirura (Oxyspirura) eremopterixa* Sultana
 121. *Oxyspirura (Oxyspirura) dukhunensis* Sultana
 122. *Oxyspirura (Oxyspirura) alli* Sultana
 123. *Paralongidorus microlaimus* Siddiqi
 124. *Paurodontus neosimilis* Khan & Basir
 125. *Proleptonchus amphidius* Jairajpuri
 126. *Proleptonchus teres* Jairajpuri
 127. *Proleptonchus indicus* Siddiqi & Khan
 128. *Proleptonchus clarus* Timm
 129. *Pseudaprocta mirzai* Sultana
 130. *Padopholus williamsi* Siddiqi
 131. *Rotylenchus sheri* Jairajpuri
 132. *Rotylenchus orientalis* Siddiqi & Husain
 133. *Rotylenchus eximius* Siddiqi
Sakia Khan (g. n.)
 134. *Sakia typica* Khan
 135. *Scutellonema grande* Sher
 136. *Stephanoprora nigerica* Gupta
 137. *Synoeenema anseriforme* Timm
 138. *Synoeenema hirsutum* Timm
 139. *Synoeenema gatesi* Timm
Trichonchium Siddiqi & Khan (g. n.)
140. *Trichonchium archium* Siddiqi & Khan
 141. *Trichonchium eximium* Siddiqi & Khan
 142. *Tylencholaimus pakistanensis* Timm
 143. *Tylencholaimus hastatus* Siddiqi
 144. *Tylencholaimellus projectus* Siddiqi
 145. *Tylencholaimellus eskei* Siddiqi & Khan
 146. *Tylencholaimus viduus* Jairajpuri
 147. *Tylencholaimus similis* Jairajpuri

147. *Tylencholaimus olescura* Jairajpuri
Xenonchium (g. n.)
149. *Xenonchium cedari* Siddiqi & Khan
150. *Xiphinema conurum* Siddiqi
151. *Xiphinema arcum* Khan
- Phylum 6. Annelida
Class Polychaeta
152. *Ancistargis brevicirris* Rangarajan
- Phylum 7. Echiuroidea
Class Echiura
152. *Acanthobonellia pirotanensis* Jose
144. *Acanthobonellia vulgaris* Menon, Datta Gupta & Johnson
155. *Acanthobonellia rollundoe* Menon, Datta Gupta & Johnson
- Choanostoma* Zenkevitch (g. n.)
156. *Choanostoma brunni* Zenkevitch
157. *Ikedella bogorovi* Zenkevitch
- Phylum 8. Mollusca
Class 1. Bivalvia
158. *Nausitora lanceolata* Rajagopal
159. *Nausitora sajnakhaliensis* Rajagopal
- Class 2. Cephalopoda
160. *Procyrtoceras mazardrikensis* Sarkar
- Phylum 9. Arthropoda
Class 1. Crustacea
Subclass 1. Branchiopoda
161. *Latona tiwarii* Biswas
- Subclass 2. Ostracoda
162. *Chrissia humilis indica* Hartman (subsp. n.)
162. *Cyprretta foveata* Hartman
164. *Cyaridopsis dispar* Hartman
165. *Parastenocypris canaliculata* Hartman
166. *Strandesia bicornuta* Hartman
167. *Strandesia elongata* Hartman
168. *Strandesia indica* Hartman
169. *Strandesia labiata* Hartman
170. *Strandesia parva* Hartman
171. *Strandesia rotunda* Hartman
172. *Strandesia saetosa* Hartman
173. *Strandesia tuberculata* Hartman
- Subclass 3. Copepoda
174. *Bomolochus sardinellae* Bennet
175. *Caligus hamruri* Pillai
176. *Chondracanthus trilobatus* Pillai
177. *Hatschekia sphyraeni* Pallai
178. *Lernacenicus anchoviellae* Sebastian & George
179. *Lernanthropus alatus* Pillai
180. *Lernanthropus carangis* Pillai
181. *Lernanthropus robustus* Pillai
182. *Lernanthropus oblongus* Pillai
183. *Lernanthropus opisthopteri* Pillai
184. *Lernanthropus gibbosus* Pillai
185. *Lernanthropus decaptri* Pillai
186. *Neodiptomus kamekhae* Reddiah
187. *Stellicomus pambanensis* Rao
188. *Taeniacanthus dentatus* Sebastian
189. *Troyodiptomus lakhimpurensis* Reddiah
- Subclass 4. Cirripedia
190. *Balanus (Megabalanus) squillae* Daniel & Ghosh
- Subclass 5. Malacostraca
191. *Agarua brachysoma* Pillai
192. *Ancialina dentata* Pillai
193. *Cleonardo maxima* Bristein & Vinogradov
194. *Ctenoscina echinata* Vinogradov
195. *Dajus afromysides* Pillai
196. *Eusirella heterochela* Bristein & Vinogradov
197. *Halicoides indica* Bristein & Vinogradov
- Mesocyclocaris* Bristein & Vinogradov (g. n.)
198. *Mesocyclocaris gracilis* Bristein & Vinogradov
199. *Mimonecteola mixta* Vinogradov
200. *Mimonecteola subchelata* Vinogradov
201. *Notophryxus lobatus* Pillai
202. *Ocyropa portonovoensis* Premkumar
203. *Prodajus gastrosacci* Pillai
204. *Prodajus ovatus* Pillai
205. *Pseudirona laeopsi* Pillai
206. *Rhopalphthalmus macropsis* Pillai
207. *Scina indica* Vinogradov
208. *Siriella robusta* Pillai
209. *Siriella jonesi* Pillai
210. *Spelaeomysis longipes* Pillai & Mariamma
- Class 2. Arachnida
211. *Amblyomma mudaliari* Rao, Hiregaudar & Alwar
212. *Cytodites amandavae* Fain & Bafort
213. *Dermenyssus intermedius* Evans & Till
214. *Drassodes phanduaensis* Tikader
215. *Haemaphysalis kysanuwensis* Trapido, Hoogstraal & Rajagopalan
216. *Haemaphysalis cornigera shimoga* Trapido & Hoogstraal
217. *Hahnia alini* Tikader
218. *Leiodynchus parasiticus* Choudhuri & Mukherjee
219. *Leptus giganticus* Khot
220. *Leptus indicus* Khot
221. *Leptus ovatus* Khot
222. *Leptus poonaensis* Khot
223. *Lychas nucifer* Basu

224. *Lychas decorata* Basu
 225. *Lycosa tatensis* Tikader
 226. *Oxyptila gertschi* Tikader
 227. *Phaeoedus mosambaensis* Tikader
 228. *Pistius roonwali* Basu
 229. *Pistius kanikae* Basu
 230. *Tegenaria lunakensis* Tikader
 231. *Tetranychus reetalius* Basu
 232. *Tetranychus aratica* Basu
 233. *Trombicula kajlutekri* Joshee
 234. *Trombicula bhattipadensis* Joshee
 235. *Trombicula multisetosa* Joshee
 236. *Xysticus roonwali* Tikader
- Class 3. Pycnogonida**
237. *Endeis ghaxiei* Rajagopal
- Class 4. Insecta**
- Order 1. Thysanura**
- Neatelura* Joseph & Mathad (g. n.)
238. *Neatelura vellaurensis* Joseph & Mathad
- Order 2. Collembola**
239. *Cyphoderodius punjabicus* Yosii & Ashraf
 240. *Xynylla indus* Yosii & Ashraf
- Order 3. Odonata**
241. *Calicnemis maheshhi* Sahani
 242. *Caconeura gaudawricus* Sahani
 243. *Ceriagrion chaoi* Schmidt
 244. *Ceriagrion malaisei* Schmidt
 245. *Himalagrion pithoragarhicus* Sahani
 246. *Lestes malaisei* Schmidt
 247. *Onychargia indica* Sahani
- Order 4. Orthoptera**
248. *Chlorizeina roonwali* Bhowmick
 249. *Eyprepenemis bhaduri* Bhowmick
 250. *Ramakrishnaia gracilis* Ramakrishnaia & Kevan
- Order 5. Dermaptera**
251. *Epilandex undulata* Ramamurthi
 252. *Labia fulleri* Ramamurthi
- Order 6. Isoptera**
253. *Angulitermes akhorisainensis* Chatterjee & Thakur
 254. *Grallatotermes niger* Chatterjee & Thapa
 255. *Microcerotermes rambanensis* Chatterjee & Thakur
 256. *Odontotermes mathadi* Roonwal & Chhotani
 257. *Speculitermes dharwarensis* Roonwal & Chhotani
 258. *Speculitermes goesswaldi* Roonwal & Chhotani
- Order 7. Hemiptera**
259. *Acyrtosiphon rubi elliptici* Stroyan & Nagaicha
Brachymyzus Basu (g. n.)
260. *Brachymyzus jasmini* Basu
 261. *Cavariella nigra* Basu
 262. *Dictyla eudia* Drake & Quadri
 263. *Ficiansa pruthii* Ghauri
 264. *Greenideoida lambersi* Basu
 265. *Insulaspis citraina* Borchsenius
 266. *Lachnus titabarensis* Raychaudhuri & Ghosh
 267. *Liosomaphis himalayensis* Basu
 268. *Masonaphis anaphalidis* Basu
 269. *Mollitrichosiphum (Metatrichosiphon) nandii* Basu
 270. *Monosteira ideia* Darke & Livingstone
Neobetulaphis Basu (g. n.)
 271. *Neobetulaphis pusilla* Basu
 272. *Oedisiphum soureni* Basu
Paracallipterus Roychaudhuri & Ghosh (g. n.)
 273. *Paracallipterus kalipadi* Raychaudhuri & Ghosh
 274. *Protrama penecaeca* Stroyan
 275. *Sitobion indicum* Basu
 276. *Stenocranus ajmerensis* Joseph
 277. *Subovatomyzus leucosceptri* Basu
 278. *Tingis agrana* Drake & Livingstone
 279. *Velu varicae* Ghauri
 280. *Vesiculaphis grandis* Basu
 281. *Vesiculaphis pieridis* Basu
- Order 8. Thysanoptera**
- Alloiothrips* Ananthakrishnan (g. n.)
282. *Alloiothrips nigrisetis* Ananthakrishnan
Azaeothrips Ananthakrishnan (g. n.)
 283. *Azaeothrips amabilis* Ananthakrishnan
Carissothrips Ananthakrishnan (g. n.)
 284. *Carissothrips nigrescens* Ananthakrishnan
 285. *Dolichothrips (Dolichothrips) montanus*
 Ananthakrishnan
286. *Dolichothrips (Dolicholepta) fulvus* Ananthakrishnan
Loyolai Ananthakrishnan (g. n.)
 287. *Loyolai indica* Ananthakrishnan
 288. *Malacothrips madrasensis* Ananthakrishnan
 289. *Nanothrips typicus* Ananthakrishnan
 290. *Oedabothrips ramamurthii* Ananthakrishnan
 291. *Praepodothrips nigrocephalus* Ananthakrishnan
Pyknothrips Ananthakrishnan (g. n.)
 292. *Pyknothrips reticulatus* Ananthakrishnan
Ramachandraiella Ananthakrishnan (g. n.)
 293. *Ramachandraiella minuta* Ananthakrishnan
Stanuardiana Ananthakrishnan (g. n.)
 294. *Stanuardiana variegata* Ananthakrishnan
Stigmothrips Ananthakrishnan (g. n.)
 295. *Stigmothrips limpidus* Ananthakrishnan
 296. *Stigmothrips bambusae* Ananthakrishnan
 297. *Strepterothrips orientalis* Ananthakrishnan

298. *Teuchothrips priesneri* Ananthakrishnan
Order 9. Lepidoptera
299. *Amathes lobbichbri* Boursin
 300. *Amathes hemitragidia* Boursin
 301. *Amathes forsteri* Boursin
 302. *Amathes tenuis nepaneusis* Boursin (subsp. n.)
 303. *Euplexidia violascens* Boursin
 304. *Mythimna tamsi* Boursin
 305. *Ochropbura (Dichagyris) despecta calamoxantha* Boursin (subsp. n.)
 306. *Perrisandria sheljurhkoii* Boursin
 307. *Rhyacia mirabilis nepalensis* Boursin (subsp. n.)
 308. *Sideris simplex nepalensis* Boursin (subsp. n.)
Order 10. Trichoptera
309. *Adinarthrum simplex* Kimmins
 310. *Chimarra nepalensis* Kimmins
 311. *Chimarra fenestrata* Kimmins
 312. *Chimarra nigra* Kimmins
 313. *Chimarra biungulata* Kimmins
 314. *Diplectrona sanguana* Kimmins
 315. *Madioxyethira nepalensis* Kimmins
Nepaloptila Kimmins (g. n.)
 316. *Nepaloptila coei* Kimmins
 317. *Psilotreta quinlani* Kimmins
 318. *Stactobia schmidi* Kimmins
 319. *Synagapetus tamrangensis* Kimmins
Trichomacronema Schmid (g. n.)
 320. *Trichomacronema shanorum* Schmid
 321. *Uenoa hiberna* Kimmins
Order 11. Diptera
322. *Alluaudomyia marginalis* Wirth & Delvinado
 323. *Anarete allahabadensis* Grover
 324. *Bacoura dihybosa* Alexander
 325. *Bacoura coloneura* Alexander
 326. *Bacoura schmidiana* Alexander
 327. *Bacoura sternata* Alexander
 328. *Bacoura acustyla* Alexander
 329. *Bacoura furcella* Alexander
 330. *Bacoura sternofura* Alexander
 331. *Callantra nepalensis* Hardy
 332. *Callicera robusta* Coe
 333. *Callicera nitens* Coe
 334. *Callicera sanguensis* Coe
 335. *Chaetostoma interrupta* Hardy
 336. *Cheilotrichia (Cheilotrichia) schmidiana* Alexander
 337. *Cheilotrichia (Empeda) dimelania* Alexander
 338. *Cheilotrichia (Empeda) vasanta* Alexander
Claspettomyia Grover (g. n.)
 339. *Claspettomyia pettiii* Grover
 340. *Clinophena parkensis* Grover
 341. *Coiorhina tripilosa* Coe
 342. *Conarete mihijamensis* Grover
 343. *Cyclopodia kalyania* Chaudhuri & Mitra
 344. *Cylindrotoma subapterogyne* Alexander
 345. *Cylindrotoma seticornis* Alexander
 346. *Cyrtopogon ornatus* Oldroyd
 347. *Dasymallomyia compacta* Alexander
 348. *Dasymallomyia ditenostyla* Alexander
 349. *Dasymallomyia mecophallus* Alexander
 350. *Dasymallomyia tanyphallus* Alexander
 351. *Dicranota (Rhaphidolabina) asiquata* Alexander
 352. *Dicranota (Rhaphidolabina) paraspectralis* Alexander
 353. *Dicranota (Rhaphidolabina) subreticularis* Alexander
 354. *Dicranota (Rhaphidolabina) arjuna* Alexander
 355. *Dicranota (Rhaphidolabina) diprion* Alexander
 356. *Dicranota (Rhaphidolabina) pristin* Alexander
 357. *Dicranota (Rhaphidolabina) unilobata* Alexander
 358. *Didactylonmyia spini* Grover
 359. *Elephantomyia (Elephantomyia) carbo sikkimensis* Alexander (subsp. n.)
 360. *Erioptera (Psiloconopa) preclara* Alexander
 361. *Erioptera (Psiloconopa) preclaroides* Alexander
 362. *Ferdinandes longifacies* Coe
 363. *Gongromastix indica* Grover
 364. *Gongromastix orientalis* Grover
 365. *Helius (Helius) perflavens* Alexander
 366. *Helius (Helius) sigillatus* Alexander
 367. *Belius (Helius) tanyrhinus* Alexander
 368. *Heteropogon nitidus* Oldroyd
 369. *Lestremia orientalis* Grover
 370. *Limnophila (Prionolabis) coracina* Alexander
 371. *Limnophila (Afrolimnophila) pterosticta* Alexander
 372. *Limnophila (Afrolimnophila) apicifusa* Alexander
 373. *Limnophila (Afrolimnophila) perdelecta* Alexander
 374. *Limnophila (Afrolimnophila) pusan* Alexander
 375. *Limnophila (Afrolimnophila) scabristyla* Alexander
 376. *Limnophila (Prionolabis) mecocera* Alexander
 377. *Limnophila pectinifera* Alexander
 378. *Limnophila iota* Alexander
 379. *Limnophila adicia* Alexander
 380. *Limnophila (Afrolimnophila) bicoloripes* Alexander
 381. *Limonia (Dicranomyia) sternolobatooides* Alexander
 382. *Limonia (Dicranomyia) sternolobatooides almorae* Alexander (subsp. n.)
 383. *Limonia (Dicranomyia) clotho* Alexander
 384. *Limonia (Dicranomyia) anata* Alexander
 385. *Limonia (Dicranomyia) kaurava* Alexander
 386. *Limonia (Dicranomyia) kaurava facifera* Alexander (subsp. n.)
 387. *Limonia (Dicranomyia) phericomata* Alexander

388. *Limonia (Dicranomyia) nigrobarbata* Alexander
 389. *Limonia (Dicranomyia) draupadi* Alexander
 390. *Limonia (Dicranomyia) chandra* Alexander
 391. *Limonia (Dicranomyia) pentadactyla* Alexander
 392. *Limonia (Dicranomyia) nakula* Alexander
 393. *Limonia (Dicranomyia) kubera* Alexander
 394. *Limonia (Dicranomyia) yaksha* Alexander
 395. *Limonia (Dicranomyia) naga* Alexander
 396. *Limonia (Dicranomyia) rixosa* Alexander
 397. *Limonia (Dicranomyia) macogastra* Alexander
 398. *Limonia (Dicranomyia) skanda* Alexander
 399. *Limonia (Dicranomyia) grishma* Alexander
 400. *Limonia (Dicranomyia) dactylophora* Alexander
 401. *Limonia (Dicranomyia) euernes* Alexander
 402. *Limonia (Dicranomyia) fugax* Alexander
 403. *Limonia (Dicranomyia) tyrannia* Alexander
 404. *Limonia (Dicranomyia) umbonis* Alexander
 405. *Limonia (Dicranomyia) malina* Alexander
 406. *Limonia (Dicranomyia) microentmema* Alexander
 407. *Limonia (Dicranomyia) ravana* Alexander
 408. *Limonia (Limonia) devata* Alexander
 409. *Limonia (Limonia) acinacis* Alexander
 410. *Limonia (Limonia) bifaria* Alexander
 411. *Limonia (Limonia) brachylabis* Alexander
 412. *Limonia (Limonia) stenolabis* Alexander
 413. *Limonia (Limonia) tanyrhyncha* Alexander
 414. *Limonia (Limonia) anteterminalis* Alexander
 415. *Limonia (Metalimnobia) brahma* Alexander
 416. *Limonia (Metalimnobia) xanthopteroides adonis*
 Alexander (subsp. n.)
 417. *Limonia (Libnotes) pramatha* Alexander
 418. *Limonia (Libnotes) sharava* Alexander
 419. *Limonia (Libnotes) tartarus* Alexander
 420. *Limonia aspropoda* Alexander
 421. *Limonia bhima* Alexander
 422. *Limonia indefessa* Alexander
 423. *Limonia luteipostica* Alexander
 424. *Limonia luteitarsis* Alexander
 425. *Limonia pernodosa* Alexander
 426. *Limonia ushas* Alexander
 427. *Limonia vibhishana* Alexander
 428. *Limonia (Rhipidia) crassirostris* Alexander
 429. *Limonia (Rhipidia) hariola* Alexander
 430. *Limonia (Rhipidia) ugra* Alexander
Melanoimonia Alexander (subg. n.)
 431. *Limonia (Melanolimonia) fulvonigrina* Alexander
 432. *Limonia (Melanolimonia) pernigrita* Alexander
 433. *Limonia (Pseudoglochina) apicalba* Alexander
 434. *Limonia (Pseudoglochina) eurymelania* Alexander
 435. *Lipoptena indicum* Rao, Hiregaudar & Alwar
 436. *Lycastris griseipennis* Coe
 437. *Malaisemyia manipurensis* Alexander
 438. *Melanagromyza leonotidis* Sehgal
 439. *Neolaparus coei* Oldroyd
 440. *Nemoochtherus sanguensis* Oldroyd
 441. *Nephrotoma glassophora* Alexander
 442. *Nephrotoma starnemarginata* Alexander
 443. *Nephrotoma umbonis* Alexander
 444. *Oldroydia maculata* Oldroyd
 445. *Peromyia orientalis* Grover
 446. *Peromyia indica* Grover
 447. *Phalacrocera manipurensis* Alexander
 448. *Philonicus curtatus* Oldroyd
 449. *Protohelius koasicus* Alexander
 450. *Pseudovolucella hingstoni* Coe
Rabindrodiplosis Grover (g. n.)
 451. *Rabindrodiplosis champakii* Grover
 452. *Rhodomastix (Rhodomastix) manipurensis*
 Alexander
 453. *Rhodomastix (Sacandaga) arnaldi* Alexander
 454. *Rhodomastix (Sacandaga) nigropumila* Alexander
 455. *Rhodomastix (Sacandaga) strictivena* Alexander
 456. *Rhagoletis rumpomaculata* Hardy
 457. *Rubsaamenia indica* Grover
 458. *Rubsaamenia orientalis* Grover
 459. *Syrphus pellucidipennis* Coe
 460. *Syrphus albipilus* Coe
 461. *Tephritis coei* Hardy
 462. *Tephritis daedala* Hardy
 463. *Tipula (Brithura) nielseniana* Alexander
 464. *Tipula (Bellardina) seguyana* Alexander
 465. *Tipula (Bellardina) vaillantiana* Alexander
 466. *Tipula (Nippotipula) edwardsomyia* Alexander
 467. *Tipula (Nippotipula) kertesiana* Alexander
 468. *Tipula (Schummelia) costolutea* Alexander
 469. *Tipula (Schummelia) durga* Alexander
 470. *Tipula (Schummelia) ishidana* Alexander
 471. *Tipula (Schummelia) lindneriana* Alexander
 472. *Tipula (Sivatipula) bhishma* Alexander
 473. *Tipula (Angaratipula) tokunogana* Alexander
 474. *Tipula (Acutipula) takahashiana* Alexander
 475. *Tipula (Indotipula) apicidilata* Alexander
 476. *Tipula (Indotipula) bangerterana* Alexander
 477. *Tipula (Indotipula) phallacaena* Alexander
 478. *Tipula (Indotipula) pierreana* Alexander
 479. *Tipula (Vestiplex) bryceana* Alexander
 480. *Tipula (Vestiplex) chiswellana* Alexander
 481. *Tipula (Vestiplex) exechostyla* Alexander
 482. *Tipula (Vestiplex) theowaldona* Alexander
 483. *Tipula (Oreomyza) brindleana* Alexander
 484. *Tipula (Oreomyza) vayu* Alexander
 485. *Volucella varipila* Coe

Order 12. Hymenoptera

486. *Aenictus doryloides* Wilson
Afenella Malaise (g. n.)
 487. *Afenella tegularis* Malaise
 488. *Aphytis alami* Agarwal
 489. *Azotus gadrii* Agarwal
Birmella Malaise (g. n.)
 490. *Birmella truncata* Malaise
 491. *Birmella genalis* Malaise
 492. *Blennia selandriiformis* Malaise
 493. *Coecophagus manii* Agarwal
 494. *Coecophagus diaspidis* Agarwal
 495. *Coecophagus indicus* Agarwal
 496. *Coecophagus citri* Agarwal
 497. *Enearsia narayanani* Agarwal
 498. *Fenusa crassicornis* Malaise
 499. *Metallus compressicornis* Malaise
Pasteelsia Malaise (g. n.)
 500. *Pasteelsi constricta* Malaise
Pedicellidea Malaise (g. n.)
 501. *Pedicellidea shanica* Malaise
 502. *Phymatoceropsis birmana* Malaise
 503. *Physcus albipodus* Agarwal
 504. *Prophyscus ceroplastidis* Agarwal

505. *Prospaltella citri* Agarwal
 506. *Prospaltella pseudococci* Agarwal
 507. *Prospaltella orientalis* Agarwal
 508. *Pseudoblennocampa sino-birmana* Malaise

Order 13. Coleoptera

509. *Acupalpus (Ancylostria) assamicus* Jedlicka
 510. *Amphizoa kashmirensis* Vazirani
 511. *Dactylotus rugosus* Kapur
 512. *Dactylotus nepalensis* Kapur
 513. *Hyperomias dattai* Kapur
 514. *Hyperomias roonwali* Kapur
 515. *Xylopertha dunensis* Rai & Chatterjee

Phylum 10. Chordata

Class 1. Pisces

516. *Pilorhynchus pseudechenus* Menon & Dutta

Class 2. Amphibia

517. *Bufo sulphureus* Grandison
 518. *Geneneophis ramaswamii* Taylor

Class 3. Mammalia

519. *Rattus niviventer monticola* Ghose (subsp. n.)
 520. *Brachyodus manchhaernsis* Prasad

IV. SUBJECT INDEX

The subject index is divided into 12 sections as follows :—

1. General Zoology
2. Protozoa
3. Porifera
4. Cnidaria
5. Platyhelminthes
 - (a) Trematoda
 - (b) Cestoda
6. Aschelminthes
 - (a) Nematoda
7. Annelida
8. Echiura
9. Mollusca
10. Arthropoda
 - (a) Crustacea
 - (b) Myriapoda
 - (c) Arachnida
 - (d) Insecta
11. Echinodermata
12. Chordata
 - (a) Tunicata
 - (b) Pisces
 - (c) Amphibia
 - (d) Reptilia
 - (e) Aves
 - (f) Mammalia

The numbers given under each section refer to the serial number of the references in the bibliography.

1. GENERAL ZOOLOGY

84, 86, 91, 130, 309, 330, 400, 429, 442, 521, 587, 616, 837, 872, 912, 1002, 1014, 1028, 1151, 1158, 1171, 1218, 1220, 1221, 1222, 1223, 1224, 1225, 1226, 1227, 1255, 1333, 1444, 1446, 1447, 1448, 1475, 1501, 1514, 1547, 1591, 1605, 1628.

2. PROTOZOA

General : 497, 561.

Morphology : 268, 331, 332, 949, 983, 986, 1107, 1192.

Histology & Cytology : 562, 1179, 1315, 1316, 1317.

Physiology & Biochemistry : 137, 266, 825, 826, 948, 1629.

Ecology : 70, 519, 869, 1204, 1590, 1637.

Palaeontology : 269, 563, 998, 999, 1126, 1274, 1275, 1276.

Systematics : 176, 441, 517, 518, 833, 835, 836, 846, 1081, 1127, 1202, 1203, 1598, 1622.

3. PORIFERA

Cytology : 904.

Physiology & Biochemistry : 447, 792.

Ecology : 1571.

Systematics : 812.

4. CNIDARIA

General : 1242, 1243.

Histology & Cytology : 891, 892, 894.

Physiology : 886, 893, 1424, 1425.

Ecology : 285.

5. PLATYHELMINTHES

a. Trematoda

General : 224, 391.

Morphology & Anatomy : 984, 985, 1017, 1122, 1385, 1581.

Biology & Development : 427, 1120, 1122.

Ecology : 1020, 1216, 1427.

Physiology : 499, 500, 508.

Systematics : 26, 27, 28, 30, 31, 32, 538, 539, 540, 541, 542, 543, 544, 548, 549, 557, 608, 902, 956, 1019, 1121, 1384, 1385, 1386, 1387, 1585, 1587.

b. Cestoda

Morphology : 556, 1290.

Biology & Development : 1487.

Ecology : 1506.

Economic & Control : 1291.

Systematics : 909, 1389, 1390, 1405, 1523.

6. ASCHELMINTHES

a. Nematoda

General : 88, 89, 1021.

Morphology : 72, 440, 595, 1194, 1562.

Physiology & Biochemistry : 48, 49, 294, 377.

Biology & Bionomics : 601, 982, 1319, 1400.

Ecology : 120, 607, 700, 721, 751, 794, 877, 915, 816, 817, 971, 981, 1090, 1091, 1092, 1306, 1307, 1363, 1364, 1403, 1406, 1428, 1479, 1481, 1515, 1516, 1517.

Economic & Control : 45, 439, 880, 947, 1012, 1018, 1093, 1320.

Histology & Cytology : 92, 1318, 1482.

Systematics : 29, 432, 433, 593, 594, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 701, 702, 703, 704, 705, 706, 707, 716, 717, 718, 1193, 1195, 1237, 1346, 1361, 1365, 1366, 1367, 1368, 1369, 1370, 1371, 1372, 1373, 1374, 1375, 1502, 1503, 1527, 1560, 1561, 1562, 1563, 1564.

7. ANNELIDA

Morphology : 318, 373, 1521.

Physiology & Biochemistry : 370, 371, 372, 374, 375.

Ecology : 409, 641.

Faunistic : 369, 1546.

8. ECHIURA

Morphology : 653, 876.

Histology & Cytology : 339.

Systematics : 1639.

9. MOLLUSCA

General : 234, 1242, 1243.

Morphology : 487, 488, 687, 945.

Palaeontology : 349, 733, 1880, 1269, 1312.

Histology & Cytology : 486.

Physiology & Biochemistry : 217, 218, 488, 685, 687, 907, 921, 922, 923, 924, 925, 926, 931, 943, 945, 1008, 1113, 1160, 1347, 1349, 1451a, 1584.

Ecology : 286, 399, 415, 416, 417, 418, 422, 425.

Faunistic : 1553.

Systematics : 1125.

10. ARTHROPODA

a. Crustacea

General : 127, 312, 513, 514, 810, 811, 1242, 1243, 1264.

Morphology : 24, 397, 471, 479, 972, 1042, 1046, 1165, 1166, 1174, 1569, 1582.

Histology & Cytology : 403, 764, 964, 970, 1280.

Physiology & Biochemistry : 35, 36, 37, 38, 39, 40, 41, 502, 745, 919, 920, 927, 928, 929, 930, 1270, 1271, 1602, 1603.

Biology & Development : 765, 1583.

Ecology : 114, 191, 286, 293, 368, 472, 474, 475, 477, 762, 1157, 1254, 1226, 1259, 1285, 1530.

Zoogeography & Faunistic : 115, 1039, 1048, 1156, 1595.

Systematics : 148, 194, 198, 319, 565, 1035, 1036, 1037, 1038, 1040, 1041, 1043, 1044, 1046, 1095, 1167, 1170, 1210, 1211, 1296, 1297, 1621.

b. Myriapoda

Morphology : 110, 1505.

Physiology & Biochemistry : 611, 1103.

Cytology : 1330.

c. Arachnida

General : 480, 693, 1200, 1201, 1600.

Morphology : 134, 170, 384, 659, 747, 1236, 1556.

Histology & Cytology : 1610, 1611.

Physiology & Biochemistry : 280, 405, 673, 674, 676, 1172, 1181.

Biology & Development : 52, 1062, 1324.

Ecology : 22, 1006, 1404, 1431, 1572.

Zoogeography & Faunistic : 167, 1190, 1552.

Economic & Control : 76, 77, 351, 1116, 1324, 1430.

Systematics : 132, 135, 136, 184, 191, 382, 383, 436, 439, 666, 732, 974, 1124, 1184, 1308, 1551, 1573, 1574, 1575, 1576.

d. Insecta

General : 90, 233, 317, 582, 638, 725, 726, 962, 993, 997, 1066, 1067, 1068, 1248, 1345.

INSECT ORDERS

1. Thysanura

Physiology : 746.

Histology : 1497.

Systematics : 657.

2. Collembola

Ecology : 1419.

Development : 301.

Systematics : 302, 1460.

3. Ephemeroptera

Systematics : 678, 1026.

4. Odonata

Morphology : 173, 560.

Faunistic : 172, 174.

Systematics : 1109, 1294.

5. Orthoptera

General : 305, 522.

Morphology : 728, 729, 1191, 1240, 1229, 1455.

Histology & Cytology : 536, 711, 840, 841, 1132.

Physiology : 708, 709, 840, 1143, 1144, 1392, 1393.

Ecology : 139, 683, 761, 1104, 1411, 1475.

Economic & Control : 160, 161, 303.

Genetics : 839.

Systematics : 188, 189, 694, 695, 696.

6. Dermaptera

Development : 169.

Morphology : 168, 171, 665, 1153.

Ecology : 166.

7. Dictyoptera

Histology & Cytology : 450, 1134, 1159, 1499.

Physiology : 153, 271, 276, 327, 791, 1024, 1397, 1604.

Genetics : 636.

Control : 20.

8. Isoptera

General : 23.

Morphology : 260, 773, 776, 777, 1219.

Physiology : 883, 1314.

Zoogeography & Faunistic : 1230.

Ecology : 655, 769, 770, 1235.

Economic & Control : 493, 1240.

Histology & Cytology : 123.

Systematics : 258, 259, 261, 262, 263, 774, 1231, 1234.

9. Mallophaga

Zoogeography & Faunistic : 310.

Systematics : 1522, 1566.

10. Siphunculata

Morphology : 637.

11. Hemiptera

General : 1532.

Morphology & Anatomy : 65, 275, 481, 509, 510, 528,

529, 618, 654, 722, 723, 752, 753, 754, 766, 820, 821,

822, 1196, 1197, 1511, 1512, 1577.

Histology & Cytology : 165, 394, 395, 396, 535, 1119,
1132, 1247, 1341, 1429, 1513.

Physiology : 103, 164, 165, 214, 275, 277, 490, 710, 862,
913.

Biology & Development : 113, 617, 1133, 1379.

Bionomics : 1458.

Ecology : 83, 117, 228, 257, 274, 346, 424, 511, 619,
831, 914, 944, 1097, 1208, 1394, 1401, 1458, 1463, 1471,
1579, 1635.

Zoogeography & Faunistic : 446.

Economic & Control : 73, 257, 431, 344, 789, 1052,
1252, 1272, 1378, 1395, 1418, 1458, 1459, 1533, 1612.

Systematics : 133, 200, 201, 231, 406, 407, 481, 482,
483, 484, 490, 654, 754, 1207, 1458, 1490, 1491.

12. Thysanoptera

Development : 376.

Control : 75.

Ecology : 1302.

Systematics : 72, 79, 80.

13. Mecoptera

Cytology : 1154, 1155.

14. Lepidoptera

General : 691, 775, 1360.

Morphology & Anatomy : 107, 1027, 1461, 1464, 1465,
1467, 1468, 1638.

Histology & Cytology : 558.

Physiology : 688, 731, 1286, 1361, 1391, 1469.

Biology & Development : 1466, 1488, 1489.

Ecology : 119, 126, 343, 472, 639, 688, 778, 784, 787,
788, 995, 996, 1031, 1034, 1051, 1105, 1313, 1337, 1357,
1614.

Economic & Control : 11, 104, 105, 270, 384, 784, 906,
1009, 1013, 1305, 1407, 1457, 1466, 1620.

Bionomics : 11, 185.

Faunistic : 772, 786, 1359.

Systematics : 216.

15. Trichoptera

Systematics : 734, 1295.

16. Diptera

General : 95, 571, 1150.

Morphology & Anatomy : 404, 453, 569, 585, 610, 958,
959, 960, 961, 1300, 1473, 1589.

Histology & Cytology : 1380.

Physiology : 715, 1115, 1250, 1435.

Biology & Bionomics : 814.

Ecology : 23, 140, 141, 297, 334, 335, 443, 660, 743, 823, 838, 1026, 1061, 1130, 1146, 1327, 1518.

Genetics & Evolution : 1114, 1209.

Economic & Control : 315, 316, 348, 494, 497, 739, 813.

Faunistic : 1182, 1310, 1630.

Systematics : 53, 54, 55, 56, 57, 58, 59, 60, 61, 278, 284, 313, 520, 564, 815, 974, 1053, 1184, 1541, 1542, 1634.

17. Siphonaptera

Control : 742.

Ecology : 69, 71.

18. Hymenoptera

General : 186, 358, 1417, 1492, 1537.

Cytology : 758, 1287.

Morphology : 15, 16, 508, 801, 1298, 1299, 1531, 1632.

Physiology : 225, 230, 1142.

Biology & Development : 225, 241.

Ecology : 63, 102, 143, 192, 350, 533, 553, 554, 555, 613, 614, 735, 759, 760, 797, 800, 888, 1145, 1187, 1189, 1443, 1615.

Systematics : 555, 656, 829.

19. Coleoptera

Morphology & Anatomy : 10, 730, 749, 750, 899, 1117, 1118, 1596, 1609, 1619.

Histology & Cytology : 333, 942, 1280, 1498.

Physiology : 378, 468, 525, 677, 896, 897, 918, 1246, 1303, 1323, 1438.

Ecology : 96, 101, 264, 347, 661, 767, 779, 781, 1162, 1182, 1337, 1493, 1609, 1626.

Biology & Development : 109, 768, 908.

Zoogeography & Faunistic : 771.

Economic & Control : 250, 256, 345, 434, 783, 898, 1066, 1147.

Pests, Insecticides & Control : 21, 82, 87, 122, 125, 129, 248, 337, 342, 423, 425, 498, 576, 583, 662, 664, 669, 698, 712, 713, 740, 749, 750, 782, 799, 827, 851, 855, 895, 943, 980, 994, 1010, 1050, 1149, 1163, 1185, 1214, 1215, 1261, 1301, 1309, 1338, 1339, 1399, 1410, 1437, 1452, 1453, 1454, 1460, 1597, 1625, 1627.

Systematics : 9, 96, 221, 222, 631, 678, 1117, 1118, 1608, 1623.

11. ECHINODERMATA

Physiology : 496.

Ecology : 641.

12. CHORDATA

General : 1235, 1283.

a. Tunicata

Development : 219, 220.

b. Pisces

General : 190, 506, 507, 641, 720, 871, 873, 1030, 1049, 1288, 1436, 1496, 1580.

Morphology & Anatomy : 13, 33, 34, 43, 46, 62, 66, 144, 149, 150, 199, 212, 298, 328, 329, 338, 340, 363, 430, 448, 449, 515, 621, 645, 648, 649, 652, 719, 724, 757, 798, 801, 805, 875, 884, 1004, 1005, 1006, 1032, 1177, 1251, 1265, 1277, 1278, 1325, 1326, 1334, 1335, 1382, 1426, 1451, 1472, 1544, 1549, 1554, 1558.

Histology & Cytology : 212, 353, 428, 463, 741, 798, 909, 965, 987, 1004, 1005, 1006, 1135, 1136, 1177, 1331, 1421.

Physiology & Biochemistry : 42, 51, 111, 211, 355, 463, 527, 566, 589, 805, 816, 818, 890, 967, 968, 1003, 1047, 1266, 1321, 1476, 1477, 1478, 1504, 1526, 1570, 1585, 1606.

Biology & Development : 452, 845, 1107, 1109, 1110, 1356, 1381, 1520, 1536.

Ecology : 128, 246, 255, 256, 272, 281, 291, 292, 419, 430, 476, 633, 634, 642, 643, 644, 646, 647, 724, 755, 756, 757, 885, 1047, 1063, 1065, 1137, 1138, 1139, 1173, 1175, 1205, 1383, 1434, 1445, 1449, 1450, 1494, 1519, 1525, 1545, 1548, 1587, 1613.

Bionomics : 1176.

Zoogeography & Faunistic : 47, 147, 621, 650.

Economic & Control : 1423.

Systematics : 620, 651, 874, 1111, 1264, 1381, 1382, 1631.

c. Amphibia

General : 320.

Faunistic : 321, 736, 1358.

Histology & Cytology : 352, 523, 905, 1329, 1332.

Physiology & Biochemistry : 112, 159, 205, 208, 209, 253, 354, 355, 365, 672, 737, 738, 795, 1168, 1262, 1263, 1352.

Ecology : 256, 322, 323, 524, 1550.

Systematics : 516, 1529.

d. Reptilia

General : 847, 1293.

Morphology & Anatomy : 364, 684, 946, 963, 1198, 1238, 1282, 1327, 1480, 1555, 1557, 1559, 1568.

Histology & Cytology : 353.

Physiology & Biochemistry : 355, 626, 848, 963, 988, 989.

Biology & Development : 19, 1082.

Zoogeography & Faunistic : 12, 1358.

Ecology : 81, 85, 106, 299, 300, 615, 1242.

e. Aves

General : 154, 196, 223, 307, 308, 803, 882, 1413.

Morphology & Anatomy : 197, 244, 245, 402, 854, 865, 937, 1083, 1624.

Histology & Cytology : 296, 353, 609, 934, 935, 991.

Physiology & Biochemistry : 14, 17, 18, 99, 162, 163, 177, 210, 239, 244, 296, 325, 355, 465, 466, 467, 469, 470, 526, 715, 727, 864, 881, 887, 990, 992, 1090, 1178, 1412, 1433, 1462, 1592, 1593, 1594.

Biology & Development : 203, 204, 213, 325, 795, 859, 953, 954, 1079, 1083, 1540.

Ecology : 1, 2, 3, 4, 6, 7, 64, 67, 282, 324, 356, 386, 387, 388, 378, 574, 575, 579, 849, 450, 938, 979, 1032, 1123, 1353, 1354, 1440, 1539.

Pathology : 306, 559, 588, 832, 1081.

Genetics : 577, 578.

Economic & Control : 130. -

Zoogeography & Faunistic : 5, 18, 152, 573, 584, 586.

Systematics : 8.

f. Mammalia

General : 215, 336, 366, 748, 857, 1108.

Morphology & Anatomy : 156, 157, 175, 232, 451, 455, 456, 457, 458, 592, 671, 763, 853, 911, 918, 933, 952, 1001, 1074, 1085, 1086, 1087, 1088, 1100, 1101, 1102, 1213, 1253, 1322, 1342, 1343, 1355, 1402, 1524, 1527, 1578.

Histology & Cytology : 124, 363, 360, 361, 459, 632, 681, 842, 900, 1074.

Physiology & Biochemistry : 94, 97, 98, 108, 116, 118, 151, 158, 181, 183, 187, 236, 237, 238, 240, 247, 249, 251, 252, 253, 267, 287, 289, 290, 311, 355, 367, 381, 385, 390, 408, 414, 421, 422, 431, 445, 485, 491, 492, 493, 512, 530, 537, 546, 547, 550, 580, 590, 591, 623, 624, 625, 635, 667, 675, 679, 680, 793, 804, 817, 819, 866, 867, 870, 879, 889, 901, 910, 932, 936, 939, 341, 950, 951, 955, 1000, 1015, 1071, 1128, 1129, 1186, 1338, 1344, 1398, 1408, 1415, 1420, 1432, 1442, 1509, 1510, 1534, 1617, 1618.

Biology & Development : 1084.

Ecology : 193, 380, 393, 531, 663, 834, 966, 969, 976, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1075, 1076, 1077, 1078, 1268, 1388, 1422, 1442.

Genetics : 790, 878, 1152, 1416.

Pathology : 155, 242, 326, 387, 411, 420, 504, 532, 534, 570, 622, 689, 692, 699, 750, 1011, 1016, 1022, 1023, 1025, 1098, 1141, 1161, 1212, 1257, 1258, 1289, 1292, 1304, 1409, 1470, 1482, 1543, 1567, 1616, 1633.

Zoogeography & Faunistic : 460, 697, 858, 1441.

Economic & Control : 361, 828, 1072, 1073, 1089, 1456.

Systematics : 273, 489, 1078.

