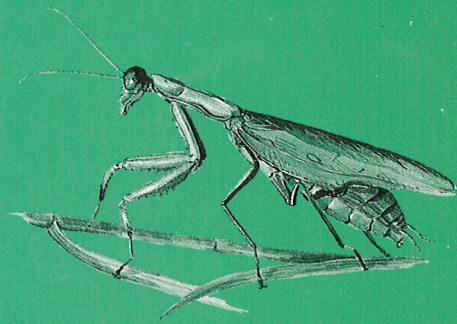
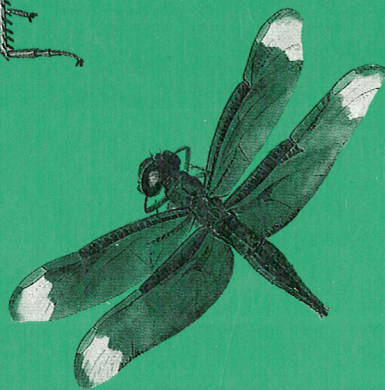
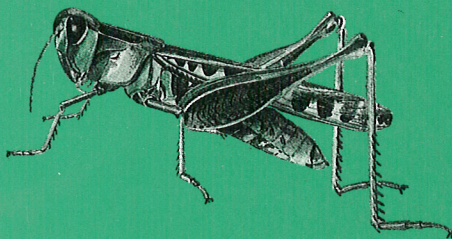


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Volume I (Protura-Odonata)

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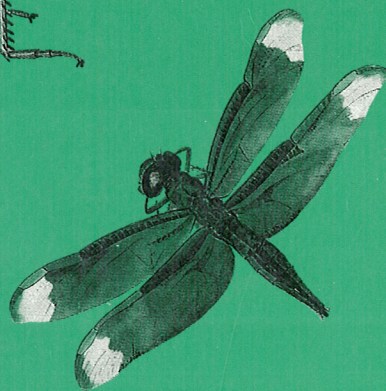
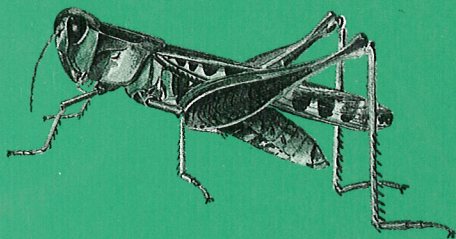


IUCN-The World Conservation Union

An Inventory of Nepal's Insects

Volume I (Protura-Odonata)

V.K. Thapa



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1997

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About the author

Dr. Vasanta K. Thapa is a Professor in the Central Department of Zoology, Tribhuvan University, Kirtipur, Kathmandu, Nepal. He has published several research papers on insects of Nepal and has participated in several seminars on Insect Taxonomy (Cicadellidae: Typhlocybinae). Dr. Thapa is the author of two text books on Biology and Zoology for the students of the certificate level.

Foreword

The Convention on Biological Diversity (CBD) sets out three main objects as:

- the conservation of biological diversity;
- the sustainable use of its components; and
- the fair and equitable sharing of the benefits arising from the use of genetic resources.

Inventorying biological resources and assessing their conservation status and economic potential is a great challenge to a country like Nepal where the range of bioclimatic diversity is so high, ecosystem diversity is so complex and species diversity is so rich and yet mostly unknown. Collecting and compiling hard scientific data like the one presented in this volume is pre-requisite to further any advancement in the process of strengthening conservation capabilities.

IUCN Nepal has been encouraging local professionals and scientists to make contributions in the process of building up a country study on biodiversity. Dr. Vasanta Kumar Thapa has kindly consented to prepare an Inventory of Nepal's Insects. The inventory covers 5,059 species of insects whose habitats range from the sultry tropical jungles of Nepal Terai to the frigid arctic climate towards the crest of the Himalaya above 5,000 m. from the mean sea level.

Perhaps there is no ecosystem in this planet without insect fauna in it. Of the 1.4 million living species of all kinds of organisms known to science, over 53 per cent i.e. 750,000 species are insects. In Nepal itself the number of insect species (approx. 5,000 species) stands at par with the number of the most well-studied group i.e. the flowering plants. Insects are well known as the most species-rich of all major group of living organisms. Therefore, what is known to us today could well be the tip of an iceberg only.

In Nepal, insects are documented more for their harmful activities than beneficial ones. Few major group such as butterflies and moths (Lepidoptera) and bees, wasps and ants (Hymenoptera) have been studied and documented to a certain extent. However, the gap of knowledge in insect fauna is presumed to be very wide, and the scope of new discoveries and useful knowledge stands very high. World's largest honey bee (*Apis laboriosa*) and the world's largest moth, the Atlas moth are both the wealth of Nepalese biodiversity. Similarly the relict dragonfly of geological past, *Epiophlebia laidlawi* is a living heritage in Nepalese fauna. Zoological explorations discover more new insects than other higher organisms. As such Riozo Yosii described 56 new ones out of his 125 species in the order collembola. He could afford to give 26 place names to his new species such as *Entomobrya lhotseae* (after Mt. Lhotse), *E. khumbuensis* (after the Khumbu region), *E. makaluae* (after Mt. Makalu), *E. nuptseae* (after Mt. Nuptse), *E. pangbochensis* (after Pangboche village), *E. khambochensis* (after Khambachen Valley) and *Janetschekbrya himalica* (after the Himalaya). A new genus *Nepalanura* is also established on the basis of Nepalese collection. All these indicate a high probability of new discoveries to add to the wealth of Nepal's biodiversity.

This first volume of the Inventory of Nepal's Insects covers 536 species belonging to 17 orders from Protura to Odonata. It is hoped that the readers will find this volume useful and will provide us with their inputs to improve upon our subsequent volumes which will appear as Volume II and III. Finally, we are grateful to Dr. V.K. Thapa for his contribution in our endeavour of enriching our knowledge on Nepal's biodiversity.

Dr. Tirtha Bahadur Shrestha
Coordinator, Heritage and Biodiversity Programme



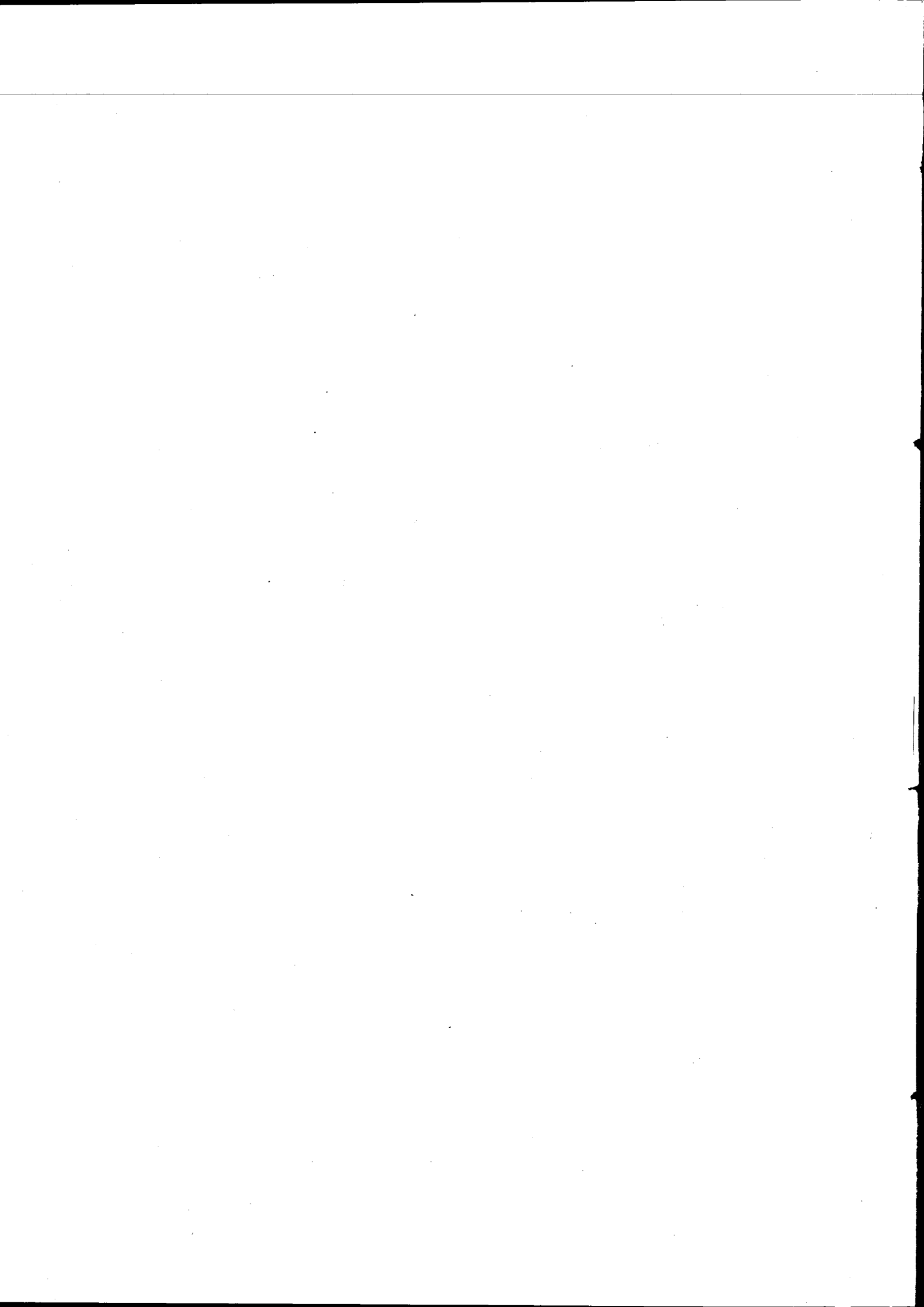
Preface

The need to investigate upon the insect fauna of Nepal largely remains unfulfilled. Therefore, an attempt is being made here to consolidate information on the species diversity of insects recorded from Nepal.

Insects are closely affiliated with the lives of human beings both as foes and friends. Like any other biological species some are rare while others are common and abundant. A number of them face serious threats even within protected areas. Therefore, it is urgent that proper attention must be paid to generate proper knowledge and information in order to enable the government and people to provide protection to Nepalese insects. This work is aimed to provide a comprehensive record of insects occurring in Nepal. The Fauna of British India is followed as a basis of classification in the enumeration. The text follows the sequence of natural orders. Each of the orders are briefly described to capture diagnostic features of the insects. Within the orders, the scientific names are arranged alphabetically. Sub-genus are indicated within a parenthesis. Several names of the species in the inventory appear incomplete without the author's name/date of publication. These are denoted by a - (dash). Distribution outside Nepal and within Nepal is briefly indicated and typology of species is mentioned as far as possible. Key references are given following each of the orders.

The author is aware of gaps and incompleteness of this work. It is hoped that this work will facilitate or initiate future works of contribution to the science of insect taxonomy, nomenclature and ecology of this very important group of living organism in our ecosystem. The author would like to acknowledge the support of IUCN Nepal at Kathmandu to inventory and publish this work. Painstaking work of Mr Rabin Shrestha in typing the manuscript and their incorporation in IUCN Nepal database is highly appreciated. Encouragements of Dr. Y.K. Malla of the Central Department of Zoology at Tribhuvan University, Nepal are gratefully acknowledged here.

V.K. Thapa
Kathmandu
March 1997



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Glossary

cf	compare
Coll.	Collector's name
e.g.	for example
Holotype	The single specimen designated or indicated as the type by the original author at the time of publication of the original description or the only specimen known at the time of the original description
nomen nudum (naked name)	It is a published scientific name which does not meet the requirement of Art. 25 of the rules as amended at Paris (1948) for want of a proper description.
nov. f.	nova (new) form
s. str. (sensu stricto)	restricted since specifically applied to the genus
sp. indet.	species indetermined
gr.	group
f.	fom

Introduction

The great wealth of insect diversity in Nepal becomes more than apparent sherry due to its great bioclimatic variation from tropical and sub-tropical zone to the Tundra and the Arctic zone along the altitudinal gradation of the mountains. Over 77 per cent of Nepal's 147,181 sq. km area is mountainous and forest land is estimated to stand at 37.6 per cent.

The interface between the two major zoo-geographic realm i.e. the Palaeartic and the Oriental is very profound in the fauna of Nepal. The Palaeartic realm extending to Nepal on the north of the main Himalayan range and the oriental realm extending to the Terai and foothills of the Himalaya merge into a complex system of mixed high mountains. This has prompted many authors to divide Nepal into three zoo-geographic zones - Indian, Himalayan and Palaeartic. As such endemism in insect flora is very much pronounced and warrants special attention for studies and research.

The history of insect exploration in Nepal cannot be traced far too long before the advent of democracy in 1951 when the country was opened to foreigners. Earlier to that it was only the Indian Expedition of 1947-48 in the Koshi Catchment and the British expedition of 1924 that could collect insect fauna for taxonomic treatment. Some British diplomats like Major General Hardwicke, however, could afford to collect butterflies from Nepal.

Of the several collecting expeditions in Nepal especial mention should be made of the German Scientific Expedition of Khumbu region during the year from 1960 to 1965 organised by Prof. Walter Hellmich. Thereafter, Prof. Jochen Martens also from Germany paid several visits in Nepal along with his associates (1969-70, 1973, 1974, 1980, 1983 and 1995) and collected many soil dwelling arthropods, pollinators of the nettle-trap flowers, other arthropods and a number of vertebrates. Altogether 150 publications were made out of it by 62 scientists of 16 different countries all over the world. There were many other research teams as well as personal enthusiasts whose contributions would always make us obliged. Some of the major ones are listed as following:

American

- 1954, 1960 - American Expedition to Nepal, California Academy of Sciences.

British

- 1924 - The Third Mt. Everest Expedition, British Museum (Natural History).
 1954 - British Museum (Natural History) Expedition (540) (BMNH-2, NPC-1).
 1961, 1962 - British Museum (Natural History) Expedition to Eastern Nepal.

Canadian

- 1967 - Canadian Nepal Expedition
 (Members: J.G. Chillcott, W.R.M. Manson, D.D. Munroe and K.C. Sharma of Nepal).

German

- 1955 - Lepidoptera der Deutschen Nepal Expedition, Part-I.

- 1960 to 1965 - Research Scheme Nepal Himalaya.
- 1967 - Die entomologischen Nepal Expedition State, Munich.
- 1973 - German Zoological Expedition to Central Nepal.
- 1979, 1981 to 1984 - Geneva Natural History Museum (?)
- Indian*
- 1967 - Natural History Society of Woodstock School, Mussoorie (UP) to the Gosaikunda Lekh region.
- The Botanical Exploration in East Nepal and some other smaller teams made efforts of insect collection at different times.
- Japanese*
- 1952 to 1953 - Japanese Expeditions to Nepal Himalaya.
- 1957 to 1958 - Osaka City University Biological Expedition to South-East Asia.
- 1962 - Osaka Prefectural Expedition to North-East Nepal.
- 1963 - Chiba University Scientific Expedition to Nepal Himalaya (June to August).
- 1968 to 1992
(at different times) - Zoogeographical studies of medically important Diptera in South-East Asia.
- 1968, 1975 - Hokkaido University Expedition to Nepal Himalaya.
- 1971 to 1972 - Kyushu University Scientific Expeditions to Nepal Himalaya.
- 1983 - Research trips for Agriculture and Forest insects in the subcontinent of India.
- - Fauna and Flora Research Society, Kyoto University.
- Netherlands*
- 1972 - Nepal Himalaya Expedition by Netherland Centre for Alpine Biological Research, Utrecht.
- Switzerland*
- 1968 (March, April) - Entomological Expedition to Nepal and Bangladesh (then East Pakistan) (Supported by Swiss National Fund for advancement of Science in Asia).
- Yugoslavia*
- 1969 - Yugoslav Himalayan Expedition.

Beside these, many scientists paid private visits and made private collections at different times. Some noted ones are:

- Byrant in 1952 and J. Quinian in 1954.
- J.B. Tyson - Expedition to West Nepal in 1953.
- H. Janetschek (Germany) - Expedition to Eastern Nepal in 1961.

- H. Löffler (Vienna) - Nepal Himalaya Research Scheme in 1964.
- Kyoji Yoda (Japan) - Osaka City University (Japan) in 1966.
- Jochen Martens (Germany) - University of Mainz, Saartz in 1969-70, 1973, 1974, 1980, 1983, 1995.
- B. Kiauta (Netherland) - Centre for Alpine Biological Research (Cytotaxonomist of Dragonflies) in 1972, 1976.
- Irena Dworakowska (Poland) in 1979 (Sept.).
- Masaaki Suwa (Japan) - Hokkaido University in 1988.

H. Franz, P. Morvan, A. Gobetti, E. Woyanovich also made individual collection. Next, Kodo Maeki, Kazuo Saitosh et Azuma Abe studied the chromosome number of butterflies of Nepal in 1966, 1969 and 1970.

Most of the taxonomic work has been carried out on butterflies (Lepidoptera), dragon and damsel flies (Odonata), beetles (Coleoptera), true flies (Diptera), and quite a few on other groups. The Germans have mostly confined on beetles and moths, Japanese on butterflies, moths, true flies and dragonflies, and the Britishers on butterflies, true flies and other insects. The Japanese have published "Fauna and flora of Nepal" (pp. 317) in 1955 edited by H. Kihara from the collection made during expeditions in 1952-53. The Germans have published "Khumbu Himal", a journal since 1966 comprising a number of articles on insects. Prof. J. Martens (1987) of Germany edited "Beiträge zur Fauna Faunengenese und Zoogeographie des Nepal - Himalaya Arthropoda" comprising 20 articles on arthropods of Nepal. A summary of collectings are present as follows:

Insect order	Number of species reported from Nepal	Number of genera described from Nepal collection	Number of species described from Nepal collection
Protura	4	-	3
Collembola (Springtails and Snow fleas)	125	2	56
Thysanoptera (Thrips)	25	-	6
Plecoptera (Stoneflies)	4	-	3
Mallophaga (Biting Lice)	10	-	-
Pscoptera (Book Lice and allies)	31	-	15
Ephemeroptera (May Flies and allies)	26	-	12
Neuroptera (Alder Flies and allies)	29	1	21
Isoptera (White Ants or Termites)	5	-	-
Trichoptera (Caddis Flies and allies)	2	-	2
Siphunculata	1	-	-
Siphonoptera (Fleas)	37	1	13
Phasmida (Stick and Leaf Insects)	2	-	-

			Introduction
Dermaptera (Earwigs)	49	-	13
Orthoptera (Crickets and Grasshoppers)	31	1	9
Dictyoptera (Cockroaches and Mantids)	8	1	2
Odonata (Dragon and Damsel flies)	147	1	2
Lepidoptera (Butterflies	656	1	11
and Moths)	789	8	11
Hemiptera (Bugs)	499	16	120
Hymenoptera (Bees and Wasps)	174	-	13
Coleoptera (Beetles)	approx. 1,489	23	630
Diptera (True Flies)	909	6	267
Total	approx. 5,052	60	1,131

It is remarkable here that of the 5052 known species of insects, 1,131 species representing over 22 per cent have been first discovered and described from Nepalese specimen. A detailed study should be conducted to examine the extent of their endemism. Thus, this work is expected to illustrate the fact that knowledge and information on insect diversity is still very meager and local expertise has not yet developed for want of financial and technical supports and encouragements.

Protura

Introduction

These are minute apterygote whitish insects mostly occurring in moist soil, peat, woodland litter, under the stones and barks. They have piercing type of mouth parts, no antennae and eyes but anterior legs are sensory.

Review

Nepalese Proturans were first brought to light by the British Museum Nepal Expedition team (1954). Based on it Condé (1958) described two new species. Imadate (1966) described one new species and recorded one species from the collections made by Chiba University Scientific Expedition to the Nepal Himalaya, 1963.

1. Genus: *Berberentulus*, -
 1. *Berberentulus numatai* Imadate, 1966
Nepal: - Tumbu? (Tumba - Nepal) (perhaps described).
(one e.g. holotype); Coll.: K. Yoda.
May.
 2. *B. tatuoi* Imadate, 1966
Thailand, Malaysia and Nepal.
Nepal: Dolkha - Kirantechhap (Kirentechap).
Rare (1 female only); Coll.: K. Yoda.
May.
2. Genus: *Eosentomon*, -
 3. *Eosentomon hyatti* Condé, 1958
Holotype from Nepal.
3. Genus: *Proturentomon*, -
 4. *Proturentomon regale* (Condé, 1958)
= *Condeellum regale* Condé, 1958
Holotype from Nepal. Also in Thailand and India (Kerala).

References

- Condé, B. (1958), Protures et Diplures Campodeides, British Museum Nepal Expedition, 1954, Proc. R. E. Soc., London (B.), **29**: 189-193.
- Imadate, G. (1966), Proturans collected by the Chiba Univ. Scientific Expedition to the Nepal Himalaya, 1963, J. of the College of Arts and Sciences, Chiba Univ., **4** (4): 459.
- Prabhoo, N.R. (1975), South Indian Protura - III. Four new species and some new records, Oriental Ins., **9** (4): 431-438.

Collembola

The Springtails and Snow-fleas

Introduction

These are smaller insects, mostly less than 5mm in length and occurring in the soil, decaying vegetable matters, among herbage, under the bark, etc. They have no compound eyes; mouth parts are entognathous and antenna 4-segmented.

Review

The Collembola of Nepal has extensively been worked out by Riozo Yosii of Japan and described a new genus, *Nepalanura* and thirty six new species in 1966, and next new genus *Janetschekbrya* and twenty three new species under different genera in 1971 from the Himalayan regions including those of Khumbu Himal. Gama (1971) also added two new species of *Xenylla* from the Khumbu Himal. Earlier, in 1958 Choudhury described two new species of *Onychiurus* and recorded one species of *Paronella* from the Kaski district and Terai regions. Here is a list of 125 species under 46 genera with 56 new species described from Nepal and four are endemic.

Family: Cyphoderidae

1. Genus: *Cyphoderus*, -
 1. *Cyphoderus albinus* Nicolet, 1841

Europe and India.
Nepal: Kavre Palanchok - Panchkhal.
Rare (1 e.g. only).
July.

Family: Entomobryidae

2. Genus: *Entomobrya* Rondani, 1861
 2. *Entomobrya (assuta-gr.) chooyuae* Yosii, 1971

Holotype from Nepal.
Nepal: Solukhumbu - Taboche (4,350m).
(Holotype - male); Uncommon.
May.
 3. *E. (assuta-gr.) chorolungmae* Yosii, 1971

Holotype from Nepal.
Nepal: Solukhumbu - Yaral with Pangpoche (4,100m).
(Holotype - male); Uncommon.
May, June.
 4. *E. (assuta-gr.) lhotseae* Yosii 1971

Holotype from Nepal.
Nepal, also found in Afganistan.
Nepal: Ramechhap - Number; Maedane Kharka; Solukhumbu - Yaral with Pangpoche (3,900m), Ama Dalam (5,700m).
(Holotype - male); Uncommon.
May, June.

5. *E. (Himalanura) khumbuensis* Yosii 1977
Holotype from Nepal.
Nepal: Solukhumbu - Yaral with Pangpoche (4,100m).
(Holotype - female); Less common.
April, May.
6. *E. (H.) makaluae* Yosii, 1971
Holotype from Nepal.
Nepal: Solukhumbu - Yaral with Pangpoche (3,900m).
(Holotype - male); Uncommon.
May, June.
7. *E. (H.) nuptseae* Yosii, 1971
Holotype from Nepal.
Nepal: Solukhumbu - Mingbo (5,250m); - Ningale (1,680m).
Uncommon.
April to June.
8. *E. (H.) pangpochensis* Yosii, 1977
Holotype from Nepal.
Nepal: Solukhumbu - Yaral with Pangpoche (3,900m).
(Holotype - male); Less common.
May.
9. *Entomobrya (H.) sp. indet. (near E. makaluae)*
Nepal: Solukhumbu -Taboche (4,350m).
Less common.
May.
10. *E. (H.) kangbachensis* Yosii, 1966
Holotype from Nepal.
Nepal: Solukhumbu - Imja khola, Taboche (5,300m), Mingbo Valley; -
Kambachen (4,160m).
Less common.
May, June.
3. Genus: *Janetschekbrya* Yosii, 1971
 11. *Janetschekbrya brahmides* (Denis, 1936)
Nepal: Solukhumbu - Mingbo Valley, Yaral.
Common.
May, June.
 12. *J. himalica* Yosii, 1971
Genus with this type-species from Nepal.
Nepal: Solukhumbu - Yaral with Pangpoche (3,900-4,100m), Taboche
(4,500m).
(Holotype - male), Uncommon.
May, June.
4. Genus: *Lepidocyrtus*, -
 13. *Lepidocyrtus (s. str.) cf instratus* Hanpschin, 1924
Nepal: Taplejung - Olangchung Gola (Walungchung gola: 3,500m).

Uncommon (2 e.g. only); Coll.: Yasuda.

14. *L. (s. str.) ornatus* Yosii, 1966
Nepal: - Kambachen (4,160m).
Uncommon (3 e.g. only); Coll.: Yasuda.

5. Genus: *Pseudosinella*, -

15. *Pseudosinella cf. immaculata* (Lie-Pattersen, 1896)
Nepal: Ramechhap - Number; - Chagma, Maedane Kharka; Dolkha -
Kiratechhap.
Less common.
June.

16. *P. inaequalis* Stach, 1960
Afganistan and Pakistan.
Nepal: - Kambachen (4,160m).
Uncommon (2 e.g. only); Coll.: Yasuda.

6. Genus: *Sinella*, -

17. *Sinella (s. str.) hoefti* Schäffer, 1901
China, Europe and Nepal.
Nepal: Solukhumbu - Yaral with Pangpoche (3,900m).
Less common.
May.

7. Genus: *Willowsia*, -

18. *Willowsia ieti* Yosii, 1971
Nepal: Solukhumbu - Junbesi (Jumbesi), Yaral with Pangpoche (3,900m); -
Maedane Kharka.
(Holotype - male); Much common.
May, June.
19. *W. nivalis* Yosii, 1971
India (Ladak).
Nepal: Ilam - Pashupati (Paspal) nagar (1,150m); - Thata (2,900m).
(Holotype - male); Rare (holotype only).
May, June.

Family: Hypogastruridae

8. Genus: *Acherondites*, -

20. *Acherondites edaphica* Yosii, 1971
Holotype from Nepal.
Nepal: Solukhumbu - Yaral with Pangpoche.
(Holotype - female); Uncommon.
May, June.

9. Genus: *Ceratophysella*, -

21. *Ceratophysella communis* (Folsom, 1899)
Cosmopolitan.
Nepal: Kavre Palanchok - Panchkhal (Pachkhal, 950m), Chaubas (2,000m).
Common.
June.

22. *C. denticulata* Bagnell, 1941
Cosmopolitan.
Nepal: Solukhumbu - Junbesi (Jumbesi).
Less common.
May.
23. *C. planipila* Yosii, 1966
Holotype from Nepal.
Nepal: - Maedane Kharka.
Uncommon (2 e.g.).
June.
24. *C. potantennalis* Yosii, 1966
Holotype from Nepal.
Nepal: - Maedane Kharka; Solukhumbu - Yaral to Pangpoche (4,100m),
Mingo Valley (4,800).
Common.
April, May, June.
25. *C. cf sinensis* Stach, 1964
Nepal: - Maedane Kharka.
Rare (1 Juv. only).
June.
10. Genus: *Cyclograna*, -
26. *Cyclograna horrida* Yosii, 1960
USA (Oregon).
Nepal: Solukhumbu - Junbesi (Jumbesi).
Uncommon.
June.
27. *C. cf vulgaris* Yosii, 1960
Nepal: - Kangbachen (4,160m).
Less common.
June.
11. Genus: *Hypogastrura*, -
28. *Hypogastrura (s. str.) distincta* (Axelson, 1902)
Finland, Germany and Nepal.
Nepal: Solukhumbu - Yaral, Pangpoche.
Less common.
May, June.
29. *H. (s. str.) himalaya* Yosii, 1971
Holotype from Nepal.
Nepal: Solukhumbu - (Boden probe).
Uncommon.
May, June.
30. *H. (s. str.) nepalica* Yosii, 1966
Holotype from Nepal.
Nepal: - Maedane Kharka.

Much common.

June.

12. Genus: *Willemia*, -

31. *Willemia anophthalma* Börner, 1901

Holarctic region - Europe.

Nepal: Solukhumbu - Junbesi (Jumbesi), Yaral with Pangpoche.

Less common.

May, June.

32. *W. buddenbrocki* Hüther, 1959

Europe, Middle America.

Nepal: - Maedane Kharka; Dolkha - Jiri.

Uncommon (3 e.g.).

June.

13. Genus: *Xenylla*, -

33. *Xenylla obscura* Imms, 1912

India (Sikkim).

Nepal: Ilam - Pashupatinagar (Paspatnagar - 1,150m); Maedane Kharka; Solukhumbu - Yaral, Pangpoche, Tumbu, Taboche (4,500m); Ama Dablam (Amai Dablang).

Common.

April to June.

34. *X. yosiana* Gama, 1971

Holotype from Nepal.

Nepal: Dolkha - Sikris; - Jarsa (2,250m); Solukhumbu - Nare Drangka (Mingbo), and Imja khola.

June.

Family: Isotomidae

14. Genus: *Anurophores*, -

35. *Anurophorus cuspidatus* Stach, 1919

Europe and Nepal.

Nepal: Solukhumbu - Junbesi, Mingo Valley, Ama Dablam, Yaral with Pangpoche (4,100m), Taboche; Ramechhap - Number.

Rather common.

May, June.

36. *Anurophorus sp. indet.*

Nepal: Solukhumbu - Junbesi (Jumbesi).

Rare (1 Juv. only).

June.

15. Genus: *Desoria*, -

37. *Desoria nepalica* Yosii, 1966

Holotype from Nepal.

Nepal: Ramechhap - Number.

Common.

June.

38. *D. notabilis* (Schaffer) f-*coeca* , -
Nepal: Taplejung - Olangchung Gola (Walungchungola); - Kangbachen.
Rather common.
39. *D. trispinata* (Mac Gillivray, 1896)
USA, Europe, Japan, Formosa (Taipei), Sikkim (Gantok).
Nepal: Ramechhap - Number.
Rare (1 e.g. only).
June.
16. Genus: *Folsomia* , -
40. *Folsomia altamontana* Yosii, 1971
Holotype from Nepal.
Nepal: Solukhumbu - Taboche (4,350m), Glacier (5,600m), Mingbo near
Drangka, etc.
Fairly common.
May, June.
41. *F. candida* (Willem, 1902)
Cosmopolitan.
Nepal: Solukhumbu - Junbesi (Jumbesi), Yaral (3,900m); Ramechhap -
Number.
Uncommon.
May, June.
42. *F. diplothalma* (Axelson, 1902)
Holarctic region. Also in Japan and Nepal.
Nepal: Dolkha - Jiri; - Maedane Kharka; - Kenza, Peda Pathi; Solukhumbu -
Yaral with Pangboche, Taboche (4,500m), Junbesi (Jumbesi), Imja khola,
Ama Dablam.
Common.
May, June.
43. *F. fime:aria* (Linnaeus, 1758)
Europe, Japan and Nepal.
Nepal: Solukhumbu - Junbesi (Jumbesi).
Uncommon.
July.
44. *F. oculata* Handschin, 1925
Java, Malaya, India, Pakistan, Japan and Nepal.
Nepal: Solukhumbu - Junbesi (Jumbesi).
Uncommon.
May.
45. *F. onychiurina* Denis, 1931
North and Middle America, Australia, Pakistan, Japan and Nepal.
Nepal: Dolkha - Jiri, Kiratechhap; Solukhumbu - Junbesi (Jumbesi), Tumbu
(Tumbe); - Maedane Kharka; - Kenza, Kapure, Peda Pathi, Chagma.
Fairly Common.
May, June.

17. Genus: *Folsomides*, -46. *Folsomides angularis* (Axelson, 1905)

Europe, USA and Nepal.

Nepal: Solukhumbu - Junbesi (Jumbesi), Tumbu (Tumbe-2,800m), Yaral with Pangpoche; - Kapure.

Uncommon.

May, June.

47. *F. nepalicus* Yosii, 1971

Holotype from Nepal.

Nepal: Solukhumbu - Yaral with Pangpoche (3,900m) and Ama Dablam.

Fairly common.

May.

48. *F. parvulus* Stach, 1922

Cosmopolitan.

Nepal: Kathmandu; Solukhumbu - Yaral (3,900m), during Hillary - Makalu Expedition at 4,500m, Junbesi (Jumbesi); - Kapure, Seta?, Maedane Kharka; Dolkha - Jiri, Kirantechhap.

Common.

June.

18. Genus: *Isotoma*, -49. *Isotoma (Desoria) mazda* Yosii, 1966

Holotype from Nepal.

Nepal: Solukhumbu - Ama Dablam Glacier (5,570m).

Less common.

July.

50. *I. (D.) nepalica* Yosii, 1966

Holotype from Nepal and endemic.

Nepal: Solukhumbu - Yaral with Pangpoche (3,900m).

Uncommon.

May, June.

51. *I. (D.) notabilis* Schäffer, 1896

Endemic to Nepal.

Nepal: Solukhumbu - Yaral with Pangpoche.

Uncommon (3 e.g. only).

May, June.

52. *I. (D.) cf. olivacea* Tullberg, 1871

Nepal: Solukhumbu - Yaral with Pangpoche (4,100m), Ama Dablam.

Uncommon.

April, May.

53. *I. (D.) tripinata* Macgillivray, 1896

Holarctic countries.

Nepal: Solukhumbu - Nare Drangka (Mingbo).

Uncommon (3 e.g. only).

May, June.

54. *I. (Pseudisotoma) himalayana* Yosii, 1971
 Holotype from Nepal.
 Nepal: Solukhumbu - Yaral with Pangpoche, Mingbo.
 Fairly common.
 May, June.
55. *I. (s. str.) decorata* Brown, 1926
 Iran, Afganistan, Pakistan and Nepal.
 Nepal: Solukhumbu - Ama Dablam, Yaral near Changmetang, etc.
 Uncommon.
 May, June.
56. *I. (s. str.) diverticula* Yosii, 1966
 Holotype from Nepal.
 Nepal: Taplejung - Olangchung Gola (Walunchungola: 3,500m);
 Solukhumbu - Junbesi (Jumbesi: 2,700m).
 Uncommon (2 e.g. only); Coll.: T. Yasuda.
57. *Isotoma (s. str.) sp. indet.* (may be one of the former sp.?)
 Nepal: Kambachen (4,160m).
 Rare (1 e.g.); Coll.: T. Yasuda.
58. *I. (s. str.) cf viridis* Bourlet, 1839
 Nepal: Solukhumbu - Mingbo at 5,450m.
 Uncommon.
 May, June.
19. Genus: *Isotomiella*,
 59. *Isotomiella minor* (Schäffer, 1898)
 Cosmopolitan.
 Nepal: Taplejung - Olangchung Gola (Walungchung gola: 3,500m);
 Solukhumbu - Junbesi (Jumbesi), Tumbu (Tumbe); Ramechhap - Number;
 - Maedane Kharka.
 Less common.
 May, June.
60. *I. thermophila* (Axelson, 1901)
 India, Europe, USA and Nepal.
 Nepal: Kathmandu; Kavre Palanchok - Panchkhal.
 Common.
 June.
20. Genus: *Proisotoma*, -
 61. *Proisotoma (Proisotoma) tenella* (Reuter, 1895)
 America, Northern Europe and Nepal.
 Nepal: Kavre Palanchok - Panchkhal; Ramechhap - Number.
 Uncommon (3 e.g. only).
 June.
62. *P. (s. str.) janetscheki* Yosii, 1971
 Holotype from Nepal.
 Nepal: Solukhumbu - Imja khola, Taboche.
 Common.

May, June.

21. Genus: *Uzelia*, -

63. *Uzelia cf setifera* Absolon, 1901

Nepal: Solukhumbu - Mingbo Alm (4,500m).

Rare (1 only).

May, June.

Family: Neanuridae (Sensu Massoud, 1967)

22. Genus: *Brachystomella*, -

64. *Brachystomella parvula* (Schäffer, 1898)

Europe, USA and Siberia.

Nepal: Solukhumbu - Junbesi (Jumbesi).

Less common.

June.

23. Genus: *Friesea*, -

65. *Friesea excelsa* (Denis, 1936) Yosii, 1966

Karakorum (India).

Nepal: Solukhumbu - Khumbu; - Kambachen.

Less common.

May, June.

66. *F. paula* Yosii, 1966

Holotype from Nepal.

Nepal: Solukhumbu - Junbesi (Jumbesi).

Less common.

May.

67. *F. sublimis* MacNamara, 1921

USA, Vietnam.

Nepal: Kavre Palanchok - Chaubas (2,000m).

Less common.

June.

24. Genus: *Lobella*, -

68. *Lobella (Lobella) roseola* Yosii, 1954

Nepal: - Kambachen (Kangbachen) (4,160m).

Rare (1 e.g.); Coll.: Yasuda.

69. *L. (L.) yasudai* Yosii, 1966

Holotype from Nepal.

Nepal: Taplejung - Olangchung Gola (Walunchun Gola: 3, 500m).

Rare (1 male), Coll.: Yasuda.

70. *L. (Propeanura) anomala* Yosii, 1966

Holotype from Nepal.

Nepal: Ramechhap - Number.

Rare (Holotype only).

June.

71. *L. (P.) ieti* Yosii, 1966

Holotype from Nepal.

- Nepal: Ramechhap - Number; - Kambachen (4,160m); - Maedane Kharka.
Less common.
May, June.
72. *L. (P.) monophthalma* Yosii, 1966
Holotype from Nepal.
Nepal: - Maedane Kharka.
Rare (Holotype only).
June.
73. *L. (P.) numatai* Yosii, 1966
Holotype from Nepal.
Nepal: Solukhumbu - Junbesi (Jumbesi); - Chagma; - Maedane Kharka.
Uncommon (2 e.g. only).
June.
74. *L. (P.) quadripunctata* Yosii, 1966
Holotype from Nepal.
Nepal: Solukhumbu - Junbesi (Jumbesi).
Uncommon (2 e.g. only).
May, June.
76. *L. (P.) reducta* Yosii, 1966
Holotype from Nepal.
Nepal: Kathmandu; Kavre Palanchok - Panchkhal (950m).
Less common.
June.
77. *L. (P.) siva* Yosii f. *khumbica* nov. f.
Nepal: Solukhumbu - Yaral (3,900m), Pangpoche.
Uncommon (Holotype - male).
May, June.
25. Genus: *Micranurida*, -
78. *Micranurida alba* Yosii, 1966
Holotype from Nepal.
Nepal: Ramechhap - Number.
Rare (1 e.g. only).
June.
79. *M. ashrafi* Yosii, 1966
Holotype from Nepal.
Nepal: Ramechhap - Number.
Rare (1 male only).
June.
80. *M. pygmaea* Börner, 1901
Europe and Nepal.
Nepal: Dolkha - Jiri; Ramechhap - Number; - Maedane Kharka; Solukhumbu - Junbesi (Jumbesi).
Less common.
June.

26. Genus: *Nepalanura* Yosii, 1966
 81. *Nepalanura paranuroides* Yosii, 1966
 Genus with this type-species from Nepal.
 Nepal: - Maedane Kharka; Solukhumbu - Junbesi (Jumbesi).
 Rare (Holotype only).
 May, June.
27. Genus: *Odontella*, -
 82. *Odontella (Clavontella) nepalica* Yosii, 1971
 = *O. trispinata* Salmon, 1951
 Malaya and Nepal.
 Nepal: Solukhumbu - Taboche (4,350m), Junbesi (Jumbesi); Dolkha - Sikris (Sikri: 2,250m); - Jarsa; - Maedane Kharka.
 Less common.
 May, June.
83. *O. (Clavontella) cf. distincta* Yosii, 1954
 Japan.
 Nepal: Solukhumbu - Junbesi (Jumbesi), Tumbu (Tumbe); Ramechhap -
 Number.
 Less common.
 May.
84. *O. (s. str.) lamellifera* (Axelson, 1903)
 Europe, Argentina, Africa and Nepal.
 Nepal: Taplejung - Olangchung Gola (Wolangchung, 3500m); - Kambachen.
 Uncommon.
85. *O. (s. str.) virgulata* Yosii, 1966
 Holotype from Nepal.
 Nepal: - Maedane Kharka.
 Rare (1 male).
28. Genus: *Paranura*, -
 86. *Paranura nepalensis* Yosii, 1966
 Holotype from Nepal.
 Nepal: - Maedane Kharka.
 Less common.
 June.
29. Genus: *Phylliomeria*, -
 87. *Phylliomeria himalayana* Yosii, 1966
 Holotype from Nepal.
 Nepal: Solukhumbu - Junbesi (Jumbesi); - Chagma; - Maedane Kharka.
 Less common.
 June.
88. *P. lepchana* Yosii, 1966
 Nepal: - Maedane Kharka.
 Rare (1 e.g. only).
 June.

89. *P. miranda* Yosii, 1966
 Holotype from Nepal.
 Nepal: - Solukhumbu - Junbesi (Jumbesi).
 Rare (holotype only).
 June.
30. Genus: *Pseudachorutella*, -
 90. *Pseudachorutella nakaoui* Yosii, 1966
 Holotype from Nepal.
 Nepal: Taplejung - Olangchung Gola (Walunchungola: 3, 500m).
 Uncommon (2 e.g.); Coll.: Yasuda.
31. Genus: *Pseudachorutes*, -
 91. *Pseudachorutes corticicolus* Schäffer, 1896
 Europe, USA and Nepal.
 Nepal: Solukhumbu - Yaral, Mingbo Valley, Pangpoche.
 Uncommon.
 May, June.
92. *P. kanchenjungae* Yosii, 1966
 Holotype from Nepal.
 Nepal: - Kambachen (Kangbachen) (4,160m).
 Rare (1 male only); Coll.: Yasuda.
93. *P. khumbuensis* Yosii, 1971
 Holotype from Nepal.
 Nepal: Solukhumbu - Imja khola, Mingbo.
 Uncommon.
 June.
32. Genus: *Pseudochorudina*, -
 94. *Pseudochorudina (Megachorutes ?) nepalica* Yosii, 1966
 Holotype from Nepal.
 Nepal: - Maedane Kharka.
 Rather common.
 June.

Family: Onychiuridae

33. Genus: *Mesaphorura*, -
 95. *Mesaphorura himalayensis* Yosii, 1971
 Holotype from Nepal.
 Nepal: Solukhumbu - Yaral with Pangpoche (3,900m).
 Uncommon, (Holotype - male).
 May, June.
96. *M. kraubaueri* Börner, 1901
 Almost cosmopolitan.
 Nepal: Solukhumbu - Junbesi (Jumbesi).
 Fairly common.
 June.

34. Genus: *Onychiurus*, -
97. *Onychiurus (Oligaphora) affinis palissai* Yosii, 1971
 Subspecies from Nepal.
 Nepal: Solukhumbu - Yaral with Pangpoche (3,900m).
 Uncommon.
 May, June.
98. *O. (O.) cf. groenlandicus* Tullenberg, 1876
 Nepal: - Kambachen (4,160m).
 Less common.
99. *O. (Protaphorura) cf. hortensis* Gisin, 1949
 Nepal: Solukhumbu - Tumbu (Tumbe).
 Rare (1 male only).
 May.
100. *O. (P.) yodai* Yosii, 1966
 Holotype from Nepal, also present in Japan.
 Nepal: Dolkha - Jiri; - Chagma, Kapure; Solukhumbu - Junbesi (Jumbesi),
 Yaral with Pangpoche.
 Uncommon.
 May, June.
101. *O. (s. str.) cf. argus* Denis, 1924
 Nepal: Solukhumbu - Yaral (3,900m).
 Rare (1 female only).
 May.
102. *O. (s. str.) decemsetosus* Yosii, 1966
 Endemic to Nepal.
 Nepal: - Maedane Kharka; Solukhumbu - Yaral with Pangpoche.
 Uncommon.
 May, June.
103. *O. (s. str.) gurjakhani* Choudhuri, 1958
 Nepal: Ramechhap - Number.
 Rare (1 e.g. only).
 July.
104. *O. (s. str.) himalayensis* Choudhuri, 1958
 Endemic to Nepal.
 Nepal: Solukhumbu - Junbesi (Jumbesi), Imja khola, Mingbo; - Maedane
 Kharka, Kiratechhap, Karyolung Rasta, Chagma; - Bakri Kharka, Sikka and
 Gurjakhani.
 Quite common.
 May, June.

Family: Orchesellidae

35. Genus: *Dicranocentrus*, -
105. *Dicranocentrus indicus* Bonet, 1930
 Formosa, Pacific Is., India, Sikkim (Gantok).
 Nepal: - Chagma, Maedane Kharka; Solukhumbu - Junbesi (Jumbesi).
 Less common.

May, June.

Family: Paronellidae

36. Genus: *Callyntrura*, -

106. *Callyntrura böerleri* (Imms, 1912)

Endemic to Nepal.

Nepal: - Maedane Kharka.

Less common.

June.

Family: Sminthuridae

37. Genus: *Arrhopalites*, -

107. *Arrhopalites (Caecarrhopalites) nivalis* Yosii, 1966

Holotype from Nepal.

Nepal: Kavre Palanchok - Panchkhal; - Maedane Kharka, Peda Pathi.

Less common (4 males only).

June.

108. *A. (s. str.) habei* Yosii, 1950

Japan, Sikkim? and Nepal.

Nepal: - Maedane Kharka.

Less common.

June.

38. Genus: *Collophora*, -

109. *Collophora mysticiosa* Yosii, 1966

India and Nepal.

Nepal: Dolkha - Jiri.

Uncommon.

June.

39. Genus: *Papirinus*, -

110. *Papirinus ieti* Yosii, 1966

Holotype from Nepal.

Nepal: Dolkha - Jiri; Solukhumbu - Tumbu (Tumbe); - Maedane Kharka, Chagma.

Less common.

June.

40. Genus: *Ptenothrix*, -

111. *Ptenothrix himalayensis* Yosii, 1966

Holotype from Nepal.

Nepal: Solukhumbu - Junbesi (Jumbesi); - Maedane Kharka; Dolkha - Kiratechhap.

Less common.

May, June.

41. Genus: *Sminthurides*, -

112. *Sminthurides himachal* Yosii, 1966

Holotype from Nepal.

Nepal: - Chagma, Maedane Kharka.

Uncommon (1 female, 1 male).

June.

42. Genus: *Sminthurus*, -
 113. *Sminthurus* sp. A
 Nepal: Solukhumbu - Junbesi (Jumbesi).
 Uncommon (2 females only).
 June.
114. *Sminthurus* sp. B
 Nepal: Solukhumbu - Junbesi.
 Rare (1 female only).
 May.
43. Genus: *Sphaeridia*, -
 115. *Sphaeridia murphyi* Yosii, 1966
 Holotype from Nepal.
 Nepal: - Chagma, Maedane Kharka.
 Less common.
 June.
116. *S. picta* Yosii, 1966
 Holotype from Nepal.
 Nepal: Ramechhap - Number; Solukhumbu - Junbesi (Jumbesi) and Sete (Seta?).
 Less common.
 June.
117. *Sphaeridia* sp. *indet.*
 Nepal: - Chagma.
 Rare (1 male only).
 June.
118. *S. zaheri* Yosii, 1966
 Holotype from Nepal.
 Nepal: - Chagma.
 Less common.
 June.
44. Genus: *Sphyrotheca*, -
 119. *Sphyrotheca gangetica* Yosii, 1966
 India and Nepal.
 Nepal: - Peda Pathi.
 Rare (1 female).
 June.
120. *S. nepalica* Yosii, 1966
 Holotype from Nepal.
 Nepal: Solukhumbu - Junbesi (Jumbesi); - Maedane Kharka; Dolkha - Kiratechhap.
 Uncommon.
 May, June.

45. Genus: *Stenognathethus*, -
 121. *Stenognathethus cassagnai* Yosii, 1966
 Holotype from Nepal.
 Nepal: - Chagma.
 Uncommon (2 males only).
 June.

Family: Tomoceridae

46. Genus: *Tomocerus*, -
 122. *Tomocerus nepalicus* Yosii, 1971
 Holotype from Nepal. Also in India (Pb.) and Pakistan.
 Nepal: Solukhumbu - Mingbo Alm (4,500m), Yaral with Pangpoche (3,900-4,100m); - Lager Bayo Khola (2,700m), Kambachen, etc.
 April, May.
123. *T. steinboeckii* Yosii, 1971
 Holotype from Nepal.
 Nepal: Solukhumbu - Yaral with Pangpoche (3,900m), Mingbo.
 (Holotype male).
 May, June.
124. *T. (s. str.) ochreatus* Denis, 1948
 India (Ladak), Vietnam, Hongkong, Formosa and Japan.
 Nepal: - Kapure, Kenza; - Chagma, - Maedane Kharka.
 Uncommon.
 June.
125. *T. (Tomocerina) simplex* Yosii, 1966
 Holotype from Nepal.
 Nepal: - Chagma.
 Uncommon (3 e.g.).
 June.

References

- da Gama, M.M. (1971), Nouvelle contribution a la connaissance du genre *Xenylla* (Insecta: Collembola), Khumbu Himal, 4 (1): 152-155.
- Yosii, R. (1966), Collembola of Himalaya, J. Coll. Arts and Sciences, Chiba Univ., 4 (4): 461-531.
- Yosii, R. (1971), Collembola of Khumbu Himal, Khumbu Himal, 4 (1): 80-130.

Thysanoptera

The Thrips

Introduction

These are minute slender insects with wings when present very narrow with reduced venation and long marginal setae. Mouth parts asymmetrical, piercing type with maxillary and labial palps. No cerci and metamorphosis with 2-3 pupa-like instars.

Review

It was Pelican who published "Thysanoptera of Nepal" in German language from the Khumbu region in 1968 and, indeed, a first contribution to the knowledge from the Indian subcontinent. He recorded eleven species of which three were described new to science. Bhatti (1982) also mention the presence of *Stenchaetothrips biformis* (Bagnall, 1913) in Nepal. Next, Kudo (1989) of Japan and his associate (1974) altogether described four new species from Nepal. Following is the list of twenty five species under fourteen genera from Nepal of which six species are described from this country.

Suborder: -

Family: -

1. Genus: *Scirtothrips*, -
 1. *Scirtothrips dorsalis*, - The Chilly Thrips
Nepal: Terai and midhills.

Suborder: Terebrantia

Superfamily: Thripodea

Family: Thripidae

2. Genus: *Adelothrips*, -
 2. *Adelothrips nepalensis* Pelican, 1970
Holotype from Nepal.
Nepal: Ramechhap - Likhu Khola (1,690m).
June.
3. Genus: *Aptinothrips*, -
 3. *Aptinothrips karyni* John, 1927
Nepal: Solukhumbu - Mingbo (5,450m).
May, June.
4. Genus: *Chloethrips* (William, -)
 4. *Chloethrips oryzae*, -
Nepal: Kavre Palanchok - Banepa.
April.
5. Genus: *Dendrothripoides*, -
 5. *Dendrothripoides innoxius* Bhatti, 1978
Malaysia.
Nepal: Dolkha - Duri Dovan (1,100m).
Aug.
Host plant: *Dioscorea sp.* and *Saccharum sp.*

6. Genus: *Dendrothrips*, -
 6. *Dendrothrips schimae* Kudo, 1989
 Holotype from Nepal.
 Nepal: Kathmandu - Shivapuri (1,700m); Dolkha - Gongar (1,300m),
 Manegaon (1,200); Nuwakot.
 (Holotype - male); Common.
 July to Sept.
7. *D. stannardi* (Anandakrishnan, 1964)
 India (Tamil Nadu - Kodaikanal).
 Nepal: Kathmandu - Shivapuri (2,000m).
 July.
8. *D. strasseni* Bhatti, 1971
 India (Maharashtra - Bombay).
 Nepal: Kathmandu - Mulkharka (2,000m); Dolkha - Pikhuti (1,000m).
 Less common.
 Aug., Sept.
 Host plant: *Smilax* sp.
7. Genus: *Stenchaetothrips*, -
 9. *Stenchaetothrips biformis* (Bagnall, 1913)
 India, Indonesia, Philippines, Taiwan, Japan, Rumania and England.
 Nepal: Kathmandu - Boudha (?Bondha).
 Coll.: N. Kumar (B.M.).
 Sept.
 It is a pest of rice in India, Nepal, Pakistan, Japan and other south-east
 Asia.
8. Genus: *Taenothrips*, -
 10. *Taenothrips flavidulus* (Bagnall, 1923)
 Japan, China, Korea, India and Nepal.
 Nepal: Dolkha - Jiri (1,950m); Dhaulagiri - Suligadh Valley, (2,800m) and
 Emaka (2,800m); Kali Gandaki - Thak Khola (Lethe: 2,500m, Ghasa: 2,250m
 and Tukucho: 3,150m).
 Common (more females than males); Coll.: J. Martens.
 April to July.
 Host plants: *Arisaema consanguineum*, *A. jacquemontii*, *A. tortuosum* and
Typhonium diversifolium.
11. *T. himalayanus* Pelican, 1968
 Holotype from Nepal.
 Nepal: Solukhumbu - Yaral with Pangboche (3,900m approx.).
 Rare.
 May.
12. *T. janetscheki* Pelican, 1968
 Holotype from Nepal.
 Nepal: Solukhumbu - Mingbo Valley (Green Hut der Hillary - Makalu
 Expedition).
 May, June.

13. *T. major* Bagnall, 1916
 Garhwal (UP) in India and Korea.
 Nepal: Solukhumbu - Pangboche (3,900m); Kali Gandaki - Thak Khola (Lethe: 2,500m); Dhaulagiri - Emaka (Tarakot: 3,900m).
 Uncommon; Coll.: J. Martens.
 May, July.
 Host plants: *Rhododendron* sp.; *Arisaema jacquemontii* and *A. utile*.
14. *T. meridionalis* Priesner, 1926
 Iran, Iraq, Turkey, Libanon, Israel and Nepal.
 Nepal: Dhaulagiri - Sandak (4,000m).
 Rare (1 female only); Coll.: J. Martens.
 June.
 Host plant: *Arisaema flavum*.
15. *T. morosus* Priesner, 1938
 Nepal: Dolkha - Jiri (1,950m).
 April.
16. *T. oreophilus* Priesner, 1935
 Japan (Kyshu), Taiwan and Nepal.
 Nepal: Kali Gandaki - Thak Khola (Ghasa: 2,250m).
 Less common; Coll.: J. Martens.
 July.
 Host plant: *Arisaema jacquemontii*.
17. *T. tectus* Strassen, 1975
 Bhutan and Nepal.
 Nepal: Dhaulagiri - Suligadh Valley (4,000m) and Emaka (2,800m); Kali Gandaki - Thak Khola (Lethe: 2,500m and Ghasa: 2,250m).
 Common (more females than males); Coll.: J. Martens.
 May to July.
 Host plants: *Arisaema consanguineum*, *A. jacquemontii* and *A. tortuosum*.
9. Genus: *Thrips*, -
18. *Thrips albipes* Bagnall, 1914
 Nepal: Dolkha - Jiri (1,950m).
 April.
19. *T. coloratus* Schmutz, 1913
 Nepal: Dolkha - Jiri (1,950m).
 April.
20. *T. formosanus* Priesner, 1934
 Tiwan and Nepal.
 Nepal: Kali Gandaki - Thak Khola (Tukucho: 3,150m).
 Rare (1 female only); Coll.: J. Martens.
 July.
 Host plant: *Typhonium diversifolium*.
21. *T. pallidulus* Bagnall, 1924
 Bihar (India) and Nepal

Nepal: - Lager Tate (2,900m); Kali Gandaki - Thak Khola (Lethe: 2,500m).
 Rare (1 female only); Coll.: J. Martens.
 June and July.
 Host plant: *Arisaema jacquemontii*.

Family: -

Subfamily: Megathripinae

10. Genus: *Meiothrips* Priesner, -
 22. *Meiothrips* sp. indet.

Suborder: Tubulifera

Family: Phlaeothripidae

11. Genus: *Ananthakrishnaniella*, -
 23. *Ananthakrishnaniella gibberosa* Kudo, 1989
 Holotype from Nepal.
 Nepal: Rasuwa - Dhunche; Kathmandu - Shivapuri (2,300m).
 (Holotype - female).
 July, Sept.
12. Genus: *Stephanothrips*, -
 24. *Stephanothrips adnatus* Anandakrishnan, 1972
 India (UP).
 Nepal: Kathmandu - Godawari (1,700m), Sundarijal, Valley; Rasuwa -
 Ramche (1,800m).
 July, Sept., Oct.
25. *S. takagi* Kudo, 1989
 Holotype from Nepal.
 Nepal: Dolkha - Suri Dovan (1,100m).
 (Holotype - male).
 Aug.
 Host plant: Graminae

References

- APROSC (1991), Glossary of some important plants and animals names of Nepal, Pub. APROSC. pp. 261.
- Bhatti, J.S. (1982), Revision of the Indian species of *Stenchaetothrips* Bagnall (Thysanoptera: Thripidae), *Oriental Insects*, **16** (4): 385-417.
- Kudo, I. (1989a), Three Nepalese species of *Urothripini* with a comment on terminology for prothoracic morphology (Thysanoptera: Phaeothripidae), *Ins. Matsum*, **42**: 83-91.
- Kudo, I. (1989b), Three species of *Dendrothrips* (Thysanoptera, Thripidae) from Nepal with description of a new species, *Jap. J. Ent.*, **57** (1): 37-45.
- Kudo, I. (1992), A new Malaysian thrips with notes on some species of *Dendrothripoides* and *Indusiothrips* (Thysanoptera, Thripidae), *Ins. Matsum*, **47**: 91-101.
- Kudo, I. and Ananthakrishnan, T.N. (1974), A new subgenus and species of *Meiothrips* Priesner (Thysanoptera, Megathripinae) from Nepal, *Kontyû*, **42**: 385-387, Tokyo.
- Pelican, J. (1970), Thysanoptera aus Nepal (Ins., Thysanoptera), *Khumbu Himal*, **3** (3): 361-369.
- Strassen, R. (1976), Hochmontane *Arisaema* - Arten (Araceae) in Nepal als Wirtspflanzen floricoler Fransenflügler (Insecta: Thysanoptera), *Senckenbergiana biol.*, **57**(1/3): 55-59.

Plecoptera

The Stoneflies

Introduction

These are soft-bodied insects of moderate to larger size with elongate, setaceous antennae, mouth parts mandibulate. The nymph develops in the water, being common on the surface of stones in swift streams, and they feed mostly on diatoms, algae and other smaller plant and animal forms.

Review

It is only Jewett (Jr.) (1975) who worked on this group of insects from Nepal and recorded three species, also described two new species from the Mt. Makalu region of Nepal. Earlier, Kawai (1968) described one species from Mt. Everest region.

Family: -

1. Genus: *Rhabdiopteryx*, -

1. *Rhabdiopteryx lunata* Kimmins, -

India (Punjab).

Nepal: E. Nepal - South of Makalu (4,724m), at 3,840m and Barun Valley (4,267m).

Less common. Coll.: L. Swan.

April, May (1954).

Family: Capniidae

2. Genus: *Capnia*, -

2. *Capnia femina*, -

Holotype from Nepal.

Nepal: Solukhumbu - Mt. Everest region (Brachypterous).

(Holotype - female).

3. *C. swani* Jewett, 1975

Holotype from Nepal.

Nepal: E. Nepal - South of Makalu (3,840m).

(Holotype - male).

April to June.

4. *C. triangulipennis* Jewett, 1975

Holotype from Nepal.

Nepal: E. Nepal - South of Makalu (3,657m).

(Holotype - male).

May.

References

- Jewett, S.G. (Jr.) (1975), Records and descriptions of stoneflies from North-West (Punjab) Himalaya and Mt. Makalu, Nepal Himalaya, *Oriental Insects*, **9** (1): 1-7.
- Kawai, T. (1968), A new species of the genus *Capnia* from Mt. Everest (Capniidae, Plecoptera), *Khumbu Himal*, **3**: 29-36.

Mallophaga

The Biting or Bire Lice (Jumra)

Introduction

These are flat ectoparasitic insects of birds and oftenly of mammals, with mandibulate type of mouth parts, no eyes.

Review

Although Emery (1974) collected some ectoparasites from the Arun Valley (East Nepal), it is Emerson and Price (1974) who described a new species of *Trichodectes emergi* from a bird (Yellow-throated Marten) of the Sankhuwasabha Dist. Lakhminarayan and Emersen (1971) also mentioned two species of *Goniocotes* from Nepal in the "Oriental Insects". The local contributors on this group of insects are Tara Devi and associate who recorded eight species of these ectoparasites from the birds in Kathmandu Valley in 1981.

Suborder: Ischnocera

Family: Monoponidae

1. Genus: *Lipeurus*, -

1. *Lipeurus caponis* Linnaeus, -

Nepal: Kathmandu - Paknajol.

Host: *Gallus gallus domesticus* (Chicken).

2. Genus: *Menacanthus*, -

2. *Menacanthus stramineus* Nitzsch, 1866

Nepal: Kathmandu - Paknajol and Central Zoo.

Host: *Gallus gallus domesticus* (Chicken); *Lophura leucomelana* (Kalij) and *Meleagris gallopavo domestica*.

3. Genus: *Menopon*, -

3. *Menopon gallinae* Linnaeus, 1758

Nepal: Kathmandu - Paknajol, Lainchour, Kshetrapati and Central Zoo.

Host: *Gallus gallus domesticus* (Chicken); *Meleagris gallopavo domestica*.

Family: Philopteridae

4. Genus: *Columbicola*, -

4. *Columbicola columbae* Linnaeus, -

Nepal: Kathmandu - Paknajol, Central Zoo.

Host: *Columba livia* (Pigeon).

5. Genus: *Goniocotes*, -

5. *Goniocotes bidentatus* Scopoli, -

Nepal: Kathmandu - Paknajol, Baneshwar and Central Zoo.

Host: *Columba livia* (Pigeon).

6. *G. hologaster* Nitzsch, 1866

Nepal: Kathmandu - Paknajol, Baneshwar.

Host: *Gallus gallus domesticus* (Chicken).

7. *G. mayuri* Lakhminarayan et Emerson, 1971

India (Delhi and Jamduar), Nepal and UK?

Nepal: Parasi - Tamispur (Nawalpur).

Feb.

Host: *Pavo cristatus* (Peacock).

8. *G. parviceps* (Piaget, 1880)

India, Nepal, Thailand, Amesterdam and Rotterdam zoo garden.

Nepal: Parasi - Tamispur (Nawalpur).

Feb.

Host: *Pavo muticus imperator*.

9. *G. retangulates* Nitzsch, 1866

Nepal: Kathmandu - Central Zoo.

Host: *Pavo cristatus* (Peacock).

6. Genus: *Goniodes*, -

10. *Goniodes gigas* Taschenberg, 1879

Nepal: Kathmandu - Paknajol.

Host: *Gallus gallus domesticus* (Chicken).

References

Lakhminarayan, K.V. and Emerson, K.C. (1971), *Mallophaga indica* - VI. Notes on *Goniocotes* (Mallophaga: Philopteridae) found on *Pava cristatus*, with description of a new species, *Oriental Insects*, **5** (1): 95-102.

Tara Devi, N.C. and Mishra, P.N. (1981), Record of some Avian Biting Lice from Kathmandu Valley, *J. Nat. Hist. Mus.*, **5** (1): 11-22.

Psocoptera

The Booklice and their allies

Introduction

These are minute soft or stout bodied insects, usually delicate, and wings membranous, antennae filiform of 12-50 segments. Head with Y-shaped epicranial suture. Certain species are apterous found among the books and papers, others are feeding on stored food products. In general the Psocids live on animal and vegetable matters particularly on fungi, algae and lichens.

Review

Taxonomic work on Psocids of Nepal as such has been started by New, T.R. (1973, 1983, 1985, 1987) from certain parts of eastern and central parts of Nepal and described fifteen new species and more than ten new records. No attempts are made from the western parts of the country and therefore follow-up has to be made. Here is a list of 31 species under 19 genera with 15 new species described from Nepal although New (1983) has mentioned the presence of 37 species.

Family: Amphientomidae

1. Genus: *Seopsis*, -

1. *Seopsis ardoi* New, 1985

Holotype from Nepal.

Nepal: Dolkha - Jiri road.

(Holotype - male).

June.

2. *S. nepalensis* New, 1973

Holotype from Nepal.

Nepal: Taplejung - Sanghu (Sangu: 1,890m).

(Holotype - male).

Oct.

Family: Amphipsocidae

2. Genus: *Amphipsocus* Mc Lachlan, 1872

3. *Amphipsocus heterothrix* Thornton et Wong, 1966

India (W. Bengal) and Bhutan.

Nepal: Dolkha - Jiri road; Taplejung - Sanghu (1,676m between Sanghu and Tamrang); Ilam - Birtamod road (Karpok: 1,700m); Mai Pokhari, Gitang Khola Valley.

Less common.

March, April, June, Sept. to Nov.

Occuring on dense vegetation along the river banks of the hill.

Family: Caeciliidae

3. Genus: *Caecilius* Curtis, 1837

4. *Caecilius coei* New, 1973

Holotype from Nepal.

Nepal: Taplejung - Arun Valley, east shore of Arun river below Tumlingtar (548m) (Sankhuwa Sabha).

Dec.

5. *C. himalayanus* Enderlein, 1903
 Bhutan.
 Nepal: Ilam - Mai Pokhari (2,100m); Terhathum - Tinjur Dhara (1,950-2,250m).
 Common at Ilam; Coll.: J. Martens and B. Daams.
 March, April, Sept.
6. *C. ilamensis* New, 1983
 Holotype from Nepal.
 Nepal: Ilam - Birtamod road at Karphok (1,700m).
 (Holotype - female).
 April.
7. *C. latreillei* Badonnel, 1981
 India (UP).
 Nepal: Kathmandu - Nagarjun (Mt. Jamacok: 1,900-2,100m).
 Rare (1 male only); Coll.: J. Martens and Schawaller.
 Aug.
8. *C. martensi* New, 1983
 Holotype from Nepal.
 Nepal: Mustang - ascent from Tukuche to Thaksang (2,650-2,950m); Ilam - Mai Pokhari, Gitang Khola Valley; Manang - Bagarchhap (2,400m); Rasuwa - Gosainkunda (Syng Gyang: 3,200m); Kathmandu - Phulchoki Mt. (2,600m).
 (Holotype - female apterous); Coll.: J. Martens.
 Jan., March, April.
9. *C. mustangensis* New, 1983
 Holotype from Nepal.
 Mustang - near Southern Lethe (2,450-2,600m).
 April, May.
10. *C. parbatensis* New, 1983
 Holotype from Nepal.
 Nepal: Parbat - between Chitre and Ghandruk (Kaski) (2,400m to 2,800m).
 (Holotype - female apterous); Uncommon.
 May.
11. *C. pictifrons* Thornton et Wong, 1966
 Bengal in India.
 Nepal: Taplejung - Sanghu, Arun Valley below Tumlingtar (548m: Sankhuwa Sabha); Ilam - Mai Pokhari (2,100-2,200m).
 Uncommon.
 March, Nov. to Jan.
 Occuring on mixed vegetation by streams in the gully and shrubs on sandy shore.
12. *C. roseus* New, 1971
 Holotype from Nepal.
 Nepal: Ilam - Mai Pokhari (2,100m), Gitang Khola Valley (1,900-2,100m);

Taplejung - Sanghu, Tamrang bridge (1,676m), Dovan, Tamur river (1,066m); Dolkha - Jiri road.

Uncommon.

March, April, June, Oct. to Jan.

4. Genus: *Dypsocus* Hagen, 1866

13. *Dypsocus fucosus* Thornton et Wong, 1966

India (W. Bengal).

Nepal: Taplejung - Sanghu (1,890m); Ilam - Mai Pokhari (2,100m).

Uncommon.

March, April.

Occuring on rocky streams.

5. Genus: *Fulleborniella* Enderlein, 1902

14. *Fulleborniella persimilaris* Thornton et Wong, 1966

India (W. Bengal).

Nepal: Taplejung - Sanghu (1,585m), Dovan (1,066m) and Arun Valley below Tumlingtar (548m) (Sankhuwa Sabha); Ilam - Mai Pokhari (2,100m).

Common.

March, April, Nov., Dec.

Occuring on damp or shady places near river gorge.

Family: Ectopsocidae

6. Genus: *Ectopsocus* Mc Lachlan, 1899

15. *Ectopsocus briggsi* Mc Lachlan, 1899

Assam (India).

Nepal: Kathmandu - Balaju, Chauni (1,350m); Ilam - Mai Khola (2,100m).

Fairly common; Coll.: J. Martens.

March, April.

Family: Epipsocidae

7. Genus: *Hinduiopsocus* Badonnel, 1981

16. *Hinduiopsocus coleopratus* New, 1987

Holotype from Nepal.

Nepal: Ilam - Mai Pokhari (2,450-2,250m); Taplejung - Alm Lassetham (3,500m), Gunsu (3,100-3,400m); Panchthar - Mai Majuwa Khola (Dhorpar Kharka: 2,700m), Deurali (Puspati).

Holotype - apterous female, all apterous. Uncommon; Coll.: J. Martens and B. Daams.

Aug., Sept.

Family: Hemipsocidae

8. Genus: *Hemipsocus* Selys-Longchamps, 1872

17. *Hemipsocus chloroticus* (Hagen, 1858)

Bhutan.

Nepal: Lamjung - Benghe to Jagat (1,100-1,250m); Taplejung - Tamur Khola (Chirua: 1,200m).

Uncommon (1female, 1male); Coll.: J. Marten and B. Daams.

April, Sept.

18. *H. roseus* (Hagen, 1859)

Widely distributed.

Nepal: Ilam - between Mai Pokhari and Ilam (1,330m).
Rare (1 male only).
April.

Family: Myopsocidae

9. Genus: *Myopsocus* Hagen, 1866
19. *Myopsocus sanguensis* New, 1973
Holotype from Nepal. Also in Bhutan.
Nepal: Taplejung - Sanghu; Kathmandu Valley.
(Holotype - female); Coll.: J. Martens. Quite common.
Sept., Oct.
Clustered on rock crevices.

Family: Peripsocidae

10. Genus: *Peripsocus*, -
20. *Peripsocus quercicola* Enderlin, 1906
India (Assam and W. Bengal).
Nepal: Taplejung - Sanghu (1,890m), Arun Valley (546m) below Tumlingtar
(Sankhuwa Sabha).
June, Dec.
Occuring on mixed vegetation by stream gully.

Family: Pseudocaeciliidae

11. Genus: *Pseudocaecilius*, -
21. *Pseudocaecilius paraornatus* New, 1977
Sri Lanka.
Nepal: Kaski - Dhampus (2,100m).
Rare (1 female only); Coll.: J. Martens.
May.
12. Genus: *Heterocaecilius* Lee et Thornton, 1967
22. *Heterocaecilius nepalensis* New, 1983
Holotype from Nepal.
Nepal: Ilam - Mai Pokhari (2,100-2,200m).
(Holotype - female).
March.
13. Genus: *Scytopsocopsis*, -
23. *Scytopsocopsis hirtipenna* Lee et Thornton, 1967
India (W. Bengal).
Nepal: Taplejung - Sanghu (1,890m).
Nov., Jan.
Occuring on mixed vegetation by stream gully.

Family: Psocidae

14. Genus: *Blaste* Kolbe, 1883
24. *Blaste* sp. *indet.*
Nepal: Taplejung - Arun Valley between Tumlingtar, river Sabhaya west
shore (548m) (Sankhuwasabha).
Dec.

15. Genus: *Clematoscenea* Enderlein, 1907
 25. *Clematoscenea josephinae* New, 1983
 Holotype from Nepal.
 Nepal: Dolkha - Jiri road; Kathmandu (on tree trunk).
 (Holotype - male); Coll.: J. Martens.
 Sept., June.
16. Genus: *Psococeratis* Pearman, 1932
 26. *Psococeratis martensi* New, 1987
 Holotype from Nepal.
 Nepal: Panchthar - Paniporua (broad-leaf forest: 2,450-2,200m).
 (Holotype - male); Coll.: J. Martens and B. Daams.
 Aug.
27. *P. nirvana* (Banks, 1914)
 India (Assam).
 Nepal: Kathmandu - Patan Zoo; Dolkha - Jiri road; Gorkha - Suteo -
 Labubesi (700-900m); Taplejung - Tada Khola (Khebang: 1,600 - 1,800m),
 Kabeli Khola (Yamuthin: 1,650 - 1,800m).
 Common.
 July, Sept.
17. Genus: *Trichadenotecnum* Enderkin, 1909
 28. *Trichadenotecnum dobhanensis* New, 1973
 Holotype from Nepal.
 Nepal: Taplejung - Dovan (1,066m) above Tamur river.
 (Holotype - female).
 Jan.
 Occuring on shady places on shrubby slope.
29. *T. pokhariense* New, 1983
 Holotype from Nepal.
 Nepal: Ilam - Mai Pokhari (2,000-2,400m, ?Kulturland).
 (Holotype - male); Coll.: J. Martens.
 March.

Family: Stenopsocidae

18. Genus: *Stenopsocus* Hagen, 1866
 30. *Stenopsocus pallidus* Thornton et Wong, 1966
 Darjeeling (W. Bengal: India).
 Nepal: Kathmandu - Ganabahal (1,350m).
 Uncommon; Coll.: J. Martens.
 April.
19. Genus: *Taeniestigma* Enderlein, 1901
 31. *Taeniestigma? ingens* Enderlein, 1903
 Bhutan.
 Nepal: Kathmandu - Godawari, Mt. Phulchoki (1,770m), Balaju.
 Less common; Coll.: J. Martens.
 March.

References

- New, T.R. (1973), Some Psocoptera from Nepal, *Oriental Insects*, **7** (1): 1-10.
- New, T.R. (1983), Psocoptera from Nepal Himalays, *Senckenbergiana biol.*, **63**, (1982) (1/2): 73-89.
- New, T.R. (1985), A small collection of Psocoptera from Nepal, *Oriental Insects*, **19**: 115-120.
- New, T.R. (1987), Further Psocoptera from Nepal Himalayas collected by the Marten's expeditions (Insecta), *Courier Forsch. - Ins. Senckenberg*, **93**: 353-358.
- Thornton, I.W.B. and Wong, S.K. (1966), Some Psocoptera from West Bengal, India, *Trans R. ent. Soc., London*, **118**: 1-21.

Ephemeroptera

The Mayflies, Lake flies or Shade flies

Introduction

These are soft-bodied insects with vestigial mouth parts, both pair of wings membranous held vertically upwards when at rest and the hind pair quite smaller. Abdomen with usually a pair of very long anal cerci with or without a similar median caudal prolongation at the terminal end.

Adults occur near lakes, streams and rivers. The males of some species show dancing action in the air, a fluttering swift upwards and slowly falling down many times repeated. The nymphs are aquatic with abdominal gills and similar terminal appendages as in adults.

Review

Allen and Edmunds (1963) described two new species and made two new records from Nepal. Earlier, Uéno (1955) of Japan recorded some of their nymphal stages from Himalayan regions of this country. It is Braach (1981, 1983, 1984) who made extensive study on this group from the collections made by J. Martens and described twelve new species from Nepal. Now a list of twenty six species of Ephemeroptera under ten genera are represented from this country of which twelve species are described as new to science.

Superfamily: Ephemeroidea

Family: Ephemeridae

Subfamily: Ephemerinae

1. Genus: *Ephemera* Linnaeus, 1758

1. *Ephemera (Ephemera Linn.) paramodi* DUBY, 1971

Indian sub-continent.

Nepal: Kaski - Pokhara (Pokra).

(Type - female).

Family: -

Subfamily: -

2. Genus: *Rhithrogena*, -

2. *Rhithrogena sp. indet.*

Nepal: Manang - Manangbhot (3,500m) on a small spring-fed brook flowing into a stream that runs down from the glacier of Annapurna.

Less common (6 nymphs).

Oct. (1952).

Superfamily: Heptagenioidea

Family: Baetidae

3. Genus: *Baetiella*, -

3. *Baetiella armata* Braach, 1983

Holotype from Nepal.

Nepal: Marsyangdi Valley - 6 km north of Khudi (Lamjung: 785m).

(Holotype - nymph).

May.

4. *B. ausobskyi* Braach, 1983
 Holotype from Nepal.
 Nepal: Kaski - Chitre and Chandruk, Chitre to Seite Pass (2,500-2,500m).
 (Holotype - nymph).
 May.
5. *B. imanishii* Braach, 1983
 Holotype from Nepal.
 Nepal: Nuwakot (Nawakot) - Batar Bazar, Tadi Khola (700m) (streams running through paddy fields).
 Coll.: Kingi.
 Dec. (1952).
6. *B. marginata* Braach, 1983
 Holotype from Nepal.
 Nepal: Rasuwa - near Dhunche (Dunche, 1950m) NN.
 (Holotype - nymph).
 April.
 Masuzo Uêno recorded *Baetis* sp. 2 (nymph: 6.0mm) and Genus *Baetiella* nymph (5.0mm) from Batar and Tadi Khola on Dec. (1952); Coll. by Imanishi.
4. Genus: *Pseudocloen*, -
7. *Pseudocloen silveci* Braach, 1983
 Holotype from Nepal.
 Nepal: Lamjung - Bahundanda (1,100m) NN.
 (Holotype - nymph).
 May.
- Family: Heptageniidae (= Ecdyonuridae)
5. Genus: *Cingymia*, -
8. *Cingymia* sp. *indet.*
 Nepal: Lamjung - Tarkughat (579m).
 May.
6. Genus: *Ecdyonurus*, -
9. *Ecdyonurus apicatus* Braach, 1984
 Holotype from Nepal.
 Nepal: Lamjung - Bhulbhule.
 (Holotype - female).
 April.
10. *E. bilineatus* Braach, 1984
 Holotype from Nepal.
 Nepal: Kaski - Tolka and Dhampus (Dampus); - Ghandruk to Seite Pass (1,6500-1,850m); Ilam - near Mai Khola, Gitang Khola; Lamjung - Bahundanda, Tarkughat (579m), Bhulbhule.
 March to May.
11. *E. wittmeri* Braach, 1981
 Nepal: Mustang - Kali Gandaki (Dana: 1,440m); Marsyangdi Valley - Bhulbhule, Phalesangu.
 Less common.

April, May.

Masuzo Uêno (1955) recorded *Ecdyonurus* sp. 1, sp. 2 and sp. 3 nymphs from different regions of Nepal on Sept., Dec.

7. Genus: *Epeorus*, -

12. *Epeorus bispinosus* Braach, 1980

Nepal: Lamjung - Bagarchhap (2,100m), Bahundanda (1,100m); Ilam - near Mai Pokhari, Gitang khola (1,900m).

March.

13. *E. rithralis* Braach, 1980

Nepal: Manang - Chame (2,550m), Thangia (2,400m).

Less common.

Uêno (1955) recorded one nymph (5,0mm) of this genus from Nuwakot on Dec.; Coll. by Imamishi.

8. Genus: *Iron*, -

14. *Iron guttatus* Braach et Soldan, 1979 (?)

Nepal: Mustang - Tukuiche (2,400m) (Kali Gandaki).

(Rare - 1 nymph).

May.

15. *I. martensi* Braach 1981

Holotype from Nepal.

Nepal: Mustang - Tukuiche (2,400m), Lupra (Jomsom: 2,750m), Thanksang (3,150-3,400m).

April, May.

16. *I. psi* (Eaton, 1885)

Nepal: Lamjung - Tarkughat (579m); Manang - Thanjia, Bagarchhap (2,100m); Ilam - Gitang Khola (1,900m).

Less common.

March, May.

17. *I. siveci* Braach, 1980

Nepal: Manang - Chame (2,550m) and at 3,450m; Mustang - Tukuiche (2,400m).

May.

18. *Iron sp. indet.*

Nepal: Manang - Bagarchhap (2,100m).

Uncommon.

May.

Superfamily: Leptophlebioidea

Family: Ephemerellidae

Subfamily: Ephemerellinae

9. Genus: *Ephemerella* Walsh (1863)

19. *E. (Acerella) uenoi* Allen et Edmunds, 1963

Nepal: Nuwakot (Nawakot: 700m); between Batar Bazar and Tadi Khola (stream running through paddy fields).

Coll.: Dr. Kingi.

Dec. (1952).

20. *Ephemerella* (*Crinitella* Allen et Edmunds, 1963) *coheri* Allen et Edmunds, 1963
Nepal: Makawanpur - Palung (Pelung) (UTAH); Tanahu - Dumre (Turture: 400-500m); Lamjung - Tarkughat (579m).
April, May.
21. *E. (Drunella* Needham, 1905) *corpulenta* Braach, 1981
Holotype from Nepal.
Nepal: Rasuwa - Dhunche (1,950m); Nuwakot - Trisuli Khola.
(Holotype - nymph); Less common.
March, April.
22. *E. (D.) gilliesi* Allen et Edmunds, 1963
Nepal: Kathmandu - Chovar (Chovan) Gorge; Kaski - Chitre and Chandruk (2500-2,600m).
Not common.
May.
23. *E. (D.) submontana* Brodsky, 1930
Nepal: Marsyangdi Valley - Thangia (2,500m), Umebung chame (2,550m);
Kaski - Chitre and Chandruk.
Not common.
May.
24. *E. (D.) serrata* Braach, 1981
Holotype from Nepal.
Nepal: Rasuwa - Dhunche; Nuwakot - Trisuli Khola; Ilam - Mai Pokhari,
Gitang Khola (1,900m).
(Holotype - nymph); Less common.
March, April.
25. *E. (Torleya* Lestage, 1917) *nepalica* Allen et Edmunds, 1963
Holotype from Nepal.
Nepal: Makawanpur - Palung (Pelung) (UTAH); Tanahu (Tanhu) - Dumre,
Turture; Marsyangdi valley.
Uncommon.
April.

Subfamily: Teloganodinae

10. Genus: *Teloganodes*, -

26. *Teloganodes tritis* (Hagen, 1858)?

Nepal: Lamjung - Bahundanda (1,100m); Ilam - Mai Pokhari, Gitang Khola.
March, May.

References

- Allen, R.K. and Edmunds, G.F. Jr. (1963), New and little known Ephemerellidae from Southern Asia, Africa and Madagascar (Ephemeroptera), *Pacific Ins.*, **5**: 11-22.
- Braach, D. (1981a), Beitrag Zur Kenntnis der Ephemerellidae des Himalaya, *Reichenbachia*, **19** (15): 85-88.
- Braach, D. (1981b), Eintagsfliegen (Gattungen *Epeorus* und *Iron*) aus Nepal, II. (Ephemeroptera, Heptageniidae), *Ibid.*, **19** (18): 105-110.
- Braach, D. (1983), Neue Baetidae von Nepal (Ephemeroptera), *Ibid.*, **21** (26): 147-155.
- Braach, D. (1984), Beitrag Zur Kenntnis der Heptageniidae des Himalaya III (Ephemeroptera), *Ibid.*, **22** (7): 65-74.

Hubbard, M.D. and Peters, W.L. (1978), A catalogue of the Ephemeroptera of the Indian subregion, *Oriental Insects*, Supplement No. 9: 1-43.

Unêno, M. (1955), May fly nymphs - Fauna and Flora of Nepal Himalaya, *Fauna and flora Res., Soc. Kyoto Univ.*, 1: 301-316.

Neuroptera

The Alderflies, Snakeflies, Lacewings, Ant lions, etc.

Introduction

These are soft-bodied insects with usually elongate antennae. Wings membranous, generally disposed in a roof-like manner over the abdomen when at rest. Larvae carnivores with biting or suctorial mouthparts and abdominal gills present.

Review

The only worker on Neuroptera (Fam. Chrysopidae) of Nepal is Hölzel who described one new genus, one new sub-genus and twenty two new species from Nepal. Here is a list of 29 species under 8 genera.

Suborder: Planipennia

Family: Chrysopidae . The green lacewings or golden eyes.

Subfamily: Chrysopinae

1. Genus: *Anisochrysa* Nakahara, 1955
 1. *Anisochrysa alcestes* (Banks, 1911)

Nepal: Solukhumbu - Junbesi (2,750m); Kavre Palanchok - Huxe (1,150m).
Uncommon.
Aug.
 2. *A. astur* (Banks, 1937)

Nepal: Kathmandu - Godawari (1,600m).
Less common.
Aug.
 3. *A. obvia* Hölzel, 1973

Holotype from Nepal.
Nepal: Dolkha - Jiri (2,000m).
(Holotype - female); Uncommon.
Aug.
 4. *A. (Apertochrysa* Tjeder, 1966) *opipara* Hölzel, 1973

Holotype from Nepal.
Nepal: Dolkha - Tama (Tamba) Kosi valley (1,400m).
(Holotype - female); Uncommon.
June.
 5. *A. (Chrysoperla* Steinmann, 1964) *carnea* (Stephens, 1836)

Nepal: Kathmandu - Chauni (1,400m).
Less common.
May.
 6. *A. (C.) oblita* Hölzel, 1973

Holotype from Nepal.
Nepal: Dolkha - Jiri (2,000m).
(Holotype - female only).
June.

7. *A. (Cunctochrysa* Hölzel, 1970) *jubingensis* Hölzel, 1973
 Holotype from Nepal.
 Nepal: Solukhumbu - Jubing (1,600m).
 (Holotype - female); Common.
 May.
8. *A. (Nepalochrysa* Hölzel, 1973) *bhandarensis* Hölzel, 1973
 Holotype from Nepal.
 Nepal: Ramechhap - Bhandar below Thodung (2,200m); Solukhumbu - Junbesi (2,750m).
 (Holotype - female).
 Aug.
9. *A. dierli* Hölzel, 1973
 Holotype from Nepal.
 Nepal: Dolkha - Jiri (2,000m).
 (Holotype - male only).
 April.
10. *A. nepalica* Hölzel, 1973
 Holotype from Nepal.
 Nepal: Dolkha - Jiri (2,000m).
 (Holotype - male only).
 Aug.
11. *A. opima* Hölzel, 1973
 Holotype from Nepal.
 Nepal: Makawanpur - Rapti valley, Manahari Khola (Belwar: 350m).
 (Holotype - male only).
 May.
12. *A. (s. str.) oblongata* Hölzel, 1973
 Holotype from Nepal.
 Nepal: Solukhumbu - Junbesi (2,750m).
 (Holotype - female); Common.
 July.
2. Genus: *Ankylopteryx* Brauer, 1864
13. *Ankylopteryx nepalensis* Hölzel, 1973
 Holotype from Nepal.
 Nepal: Dolkha - Jiri (2,000m); Kavre Palanchok - Banepa (1,700m); Kathmandu - Godawari (1,600m).
 Less common.
 Aug.
3. Genus: *Chrysopidia* Navas, 1910
14. *Chrysopidia (Anachrysa* Hölzel, 1973) *elegans* Hölzel, 1973
 Subgenus with its type-species from Nepal.
 Nepal: Dolkha - Jiri (2,000m); Ramechhap - Bhandar below Thodung (2,200m).
 (Holotype - male); Less common.
 Aug.

15. *C. (A.) erato* Hölzel, 1973
Holotype from Nepal.
Nepal: Dolkha - Jiri (2,000m).
(Holotype - male only).
Aug.
16. *C. (s. str.) jiriana* Hölzel, 1973
Holotype from Nepal.
Nepal: Dolkha - Jiri (2,000m), Lamagaon (Lawagong) with Jiri (2,400m).
(Holotype - female only).
Aug.
17. *C. (s. str.) jocasta* Hölzel, 1973
Holotype from Nepal.
Nepal: Dolkha - Jiri (2,000m); Ramechhap - Bhandar below Thodung
(2,200m).
(Holotype - female only).
Aug.
18. *C. (s. str.) junbesiana* Hölzel, 1973
Holotype from Nepal.
Nepal: Solukhumbu - Junbesi (2,750m).
(Holotype - female only).
July.
19. *C. (s. str.) nigrata* Navas, 1910
Nepal: Solukhumbu - Junbesi (2,750m).
Less common.
July.
20. *C. (s. str.) remanei* Hölzel, 1973
Holotype from Nepal.
Nepal: Solukhumbu - Junbesi, Thaksindu (2,600m).
(Holotype - female); Uncommon.
July.
4. Genus: *Chrysotropia* Navas, 1911
21. *Chrysotropia orientalis* Hölzel, 1973
Holotype from Nepal.
Nepal: Kathmandu - Godawari (1,500m).
Rare (Holotype - female only).
May.
5. Genus: *Himalochrysa* Hölzel, 1973
22. *Himalochrysa modesta* Hölzel, 1973
Genus with its type-species from Nepal.
Nepal: Solukhumbu - Junbesi (2,750m).
(Holotype - female only); Uncommon.
July.

6. Genus: *Italochrysa* Principi, 1946
23. *Italochrysa stitzi* (Navas, 1924)
Sikkim (Holotype).
Nepal: Kathmandu - Godawari (1,600m); Solukhumbu - Jubing (1,600m);
Makawanpur - Chisapani Garhi (1,600m).
Uncommon.
July.
24. *I. talaverae* (Navas, 1928)
Nepal: Ramechhap - Bhandar below Thodung (2,200m).
(1 male - Neotype).
7. Genus: *Tumeochrysa* Needham, 1909
25. *Tumeochrysa caesarea* Hölzel, 1973
Holotype from Nepal.
Nepal: Kathmandu - Phulchoki (Phulchauki: 2,600m).
(Holotype - female); Uncommon.
July.
26. *T. magnifica* Hölzel, 1973
Holotype from Nepal.
Nepal: Solukhumbu - Junbesi (2,750m).
(Holotype - female only); Uncommon.
July.
27. *T. olympia* Hölzel, 1973
Holotype from Nepal.
Nepal: Solukhumbu - Khumjung (3,800m).
(Holotype - female only).
July.
28. *T. praeclara* Hölzel, 1973
Holotype from Nepal.
Nepal: Ramechhap - Bhandar below Thodung (2,200m).
(Holotype - female only).
Aug.

Family: Mantispidae

8. Genus: *Matispa*, -
29. *Matispa* sp. *indet.*
Nepal: Kathmandu Valley.
Predator of aphids.

References

- Hölzel, H. (1973), Neuroptera aus Nepal I. Chrysopidae, Khumbu Himal 4 (13): 333-388.
- NARC (1990/91), Annual Report of 2047/48 (1990-91), Nepal Agricultural Research Council, Central Entomology Division, Kumaltar (Kath.)
- Sharma, K.C. (1979), Notes on some predaceous insects preying on the apple woolly aphid *Eriosoma langigerum* (HSM) in Kathmandu Valley, J. Nat. Hist. Mus., 3 (1-4): 31-34.

Isoptera

The White-ants or Termites (Dhamiro)

Introduction

These are soft-bodied, yellowish-white coloured "wood ants", social in habit with reproductive - King and Queen forms, and non-reproductive soldier and worker forms. They live either in wood or in the soil. The winged forms have wings that are similar, elongate and membranous but will be shed by means of basal fractures. Mouth parts, chewing type.

Review

Uptil now only four species of termites are recorded from Nepal by Weidner (1970)

Family: Termitidae

1. Genus: *Euhamitermes* Holmgren, 1912
 1. *Euhamitermes lighti* (?) (Synder, 1933)
Nepal and ...
2. Genus: *Microcerotermes* Silvestri, 1901
 2. *Microcerotermes sp. indet.*
Nepal and ...
3. Genus: *Odontotermes*, -
 3. *Odontotermes feae* (Wasmann, 1896)
Nepal and ...
 4. *O. horai* Roonwal et Chhotani, 1962
Nepal and ...
 5. *O. obesus* Rambur, - The Sugar-cane termite
Nepal and ...
General pest of sugar-cane and wheat in Nepal.

References

- APROSC (1991), Glossary of some important plants and animals name in Nepal, Pub.: APROSC, pp. 261.
- Weidner, H. (1970), Termiten aus Nepal. Khumbu Himal, 3 (3): 457-461.

(mirrored) Trichoptera

(mirrored) The Caddis Flies

Introduction

The caddis flies are the moth-like insects with setaceous antennae, wings more or less densely hairy and held roof-like over the back in repose. Their larvae are aquatic and usually living in cages.

Review

Study of the caddis flies collected by Prof. H. Janetschek of Germany during Nepal Expedition in 1961 was done by Botosaneau in 1976 and described the new species of *Micrasema* and *Uenoa*. Description of a delicate and remarkable cases of the larvae of a Glossosomatid, *Catagapetus sp.?* and the larval "traps" of the Diplelectroninae were also made by him present in the collection.

1. Genus: *Micrasema*, -
 1. *Micrasema nepalicum* Botosaneau, 1976
Holotype from Nepal.
2. Genus: *Uenoa*, -
 2. *Uenoa janetscheki* Botosaneau, 1976
Holotype from Nepal.

Reference

Botosaneau, L. (1976), Une collection de stades aquatiques de Trichoptères du Nepal, realisee par le Professeur H. Janetschek, Khumbu Himal, 5: 187-200

Siphunculata (Anoplura)

The Sucking Lice (Jumra)

Introduction

These are apterous ectoparasitic insects of mammals. Eyes are reduced or absent, no ocelli, single-tarsus and single claw. Body flattened, no cerci and metamorphosis sight.

Family: Pediculidae

1. Genus: *Pediculus*, -

1. *Pediculus humanis corporis* , - The Body louse

Cosmopolitan.

Nepal: Widely distributed.

Reference

APROSC (1991), Glossary of some important plants and animals names in Nepal, Pub. APROSC. pp. 261.

Siphonoptera

The Flea (Upiyan)

Introduction

These are ectoparasitic insects of birds and mammals with laterally flattened body. They are small, without wings and eyes may be present or absent, but ocelli present. They are photonegative and respond to warmth, shadow cast by a potential host attracts the flea and when the host dies they leave as soon as the body cools and look for the next host. They have piercing and sucking type of mouth parts, both palps present, antennae short and stout. The thoracic segments are free, coxae very large and tarsi 5-segmented.

Review

The only taxonomist who worked on fleas of Nepal are F.G.A. Smit (1974, 1975, 1976, 1977) of British Museum, R.E. Lewis (1974) and Mitchel et al. (1976). Smit described a new genus, *Aconothobius* and ten species. Lewis described four species of *Paradoxopsyllus* from Nepal. Mitchel et al. recorded two species of fleas on bat. It is now a total of 37 taxa under 24 genera of which one genus and thirteen species are described from Nepal.

Family: -

Subfamily: -

1. Genus: *Aconothobius* Smit, 1975. The Pika Flea

1. *Aconothobius anthobius* Smit, 1975

Genus with this type-species from Nepal.

Nepal: Dolpa - between Bagar La and Ringmo.

(Holotype - female).

June.

Host: *Arisaema* inflorescence (flower)

Family: Ceratophyllidae

Subfamily: Ceratophyllinae

2. Genus: *Amphalius*, -

2. *Amphalius spirataenius* Liu, Wu et Wu, 1966

Tibet.

Nepal: - between Büko La and Mo La.

Uncommon.

June.

Host: *Ochotona* sp.

3. Genus: *Ceratophyllus*, -

3. *Ceratophyllus (Ceratophyllus) phrillinae* Smit, 1976. The bird flea

Holotype from Nepal.

Nepal: Myagdi - Dhorpatan above Dhumba (3,000m); Mustang - Thak Khola.

(Holotype - female); Rare.

March, May.

Hosts: Tree-creeper, *Certhia familiaris* and *Apodemus gorkha* (accidental host).

4. Genus: *Callopsylla*, -4. *Callopsylla tenuihamus*, -i. *C. tenuihamus tallah* (Lewis, 1971)

Nepal: Myagdi - Dhorpatan, Thankur; Mustang - Dambush, Ghorapani (Gorapani), Thaksang; - Mukut, Uttar Ganga.

Fairly common of microtine rodents. Coll.: K.H. Hyatt.

March to May, Nov., Dec.

Hosts: *Pitymys sikimensis*, *Rattus nitidus* and *Alticola stoczkanus*.

ii. *C. tenuihamus tenuihamus* (Liu, Wu and Wu, 1966)

Tibet.

Nepal: Dolpa - Charka.

Rare (1 female only).

June.

Host: *Alticola stoczkanus*.

5. Genus: *Nosopsyllus*, -5. *Nosopsyllus simla* (Jordan et Rothschild, 1921)

North-Western India (Simla).

Nepal: Mustang - Thaksang; - Lumsum (2,450m) (28.31N 83.17E).

Uncommon; Occurs higher to 3,000m. Coll.: K.H. Hyatt.

March, Nov.

Hosts: *Rattus rattoides*, *R. norvegicus* and *R. musculus* (*Mus musculus*)

Family: Hystrichopsyllidae

Subfamily: Ctenophthalminae

6. Genus: *Palaeopsylla*, -6. *Palaeopsylla helenae* Lewis, 1973

Nepal: Dolpa - Tarakot, Ranmagaon; Myagdi - Dhorpatan; Mustang - Lethe, Dambush Khola, Ghorapani (Gorapani), - Mahabharat mts., - Chordung Mt.; - Lumsum, upto 3,500m also at Chitre.

Common.

March to May, Nov. and Dec.

Hosts: *Soriculus nigrescens*, *S. leucops*, *S. baileyi*, *S. caudatus* and *Apodemus gurkha*.

7. *P. remota remota* Jordan, 1929

Nepal: Solukhumbu - Lukla Airport (reported by Lewis, 1973)

8. *P. tauberi tauberi* Lewis, 1973

Nepal: Dolpa - Tarakot, Ranmagaon; Myagdi - Dhorpatan; Mustang - Lethe, Dambush Khola, Ghorapani (Gorapani); - Mahabharat mts.; - Chordung Mt.; - Lumsum, upto 3,500m also at Chitre.

Less common; Coll.: K.H. Hyatt.

March to May, Nov. and Dec.

Hosts: *Soriculus nigrescens*, *S. leucops*, *S. baileyi* and *S. caudatus*.

The females can be parasitised by the nematodes (Hyperparasitism).

Subfamily: Doratopsyllinae

7. Genus: *Xenodaeria*, -9. *Xenodaeria telios* Jordan, 1932

Nepal: Myagdi - Thankur, Dhorpatan; - Chordung Mt.; Rasuwa - Syn Gyang near Gosainkund; - Lumsum.

Quite uncommon; Coll.: K.H. Hyatt.

March to May, Oct.

Hosts: *Soriculus caudatus*, *S. baileyi*, *S. nigrescens* and *Pitymys sikimensis*.

Subfamily: Hystrichopsyllinae

8. Genus: *Hystrichopsylla* Taschenberg, 1880

10. *Hystrichopsylla synaptica* Smit, 1975

Nepal: Rasuwa - Syn Gyang near Gosainkund.

(Holotype - male).

April.

Host: *Soriculus caudatus*.

Subfamily: Neopsyllinae

9. Genus: *Genoneopsylla*, -

11. *Genoneopsylla thysanota* (Traub, 1968)

Nepal: - Charka.

Rare (1 female only).

June.

Host: *Alticola stoliczkanus*.

10. Genus: *Neopsylla*, -

12. *Neopsylla marleanae* Lewis, 1971

Nepal: Dolpa - Tarakot, Gompa; Mustang - Nabricot; - Lumsum, Chordung; - Muri Ghasa.

Quite common parasite of *Rattus* occurring between 2,100-3,300m in Nepal. Coll.: K.H. Hyatt.

March to May, Nov.

Hosts: *Rattus rattoides*, *R. rattus*, *R. eba*, *Soriculus nigrescens* and *Apodemus gorkha*.

13. *N. secura*, -

i. *N. secura secura* Rothschild, 1915

Simla, Kashmir and Pakistan.

Nepal: Dolpa - Ringmo, Phoksundo (Phosumdo) Lake; Palpa? - Mukut, near Kakkot gaon (28.53N 83.09E) (3,500m) and Tareng gaon.

Less common; Coll.: K.H. Hyatt. Restricted to 3,600-4,100m (Smit).

April to June

Hosts: *Mus musculus*, *Apodemus sylvaticus* and *Pitymys sikimensis*.

ii. *N. secura separata* Smit, 1975

Subspecies from Nepal.

Nepal: Myagdi - Dhorpatan; Mustang - Lethe, Old Marpha, Thaksang, Chadziou Khola, Nabricot, Ghorapani; - Chitre, Lusum, Saure Khola.

Quite common at Myagdi but less common at Mustang. Coll.: K.H. Hyatt.

It occurs at 2,100m-3,200m (Smit). Both males, females from Dhorpatan contained nematodes.

March to June, Oct., Dec.

Hosts: *Rattus rattoides*, *R. tratoi*, *R. fulvescens*, *Apodemus gurkha*, *A. sylvaticus*, *Soriculus caudatus* and *S.*, *Pitymys sikimensis*.

Subfamily: Rhadinopsyllinae

11. Genus: *Rhadinopsylla*, -

14. *Rhadinopsylla dahurica* Wagner, 1930

R. dahurica vicinoides Smit, 1975

Subspecies from Nepal.

Nepal: Myagdi - Dhorpatan.

(Holotype - female); Uncommon.

April, May.

Host: *Pitymys sikimensis*.

(*R. dahurica vicina* Wagner, 1930 was recorded from East Tibet).

15. *R. (Actenophthalmus) rhigalea* Smit, 1977

Holotype from Nepal.

Nepal: Palpa? - Mukut (28.50N, 83.25 E) (4,050m).

(Holotype - female, at BMNH, length: 2.0mm); Coll.: K.H. Hyatt.

April (1974).

Host: *Alticola stoliczkanus*.

12. Genus: *Stenischia* Jordan, 1932

16. *Stenischia lewisi* Smit, 1975

Holotype from Nepal.

Nepal: Mustang - Lethe, Chadziou Khola, Thaksang; Myagdi - Dhorpatan; - Lumsum (28.31N, 83.17E) (2,100m).

(Holotype - female); Less common.

March to May, Oct., Nov.

Hosts: *Soriculus nigrescens*, *S. leucops* and *Apodemus gurkha*.

17. *S. pagiana* Lewis, 1969

Nepal: Sindhu Palchok - Tarke Ghyang; Rasuwa - Thare Pati (Uring Ghyang).

Uncommon (2 females only, male - unknown).

Hosts: *Soriculus nigrescens* and *Apodemus sp.*

18. *S. rhadinopsylloides* Smit, 1975

Holotype from Nepal.

Nepal: Dolpa - Ringmo: Phoksundo Lake area, Tarakot

Uncommon (3 e.g. only); Coll.: K.H. Hyatt.

April to June.

Hosts: *Pitymys sikimensis* and *Apodemus gurkha*.

Family: Ischnopsyllidae

13. Genus: *Ischnopsyllus*, - The bat flea

19. *Ischnopsyllus indicus*, -

Nepal: - Sindu?

Host: Bat.

14. Genus: *Thaumapsylla*, - The bat flea
 20. *Thaumapsylla breviceps*, -
 Nepal: Kathmandu and Sankhuwasabha.
- Family: Leptopsyllidae
 Subfamily: Amphipsyllinae
15. Genus: *Amphipsylla*, -
 21. *Amphipsylla orthogonia* Liu, Tsai et Wu, 1975
 Tsinghai (over 4,000m) (W. China).
 Nepal: Palpa? - Mukut (4,050m); - Kaha Lungpa Valley.
 Less common; Coll.: K.H. Hyatt.
 April.
 Host: *Alticola stoliczkanus*.
 Smit and Rosicky (1976) recorded specimens collected at 4,800m (upper limit of alpine zone meadows) in the Makalu region on the same host.
22. *A. primaris*, -
 Nepal: Dolpa - Charka.
 Rare (1 female).
 June.
 Host: *Alticola stoliczkanus*.
16. Genus: *Ctenophyllus* Wagner, 1927
 23. *Ctenophyllus lacertosus* Smit, 1975
 Holotype from Nepal.
 Nepal: - between Büko La and Mo La Passes.
 (Holotype - female).
 June.
 Host: *Ochotona sp.*
24. *C. martensi* Smit, 1975
 Holotype from Nepal.
 Nepal: Kaski - Ulleri; Mustang.
 (Holotype - female).
 July.
 Host: *Ochotona roylei*.
17. Genus: *Frontopsylla*, -
 25. *Frontopsylla (Frontopsylla) spadix* (Jordan et Rothschild, 1921)
 i. *F. spadix disquingensis* Li and Hsieh, 1974
 Nepal: Myagdi - Dhorpatan, Utter Ganga (3,050m); Dolpa - Tarakot;
 - Sangdah, Kaha Lungpa Valley, Saure Khola; - Mukut (4,050m).
 Occur between 2,200-4,300m. Less common; Coll.: K.H. Hyatt.
 March to May.
 Hosts: *Apodemus sylvaticus* (at high altitude), *A. gurkha* (at low altitude), *Alticola stoliczkanus*, *Pitymys sikimensis*, *Rattus rattoides* and *Mus musculus homourus*.
- ii. *F. (F.) spadix gurkha* Smit, 1975
 Subspecies from Nepal.
 Nepal: Kaski - Ulleri; Myagdi - Dhorpatan, Thakur; Dolpa - Phoksundo Lake area; Mustang - Thaksang.

Less common.

April, May, July, Nov.

Hosts: *Ochotona roylei*, *Apodemus gorkha*, *A. sylvaticus*, *Rattus rattoides* and *Mus musculus*.

26. *F. (Profrontia) ambigua* Fedina, 1946
 Afganistan, Nepal, Tazhikistan, Kirgiziya, Kazakhstan and Sing Kiang - Uighur.
 Nepal: Dolpa - Charka; - Mukut (4,050m), Tareng gaon (3,650m) (28.52N, 83.22E), - Kakkot gaon. Occur between 3,500-4,500m.
 Common; Coll.: K.H. Hyatt.
 April, June.
 Hosts: *Apodemus sylvaticus* and *Alticola stoliczkanus*.
18. Genus: *Paradoxopsyllus*, -
27. *Paradoxopsyllus dictosus* Smit, 1975
 Holotype from Nepal.
 Nepal: Mustang - Tukuhe, Rupshesara?; - Lumsum (28.31N, 83.17E) (2,100m)
 (Holotype - male: length: 1.75-2.0mm); Common (9 females, 6 males). Coll.: K.H. Hyatt.
 Feb., Oct., Dec.
 Hosts: *Rattus rattoides*
 Lewis (1974: 46) recorded single pair of "*P. custodis*" from Tarke Ghyang (2,530m) (28.02N, 85.34E: Sindhu Palchok) from the same host. Smit believes it as *P. dictosus*.
28. *P. digitatus* Lewis, 1974
 Holotype from Nepal.
 Nepal: Myagdi - Dhorpatan (2,900m); Dolpa - Tarakot.
 Uncommon - 1 female, 1 male only; Coll.: K.H. Hyatt.
 April.
 Hosts: *Soriculus nigrescens* and *Pitymys sikimensis*.
29. *P. mustangensis* Lewis, 1974
 Holotype from Nepal.
 Nepal: Mustang - Thaksang, Nabricot; - Kalapani (28.39N, 83.37 E), Mukut (28.50N, 83.25 E); Myagdi - Dhorpatan.
 Common; Occur between 2,750-4,050m. Coll.: K.H. Hyatt.
 April, Nov., Dec.
 Hosts: *Rattus rattoides* and *Apodemus sylvaticus*.
30. *P. oribatus* Lewis, 1974
 Holotype from Nepal.
 Nepal: Dolpa - Ringmo: Phoksundo Lake; Myagdi - Dhorpatan.
 Less common.
 April to June.
 Hosts: *Pitymus sikimensis* and *Apodemus sylvaticus*.
31. *P. spinosus* Lewis, 1974
 Holotype from Nepal.
 Nepal: Solukhumbu - Gorakshep; Dolpa - Charka.

Uncommon.

June, Sept.

Hosts: *Apodemus sylvaticus* and *Alticola stoliczkanus*.

Family: Pulicidae

Subfamily: Pulicinae

19. Genus: *Echidnophaga*, -

32. *Echidnophaga gallinacea* (Westwood, 1875)

Nepal: - near Kakkat gaon (3,500m) along Barbung Khola (28.53N, 83.09E).

Rare (1 female only); Coll.: K.H. Hyatt.

April.

Host: *Apodemus sylvaticus*.

20. Genus: *Pulex*, -

33. *Pulex irritans* Linnaeus, 1758. The human flea

Nepal: Solukhumbu - Khumjung; - Kanger (from human dwelling).

June.

Host: man.

21. Genus: *Xenopsylla*, -

34. *Xenopsylla cheopsis*, -

Family: Pygiopsyllidae

Subfamily: Pygiopsyllinae

22. Genus: *Stivalius*, -

35. *Stivalius ferinus* (Rothschild, 1908)

Sri Lanka, India and Nepal.

Nepal: Kathmandu (Kat.) - Sankhu (Sanghu).

Less common.

Jan.

Host: *Suncus murinus*.

Family: Vermipsyllidae

23. Genus: *Chaetopsylla*, -

36. *Chaetopsylla (Chaetopsylla) homoea* Rothschild, 1906

Tibet, Mongolia, Switzerland, etc.

Nepal: - Chordung Mt.

Rare (1 female only).

March.

Host: *Martes flavigula*.

24. Genus: *Vermipsylla*, -

37. *Vermipsylla perplexa* Smit, 1975

Holotype from Nepal.

Nepal: - Lake Titi from soil litter.

(Holotype - female).

Dec.

References

- APROSC (1991), Glossary of some important plants and animals names of Nepal, Pub.: APROSC, pp. 261.
- Lewis, R.E. (1974), The *Paradoxopsyllus* fauna of Nepal with descriptions of eight new species and a key to the genus (Siphonoptera: Leptopsyllidae), J. med. Ent., **11**(1): 46-67.
- Mitchel, R. and Punzo, F. (1976), Ectoparasites of bats from Nepal, J. Bomb. Nat. Hist. Soc., **73** (1): 84-87.
- Smit, F.G.A. (1975a), Siphonoptera collected by J. Martens in Nepal, Senckenbergiana biol., **55**(4/6): 357-398.
- Smit, F.G.A. (1975b), *Aconothobius anthobius* n. gen., n. sp. a pika flea found in a flower in Nepal, Ibid., **56** (4/6): 247-256.
- Smit, F.G.A. (1976), A new bird-flea from Nepal (Siphonoptera), Ibid., **57** (1/3): 63-66.
- Smit, F.G.A. (1977a), Notes on a collection of Siphonoptera from Nepal, J. nat. Hist., **11** (6): 693-702.
- Smit, F.G.A. (1977b), Some Siphonoptera from small mammals in Kashmir, Senckenbergiana biol., **58** (1/2): 45-53.

Phasmida

The stick and leaf insects

Introduction

These are larger winged or unwinged, often depressed and stick or leaf-like. Metamorphosis slight, mouth parts mandibulate. Prothorax short but meso and metathorax usually elongate.

Family: Phasmidae

1. Genus: *Necroscia*, -
 1. *Necroscia pholidotus*, - The Stick-insect
Nepal: Terai and lower mid-hills.
2. Genus: *Phyllium*, -
 2. *Phyllium soythe*, - The Leaf-insect
Nepal: Terai and mid-hills in burrows with leaves.
Common.

Reference

APROSC (1991), Glossary of some important plants and animals names of Nepal, Pub.:
APROSC. pp. 261.

Dermaptera

The Earwigs (*Khape Kira*)

Introduction

These are elongate insects with shorter hard forewing called tegmina without veins and the hindwings are normal semicircular with veins highly modified and disposed radially. The last abdominal segment is with a pair of unjointed, heavily sclerotised "forceps". Their ovipositor, therefore, is reduced or absent. Metamorphosis is slight and they are mostly nocturnal hiding in the soil, under the bark and stones or among herbage during the day.

Review

Apart from isolated record of the earwigs such as those in the "Fauna of British India" by Burr (1910) who recorded six species from Nepal, the only recent list of Dermaptera from this country is given by Yamasaki (1965) and Bey-Bienko (1968). Yamasaki of Japan recorded two species and Bey-Bienko of Moskva (Russia) recorded six species, three of which were new record for this country. Allen Brindle (1974) of Manchester Museum (UK) recorded altogether 18 species but made some more additional records in 1983 and 1987. He (1974, 1975, 1983, 1987) described seven new species from Nepal and thus recorded 23 species in 1987. Next contributor on this group is Kapoor of India and his associates (1977, 1978, 1980) who recorded 16 species of which three were described as new. Thus a total of 49 taxa of earwigs under 26 genera has been listed here of which twelve species are described from Nepal.

Family: Carcinophoridae/Anisolabididae

Subfamily: Brachylabidinae

1. Genus: *Brachylabis*, -

1. *Brachylabis* sp. *indet.*

Nepal: Dhading - Ankhu Khola Valley, Ankhu Sangu with Sallentar (Gorkha: 530-750m)-1 immat.; Ilam - Mai Pokhari (2,150-2,250m)-1 immat.

Uncommon.

July, Aug.

Subfamily: Carcinophorinae (=Psalinae)

2. Genus: *Aborolabis* Srivastava, -

2. *Aborolabis martensi* Brindle, 1987

Holotype from Nepal.

Nepal: Gorkha - Budhi (Buri) Gandaki between Suteo and Labubesi (700-800m).

(Holotype - female); Uncommon (2 females, 1 male); Length: 7.5mm.

July (1983).

Occuring on: *Shorea*.

3. *A. nepalensis* (Brindle, 1975)

Holotype from Nepal. Also in Sikkim and Darjeeling (India).

Nepal: Myagdi - Myagdi Khola (Muri: 2,300m); Mustang - E. Dhaulagiri Himal near Lethe (2,450m), Kalopani, Dharapani, S. Annapurna Himal between Sikha and Ghorapani (Gorapani: 2,300-2,700m); Kaski - Dhampus (Dhumpus), Mahendra Goopha (1,000-1,200m: Pokhara); Lamjung - Marsyangdi Valley (1,150m), Nayagaon (Bahundanda); Gorkha - Budhi

(Buri) Gandaki; Chuling Khola Valley (2,450-2,870m).
 Uncommon; Coll.: Almen, Brachland, Gebüsch.
 March to May, July, Aug.
 Occuring on: *Ficus religiosa* and *Pinus excelsa*.

4. *A. nigrescens* Brindle, 1987

Holotype from Nepal.

Nepal: Nuwakot - Trisuli (600-650m).

(Holotype - female); Less common (2 females, 1 male); Length: 10-11mm.
 July (1983).

3. Genus: *Euborellia*, -

5. *Euborellia annulipes* (Lucas, -)

Cosmopolitan.

Nepal: Kathmandu.

NB: Carcinophorinae indet. occuring at Gorkha, Nuwakot and Ilam Districts.

Subfamily: Isolabidinae

4. Genus: *Isolabis*, -

6. *Isolabis caudelli* (Burr, 1908)

Nepal, Sikkim and Darjeeling area, Arunachal Pradesh. Nepal: Terhathum -
 Nessum (1,350m).

Uncommon (1female, 1male).

Sept. (1983).

5. Genus: *Nannisolabis*, -

7. *Nannisolabis* sp. indet.

Nepal: Taplejung - Tamur Khola (Chirua: 1,200m).

Rare (1 male only).

Oct.

Family: Chelisochidae

Subfamily: Chelisochillinae

6. Genus: *Proreus* Burr, 1907

8. *Proreus biratnagarensis* Kapoor et al., 1978

Holotype from Nepal.

Nepal: Morang - Biratnagar.

(Holotype - female); Uncommon.

Nov.

Family: Forficulidae

Subfamily: Allodahliinae

7. Genus: *Allodahlia* Brindle, 1972

9. *Allodahlia macropyga* (Westwood, 1836)

Himalayas from NW. India (Kumaon, UP, Assam), Tibet and
 eastwards to N. Myanmar and Yunnan (China).

Nepal: Kathmandu - Godawari; Mustang - Chadziou Khola (2,530-2,600m);

Dolpa - Dhaulagiri road from Pelma to Tarakot (2,700m), Suligadh Valley near
 Perila (2,700m).

Uncommon.

May to July, Oct.

10. *A. martensi* Brindle, 1974

Holotype from Nepal.

Nepal: Mustang - Thaksang above Tukuhe (3,100-3,400m), Chadziou Khola (2,650m); Parbat - Chitre; Kaski - Dhampus (2,100m), Ghandruk.

Less common.

May, July, Aug.

Occuring on: *Alnus*, *Quercus* and *Rhododendron* forests from 2,500-2,900m.

Subfamily: Anechurinae

8. Genus: *Anechura* Scudder, 187611. *Anechura stoliczkae* Burr, 1911

NW. India (Ladakh, Kashmir) and Nepal.

Nepal: Kaski - Chandruk to Seite Pass (2,300-2,700m); Parbat - Chitre; Dolpa - ascent to Phoksundo lake (3,700-3,300m), Ringmo to Phoksundo, Suligadh Valley (3,000m), Northern Dhaulagiri Himal.

Fairly common at higher altitude.

May, June.

Subfamily: Cosmiellinae

9. Genus: *Liparura*, -12. *Liparura punctata* Burr, 1910

Cosmopolitan (esp. Nepal, Sikkim and Darjeeling).

Nepal: Kaski - Pipar (Karuwa: 1,382m); Ilam - Gitang Khola.

Uncommon.

March, June.

Occuring on: *Lithocarpus*.

13. *L. simplex* Brindle, 1975

Myanmar and Nepal.

Nepal: Terhathum/Dhankuta - Tinjura Dara, Chauki with Basantapur (2,550-2,850m); Ilam - Mai Pokhari (2,150-2,250m); Panchthar - Deorali, Puspati (?Pashupati), Sheldoti.

Uncommon (4 immatured only).

Aug., Sept. (1983).

Occuring on: *Lithocarpus*.

Subfamily: Eudohrninae

10. Genus: *Eudohrnia* Burr, 190714. *Eudohrnia metallica* (Dohrn, 1865)

N. India, Bombay. Along the Himalayas to Nepal, Sikkim and eastwards to Myanmar, W. China and Southwards to Viet Nam.

Nepal: Kathmandu - Godawari (Phulchoki upto 1,770m), around Bhisnumati river, Nagarjun (Jamacok: 1,400-1,600m); Dolkha - above Barahbise to Ting Sang La (800-1,500m).

Uncommon (but common on tender leaves).

March, April, June, Aug.

Subfamily: Forficulinae

11. Genus: *Elaunon* Burr, 190715. *Elaunon bipartitus* (Kirby, 1891)

Oriental and Australian regions.

Nepal: Kathmandu - Gokarna.

Rare (1 female only).

July.

Occuring under the stone.

12. Genus: *Forficula* Linnaeus, 1758

16. *Forficula acris* Burr, -

Cosmopolitan.

17. *F. beebi* Burr, 1911

Himalaya from Nepal into NE. India (Darjeeling as well).

Nepal: Kaski - Pipar (Karuwa: 1,382m); Myagdi - Dhorpatan to Thankur (3,600-4,000m); Dolpa - Tarakot/Gompa (Phurbang: 4,200m), Ringmo to Phoksundo Lake (4,000m), Suligadh Valley (2,800m); Solukhumbu - Imja to Phunki Drangka birch forest (3,250-3,300m); Gorkha - Darondi Khola (Barpak: 3,600-3,450m).

Uncommon.

May, June, Aug. to Sept.

Occuring on: *Arisaema* flowers.

18. *F. beelzebub* Burr, 1900

Himalayas from NW. India to Sikkim, Bhutan, eastwards to Yunnan (China).

Nepal: Kathmandu - Ganabahal, Swayambhu, Balaju, Godawari and Baneswor; Dhading - Budhi (Buri) Gandaki (Nyak: 1,600-1,800m); Ilam - Gitang Khola (1,900-2,550m); Kaski - Pipar; Mustang - Thak Khola, Tukucho (2,000m), Muktinath (3,400m), Thaksang (2,650-2,950m), Tilhar (1,100m), above Kusma, Dara Khola near Lumsum (2,400m), Marpha, Lethe, Thimang (Bagar Chhap: 2,550m); Dolpa - Pelma to Tarakot, Suligadh Valley; Ramechhap - Khimti Khola Valley (Shivalaya).

Uncommon but little more at higher altitude.

March to Aug., Oct., Nov.

Occuring on: *Cupressus* - *Pinus* forest, *Lithocarpus* tender leaves, under the stones of river banks.

19. *F. flavalis* Brindle, 1983

Holotype from Nepal. Also at Sikkim and Darjeeling.

Nepal: Lamjung - Nayagaon (Bahundanda: 1,150m).

(Holotype -female); Coll.: J. Martens.

April.

20. *F. lucens* Brindle, 1975

Myanmar and Nepal.

Nepal: Mustang - Thak Khola (Lethe and Ghasa: 2,500-2,150m).

Less common (4 females only).

July.

Occuring on: *Arisaema* flowers.

21. *F. schlagintweiti* (Burr, 1911)

Himalayas from Punjab eastwards and extending to Yunnan including Tibet, Nepal, Afganistan and Myanmar. Palaearctic species.

Nepal: Taplejung - Gunsu (3,200-3,400m), Simbua Khola, Yalung; Gorkha - Chuling Khola (3,00-3,400m), Rupina La, Seite (4,100-4,500m); Panchthar - Mai Majuwa Khola (2,250-2,500m), Dhorpar Kharka (2,700m); Kaski - Pipar (Sanokhopang: 1,750); Myagdi - Dhorpatan (3,000-3,100m), Thankur (3,000-3,600m); Dolpa - Gompa/Tarakot (3,300-3,400m), Suligadh Valley

(2,300-3,000m); Mustang - Old Marpha (3,100-3,200m), Thaksang above Tukuhe; Ramechhap - Thodung; Dolkha - above Pikhuti (Bikuti) to Ting Sang La, Chordung mt. near jiri to Shivalaya (2,500-2,000m); Rasuwa - Gosainkunda; Kathmandu - Mt. Phulchoki (2,500-2,700m).

Fairly common.

Jan, April to Sept.

Also occurring on: *Abies*, *Larix*, *Rhododendron*, *Quercus* and *Lithocarpus* forests.

Forficula sp. at Gorkha (Budhi Gandaki; Chuling Knola Valley: 2,450-2,870m) on *Quercus semecarpifolia*. 5 imm. forms; Aug., 1983.

Subfamily: Opiϑthocosmiinae

13. Genus: *Cordax*, -

22. *Cordax politus* Burr, 1911

Nepal, India (Arunachal Pradesh) and Myanmar.

Nepal: Panchthar - Mai Majuwa Khola (2,250-2,500m).

Rare (1 male only).

Aug.

14. Genus: *Eparchus* Burr, 1907

23. *Eparchus insignis* (de Haan, 1842)

Oriental region.

Nepal: Kathmandu - Balaju Park (1,400m), Suryabinayak, Godawari, Narayansthan; Gorkha - Darondi Khola (750-900m).

Uncommon.

March, July to Sept.

Occuring under the stone.

24. *E. oberthuri* Borelli, 1912

NE. India, N. China and Bhutan.

Nepal: Kathmandu - Phulchoki (2,000-2,500m); Myagdi - Myagdi Khola (Muri: 2,100m), Southern Dhaulagiri; Rasuwa - between Ramche and Dhunche (1,800-2,000m), Gosainkund area (2,400-2,600m).

March, April.

Occuring in forest area of: *Rhododendron*, Pine - *Rhododendron* and under the stone.

15. Genus: *Hypurgus*, -

25. *Hypurgus humeralis* (Kirby, 1891)

India (UP), Myanmar and Nepal - Oriental.

Nepal: Makawanpur - Chisapani Gadhi (540 ft.).

Quite common; Coll.: Mitaura.

Sept.

16. Genus: *Kosmetor* Burr, 1907

26. *Kosmetor bosei* Bharadwaj et al., -

Nepal and India.

17. Genus: *Timomenus* Burr, 1907

27. *Timomenus neville* Burr, 1904

India (Sikkim), Bhutan and Nepal.

Family: Labiduriidae

Subfamily: Labidurinae

18. Genus: *Forcipula* Bolivar, 1897
28. *Forcipula borellii* Chopard, 1924
N. India (Arunachal Pradesh).
Nepal: Lamjung - Marsyangdi (Bahulbhule: 800-850m), Senghe-Jagat (1,100-1,250m).
April.
29. *F. decolyi* Bormans, 1900
Sikkim, Nepal, China (Yunnan), India, Viet Nam and New Guinea.
Nepal: Dhading - Naubise; Lamjung - Marsyangdi Valley (Bachrad: 800-850m); Dolkha - Jiri to Shivalaya (2,000-2,500m near the stream); Southern Dhaulagiri Himal; - Tilhar above Kusma (1,100m).
Uncommon.
March, April.
Occuring under the stone on river banks.
30. *F. indica* Brindle, -
N. India and Bhutan.
Nepal: Kathmandu - Sundarikal.
Uncommon (2 females).
31. *F. pugnax* Kirby, -
Nepal: Kaski - Pipar (Karuwa: 1,382m).
32. *F. quadrispinosa* (Dohrn, 1863)
Oriental regions.
Nepal: Kathmandu - Chovar.
Rare (1 female only).
March.
Occuring under the stone.
33. *F. trispinosa* (Dohrn, 1863)
Oriental and Palaearctic regions from Iran to N. India including Myanmar.
Nepal: Kathmandu - Godawari, Sundarikal; Dhading - Naubise; Nuwakot - Trisuli; Tanahu (Tanhu) - near Purkot (600m); Kaski - Pipar (Karuwa); Dolkha - Ting Sang La to Barabise (Sindhu Palchok: 1500-800m).
Common (4 females, 5 males) in Kathmandu but uncommon at other places.
April, Aug.
34. *F. walkeri* (Kirby, -)
Indian Continent, Hongkong.
Nepal: Kathmandu.
Less common.
19. Genus: *Labidura* Leach, 1815
35. *Labidura riparia* (Pallas, 1773)
Cosmopolitan.
Nepal: Kathmandu - Naxal, Ganabahal, Bhaktapur; Kaski - Suikhet Valley; Gorkha - Budhi (Buri) Gandaki (Laubesi-Gorlabesi: 900-1,000m); Dhading - Ankhu Khola Valley (Ankhu Sangu with Sallentar, Gorkha: 530-750m).
Uncommon; Coll. on broad-leaf forest.
March, April, July and Sept.

Subfamily: Nalinae

20. Genus: *Nala* Zacher, 191036. *Nala livipides* (Dufour, 1829)

Cosmopolitan - Europe, Africa, SE. Asia to China, Philippines and Japan.

Nepal: Kathmandu - Naxal, Chauni (1,350m).

Uncommon.

July, Sept., Nov.

37. *N. nepalensis* Burr, 1907

Perhaps described from Nepal. Also in India (Kumaon) and Malaysia.

Nepal: Kathmandu - Balaju; Ramechhap - Khimti Khola Valley, Shivalaya (1,800m) on river bank.

Uncommon.

March, April.

Occuring under the stone.

Family: Labiidae

Subfamily: Labiinae

21. Genus: *Labia* Leach, 181338. *Labia bhaktapurensis* Kapoor et al., 1978

Holotype from Nepal.

Nepal: Kathmandu - Bhaktapur.

(Holotype - male); Common.

Aug.

39. *L. curvicauda* (Motschulsky, 1863)

India (UP, Sikkim, Darjeeling, Arunachal Pradesh); Cosmopolitan.

Nepal: Gorkha - Arughat to Suteo (600-700m); Dhading - Ankhu Khola Valley (Ankhu Sangu with Sallentar; Gorkha: 530-750m) 9 miles W. of Mitaura (400m).

Uncommon.

July, Nov.

40. *L. minor* (Linnaeus, 1758)

Palearctic (Sikkim and Darjeeling), Myanmar, Cosmopolitan.

Nepal: Kathmandu - Nagarjun (Mt. Jamachok: 1,900-2,100m).

Rare (1 male only).

Aug. (1983).

NB: Labiidae indet.

Occuring at Mustang (S. Lethe: 2,450-2,600m) on April, May.

Subfamily: Spongiphorinae

21. Genus: *Homotages* Burr, 190741. *Homotages feae* (Bormans, 1888)

Oriental - India, Myanmar and Nepal.

Nepal: Kathmandu - Godawari; Dhading - Naubise; Dhankuta - Basantapur, Hile (2,300-2,600m).

Uncommon.

April, Sept.

Occuring under the stone.

23. Genus: *Irdex* Burr, 1911

42. *Irdex dakshinkaliensis* Kapoor et al., 1978

Holotype from Nepal.

Nepal: Kathmandu - Dakshinkali.

(Holotype - female); Common.

Sept.

Occuring under the decaying leaves.

Family: Diplatyidae

Subfamily: Diplatyinae

24. Genus: *Diplatys* Serville, 1831

43. *Diplatys bidentatus* (Burr, 1915)

India (E. Himalayas) and Nepal.

Nepal: Kaski - Tolka, Dhampus, Landruk; Lamjung - Syuribar, Phalesangu, Nayagaon (Bahundanda).

April, May.

Occuring on: *Ficus religiosa* and *Pinus excelsa*.

44. *D. rileyi* Hincks, 1955

Sikkim and Nepal.

Nepal: Kathmandu - Balaju (1,400m).

Uncommon.

March.

45. *D. rufescens* (Kirby, 1896)

Himalayas from UP to Sikkim in India and Nepal.

Nepal: Kathmandu - Dakshinkali; Dolpa - "Thulo Bheri" (Beri) river near Tarakot (2,300m); Lamjung - Marsyangdi Valley (1,100-1,250m).

Uncommon.

April, June, Aug.

Occuring under decaying leaves.

46. *D. transversalis* Brindle, 1983

Holotype from Nepal.

Nepal: Mustang - Dana (1,500m); Lamjung - Marsyangdi Valley (640-750m), Phalesanghu.

(Holotype - female).

April, May.

25. Genus: *Haplodiplatys* Hincks, 1955

47. *Haplodiplatys schawalleri* Brindle, 1987

Holotype from Nepal.

Nepal: Nuwakot - Trisuli (600-650m).

(Holotype - female).

July (1983).

48. *H. triangulatus* Brindle, 1987

Holotype from Nepal.

Nepal: Sankhuwasabha - Arun Valley (213m).

(Holotype - female); Uncommon.

Length: 10-11mm; Coll.: L. Swan.

June.

Brindle (1987) considers *Diplatys* sp. as probably *Haplodiplatys*.

Family: Pygidicranidae

Subfamily: Echinomatinae

26. Genus: *Echinosoma*, -

49. *Echinosoma convolutum* Hincks, 1959

Oriental region.

Nepal: Kathmandu.

Rare (1 female only); Coll.: E.S. Ross.

May (1970).

References

- Burr, M. (1910), Fauna of British India - Dermaptera, To-day and Tomorrow Pub. (India), pp. 127.
- Brindle, A. (1974), Dermaptera of Nepal, *Senckenbergiana biol.*, **55**(1/3): 141-164.
- Brindle, A. (1983), Dermaptera of Nepal, *Ibid.*, **63** (1982) (1/2): 91-104.
- Brindle, A. (1987), New Dermaptera records from Nepal, with descriptions of new species and a review of the Himalayan fauna (Insecta), *Courier Forsch. - Inst. Senckenberg*, **93**: 333-351.
- Bey-Bienko, G.S. (1968), On the Orthopteroid Insects (Orthopteroidea) from Eastern Nepal, *Rev. Ent. USSR*, **47**: 106-130.
- Bey-Bienko, G.S. (1971), On the Orthopteroid Insects from Eastern Nepal, *Khumbu Himal*, **4** (1): 55-57.
- Kapoor, V.C.; Malla, Y.K. (1977), Dermaptera of Nepal and India (A taxonomic review), *J. Nat. Hist. Mus.*, **1** (2-4): 151-182.
- Kapoor, V.C.; Malla, Y.K. (1978a), Dermaptera of Nepal, *J. Inst. Sc.*, **1**: 133-138.
- Kapoor, V.C.; Malla, Y.K. (1978b), A new species of the genus *Labia* Leach (Dermaptera) from Nepal, *Oriental Insects*, Honolulu.
- Kapoor, V.C.; Malla, Y.K. (1980), Two new species of earwigs (Dermaptera) along with new record of *Kosmetor bosei* Bharadwaj and Kapoor, from Nepal, *Ent. Ber.*, **40** (1): 10-13.
- Kapoor, V.C.; Malla, Y.K. and Shah, P.J. (1978), On a collection of earwigs (Dermaptera) from Nepal, *J. Nat. Hist. Mus.*, **2** (1-4): 57-67. Kathmandu.
- Shrestha, P.K. (1984), Some insects of Pipar, *Ibid.*, **8** (1-4): 9-21.
- Yamasaki, T. (1965), Earwigs taken by Chiba Univ. Party in Rolwaling Himal, E. Nepal, *J. College Arts and Sc., Chiba Univ., Japan (Nat. Sci. Series)*, **4** (3): 313.

Orthoptera

The Grasshoppers/Locusts and Crickets (Phatyangra/Salaha and Kithro)

Introduction

These are moderate to larger insects with mandibulate mouth parts; prothorax large and distinct, and forewings little thickened forming tegmina or wings, often greatly reduced or wanting and hind pair of legs comparatively more developed for jumping purpose. Females generally with well developed ovipositor and cerci present. Sound producing stridulating and specialized auditory organs frequently developed. Metamorphosis incomplete.

Review

It is only Balderson et al., Bey-Bienko (1968) and Walker (1970) seems to have worked on taxonomy of grasshoppers of Nepal, although Kirby (1914) mentioned the presence of nine species and described one new species. Here is a list of 31 species under 26 genera with one genus, *Nepalacris* and nine species are described from Nepal.

Suborder: Caelifera

Family: Acridiidae

1. Genus: *Acrida* Linnaeus, 1758
 1. *Acrida exaltata* Walker, 1859
Sri Lanka and Nepal.
Nepal: Kavre and Kathmandu (Khumaltar).
 2. *A. gigantea* Herbst, 1794
Africa and Nepal.
2. Genus: *Atractomorpha* Saussure, 1861
 3. *Atractomorpha burri* Bolivar, 1905
Indie (Assam to Cherrapungi).
Nepal: Kathmandu - Khumaltar.
 4. *A. crenulata* Fabricius, 1793
Nepal and India (Bengal and Madras).
3. Genus: *Aularches* Stail, 1858
 5. *Aularches miliaris* Linnaeus, 1758
India, Nepal, Sikkim, Sri Lanka and Java.
 6. *A. punctatus* Drury, 1773
India (Kashmir, Garhwal), Nepal, Tibet, Java and Malay States.
4. Genus: *Caloptenus* Burmeister,
 7. *Caloptenus nepalensis* Walker, 1870
Perhaps described from Nepal. Type in the British Museum.
5. Genus: *Catantops* Schaun, 1853
 8. *Catantops karnyi* Kirby, 1910
Perhaps described from Nepal. Nepal: Ternani(?).

6. Genus: *Crotogonus* , -
 9. *Crotogonus* sp. *indet.*
 Nepal: Kavre and Kathmandu (Khumaltar Agri. Farms).
 (associated with *Amaranthus* crops).
7. Genus: *Dectius*, -
 10. *Dectius coninnus* Walker,
8. Genus: *Gastrimargus* Saussure, 1884
 11. *Gastrimargus transversus* Thunberg, 1815
 India, Nepal, Java and Celebes.
9. Genus: *Hieroglyphus* Krauss, 1877
 12. *Hieroglyphus banian* Fabricius, 1798. The Rice Grasshopper.
 India (Central Prov.), Nepal and Myanmar.
 Pest on paddy and maize crops in Nepal.
13. *H. nigropeltus* ?
 Pest on maize crop in Nepal.
10. Genus: *Mesambria* Stål, 1877
 14. *Mesambria nepalensis* Walker, 1870
 Perhaps described from Nepal. (length 20mm). Type in the British Museum.
11. Genus: *Oxya* Serville, 1831
 15. *Oxya adentata* Will., -
 Nepal: Kavre and Kathmandu (Khumaltar and Kirtipur).
 Pest on groundnut and millet in Nepal.
16. *O. ebneri* Will., -
 Nepal: Kathmandu - Khumaltar.
17. *O. mutidentata* Willemsse, -
12. Genus: *Paratettix* Bolivar, 1877
 18. *Paratettix* sp. *indet.*
 Nepal: Kathmandu - Khumaltar.
13. Genus: *Schistocera* Stål, 1873
 19. *Schistocera gregaria* , - The Desert Locust
 Swarming occurs sometimes during May and June.
20. *S. tatarica* Linnaeus, 1758
 Nepal, Assam, Sri Lanka, W. Asia, South and Central America and
 Mediterranean region.
 Nepal: Length: 40-62mm.

Suborder: Ensifera

Family: Gryllidae

14. Genus: *Acheta*, -
 21. *Acheta (Gryllus) assiusmilis* , - The Field cricket (Kithro)
 Widely distributed in Nepal.

15. Genus: *Brachytrupes*, -
 22. *Brachytrupes portentotus*, - The Large Cricket
 Injurious to maize.
16. Genus: *Gryllotalpa* Beavais, -
 23. *Gryllotalpa africana*, - The Mole Cricket (Twantee)
17. Genus: *Gryllus* Gabricius (1775)
 24. *Gryllus conscitus* Walker, -

List of Orthoptera of Nepal preserved at Central Entomology Division, Khumaltar (Kath.) (Fam. Acrididae) (No detail field data mentioned); reported in the annual report (1989/90).

1. Genus: *Aulacobothrus* Boliver (1902)
 1. *Aulacobothrus unicolor* Balderson et yin, -
2. Genus: *Chorthippus* Fieber (1852)
 2. *Chorthippus himalayanus* Balderson et yin, -
 3. *C. muktinathensis* Balderson et yin, -
 4. *C. nepalensis* Balderson et yin, -
3. Genus: *Coptacra* Stål (1873)
 5. *Coptacra longicornis* Balderson et yin, -
4. Genus: *Eyprepocnemis*, -
 6. *Eyprepocnemis rentzi* Balderson et yin, -
5. Genus: *Fylotrhpidius*, -
 7. *Fylotrhpidius brevicornis* Balderson et yin, -
6. Genus: *Nepalacris*, -
 8. *Nepalacris chitwanica* Balderson et yin, -
7. Genus: *Parvibothrus*, -
 9. *Parvibothrus brunneus* Balderson et yin, -
 10. *P. nepalensis* Balderson et yin, -
8. Genus: *Peripolus* Martinez (1902)
 11. *Peripolus nepalensis* Urasav, -
9. Genus: *Tagasta* Boliver (1905)
 12. *Tagasta longepene* Balderson et yin, -

List of Orthopteroid insects from Eastern Nepal (Family ?) (No detail field data mentioned); reported by Bey-Bienko, G.Y. (1971).

10. Genus: *Anabropsis*, -
 13. *Anabropsis miser* Bey-Bienko, 1968
11. Genus: *Bolivaritettix*, -
 14. *Bolivaritettix nov. spec.* 122 larva male from 3,000m
 15. *B. singlaensis* Hancock, -

- (3) Genus: *Coptacra* Stål (1873)
16. *Coptacra minuta* Bey-Bienko, 1968
12. Genus: *Ergatettix* Kirby (1914)
17. *Ergatettix nodulosus* Hancock, -
- (4). Genus: *Eyprepocnemis* Fieber (1853)
18. *Eyprepocnemis alacris alacris* Serville, -
13. Genus: *Melanogryllus*, -
19. *Melanogryllus chopardi* Bey-Bienko, 1968
14. Genus: *Oedaleus* Fieber (1853)
20. *Oedaleus abruptus* Thunb., -
15. Genus: *Pachyacris*, -
21. *Pachyacris vinosa* Walker, -
16. Genus: *Phlaeoba*, -
22. *Phlaeoba sikkimensis* Ramme, -
17. Genus: *Sphingonotus* Fieber (1852)
23. *Sphingonotus longipennis* Sauss., -
18. Genus: *Synalibas*, -
24. *Synalibas perplexus* Hancock, -
19. Genus: *Systolederus* Boliver (1887)
25. *Systolederus gravelyi* Güther, -
20. Genus: *Teredorus*, -
26. *Teredorus carmichaeli* Hancock, -
21. Genus: *Tridactylus*, -
27. *Tridactylus saussurei* Chop., -
22. Genus: *Turanogryllus*, -
28. *Turanogryllus tarbinskii* Bey-Bienko 1968
23. Genus: *Tylotropidius*, -
29. *Tylotropidius varicornis* Walker, -
24. Genus: *Velarifictorus*, -
30. *Velarifictorus nepalicus* Bey-Bienko 1968
25. Genus: *Xiphidiopsis*, -
31. *Xiphidiopsis janetscheki* Bey-Bienko 1968

References

- APROSC (1991), Glossary of some important plants and animals names in Nepal, Pub.: APROSC, pp. 261.
- Atkinson, E.T. (1974), Fauna of the Himalayas, COSMO Pub., India, pp. 226.
- Bey-Bienko, G.Y. (1971), On the Orthopteroid insects from Eastern Nepal, Khumbu Himal, **4** (1): 55-57.
- Dhamala, B.R. (1982), Estimation of Annual assimilation energy of *Oxya identita* Will.: an Acrididae grasshopper at Kirtipur meadows, Kath., J. Ins. Sc. Tech., **5**: 127-132.
- Gyawali, B.K. (1982), Population dynamics of soyabean insects, J. Nat. Hist. Mus., **6** (1-4): 101-109.
- Gyawali, B.K. (1986), Population dynamics of pea insects, Ibid., **10** (1-4): 113-118.
- Joshi, S.L. (1979), Groundnut insect pests inventory in Khumaltar, Lalitpur, J. Nat. Hist. Mus., **3** (1-4): 95-100.
- Kirby, W.F. (1914), Fauna of British India – Orthoptera (Acrididae), Vol. 1, To-day and Tomorrow Pub., India: pp. 276.
- Mani, M.S. and Singh (1961), Entomological survey of Himalaya Part - XXVI, J. Bombay Nat. Hist. Soc., **58** (2): 387-406.
- NARC (1989/90), Annual Report (1989/90), Central Entomology Section (NARC), Khumaltar (Kath.), Nepal, pp. 32.
- HMG/ARSAP (1981), Training booklet on pesticides used in Agriculture in Nepal (in Nepali). Pub.: HMG/ARSAP.

Dictyoptera

Cockroaches and Mantids (Sanglo)

One genus (*Meretiola*) and two species are described from Nepal, new to science.

Suborder: Blattaria

Family: Blattidae

1. Genus: *Periplaneta*, -

1. *Periplaneta americana*, - The Cockroach (Sanglo)

Oriental region.

Nepal: Terai and Kath. Common at Terai.

List of Blattoptera in Eastern Nepal.

- *Hemipterisca submarginata* Walker, -
- *Maretiola nepalica* Bey-Bienko, 1968 (Genus and species new to science)
- *Parasymploce heralda* Bey-Bienko, 1968
- *Pysnoscelis janetscheki* Bey-Bienko, 1968
- *Rhabdoblatta asymmetrica* Bey-Bienko, 1968
- *R. subcitta* Bey-Bienko, 1968
- *Stilpnoblatta nepalensis* Bey-Bienko, 1968

References

APROSC (1991), Glossary of some important plants and animals names in Nepal, Pub.: APROSC, pp. 261.

Bey-Bienko, G.Y. (1971), On the Orthopteroid insects from Eastern Nepal, Khumbu Himal, **4** (1): 55-57.

Odonata

The Dragon and Damsel flies (**Gaine Kira**)

Introduction

These are larger insects; have two pairs of elongate membranous wings with many longitudinal and cross veins and distinct stigmata. They have large eyes and stronger mandibles on head, and abdomen is slender and elongate. Larvae and pupae are active (niaid) aquatics with their labium modified to prehensile organs for the prey collection; adults are also the predators.

Review

A number of odonates have been recorded from Nepal in Fraser's "The Odonata" in the Fauna of British India in three volumes (1933, 1934, 1936). Syoziro Asahina (1955, 1963, 1964, 1965) of Japan also recorded a number of odonates of Rolwaling and other Himalayan regions collected by different expedition teams and team experts of Japan in 1952-1953, 1961, 1962, 1963, 1964 and 1969/70. Quentin (1970) of Germany also worked on odonates of Nepal in which he recorded a list of 77 species including 21 new records to Nepal. Thereafter, Kiauta of then Yugoslavia contributed on dragonflies of the Himalayan regions and Pokhara in 1972, 1973. He also studied the cytotaxonomy of some odonates from the Khumbu Himal (Sagarmatha region). Lahiri (1979), Kumar and Khanna (1983) also mentioned the presence of some odonates in their contribution.

- Colin Smith (1978, 1981) of England also recorded altogether 26 species of Agriidae (= Calopterygidae) and Gomphidae, particularly from the Kathmandu Valley. Earlier, Sharma (1975) made a note of dragonflies collected in Kathmandu. Mahato reported the presence of 19 species of dragonflies from the Saptari District in 1984, and in 1988 he made a list of 43 species from Ilam, Panchthar, Dang, Banke, Surkhet, Dailekh Districts. Mahato and Edds in 1993 worked on altitudinal distribution of odonate larvae in Gandaki river and reported the larval forms of 19 species. They claimed the presence of 170 species of Odonate species in this country and here is a list of 147 species under 71 genera, two species described from Nepal.

Suborder: Anisoptera

Family: Aeschnidae

Subfamily: Anactinae (Aeschninae)

1. Genus: *Aeschna*, -
 1. *Aeschna taiyal* Asahina, -

Nepal: Kathmandu - Phulchoki (Phulchok: 2,800m).
Less common, 1 female, 4 males (exuvia).
June.
2. Genus: *Anaciaeschna* Selys, 1878
 2. *Anaciaeschna jaspidea* (Burmeister, -)

Nepal: Kathmandu - Chauni (1,350m).
Rare (1 female only).
April.
 3. *A. martini* (Selys, 1897)

Java, India (Nilgiri) and Nepal.

3. Genus: *Anax* Leach, 1815
4. *Anax guttatus* (Burmeister, 1839)
 India (Dehra Dun), Myanmar, Sri Lanka, Taiwan, Java, N. Australia, and many other smaller islands.
 Nepal: Kathmandu - Swyambhu, Chauni, Nagarjun (1,500-1,700m); Dolkha - Ting Sang La (3,400m).
 Less common.
 April, June, Sept.
 Predator (larval form) on mosquito larvae.
5. *A. immaculifrons* Rambur, 1842
 South of Bombay in India, Sri Lanka and Nepal.
 Nepal: from 333-970m; Ilam - Phidim; Kaski - Pokhara.
6. *A. nigrofasciatus nigrolineatus* Fraser, 1935
 India (Dehra Dun, Kurseong, Sikkim) to Nepal from Java to Celebes.
 Nepal: Kathmandu - Godawari (1,600-1,800m); Dolkha - Jiri.
 Less common.
 April to June.
7. *Anax sp. indet.*
 Nepal: Kaski - Pokhara (848m).
4. Genus: *Cephalaeschna* Selys, 1883
8. *Cephalaeschna acutifrons* (Martin, 1909)
 Myanmar and Nepal.
 Nepal: Dolkha - Jiri (2,394m).
9. *C. biguttata* Fraser, -
 Shillong and Assam in India.
 Nepal: Dolkha - Jagat.
 Rare (1 male); Coll.: Imanishi.
 Sept. (1952).
10. *C. masoni* (Martin, 1909)
 India (Assam, Bengal - Darjeeling).
 Nepal: E. Nepal - Thonje (1,800m) (1 male); Kathmandu (2,697m).
 (1); Coll.: Imanishi and others.
 Sept. to Nov.
11. *C. orbifrons* Selys, 1893
 India (Darjeeling, Bengal, Simla).
 Nepal: Kathmandu (upto 2,697m); Dolkha - around Jiri in *Rhododendron* forest (3,100m).
 Sept.
12. *C. viridifrons* (Fraser, 1923)
 Myanmar and Nepal.
 Nepal: Kathmandu; Kaski - Pokhara. From 1,879-2697m.
5. Genus: *Gynacanthaeschna* Fraser, 1922
13. *Gynacanthaeschna sikkima* (Karsch, 1891)
 India (Bengal, Sikkim).

Nepal: Kaski - Pokhara (1,424m).

6. Genus: *Polycanthagyna* Fraser, 1933
 14. *Polycanthagyna erythromelas* MacLahlan, 1896
 India (Bengal, Simla States, Sikkim).
 Nepal: Kaski - Pokhara (1,333-1,879m).

Subfamily: Gynacanthinae

7. Genus: *Gynacantha* Rambur, 1842
 15. *Gynacantha bayadera* Fraser, -
 Nepal: Kaski - Pokhara (Phewa Lake: 915m).
 Coll.: C. Smith.
 Sept.
16. *G. incisura* Fraser, 1935
 India (Loimwe to Shan States)
 Nepal: Kathmandu - Godawari, Nagarjun (1,500-1,700m); Kaski - Pokhara.
 From 606-1,636m.
 Uncommon.
 Aug., Sept.
17. *G. japonica* Bartenef, -
 Japan and Formosa.
 Nepal: Kathmandu; Kaski - Pokhara; Lamjung - Khudi. From 485-1,788m.
 Coll.: Imanishi and others.
 Sept. (1952).

Family: Chlorogomphidae

8. Genus: *Chlorogomphus* Selys, 1854
 18. *Chlorogomphus atkinsoni* (Selys, 1878)
 India (Darjeeling, Sikkim).
 Nepal: Sindhu Palchok? - Risingo.
 Rare (1 male only).
 June.
19. *C. mortoni* Fraser, -
 Nepal: Sunsari - Dharan (Sardu Khola: 730m).
 Rare (1 male); Coll.: C. Smith.
 May.
20. *C. olympicus* Fraser, 1933
 Nepal: Godawari (1,600-1,800m); Dolkha - Jiri (2,000m).
 Quite common.
 May, June.
21. *C. preciosus* (Fraser, 1929)
 India (Darjeeling Dist.).
 Nepal: Sunsari - Dharan; Ilam.
22. *C. selysi* Fraser, 1929
 Nepal: Godawari (1,600-1,800m), Phulchoki (Phulchok: 2,300-2,500m);
 Solukhumbu - Jubing (2,600m).
 May, June.

Family: Cordulegasteridae

Subfamily: Cordulegasterinae

9. Genus: *Allogaster*, -

23. *Allogaster latifrons* Selys, 1878

Nepal: Sindhu Palchok - Tarke Bhanjyang; Kathmandu - Phulchoki (2,300-2,500m); Dolkha - Jiri; Ramechhap - Thodung (3,200m); Solukhumbu - Junbesi (Jumbesi: 2,750m).

Uncommon.

May to Aug.

10. Genus: *Anotogaster* Selys, 1854

24. *Anotogaster basalis palampurensis* Fraser, 1929

Nepal and India (Sikkim).

25. *A. nipalensis* Selys, 1850

Holotype from Nepal. Also present in India (Sikkim, Darjeeling).

Nepal: Solukhumbu - Jubing (2,600m); Taplejung - Rakhato (2,400m); Kathmandu - Nagarjung (1,500-1,700m), Godawari and Phulchoki (2,300-2,500m); Ramechhap - Thodung (3,200m); Dolkha - Jiri; Bara - Trebanee; - Sisneri; - Chalsa; - Sarti-Aga (1,860-2,400m).

Uncommon; Coll.: Kawakita and others.

June, July, Sept., Oct.

11. Genus: *Neogaster*, -

26. *Neogaster sp. indet.*

Nepal: Kathmandu; Solukhumbu. From 2,697-3,060m.

Family: Corduliidae

Subfamily: Corduliinae (=Epopthalminae)

12. Genus: *Macromia* Rambur, 1842

27. *Macromia cingulata* Rambur, -

Nepal: Dang Valley.

Rare 1 male only.

July.

28. *M. moorei* Selys, 1874

India (Dehra Dun, NE. Himalayas - Shillong, Simla Hilla, Assam, Darjeeling Dist.).

Nepal: Kathmandu - Godawari (1,600-1,800m); Makawanpur - Bhainse Dovan (750m); Kavre - Banepa; Ilam.

Uncommon.

July, Aug.

29. *M. trituberculata* Fraser, -

Shillong and Assam in India.

Nepal: Kavre Palanchok - Dolalghat (600m); Sindhu Palchok - Panchkhal (950m), Sikkhalpur (1,010m).

Uncommon (2 males tenerae only).

Subfamily: Idionychinae

13. Genus: *Idionyx* Hagen, 1867

30. *Idionyx stevensi* Fraser, -

Nepal: Taplejung - Rakhato (2,400m); Kathmandu - Godawari; Ramechhap - Khimti Khola.

Uncommon (2 males only).

May, July.

Family: Gomphidae

Subfamily: Epigomphinae

14. Genus: *Macrogomphus* Selys, 1854

31. *Macrogomphus seductus* Fraser, 1926

India (Bengal, Assam).

Nepal: Sunsari - near Dharan.

Rare (1 e.g. only).

May.

Subfamily: Gomphinae

15. Genus: *Anisogomphus* Selys, 1857

32. *Anisogomphus bivittatus* (Selys, 1854)

India (Darjeeling Dist., Kumaon-Simla).

Nepal: Godawari, Phulchoki (Phulchok), Sundarijal, Nakkhu Khola, Nagarjun (1,500-1,700m); Dolkha - Jiri; Taplejung - Mamankhi (3,600m); - Majhgaon to Kasigaon (1,890-1500m); Solukhumbu - Jubing (2,600m); - Lohare Khola, Reuti Khola.

Coll.: Kawakita and others.

May to Aug., Oct.

33. *A. occipitalis* (Selys, 1854)

India (Dehra Dun, N. Bengal, Assam) to Nepal.

Nepal: Kathmandu - Godawari, Nagarjun (1,500-1,700m), Suryabinayak; Makawanpur - Chisapani Gadhi (1,600m), Belwa (350m); Sindhu Palchok? - Risingo (Resangu); Ramechhap - Likhu Khola with Number (Larval form).

Less common.

May to July.

34. *A. orites* Laidlaw, -

Nepal: Kathmandu - Godawari.

Uncommon (2 females only).

May, June.

16. Genus: *Burmagomphus* Williamson, 1907

35. *Burmagomphus pyramidalis* Laidlaw, 1922

Western and Southern India.

Nepal: Kathmandu - Godawari; Kaski - Pokhara (near Phewa Tal).

17. Genus: *Davidius* Selys, 1878

36. *Davidius aberrans aberrans* (Selys, 1873)

India (N. India and Assam).

Nepal: Kathmandu; Mugu; - Tsumdung - Tsumje: 3,130m; Dolkha - Tamakosi Valley, Ting-Sang-La (2,300-3,000m).

Uncommon; Coll.: Kawakita and others.

May, June, Aug.

37. *D. zallorensis delineatus* Fraser, 1926

India (Gantok to Darjeeling Dist.).

Nepal - Jumla; Solukhumbu - Jubing (1,600m); Kathmandu - Godawari.

Uncommon.

June, July.

18. Genus: *Lamelligomphus* Fraser, 1922
 38. *Lamelligomphus biforceps* (Selys, 1878)
 China, Indo-China, Malaysia, India (Dehra Dun, Bengal, Sikkim) and Myanmar.
 Nepal: Kathmandu - Nagarjun (1,500-1,700m); Kavre Palanchok - Dolalghat (800-1,200m); Sindhu Palchok - Lamosangu; - Ananda Ban (Hill).
 Uncommon.
 July, Aug.
19. Genus: *Mesogomphus* Förster, 1906
 39. *Mesogomphus linaeatus* Selys, 1850
 India (Dehra Dun, Bengal, Poona, Bangalore, Madras) to Myanmar
 Nepal: Gorkha; Kathmandu (1,400m); Chitwan - Megouli (3,00m).
 Uncommon.
 April, Aug.
20. Genus: *Nepogomphus* Fraser, 1934
 40. *Nepogomphus modestus* (Selys, 1878)
 India (Bengal, Assam), Myanmar and Sumatra.
 Nepal: Far western Nepal; - Reuti Khola; Kathmandu Valley (Godawari).
 Oct.
21. Genus: *Onychogomphus* Selys, 1854
 41. *Onychogomphus biforceps* (Selys, -)
 Nepal: Kathmandu - Godawari; - Lohari Khola, Reuti Khola, Samri Bhanjyang (1,300m).
 Uncommon; Coll.: Imanishi and others.
 July, Sept., Oct.
42. *O. cerastes* (Selys, 1854)
 North India and Nepal.
43. *O. duaricus* Fraser, 1924
 India (Bengal).
 Nepal: Sunsari - near Dharan.
44. *O. m-flarum* Selys, 1854 (= *O. bistrigatus* Hagen, 1854)
 India (Darjeeling Dist.).
 Nepal: Kathmandu - Godawari (1,600-1,800m), Nakkhu Khola, Bajramati; Kavre Palanchok - Huxe (1,000-1,400m); Makawanpur - Belwa (320m); - Reuti Khola, Lohare Khola.
 Less common.
 May, Aug.
45. *O. risi* (Fraser, -)
 Nepal: - Reuti Khola.
 Uncommon (2 females, 1 male).
 Oct.
46. *O. schmidtii* Fraser, 1937
 NW. India.
 Nepal: Kathmandu - Godawari; Sindhu Palanchok - Tatopani (1,400-

1,500m); - Kanchok.

Uncommon (2 females only); Coll.: Imanishi and others.

June, July, Sept. (1952).

47. *O. striatus* Fraser, 1922

India (Nilgiri) and Nepal.

Nepal: - Lohare Khola near Ilam.

Rare (1 male).

June, Oct.

22. Genus: *Platygomphus* Selys, 1854

48. *Platygomphus dolabratus* Selys, 1854

India (Bihar, Bengal).

Nepal: at higher altitude than the others, at Lumle (near Pokhara) and near Jiri (Dolkha).

23. Genus: *Stylogomphus* Fraser, 1922

49. *Stylogomphus inglisi* Fraser, 1922

India (Darjeeling Dist.).

Nepal: Ilam - near thick jungle stream.

May.

Smallest Gomphid in Nepal (Smith, 1981).

Subfamily: Ictininae (=Ictinogomphinae)

24. Genus: *Ictinus* Rambur, 1842

50. *Ictinus pertinax* Selys, -

Nepal: Kaski - Pokhara.

Uncommon (2 males only).

June.

51. *I. rapax* (Rambur, 1842)

India, Myanmar, Sri Lanka and Malaysia.

Nepal: Kaski - Pokhara (near Phewa Tal); Kathmandu - Nagarjun (1,500-1,700m).

July.

Family: Libellulidae

Subfamily: -

25. Genus: *Cratilla*, -

52. *Cratilla lineata* (Brauer, -)

Nepal: - Phikri Khola (855m).

Coll.: C. Smith.

Oct.

Subfamily: Brachydiplactinae

26. Genus: *Brachydiplax* Brauer, 1868

53. *Brachydiplax sobrina* (Rambur, 1842)

Nepal: - Hangdanwa; Kathmandu - Nagarjun (1,500m).

Less common.

May, Aug.

Subfamily: Diastatopidinae

27. Genus: *Palpopleura* Rambur, 184254. *Palpopleura sexmaculata sexmaculata* (Fabricius, 1787)

India (Dehra Dun) to Nepal, Sri Lanka, Malaysia, Indo-China and China.

Nepal: from Terai to 2,394m; Makawanpur - Bhimphedi, Jhuwani (200m); Kathmandu - Godawari, Nagarjun, Chauni; Lamjung - Khudi; Tehrathum - Khunga (1,500m); Kanchanpur; - Khopang-Bare Pirke (790-690m), Cari Khola; Ramechhap - Bhandar; Dolkha - Jiri, Tama Kosi Valley; Sindhu Paichok - Sunkosi Valley; - Sisneri.

Uncommon; Coll.: Imanishi, Kawakita and others.

April to June, Aug. to Oct.

Subfamily: Leucorrhiniinae (= Rhyotheminae)

28. Genus: *Rhyothemis* Hagen, 186755. *Rhyothemis triangularis* Kirby, 1889

India, Myanmar and Sri Lanka.

Nepal: Kaski - Pokhara.

56. *R. variegata* (Linnaeus, 1763)

India, Sri Lanka and Myanmar.

Nepal: Kathmandu - Chauni, Patan; Kanchanpur - Suklaphanta; Sunsari - Dharan.

Common.

Aug.

Subfamily: Libellulinae

29. Genus: *Orthetrum* Newman, 183357. *Orthetrum brunneum* (Fonscolombe, 1873)

S. Europe, N. Africa, Asia (India, Nepal).

Nepal: Kathmandu (1,687m).

58. *O. devium* Needham, 1930

Nepal: Kathmandu - Godawari; Dolkha - Jiri.

Uncommon.

June, Aug.

59. *O. glaucum* (Brauner, 1865)

India (Dehra Dun) to Nepal, Philippines, Malay Archipelago, Sri Lanka, New Guinea, Timor, S. China, etc.

Nepal: Taplejung - Dovan; Kathmandu - Godawari, Nagarjun; Kaski - Ulleri, Sallentar, Naudhara to Suikhet, Bhurumdi to Ulleri (1,120-2,020m); - Bhirkuna, Samri Bhanjyang, Tharbu; Makawanpure - Megouli, Chisapani Gadhi; Lamjung - Khudi; Dolkha - Jiri, Tama Kosi; - Reuti Khola; Dang Valley; Ramechhap - Likhu Khola; Solukhumbu - Jubing, Sete.

Uncommon; Coll.: Kawakita and others.

April to Dec.

60. *O. japonicum interum* MacLachlan, 1894

India (Kashmir, Himalayan tracts of Bengal, Assam), Tibet and SW. China.

Nepal: Kathmandu - Phulchoki, Godawari, Nagarjun; Ilam - Mai Pokhari, river side of Maitakhurni (410m); Ramechhap - Likhu Khola (1,700m), Bhandar; Dolkha - Jiri (2,000m), Thodung; Solukhumbu - Jubing, Sete, Namche Bazar (3,500m); Mustang - Tukuhe (Thaksang; 2,900m); Panchthar - Phidim.

Less common.

April to Aug.

61. *O. luzonicum* Brauer, 1868
 India, Sri Lanka, Nepal, Java, Philippines and Sumatra.
 Nepal: from 700-1,576m; Surkhet; Saptari - Kanchanpur; Kathmandu - Godawari; Nuwakot - Trisuli Bazar to Dhanphedi, Kakani; Kavre Palanchok - Chaubas (=Tschaubas); Dolkha - Tama Kosi (1,000m); Chitwan - Jhuwani (200m); Lamjung - Khudi; - Khopang.
 Uncommon; Coll.: Imanishi, Kawakita and others.
 March, May, Aug. to Oct.
62. *O. pruinatum neglectum* (Rambur, 1842)
 India (Dehra Dun) to Myanmar, Sri Lanka, China, Indo-China, Taiwan, Hong Kong, Thailand and Malaysia.
 Nepal: Ilam; Taplejung - Dhoban; Dhankuta (1,364-2091m), Solukhumbu - Jubing, Sete; Kathmandu - Bhaktapur, Godawari, Nagarjun, Balaju; Nuwakot - Trisuli (650m) to Dhanphedi (720m); Gorkha - Arughat (Kanchokphedi: 610-960m); Dolkha - Jiri, Tama Kosi; Chitwan - Jhuwani, Megouli; Ramechhap - Bhandar; Kaski - Sallentar; Kavre Palanchok - Dolalghat; Dang Valley; Surkhet; Sisneri; Chalsa.
 Less common; Coll.: Imanishi, Kawakita and others.
 March to Oct.
63. *O. ramburi* (Selys, 1848)
 Nepal: Dolkha - Jiri (2,000m).
 Uncommon (1 female, 1 male only).
 May.
64. *O. sabina* (Drury, 1770)
 Ranges from Cyprus, NE. Africa, near East Throughout Indian subcontinent to Malaysia and Australia.
 Nepal: Kavre Palanchok - Huxe (1,200m); Kathmandu - Nagarjun, Balaju; Tehrathum - Tharbu (1,300m); Phanchthar - Phidim; Kaski - Pokhara, Sallentar - Katunge-Sallentar (1,430-740m); Banke - Nepalgunj; Nuwakot - Trisuli Bazar (600m), Kakani, Dhanphedi; Saptari - Kanchanpur; - Ganesh Himal; Chitwan - Jhuwani (Jhawani: 200m), Megouli (300m); Dang Valley.
 Less common; Coll. Imanishi, Kawakita, Udibu and others.
 March to Oct., Dec.
65. *O. taeniolatum* (Schneider, 1845)
 India (Dehra Dun) to Nepal and countries bordering Mediterranean.
 Nepal: Kathmandu - Chauni; Dhankuta; Gorkha; Makawanpur - Belwa; - Sikha; Kalika Pokhari; - Lohare Khola; Kaski - Ghorepani (Goropani: 2,700m); Sindhu Palchok - Tatopani, Sunkosi Valley; Kavre Palanchok - Jaraetar (1,700m).
 Less common.
 March to May, July, Aug., Oct.
66. *O. triangulare triangulare* (Selys, 1878)
 India (Dehra Dun) to Myanmar, Sri Lanka, Nepal to Vietnam in the East.
 Nepal: from 394 - 2,180m; Kathmandu - Tika Bhairab, Nagarjun, Godawari; Lamjung - Khudi; Makawanpur - Bhimphedi; Dolkha - Jiri; Kavre Palanchok - Chautara; Ramechhap - Khimti Khola, Likhu Khola, Bhandar; Sindhu Palchok - Sunkosi Valley, Tatopani; Solukhumbu - Jubing; - Aga-Kannbung (2,180-1,400m), Maghgaon to Kasigaon (1,890-1500m); Panchthar - Phidim; Dang

Valley; Surkhet; Sisneri; (Lamchaure).
 Uncommon; Coll.: Imanishi, Kawakita and others.
 May to Oct.

67. *Orthetrum* sp. indet.
 Nepal: Okhal Dhunga - Likhu Khola near Jiri.
 (1 female broken).
 June.

68. *Orthetrum* sp. indet.
 Nepal: Kavre Palanchok - Boiti (1,800-1,500m).
 Rare (1 male only)
 June

30. Genus: *Potamarcha* Karsch, 1890

69. *Potamarcha congener* (Rambur, 1842)
 India, Nepal, Sri Lanka, Malaysia, and some parts of Indonesia.
 Nepal: Banke - Nepalgunj.
 Rare (1 female only).
 Oct.

70. *P. obscura* (Rambur, 1842)
 India (Dehra Dun) to Myanmar, Sri Lanka, Taiwan, Malay Archipelago,
 Philippines, Java, Sumatra and New Guinea.
 Nepal: Saptari - Kanchanpur (forest); Kathmandu - Nagarjun (1,350m);
 Kavre Palanchok - Dolalghat, Huxe (1,200m).
 Uncommon.
 May, June, Aug.

Subfamily: Pantaliinae (= Trameinae)

31. Genus: *Pantala* Hagen, 1861

71. *Pantala flavescens* (Fabricius, 1798)
 Dehra Dun to Nepal, Myanmar, Sri Lanka, Tibet, Circum and Subtropical
 Micronesia, Morocco, Sumatra, Bali and Borneo.
 Nepal: East Nepal; Kathmandu - Chauni, Nagarjun, Godawari; Kaski -
 Pokhara, Naudhara to Suikhet, Birethanti; Tehrathum - Tharpu; Solukhumbu
 - Dhudh Kosi Valley, Tangpoche (3,400m); Lamjung - Khudi, Majhgaon to
 Baseri (1,500-1,050m); Gorkha - Arughat Bazar to Kale Pasal (620-700m); -
 Changu La; Babai; Ramechhap - Bhandar; Dolkha - Sikris (Sikri: 1,800m),
 Namdu (1,700m); Kavre Palanchok - Huxe; Sindhu Palchok - Tatopani,
 Sunkosi Valley; Chitwan - Jhuwani (200m); Banke - Nepalgunj.
 Uncommon; Coll.: Kawakita and others.
 March, April, Aug. to Oct.

32. Genus: *Tramea* Hagen, 1861

72. *Tramea basilaris burmeisteri* Kirby, 1889
 Dehra Dun to Nepal, Myanmar, Sri Lanka and Malaysia.
 Nepal: from 242-1,485m; Kathmandu - Chauni, Nagarjun (1,500-1,700m);
 Jhapa - Sanischare; Kaski - Pokhara.
 Uncommon.
 Nov.

73. *T. limbata* (Dasjardins, 1832)
 Southern India, Sri Lanka and extends from Africa, Madagascar and

Australia.

Nepal: Kaski - Pokhara (1,455m).

74. *T. virginia* (Rambur, -)

Myanmar, Indo-China, Formosa and Siam.

Nepal: Kaski - Pokhara.

Subfamily: Sympetrinae

33. Genus: *Acisoma* Rambur, 1842

75. *Acisoma panorpoides panorpoides* Rambur, 1842

Dehra Dun, Sri Lanka, Java, Bali, Philippines, Celebes, China, Japan, Thailand, Singapore and other Smaller Islands.

Nepal: East Nepal; Kathmandu - Nagarjun; Kaski - Pokhara; Dolkha - Tama Kosi Valley; Ramechhap - Likhu Khola (1,800-2,200m), Bhandar; Banke - Nepalgunj.

Less common.

June, Aug., Oct.

34. Genus: *Brachythemis* Brauer, 1868

76. *Brachythemis contaminata* (Fabricius, 1793)

India (Dehra Dun) to Nepal, Myanmar, Sri Lanka, Thailand, Singapore, Malaya, Taiwan, China, Philippines, Java and Sumatra.

Nepal: Kathmandu (1,364-1,394m); Saptari - Kanchanpur; Chitwan - Megouli (300m), Jhuwani (2,000m).

Fairly common.

March, May.

35. Genus: *Bradinopgya* Kirby, 1893

77. *Bradinopgya geminata* (Rambur, 1842)

India (Dehra Dun) to Nepal and Sri Lanka.

36. Genus: *Crocothemis* Brauer, 1868

78. *Crocothemis erythraea* (Brulle, 1832)

S. Europe, Africa from Cape to Cairo, Arabia, Mesopotamia and NW. India.

Nepal: from 303-3,080m; Kathmandu; Dang Valley; Kaski - Birethanti, Naudhara-Suikhet, Pokhara; Saptari - Kanchanpur; Banke - Nepalgunj; Butwal; Dhankuta; Mustang - Ghara? (Ghara); - Kalika Pokhari.

Uncommon.

March, June to Oct.

79. *C. servilia servilia* (Drury, 1770)

India, (Dehra Dun) to Nepal, Myanmar, Sri Lanka, Japan, throughout Tropical Asia, Philippines, Australia and Southwards to Sundaic Archipelago.

Nepal: Makawanpur - Hetauda (Hetaura), Bhimpheidi; Nuwakot - Trisuli Bazar (600m) to Dhanpheidi (700m); Kathmandu - Godawari, Nagarjun (1,364-1,848m); Panchthar - Phidim; Taplejung - Dobhan, Taplethok (?); Saptari - Kanchanpur; Kaski - Suiket, Ulleri, Sallentar, Thonga Theine (3,080-2,640m); Gorkha - Arughat to Khanchok Phedi (610-960m); - Samri Bhanjyang (720-1,800m), Thonje (1,800m), Jaraetar (1,700m); Dolkha - Tama Kosi Valley, Namdu (1,700m); Chitwan - Megouli, Jhuwani; Solukhumbu - Jubing; Lamjung - Khudi; Ramechhap - Likhu Khola; Banke - Nepalgunj; - Bikhola, Kalika Pokhari, Lamachaur, Reuti Khola, Sisaghat Bazar (800-520m).

Common; Coll.: Imanishi, Kawakita and others.

April to Aug., Oct., Nov.

37. Genus: *Diplacodes* Kirby, 1889
80. *Diplacodes lefebvrei* (Rambur, -)
Nepal: Parsa - Birgunj.
(1 male only).
June.
81. *D. nebulosa* (Fabricius, 1793)
Western India, Myanmar and Sri Lanka to Australia and Southwards to Java.
Nepal: from 545-848m; Gorkha; Pokhara; Kanchanpur.
82. *D. trivialis* (Rambur, 1842)
Mainly in India (Dehra Dun) to Nepal, Sri Lanka, Iraq, Taiwan, Thailand, Japan, Australia, Philippines and other smaller Islands.
Nepal: from 364-1,800m; Kanchanpur; Kathmandu - Godawari, Nagarjun; Taplejung - Mamankhi (3,600m), Dobhan; Dang Valley; Surkhet; Nuwakot - Trisuli Bazar (600m); Banke - Nepalgunj; Kaski - Birethanti to Chandrakot (1,250m), Naudhara to Suikhet; Makawanpur - Bhimphedi; Kavre Palanchok - Banepa, Huxe; Dolkha - Tama Kosi; - Kalika Pokhari.
Less common; Coll.: Udibu, Imanishi and others.
July to Oct.
38. Genus: *Nannophya* Rambur, 1842
83. *Nannophya pygmaea* Rambur, -
Lower Myanmar, India and Nepal and extending from Borneo, Celebes, Sumatra through Malaysia and Indo-China.
Nepal: Eastern part.
39. Genus: *Neurothemis* Brauer, 1867
84. *Neurothemis fulvia* (Drury, 1773)
Throughout India, Myanmar, Sri Lanka, Thailand, Malacca, Indo-China and Sumatra.
Nepal: from 788-2,394m; East Nepal; Kathmandu - Balaju, Nagarjun, Sankhu (1,600m), Godawari, Sundarijal, Bautinysmre(?), Chauni, Bhaktapur; Lamjung - Khudi; Kaski - Pokhara (upto 2,000m); Baseri to Arughat Bazar (1,050-620m); Makawanpur - Bhimphedi; Nuwakot - Trisuli Bazar (600m), Kanchok, Dhanphedi, Malepatan to Sisaghat (520-730m); Kavre Palanchok - Huxe, Dolalghat, Banepa (1,600m); Dolkha - Tama Kosi.
Common; Coll.: Imanishi, Kawakita and others.
March to Sept., Oct.
85. *N. intermedia*, -
- i. *N. intermedia atalanta* Ris, 1916
Assam, Sikkim.
Nepal: Dolkha - Kiratechhap to Charange Khola (1,800-1,160m).
- ii. *N. intermedia degener* Selys, -
Nepal: Kathmandu.
June.
- iii. *N. intermedia intermedia* (Rambur, 1842)
India, Sri Lanka and Myanmar.
Nepal: from 1,364-1,727m; Kavre Palanchok - Ravi (near Banepa),

Dolalghat, Huxu; Kaski - Pokhara; Kathmandu - Godawari, Balaju, Chauni, Nagarjun; Lamjung - Khudi; Dang Valley; - Bhirkuna.
 Uncommon; Coll.: Imanishi, Udibu and others.
 April to Oct., Dec.

86. *N. tullia tullia* (Drury, 1773)
 Nepal to Indonesia, India, Sri Lanka and Southern Thailand in the East.
 Nepal: Kaski - Pokhara; Kanchanpur - Suklaphanta; Chitwan - Megouli.
 Less common.
 March.
40. Genus: *Pseudotrimea* Fraser, 1920
 87. *Pseudotrimea prateri* Fraser, 1920
 India (Darjeeling Dist., Sikkim).
 Nepal: Kaski - Pokhara; Dolkha - Jiri (1 female only).
 April.
41. Genus: *Sympetrum* Newman, -
 88. *Sympetrum commixtum* (Selys, 1884)
 India (Dehra Dun) to Nepal and Sri Lanka.
 Nepal: from 1,515-3,500m; Manangbhot (3,500m); Kathmandu - Bhaktapur; - Pisang; Mustang - Tukuhe (2,650m).
 Less common; Coll.: Imanishi.
 July, Oct.
89. *S. hypomelas* (Selys, 1884)
 Tibet, China, Myanmar and India (N. Bengal, Sikkim, Assam, Meghalaya and Arunachal Pradesh).
 Nepal: Dolkha - Jiri; Ramechhap - Bhandar.
 Less common.
 Aug.
90. *S. orientale* (Selys, -)
 Nepal: Kathmandu.
 Aug.
- Subfamily: Trithemistrinae (= Tritheminae)
42. Genus: *Trithemis* Brauer, 1868
 91. *Trithemis aurora* (Burmeister, 1839)
 Throughout Indian subcontinent including Myanmar. Also in Sumatra, Java, Philippines, Malaya, Taiwan, Celebes, Borneo and other smaller Island.
 Nepal: Kathmandu - Tika Bhairab, Godawari; Makawanpur - Hetauda (608m); Dhankuta; Pokhara (Kaski); Chitwan - Jhuwani (200m); Dang Valley; Lohare Khola; Reuti Khola.
 Fairly common.
 March, May to July, Oct.
92. *T. festiva* (Rambur, 1842)
 Throughout Indian subcontinent including Myanmar. Also in Sumatra, Java, Philippines, Malaya, Taiwan, Celebes, Borneo and other smaller Island.
 Nepal: E. Nepal - Dhankuta; Kathmandu - Chauni, Godawari, Nagarjun; Sindhu Palchok - Tatopani; Nuwakot - Kakani, Dhanphedi to Trisuli Bazar (700-720m), Chaturali to Dhanphedi (700m), Betrawati (650m); - Tarkughat

Bazar (600m); Kaski - Male Patan to Pokhara, Bhurundi to Ulleri (1,120-2,020m); Chitwan - Jhuwani; Ramechhap - Likhu Khola; Kavre Palanchok - Boiti (1,800-1,500m), Huxe; Makawanpur - Bhimphedi (400m), Belwa (350m); Dang Valley; Reuti Khola.

Uncommon; Coll.: Kawakita, Imanishi and others.

March to Oct.

93. *T. pallidinervis* (Kirby, 1889)

Indian subcontinent to Taiwan, Philippines and Southwards to Singapore and Malaya.

Nepal: Solukhumbu - Jubing (2,600m); Saptari - Kanchanpur; Kaski - Pokhara localities upto 2,600m; Chitwan - Megouli (300m); Makawanpur - Belwa (350m).

Less common.

March to May.

Suborder: Anisozygoptera

It includes mostly the extinct Mesozoic forms and the living form includes *Epiophlebia* from Nepal, India and Japan.

Family: Epiophlebiidae

43. Genus: *Epiophlebia*, -

94. *Epiophlebia laidlawi* Tillvard, 1921

India (Darjeeling) to Nepal.

Nepal: Kathmandu; E. Nepal - Chittre Valley (2,700m - Dhankuta?).

Coll.: T. Haruta.

July.

Suborder: Zygoptera

Family: Calopterygidae (= Agriidae)

Subfamily: Agriinae

44. Genus: *Vestalis* Selys, 1853

95. *Vestalis gracilis gracilis* (Rambur, 1842)

Myanmar, Nepal and India (Bengal, Assam).

Nepal: Kaski - Pokhara; Gorkha; Dang Valley.

Uncommon.

July, Oct.

Subfamily: Caliphaenae

45. Genus: *Caliphaea* Selys, 1859

96. *Caliphaea confusa* Selys, 1859

Tibet, South-Western China, India (Bengal and Assam).

Nepal: Kathmandu - Godawari, Shivapuri; Dang Valley.

Uncommon.

May, July, Oct.

Subfamily: Calopteryginae

46. Genus: *Neurobasis* Selys, 1859

97. *Neurobasis chinensis chinensis* (Linnaeus, 1758)

India (Dehra Dun) to Myanmar and Sri Lanka.

Nepal: Kathmandu - Godawari, Bajramati, Nakkhu Khola; Kaski - Pokhara, Suikhet (1,100m), Male Patan (Sallentar); Makawanpur - Hetauda (300m), Bainse (730m), Bhimphedi (400m), Belwa (350m); Kavre Palanchok - Chautara to Sisaghat Bazar; - Reuti Khola.

Less common; Coll.: Imanishi and others.

March to May, July, Sept. Oct.

Subfamily: Epallaginae

47. Genus: *Allophaea* Fraser, 1929

98. *Allophaea ochracea* (Selys, 1859)

Assam, Myanmar, Siam, Annam and Malaca.

Nepal: Eastern Terai in thick jungle nearby a stream.

June.

Subfamily: Libellaginae

48. Genus: *Libellago* Selys, 1840

99. *Libellago lineata lineata* (Burmeister, 1839)

N. India (Dehra Dun, Assam), Myanmar. Also throughout the Sundaic Archipelago and some Islands.

Nepal: Kaski - Pokhara near Phewa Tal.

Subfamily: Philoganginae

49. Genus: *Philoganga* Kirby, 1890

100. *Philoganga montana* (Selys, 1859)

India (Assam, Bengal).

Nepal: near Ilam in thick jungle.

May.

Family: Chlorocyphidae

Subfamily: Chlorocyphinae

50. Genus: *Rhinocypha* Rambur, 1842

101. *Rhinocypha biforata* Selys, -

Nepal: Bara - Nijgadh near jungle stream.

Uncommon (2 males only).

June.

102. *R. cuneata* Selys, 1853

India (W. Bengal, Assam), Tibet.

Nepal: near Ilam.

(Rare, Smith).

May.

103. *R. quadrimaculata quadrimaculata* Selys, 1853

India (Dehra Dun, Kashmir, Sikkim, Darjeeling) to Nepal and Myanmar.

Nepal: Kathmandu - Zoo, Suryabinayak, Chauni (1,400m); Sunsari - Dharan; Kaski - Pokhara; Makawanpur - Hetauda (300m), Bhainse Dovan (730m), Bhimphedi; Kavre Palanchok - Ravi (1,200m) near Banepa, Huxe; Gorkha - Arughat Bazar (Kanchok Phedi: 610-960m), Belwa (350m); Ilam; Sindhu Palchok - Chautara (984-1,377m).

Common; Coll.: Imanishi, Kawakita and others.

March, April, July to Sept.

104. *R. trifasciata trifasciata* Selys, 1853

India (Dehra Dun, Punjab, Nainital, Kailana - UP) to Nepal.

Nepal: Kathmandu - Godawari, Balaju, Nakkhu Khola, Dakshin Kali, Bajramati, Surya Binayak, Nagarjun (Nagarjong); Kaski - Pokhara; - Bhirkuna.

Less common. Coll.: Imanishi and others.

Aug. to Dec.

105. *R. unimaculata* Selys, 1853

India (Dehra Dun, Bengal, Assam, Kalimpong).

Nepal: Kathmandu - Godawari (1,600-1,700m), Tika Bhairab, Dakshin Kali, Nakkhu Khola, Nagarjun, Budhanilkantha; Makawanpur - Bhaise Dovan (730m); Kaski - Pokhara; Dolkha - Tama (Tamba) Kosi Valley; - Dovan, Reuti Khola.

Less common.

May to June.

Family: Coenagriidae (Coenagrionidae)

Subfamily: -

51. Genus: *Himalagrion*, -

106. *Himalagrion exclamatoris* Fraser, -

Nepal: Ilam - Mai Pokhari.

Rare (1 female only).

Subfamily: Agrioninae

52. Genus: *Aciagrion* Selys, 1891

107. *Aciagrion hisopa* (Selys?, -)

Nepal: Kaski - Pokhara.

Rare (1 female only).

June.

108. *A. pallidum* Selys, -

African and Indian continents - Myanmar, Sri Lanka. Also in Australia and Borneo.

Nepal: Kathmandu (1,758-2,091m); Lamjung - Khudi (1 female).

Coll.: Imanishi and others.

Sept. (1952).

53. Genus: *Agriocnemis* (Selys, 1869)

109. *Agriocnemis lacteola* Selys, -

Africa to Australia and Oriental region.

Nepal: Saptari - Kanchanpur; Banke - Nepalgunj.

Common at Saptari.

Oct.

110. *A. pygmaea* (Rambur, 1842)

China, Myanmar, Sri Lanka, Singapore, Java, Australia, Pacific Island. Also in the Oriental region.

Nepal: Kathmandu; Sunsari - Dharan; Saptari - Kanchanpur; Kaski - Pokhara; Lohare Khola.

Uncommon.

May, Oct.

54. Genus: *Cercion*, -

111. *Cercion parvum* (Selys, 1876)

Southern Asia.

Nepal: Kaski - Pokhara.

Uncommon.

March, June.

55. Genus: *Coenagrion* Kirby, 1890
 112. *Coenagrion dyeri* Fraser, 1919
 Peninsular India.
 Nepal: Sunsari - Dharan; Saptari - Kanchanpur.
 Uncommon.

56. Genus: *Onychargia* Selys, 1865
 113. *Onychargia atrocyana* Selys, 1865
 India and Myanmar.
 Nepal: Saptari - Kanchanpur.
 Rare (1 female only).

Subfamily: Coenagriinae

57. Genus: *Ceriagrion* Selys, 1876
 114. *Ceriagrion azureum* Selys, 1891
 Nepal: Kathmandu - Swayambhu, Nagarjun (Nagargeon: 1,500-1,700m).
 Uncommon.
 June, July.

115. *C. coromandelianum* (Fabricius, 1790)
 India (Dehra Dun), Myanmar, Sri Lanka, Malaysia, Hainan and Indo-China, S. China and Thailand.
 Nepal: Bara - Nepalgunj; Ilam - Mai Pokhari; Makawanpur - Bhimphedi (400m); Sunsari - Dharan; Saptari - Kanchanpur; Kathmandu (1,400m).
 Common in rivers and ponds.
 April, May, Aug., Oct.

116. *C. fallax* Ris, 1914 *cerinomelas* Lieftinck, 1927
 India (Assam, Simla Hills, Bengal, Sikkim) and Tibet.
 Nepal: from 1,455-2,000m; Kathmandu - Godawari, city; Ramechhap - Bhandar (2,000m).
 Less common.
 April to Aug.

117. *C. olivaceum* Laidlaw, 1914
 India.
 Nepal: Kathmandu; Pokhara (849-1,879m).

Subfamily: Ischnurinae

58. Genus: *Enallagma* (Charpentier?, 1840) (Selys, 1876)
 118. *Enallagma parvum* Selys, 1876
 India (Dehra Dun), Sri Lanka, Myanmar and widely distributed in other S. Asia.
 Nepal: Kathmandu - Godawari (1,600-1,800m); Kavre Palanchok - Dolalghat (Daulaghat: 800-1,200m); Chitwan - Megouli (300m).
 March, April.

59. Genus: *Ischnura* Charpentier, 1840
 119. *Ischnura annadalei* Laidlaw, 1919
 North Shan States, Myanmar and China.
 Nepal: Kaski - Pokhara.

120. *I. aurora aurora* (Brauer, 1865)

Throughout Southern Asia and Java.

Nepal: Kathmandu - Godawari (1,600-1,800m); - Lohare Khola; Kaski - Pokhara; E. Nepal - Dobhan (700m); Dolkha - Sikri (1,800m); Kavre Palanchok - Huxe (1,000-1,400m), Dolalghat (800-1,200m); Chitwan - Jhuwani (200m).

Uncommon.

April, May, Aug., Oct.

121. *I. dilecta* Hagen, 1858

India, Sri Lanka, Myanmar, Malaysia, Borneo, Philippines, etc.

Nepal: Saptari - Kanchanpur.

Less common.

122. *I. forcipata* Morton, 1907

India (Dehra Dun) to Russia, Iran, Afganistan and Pakistan.

Nepal: Kathmandu - Chauni (1,400m), Nagarjun (Nagarjeong: 1,500-1,700m); - Reuti Khola.

Uncommon.

April, Sept., Oct.

123. *I. mildredae* Fraser, 1927

Myanmar and Nepal.

Nepal: Kathmandu - Chauni (1,400m), Godawari, Nagarjun (1,500-1,800m); Dolkha - Jiri.

Uncommon.

April, July, Aug.

124. *I. rufostigma* Selys, 1876

India (Bengal, Assam and Bihar)

Nepal: Kathmandu (1,364-1,576m).

May, Aug.

Subfamily: Protoneurinae

60. Genus: *Caconeura* Kirby, 1890-125. *Caconeura autumnalis* Fraser, -

Nepal: Kaski - Pokhara.

Fairly common.

June.

126. *C. nigra* Fraser, 1922

Lower Myanmar, Kings Island and Mergui.

Nepal: Kaski - Pokhara.

June.

Subfamily: Pseudagrioninae

61. Genus: *Pseudagrion* Selys, 1876127. *Pseudagrion decorum* (Rambur, 1842)

India (Dehra Dun) to Nepal, Myanmar, Sri Lanka, Malaysia, Indo-China, and S. China.

Nepal: Chitwan - Jhuwani (200m), Megouli (300m); Dolkha - Jiri (2,000m).

Less common.

March to May.

128. *P. hypermelas* Selys, 1876

India (MP to Hoshangbad) to Nepal, Myanmar, Malaysia, Indo-China, Indonesia and Taiwan.

Nepal: Saptari - Kanchanpur.

Uncommon.

129. *P. rubiceps rubiceps* Selys, 1876

India (Dehra Dun) to Nepal, Myanmar, Malaysia, Indo-China, Indonesia and Taiwan.

Nepal: Chitwan - Jhuwani (Jhawani: 200m).

Rare (1 female, 1 male).

May.

130. *P. spenci* Fraser, 1922

Central Indian States - Bengal, Assam.

Nepal: Kaski - Pokhara (200-1,900m); Chitwan - Jhuwani (200m), Megouli (300m); Dolkha - Jiri (1,900m).

Less common.

March to May.

Subfamily: Synlestinae (= Megalestinae)

62. Genus: *Megalestes* Selys, 1852131. *Megalestes major* Selys, 1862

India (Assam, W Bengal, Sikkim and N. Punjab Hills, Shillong, Kumaon).

Nepal: Nuwakot - Kakani (2,134m); Kathmandu - Patan, Godawari; W.

Nepal - Pokhara, Jumla and Dandeldhura; E. Nepal - Gumgardi, Jiri, Resangu (1,500m), Sikri (2,000m), Manga Deorali to Phaeda Kharka.

Uncommon.

May to Aug.

Family: Euphaeidae (=Epallagidae)

Subfamily: Epallaginae

63. Genus: *Anisopleura* Selys, 1880132. *Anisopleura comes* Selys, 1880

India (Bengal, Sikkim, Assam, Punjab) (3,000-5,000ft).

Nepal: Nuwakot - Kakani (2,080m); Kathmandu - Godawari, Dakshinkali,

Surya Binayak, Budhanilkantha, Bajramati; Makawanpur - Bhimphedi

(400m); Dolkha - Jiri (2,000m) Yarsa; Kaski - Pokhara; Dang Valley; Gorkha - Arughat Bazar (Kanchok Phedi: 600-960m); - Reuti Khola.

Less common; Coll.: Kawakita.

March, April, Oct.

133. *A. lestoidea* (Selys, 1853)

India (Bengal, Sikkim, Assam, Dehra Dun) to Nepal.

Nepal: Kathmandu - Godawari (1,600-1,800m), Nagarjun; Dolkha - Jiri (2,000m); Lamjung - Khudi; - Sete (2,500m); Solukhumbu - Jubing.

Uncommon (2 females, 1 male); Coll.: Imanishi and others.

May to Sept.

64. Genus: *Bayadera* Selys, 1853134. *Bayadera indica* (Selys, 1853)

India (Dehra Dun, NE. India, N. Bengal, Shillong, Khasi Hills, Assam) to Nepal.

Nepal: Dakshin Kali, Godawari garden, Nakkhu Khola; Kavre Palanchok - Banepa, Dolalghat (Daulaghat: 800m); Kaski - Pokhara; Makawanpur - Bhainse Dovan, Chauri Khola; Dolkha - Tama (Tamba) Kosi.

Common.

May to Aug.

Family: Lestidae

Subfamily: -

65. Genus: *Indolestes*, -

135. *Indolestes cyanea* (Selys, -)

Nepal: Ilam - Mai Pokhari.

Less common (3 females, 1 male).

May.

Subfamily: Lestinae

66. Genus: *Lestes* Leach, 1815

136. *Lestes dorothea* Fraser, 1924

India (Dehra Dun) to Myanmar, Sri Lanka and Philippines.

Nepal: Kathmandu - Godawari, Nagarjun.

Less common.

May, July, Aug.

137. *L. praemorsa* Selys, 1862

Nepal: Nagarjun (Nagarjeong: 1,500-1,700m).

Uncommon (2 females only).

June.

Subfamily: Sympecmatinae

67. Genus: *Ceylonolestes* Kennedy, 1920

138. *Ceylonolestes cyanea* (Selys, 1862)

Nepal: Dolkha - Jiri, Cari Khola (2,700m); - Sikha (2,150m).

Uncommon.

April, May, July.

Family: Platystictidae (=Platycnemididae)

Subfamily: Calicneminae (=Calichemidinae)

68. Genus: *Calicnemis* Selys, 1863

139. *Calicnemis eximia* Selys, 1863

India (NE. Bengal, Sikkim, Assam).

Nepal: Makawanpur - Bhainse Dovan (730m), Belwa (350m); Kathmandu; Ilam; Kavre Palanchok - Ravi (1,200), Dolalghat (Daulaghat: 800-1,200m); Ramechhap - Likhu Khola Valley (1,700m); Dolkha - Kirantechhap to Charanga Khola (1,800-1,160m), Tama Kosi (1,000-1,400m), Katakot (1,900m).

Less common.

May to Aug.

140. *C. miles* Laidlaw, 1917

India (Dehra Dun) and Myanmar.

Nepal: Makawanpur - Bhimphedi (400m); - Belwa (350m); Kathmandu - Nagarjun; Sindhu Palchok - Barahbise; Kavre Palanchok - Dolalghat; Dolkha - Tama Kosi.

Less common.

April, July to Sept.

141. *C. miniata* Selys, 1886
 India (Darjeeling, Sikkim) and borders of Tibet.
 Nepal: Sindhu Palchok - Tatopani.
 Uncommon (2 females, 1 male).
 July.
142. *C. pulverulans* Selys, 1886
 India (N. Bengal, Sikkim).
 Nepal: Kathmandu (Godawari (1,600-1,800m), Nagarjun (1,500-1,700m);
 Ramechhap - Likhu Khola (Bhandar: 2,000m); Dolkha - Charikot, Jiri
 (2,000m); Kaski - Birethanti (1,350-1,000m); Sindhu Palchok - Tatopani
 (1,500-1,600m); E. Nepal.
 Less common.
 May to Aug.
69. Genus: *Coeliccia* Kirby, 1890
 143. *Coeliccia dierli* Quentin, 1970
 Holotype from Nepal.
 Nepal: Kathmandu - Godawari (1,600-1,800m).
 (Holotype - female); Less common.
 June.
144. *C. loogali* Laidlaw, -
 Myanmar.
 Nepal: Gorkha - Sallentar.
 Rare (1 male only); Coll.: Imanishi.
 Sept. (1952).
145. *C. renifera* (Selys, 1886)
 Nepal: Kathmandu - Godawari, Nagarjun (Nagarjong) (1,500-1,700m).
 Uncommon (1 juvenile and 1 adult).
 May, June, Aug.

Subfamily: Platystictinae (= Platycneminiinae)

70. Genus: *Copera* Kirby, 1890
 146. *Copera marginipes* (Rambur, 1842)
 Nepal: Makawanpur - Mai, Hetauda (Hitora: 300m).
 March.
71. Genus: *Drepanosticta* Laidlaw, 1917
 147. *Drepanosticta carmichaeli* (Laidlaw, 1915)
 India (Dehra Dun).
 Nepal: Makawanpur - Bhainse Dovan (730m), Belwa (350m).
 May, July.

References

- APROSC (1991), Glossary of some important plants and animals names in Nepal., Pub.:
 APROSC. pp. 261.
- Asahina, S. (1955), Dragonflies, Fauna and flora of Nepal Himalaya. Fauna and Flora
 Research Soc., Kyoto Univ., Kyoto, Japan, 1: 291-300.
- Asahina, S. (1963a), Nepalese and Indian Odonata taken by Mr. T. Yamada in 1961, Akitu,

11: 7-8.

- Asahina, S. (1963b), Description of the possible adult dragonfly of *Epiophlebia laidlawi* from the Himalayas. TOMBO, 6 (3-4): 18-20.
- Asahina, S. (1964a), Nepalese Odonata taken by the Botanical Expedition of Tokyo Univ. in 1963, Akitu: 11.
- Asahina, S. (1964b), Odonata taken by the Chiba Univ. Rolwaling Himal Expedition, 1963, *Ibid.*, 12: 10.
- Asahina, S. (1964c), The Odonata taken by Dr. T. Yasuda in northeastern Nepal in 1962, *Ibid.*, 12: 9.
- Asahina, S. (1965a), The dragonflies taken by the Rikkyo Univ. Himalayan Expedition, 1964, *Ibid.*, 12: 33-34.
- Asahina, S. (1965b), The dragonflies taken by the Chiba Univ. Rolwaling Himal Expedition, 1963, *J. Coll. Arts. Sci. Chiba Univ. Nat. Sc. Ser.*, 4 (3): 311.
- Asahina, S. (1965c), Nepalese Odonata taken by Dr. R. Kano in 1964; Akitu, 13: 5-7.
- Asahina, S. (1974), Nepalese Odonata taken by Dr. J. Martens in 1969/70 and 1973, *Senckenbergiana biol.*, 55 (4/6): 281-291.
- Fraser, F.C. (1933, 1934, 1936), *Fauna of British India*, Vol. - I, II, III, To-day and Tomorrow Pub., India.
- Jackson, J.A. (1955), *More than Mountains - Appendix*.
- Kiauta, B. (1972), Scientific Results of the Yugoslav 1969 Hiamalaya Expedition, *Bioloski Vestnik*, 20: 109-119.
- Kiauta, B. (1973), A note on the dragonfly folk names in Nepal, *Odontologica*, 2 (1): 29-32 Utrecht.
- Kumar, A. and Khanna, V. (1983), A review of the Taxonomy and Ecology of Odonata larva from India, *Oriental Insects* (Published in 1984), 17: 127-157.
- Lahiri, A.R. (1979), Odonata (Insecta) from different states of North-eastern India, *Oriental Insects*, 13 (1-2): 119-132.
- Mahato, M. (1984), List of dragonflies of Kanchanpur area, Saptari District, Nepal, *J. Nat. Hist. Mus.*, 8(1-4): 23-28.
- Mahato, M. (1988), Dragonfly inventory of the survey in Eastern and Mid-western Nepal, with records of five species new to the fauna of Nepal, *Opusc. Zool. flumin*, 29: 1-9.
- Mahato, M. and Edds, D. (1993), Altitudinal distribution of Odonate larvae in Nepal's Gandaki river, *Odontologica*, 22 (2): 213-221.
- Mani, M.S. and Singh, S. (1961), Entomological survey of Himalaya. Part XXVI. A contribution to our knowledge of the geography of the high altitude insects of the Nival Zones of the North-West Himalaya, Part - I, *J. Bombay Nat. Hist. Soc.*, 58 (2): 387-406.
- Sharma, K.C. (1975), A note on the Odonata collections in the Entomological Div. of Dept. of Agriculture, Nepal, *Odontologica*, 4 (2): 89-93.
- Shrestha, R.L. and Mahato, M. (1983), Some odonates of Nepal, *J. Nat. Hist. Mus.*, 7 (1-4): 83-91.
- Shrestha, R.L. and Mahato, M. (1984), Habit and feeding behaviour of dragonfly larva, *Anax guttatus* Burm. (Odonata), *Ibid.*, 8 (1-4): 29-32.
- Smith, C. (1978), Dragonflies (Odonata) of Nepal with particular reference to Kathmandu Valley. Part - 1 Agriidae, Part - 2 Gomphidae, *J. Nat. Hist. Mus.*, 2 (1-4): 27-33 and 67-79.
- Smith, C. (1981), — Part 3. Agriidae and Gomphidae. *Ibid.*, 5 (1): 79-83.
- St. Quentin, D. (1970), Odonata aus Nepal, Khumbu Himal, 3 (3): 389-411.

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