

INSECTA : COLEOPTRA : SILVANIDAE

By

T. K. PAL

Zoological Survey of India, Calcutta.

INTRODUCTION

The Insect material collected from Namdapha contained 69 examples of Silvanidae which were made available to the author for study. This collection represents 8 species under 5 genera. All these species except *Uleiota spinicollis* (Guérin-Méneville) are recorded for the first time from Arunachal Pradesh, of which *Silvanus robustus* Halstead and *Silvanus cribricollis* (Grouvelle) are recorded first time from India. Pal, Sengupta and Crowson 1984 described *Uleiota alticola* from Meghalaya, and in the present study this species is also recorded from Arunachal Pradesh.

Family : SILVANIDAE

Subfamily : SILVANINAE

1. *Silvanus difficilis* Halstead

Silvanus difficilis Halstead, 1973, *Bull. Br. Mus. nat. Hist. (Ent.)* 29, (2) : (Keruing, Malay) : Pal and Sengupta, 1977, *Oriental Insects* 11 (2) : 279-80.

So far this species is recorded from several far east countries, Australia, West Africa. Though *S. difficilis* was recorded from South India and Uttar Pradesh but was not recorded from N. E. India. In the present study 3 examples have been recorded from Hornbill Camp of Namdapha. This species is characterized by its eyes about half as long as head, temple as long as 1.5 eye facets and its tip not pointed, elongated prothorax with anterior spines about half as long as eye, aedeagus with apical projection of median lobe short and blunt, apex of each paramere bilobed, one lobe with a long seta and other with two short setae. Length 2.20-2.82 mm.

Material examined : Arunachal Pradesh, Namdapha Survey 1981, Hornbill Camp, 35 km from Miao, 3 ex., 14.iv.1981. *S. Biswas* coll., under bark.

Distribution : India : Tamil Nadu, Kerala, Karnataka, Uttar Pradesh, Arunachal Pradesh ; Sri Lanka ; Vietnam ; Taiwan ; Malaysia ; Singapore ; Indonesia ; Philippines ; Moluccas ; New Guinea ; I. Delcas ; Solomon Is., Samoa Is. ; Australia ; New Ireland ; West Africa.

2. *Silvanus robustus* Halstead

Silvanus robustus Halstead, 1973, *Bull. Br. Mus. nat. Hist. (Ent.)* 29(2) : 71 (Johore, Malaya).

This species so far remains recorded from South-East Asian countries and unrecorded from India. In the present study this species is recorded for the first time from North-east India. This species resembles *S. difficilis* but can be distinguished by its prothorax somewhat elliptical with anterior spines slightly curved inwardly, antennal segment 9 elongated, hind trochanter in male with a spine ; aedeagus with apical projection of median lobe elongated and its tip pointed. Length-3.00 mm.

Material examined : Arunachal Pradesh, Namdapha Survey 1981, Namdapha Camp, 1 ex., 21.iv.1981, S. Biswas coll., under bark.

Distribution : India : Arunachal Pradesh ; Malaysia ; Singapore ; Indonesia ; Philippines.

3. *Protosilvanus lateritius* (Reitter)

Silvanus lateritius Reitter, *Verh. zool-bot. Ges. Wien* 28 : 194 (Sri Lanka).

Silvanus (Protosilvanus) lateritius : Grouvelle, 1912, *Annls Soc. ent. Fr.* 81 : 336.

Protosilvanus lateritius : Halstead, 1973, *Bull. Br. Mus. nat. Hist. (Ent.)* 29(2) : 96.

This is one of the common species in India as well as other Oriental countries and found under bark of various trees. This can be easily recognised by its antennal segments 9 and 10 with apical spines ; short, prominent anterior spines of prothorax and pronotum flat ; 7th elytral interstice carinate ; aedeagus with median lobe tapered at apex, each paramere with a few apical setae, of which three are longer than others. Length-2.94-4.64 mm.

Material examined : Arunachal Pradesh, Namdapha Survey 1981, Deban North, 14 ex., 28.iv.1981, S. Biswas coll. ; Deban, 10 ex., 28.v.1981, S. Biswas coll., under bark ; Gibbon land, 360 m, 12 ex., 3.v.1981, S. Biswas coll., under bark.

Distribution : Widely distributed in Oriental region.

Silvanoides cribricollis (Grouvelle) Comb. nov.

Silvanus cribricollis Grouvelle, 1897, *Annali Mus. civ. Stor. nat. Giacomo Doria* 38 : 397 (Engano, Sumatra : Indonesia).

Neosilvanus cribricollis (Grouvelle) : Grouvelle, 1912, *Annls Soc. ent. Fr.* 81 : 324.

Grouvelle (1897) described this species under the genus *Silvanus* Latreille and latter (1912) transferred to the genus *Neosilvanus* Grouvelle. But due to the following character this species is placed

in *Silvanoides* Halstead : antennal segments 4-8 about as long as broad to slightly transverse, anterior spines of prothorax situated beneath the level of its anterior margin, ventrite 1 with femoral lines opened. Length 2.6 mm.

Material examined : Arunachal Pradesh, Namdapha Survey 1981, Miao, 1 ex., 5.v.1981, S. Biswas coll., under bark.

Distribution : India : Arunachal Pradesh ; Indonesia (Sumatra).

Subfamily : PSAMMOECINAE

5. *Psammoecus trimaculatus* Motschulsky

Psammoecus trimaculatus Motschulsky, 1858, *Etud. Ent.* 7 : 45 (Sri Lanka).

Cucujus incommodus Walker, 1859, *Ann. Mag. nat. Hist.* (3) 3 : 53.

Telephanus cruciger Waterhouse, 1876, *Entomologists' mon. Mag.* 13 : 125.

This species was recorded from some South-east Asian countries and Madagascar. Pal and Sengupta (1979) recorded it from Bhutan. This species shows similarity with *P. impressicollis* Grouvelle and can be distinguished by the presence of longitudinal sutural spot on elytra ; prothorax less transverse and transverse depression near posterior margin indistinct, lateral teeth hardly twice longer than wide ; aedeagus with median lobe long, gradually narrowed and pointed at apex, parameres long and slender, each paramere with a long apical seta and few short setae along its inner margin, a few short and rather dense setae along the broad base of paramere. Length 2.23-2.94 mm.

Material examined : Arunachal Pradesh, Namdapha Survey 1981, Chiri Camp, 1 ex., 25.iv.1981, S. Biswas coll.

Distribution : India : Arunachal Pradesh ; Bhutan ; Sri Lanka ; Burma ; Malaysia ; Japan ; Madagascar.

6. *Psammoecus harmandi* Grouvelle

Psammoecus harmandi Grouvelle, 1912. *Bull. Mus. Paris* 28 : 413 (Darjeeling, India).

This species so far remains recorded only from Darjeeling (West Bengal) and is recorded for the first time from Arunachal Pradesh. This species is closely related to *P. lepidus* Grouvelle and can be separated by its teeth on lateral margin of prothorax minute and indistinct, sides of pronotum more or less depressed with lateral margins slightly rounded and narrowed behind middle ; antennal segments 9 and 10 blackish ; aedeagus with median lobe broad, gradually narrowed and slightly constricted above apex, parameres

broadly elongated, each paramere with a few short setae on its surface and two long setae near apex, small glandular punctures on parameres. Length 2.85 mm.

Material examined : Arunachal Pradesh, Namdapha Survey 1981, Chiri Camp, 1 ex., 25.iv.1981, S. Biswas coll.

Distribution : India : West Bengal (Darjeeling), Arunachal Pradesh.

Subfamily : ULEIOTINAE

7. *Uleiota spincollis* (Guérin-Méneville)

Brontes spincollis Guérin-Méneville, 1829-44, *Iconographie du Règne Animal de G. Cuvier. Insectes* : 205 (Java).

Hyliota atrata Reitter, 1877, *Mitt. Munch. Ent. Ver.* 1 : 247.

Hyliota spincollis (Guérin-Méneville) : Arrow, 1901, *Trans. ent. Soc. Lond.* 4 : 596

Guérin-Méneville (1829-44) described this species from Java and Arrow (1901) synonymised *Hyliota atrata* Reitter with this species. Pal, Sengupta and Crowson 1984 recorded this species from Arunachal Pradesh and Meghalaya. This is a distinct species and can be easily recognised by its lateral sides of prothorax with large and distinct teeth, antennal segments 5-10 about as broad as scape ; other distinguishing characters : aedeagus with median lobe broadly elongated, parameres slender and elongated, each paramere with a few long apical setae and short setae on its surface. Length 9.37-11.56 mm.

Material examined : Arunachal Pradesh, Namdapha Survey 1981, Hornbill Camp, 35 km from Miao, 5 ex. 21.iv.1981, S. Biswas coll., under bark.

Distribution : India : Arunachal Pradesh, Meghalaya ; Indonesia (Java).

8. *Uleiota alticola* Pal, Sengupta and Crowson

Uleiota alticola Pal, Sengupta & Crowson, 1984, *Oriental Insects* 18 : 221-222 (Shillong, Meghalaya).

Pal, Sengupta and Crowson 1984 described this species from Meghalaya. This species resembles Ceylonese species *U. serricollis* Candeze but can be distinguished by its elytral interstices distinctly narrower than rows of punctures, transverse depression on vertex absent, temple about as long as 4-5 eye facets ; aedeagus with median lobe broadly elongated and tapered at apex, parameres short and slender, each paramere with a single long apical seta and a few short setae on inner margin. Length 5.4-6.0 mm.

Material examined : Arunachal Pradesh, Namdapha Survey 1981, Hornbill Camp, 35 km from Miao, 15 ex., 14.iv.1981, S. Biswas coll., under bark ; Namdapha Camp, 5 ex., 21.iv.1981, S. Biswas coll. ; Deban, 1 ex., 28.v.1981, S. Biswas coll., under bark.

SUMMARY

69 specimens collected from Namdapha (Arunachal Pradesh) comprise 8 species under 5 genera. All these species except *Uleiota spinicollis* (Guérin-Ménéville) are first time recorded from Arunachal Pradesh. *Silvanus robustus* Halstead and *Silvanoides cribricollis* (Grouvelle) comb. nov. are recorded for the first time from India. *Uleiota alticola* Pal, Sengupta & Crowson is also recorded.

ACKNOWLEDGEMENTS

The author is indebted to Dr. B. K. Tikader, Director, Zoological Survey of India, Calcutta for providing laboratory facilities, Likewise he expresses his sincere thanks to Dr. S. Biswas and other partymembers who made this interesting collection during Namdapha Survey, 1981 and provided the author an opportunity to study these materials. He is grateful to Dr. T. Sengupta for encouragement and critically going through the manuscript. Thanks are due to Dr. D. G. H. Halstead of Pest Infestation Control Laboratory, Slough, England for confirmation of *Silvanoides cribricollis* (Grouvelle). The Council of Scientific and Industrial Research (New Delhi) awarded a Research Associateship to the author for undertaking this work.

REFERENCES

- ARROW, G. J. 1901. The genus *Hyliota*, of the Coleopterous family Cucujidae, with descriptions of new forms and a list of the described species. *Trans. ent. Soc. Lond.* : 593-601.
- GROUVELLE, A. 1897. Clavicornes nouveaux des Indes Orientales et pays voisions. *Annali Mus. civ. Stor. nat. Giacomo Doria* 38 (series 2 18) : 342-398.
- GROUVELLE, A. 1912. Notes sur les Silvanini (Col. Cucujidae). *Annls Soc. ent. Fr.* 81 : 313-386.
- GUÉRIN-MÉNEVILLE, F. E. 1829-44. *Iconographie du Règne Animal de G. Guvier. Insects.* Paris and London, 576 pp., 104 pls.

- PAL, T. K. AND SENGUPTA, T. 1979. Ergebnisse der Bhutan-Expedition 1972 des Naturhistorischen Museums in Basel. Coleoptera : Fam. Silvanidae. *Ent. Basel.* 4 : 69-82.
- PAL, T. K. SENGUPTA, T. AND CROWSON, R. A. 1984. Revision of *Uleiota* (Coleoptera : Silvanidae) from India and Sri Lanka and its systematic position. *Oriental Insects* 18 : 213-233.