

ON A COLLECTION OF SCOLYTID-BEETLES (SCOLYTIDAE :
COLEOPTERA) FROM SIKKIM, INDIA

By

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INTRODUCTION

The bark- and timber-beetles belonging to the coleopterous family Scolytidae of Sikkim, a Himalayan State of the eastern India, are extremely poorly known so far. As early as in 1904, Hagedorn published a paper dealing with some scolytid species from Sikkim and Japan. In this paper, some six species have been recorded from Darjeeling which is now outside the limit of the newly defined political State of Sikkim. However, only two species, namely *Cnestus nitidipennis* (Schedl) and *Xyleborus asperipennis* Eggers are reported from the area so far. The first one was originally described as *Xyleborus nitidipennis* from Java by Schedl (1951) which was subsequently reported from Sikkim by the same author in 1969, as a species under the genus *Cnestus* Sampson. The other species was reported by Schedl (1969) which had now been transferred to the genus *Euwallacea* Hopkins.

However, in a recent collection trip to Sikkim undertaken by Zoological Survey of India, a small collection was made available to us on which the present report is based. A total of 9 species belonging to 7 genera has been dealt with in the present paper with particular regard to their synonymy, distribution and taxonomic remarks, etc. All the species reported here are recorded for the first time from the area. The two known species referred to above were not available in the present collection.

The most common genus *Xyleborus* Eichhoff containing a large number of heterogenous group of species is now splitted into a number of genera (Wood, 1980). Accordingly, some species, so far included under this genus have been transferred to some other genera in the present study as follows : The species *Xyleborus interjectus* Blandford has been transferred to the genus *Euwallacea* Hopkins, *Xyleborus mus* Eggers to *Microperus* Wood and *Xyleborus artestriatus* Eichhoff to *Xyleborinus* Reitter.

SYSTEMATIC ACCOUNT

Family : SCOLYTIDAE

Subfamily : SCOLYTINAE

Tribe (i) XYLEBORINI

1. *Euwallacea interjectus* (Blandford)

Xyleborus interjectus Blandford, W. F. H. 1891. *Trans. ent. Soc. Lond.*, pp. 576-577, ♀, *Type-locality* : Japan ; Eggers, H. 1923. *Zoöl. Meded. Leiden*, 7 : 198, ♂.

Xyleborus lopchuensis Beeson, C. F. C. (in literature) ; Schedl, K. E. 1972. *Ent. Arb. Mus. Frey.*, 23 : 258 ; Schedl, K. E. 1975. *Revue suisse Zool.*, 83 (3) : 451, Kerala.

Material : One Female (F. C. No. N8/17.4.1980) from Sikkim, jungle near P. W. D. Rest House, Gangtok, *B. Nandi and S. Chakraborty* coll., 17.iv.1980, ex. "at light" ; One female from Mantham, 20 km. N. of Rongpo, Sikkim (alt. 625m), *R. K. Varshney and party* coll., 7.iv.1981, ex. "soft wood of a unknown log".

Measurements (in mm) : Total length of body, 3.53-3.88 ; Max. width of head (across the eyes), 0.92-0.96 ; Max. length of pronotum, 1.30-1.46 ; Max. width of pronotum, 1.46-1.57 ; Max. length of elytra, 2.14-2.50 ; Max. width of elytra, 1.50-1.61.

Distribution : *Sikkim* : Gangtok and Mantham (Present record). *Elsewhere*. ORIENTAL REGION : *India* : Tamil Nadu, Maharastra, Madhya Pradesh, West Bengal, Assam, Andaman Islands and Kerala ; *China*, *Taiwan*, *Burma*, *Sri Lanka*, *Indonesia* and *Malaysia*. PALAEARCTIC REGION : *Japan*.

Remarks : The species, *E. interjectus* (Blandford) is predominantly distributed in the Oriental Region and is recorded for the first time from the Himalayan region in the Sikkim State. *Xyleborus lopchuensis*, an undescribed species of Beeson from Darjeeling Himalaya is very much identical to *E. interjectus* for which Schedl (1972) synonymised the same with the latter species. Subsequently, Schedl (1975) maintained its status as *X. lopchuensis*. But, after thorough examination of the types present in Forest Research Institute, Dehra Dun, in the present study, we are putting *Xyleborus lopchuensis* as a synonymy of *E. interjectus* (Blandford).

2. *Eccoptopterus spinosus* (Olivier)

Scolytus spinosus Olivier, 1794. *Entomologie, Ou Histoire Naturelle des Insects.*, 3 : 9, ♀, *Type-locality* : Indonesia : Java ; Eggers, H. 1927. *Philipp. J. Sci.*, 33 : 102, ♂, India : Dehra Dun ; Philippine : Luzon ; (as *Xyleborus sexspinosus*).

Eccoptopterus sexspinosus Motschulsky, V. 1863. *Bull. Soc. Imp. Nat. de Moscow*, 36 : 515-516, ♀, *Type-locality* : Sri Lanka.

Xyleborus abnormis Eichhoff, W. 1868. *Berl. ent. Z.*, 12 : 282, *Type-locality* : Sri Lanka.

Platydactylus sexspinosus Motsch. var. *multispinosus* Hagedorn, M. 1908. *Dt. ent. Z.*, p. 377, *Type-locality* : Indonesia : Sumatra (Kamerun).

Eccoopterus sexspinosus Motsch. var. *pleuridentatus* Schedl, K. E. 1942. *Tijdschr. Ent.*, 85 : 49, *Type-locality* : Sumatra.

Eccoopterus spinosus (Olivier), Schedl, K. E. 1962. *Ent. Blatt.*, 58 : 201.

Material : One Female from Mamring near Rongpo, Sikkim (alt. 300 m), R. K. Varshney coll., 5.iv.1981, ex. "soft wood of an unknown log".

Measurements (in mm) : Total length of body, 3.10 ; Max. width of head (across the eyes), 0.84 ; Max. length of pronotum, 1.14 ; Max. width of pronotum, 1.46 ; Max. length of elytra, 1.53 ; Max. width of elytra, 1.23.

Distribution : *Sikkim* : Mamring and Rongpo (present record). *Elsewhere* : ORIENTAL REGION : *India* : Kerala, Tamil Nadu, Maharastra, West Bengal, Assam and Andaman Islands ; *Burma*, *Philippines*, *Malaysia* (Borneo) and *Indonesia* (Sumatra, Java, Celebeys). AUSTRALIAN REGION, ETHIOPIAN REGION : East Africa, and MALAGASY REGION : Seychelles.

3. *Microperus mus* (Eggers)

Xyleborus mus Eggers, H. 1930. *Indian Forest Rec.*, 14 (9) : 203-204, ♀, *Type-locality* : Bangladesh : Chitagong Hill tract ; Beeson, C. F. C. 1930. *Indian Forest Rec.*, (*Ent.*), 14 (10) : 74 ; Beeson, C. F. C. 1941. *The Ecology and Control of Forest Insects of India and the Neighbouring Countries*, 308 p.

Material : 19 Females and two males from Fatak, near Mamring, North Sikkim, (alt. 925 m), R. K. Varshney coll., 12.iv.1981, ex. "under soft wood of an unknown broken branch".

Measurements (in mm) : Total length of body, 2.26-2.32 ; Max. width of head (across the eyes), 0.65-0.68 ; Max. length pronotum, 0.82-0.84 ; Max. width of pronotum, 0.88-0.90 ; Max. length of elytra, 1.42 ; Max. width of elytra, 0.90-0.92.

Distribution : *Sikkim* : Fatak (present record). *Elsewhere* : ORIENTAL REGION : *India* : West Bengal ; and *Bangladesh*.

Remarks : There is a wide variation in colour in different individuals of the species inhabiting in the same colony. The complete black specimens are not uncommon in addition to the total brown ones or combination of blackish elytra and brownish pronotum. The male of the species is so far undescribed which is being described elsewhere by the same authors.

4. *Xyleborinus artestriatus* (Eichhoff)

Xyleborus artestriatus Eichhoff, W. 1878. *Ratio descriptio emendato eorum Tomicino-*
rum, p. 507, ♀, *Type-locality* : India.

Xyleborus laticollis Blandford, W. F. H. 1896. *Trans. ent. Soc. Lond.*, p. 226, ♀, *Type-*
locality : India : Karnataka ; Schedl, K. E. 1958. *Tijdschr. Ent.*, 83 (3-4) : 152.

Material : One Female from Mantham (alt. 625 m), 20 km. of North Sikkim, Rongpo, R. K. Varshney and party coll., 7.iv.1981, ex. "soft wood of an unknown log".

Measurements (in mm) : Total length of body, 2.57 ; Max. width of head (across the eyes), 0.65 ; Max. length of pronotum, 1.05 ; Max. width of pronotum, 0.96 ; Max. length of elytra, 1.53 ; Max. width of elytra, 0.96.

Distribution : *Sikkim* : Mantham (present record). *Elsewhere* : ORIENTAL REGION : *India* : Maharastra, Madhya Pradesh, Uttar Pradesh, West Bengal, Assam ; *Burma, Malaysia, China* and *Vietnum*. AUSTRALIAN REGION : *Queensland*.

Remarks : The species is widely distributed in the Oriental and Australian Regions. The single specimen collected from Sikkim is very similar to that of West Bengal, except in having comparatively much blackish elytra and distinct tubercles on interstriae 3 on declivity.

5. *Xyleborus cristatus* Hagedorn

Xyleborus cristatus Hagedorn, M. 1908. *Dt. ent. Z.*, pp. 377-378, ♀, *Type-locality* : India : West Bengal, Darjeeling Dist., Kurseong ; Hagedorn, M. 1910. *Coleopt. Cat.* 26 (4) : 101 Himalaya ; Beeson, C. F. C. 1930. *Indian Forest Rec. (Ent.)*, 14 (10) : 55. India : West Bengal and Assam.

Material : One Female from Singla (alt. 1300 m), N. Sikkim, R. K. Varshney coll., 11.i.1981, ex. "soft wood of an unknown log".

Measurements (in mm) : Total length of body, 3.34 ; Max. width of head (across the eyes), 0.92 ; Max. length of pronotum, 1.38 ; Max. width of pronotum, 1.53 ; Max. length of elytra, 1.96 ; Max. width of elytra 1.53.

Distribution : *Sikkim* : Single (present record) *Elsewhere* : ORIENTAL REGION : *India* : West Bengal and Assam.

Remarks : The specimen from Sikkim is very similar in all essential Characters to that of the typical *Xyleborus cristatus* Hagedorn from north-eastern India. But, it differs in having more depressed incurved elytra at anterior one-third, comparatively more prominent tubercles on 3rd interstria and smaller in size.

6. *Xyleborus similis* Ferrari

Bostrichus ferrugineus Boheman, C. H. 1958-1959. *Voyage de kongliga Svenska Fregatten Euginies Resa*, 1851-1853, p. 88, ♀.

Xyleborus similis Ferrari, J. 1867. *Die forst und Baumzuchtscnädlichen Borkenkafer*, pp. 23-24 (mom. nov.), ♀. *Type-locality* : Keelings Island ; Schedl, K. E. 1942. *Tijdschr. Ent.*, 85 : 47, ♂. *Type-locality* : Indonesia : Java.

Anodius denticulus Motschulsky, V. 1863. *Bull. Soc. Imp. Moscow*, 36 : 512, ♀ and ♂.

Xyleborus parvulus Eichhoff, W. 1868. *Berl. ent. Z.*, 12 : 152, *Type-locality* : Sri Lanka.

Xyleborus dilatatus, Eichhoff, W. 1878. *Ratio. descriptio emendatio Tomycinorum*, pp. 64, 393-394, 484, ♀, *Type-locality* : Africa : St. Mauritius Island.

Xyleborus parvulus Eichhoff var. *submarginatus* Blandford, W. F. H. 1895. *Ann. Mag. nat. Hist.*, 15 (6) : 322, ♀, *Type-locality* : Sri Lanka.

Xyleborus submarginatus, Blandford, W. F. H. 1896. *Trans. ent. Soc. Lond.*, pp. 223-224, ♀, *Type-locality* : India : Belgaum.

Xyleborus bucco Schaufuss, C. 1897. *Tijdschr. Ent.*, 40 : 212-214, ♀, *Type-locality* : Seychelles ; La Digue.

Xyleborus capito Schaufuss, C. 1897. *Tijdschr. Ent.*, 40 : 215, ♂, *Type-locality* : Philippines.

Material : Two Females from Mantham (alt. 625m), 20 km. N. of near Rongpo, Sikkim, R. K. Varshney and party coll., 7.iv.1981, ex. "soft wood of an unknown log".

Measurements (in mm) : Total length of body, 2.34 ; Max. width of head (across the eyes), 0.50 ; Max. length of pronotum, 0.92 ; Max. width of pronotum, 0.80 ; Max. length of elytra, 1.38 ; Max. width of pronotum, 0.80.

Distribution : *Sikkim* : Mantham (present record) *Elsewhere* : ORIENTAL REGION : *India* : Andaman Islands, Assam, West Bengal, Bihar, Orissa, Maharashtra, Madhya Pradesh, Uttar Pradesh, Karnataka. *Sri Lanka*, *Burma*, *Taiwan*, *Malaysia*, *Indonesia*, *Philippine Islands*, AUSTRALIAN REGION : Queensland ; PAPUAN SUB-REGION : *New Guinea*, the Solomon Islands, Guam and Christmas Island.

7. *Xylosandrus discolor* (Blandford)

Xyleborus discolor Blandford, W. F. H. 1898. *Trans. ent. Soc. Lond.*, p. 429, ♀, *Type-locality* : Sri Lanka.

Xyleborus posticestriatus Eggers, H. 1939. *Arb. morph. taxon. Ent., Berl.*, 6 : 119, ♂, Taiwan ; Schedl, K. E. 1950. *Tijdschr. Ent.*, 93 : 63-64, ♀.

Xylosandrus discolor (Blandford), Browne, F. G. 1961. *Malayan Forest Rec.*, no. 22, p. 169. India, Sri Lanka, Burma, Sumatra, Java, Malaya.

Material : One Female (F. C. No. N13/14.4.1980) from Rangpo (alt. 152 m), Ca. 3 km north-east of PWD Bungalow, Sikkim, *B. Nandi* and *S. K. Chakraborty* coll., 14.iv.1980, ex. "under bark of an unknown log".

Measurements (in mm) : Total length of body, 1.93 ; Max. width of head, 0.73 ; Max. length of pronotum, 1.03 ; Max. width of pronotum, 1.11 ; Max. length of elytra, 1.19 ; Max. width of elytra, 1.11.

Distribution : Sikkim, Rangpo (present record), *Elsewhere* : ORIENTAL REGION : *India* : West Bengal, Assam, Uttar Pradesh and Tamil Nadu ; *Sri Lanka, Burma, Taiwan, Indonesia and Malaysia.*

8. *Xyleborus gravidus* (Blandford)

Xyleborus gravidus Blandford, W. F. H. 1898. *Trans. ent. Soc. Lond.*, pp. 427-428, ♀, *Type-locality* : Bangladesh : Chittagong Hills ; Beeson, C. F. C. 1930. *Indian Forest Rec.*, 14 (10) : 61, Bangladesh ; Assam, West Bengal ; Kumar, A. and Chandra, A. 1977. *Oriental Ins.*, 11 (1) : 34 and 42, ♀, India and Malaysia.

Material : Two Females from Mantham (alt. 625 m), 40 km N. Sikkim, *R. K. Varshney and party* coll., 7.iv.1981, ex. "under soft wood of an unknown log".

Measurements (in mm.) : Total length of body, 4.90 ; Max. width of head, 1.5 ; Max. length of pronotum, 2.20 ; Max. width of pronotum, 2.65 ; Max. length of elytra, 2.60 ; Max. width of elytra 2.70.

Distribution : Sikkim : Mantham (present record), *Elsewhere* : ORIENTAL REGION : *India* : West Bengal, Assam ; *Bangladesh, Malaysia and China.*

Remarks : The broad and stout general appearance of the species indicates its inclusion under the genus *Xylosandrus* Reitter characterised by widely separated procoxae. But, the procoxae is contiguous in this species, for which the species has been retained as such under the genus *Xyleborus* Eichhoff in the present study.

Tribe (ii) DRYOCOETINI

9. *Coccotrypes cyperi* (Beeson)

Thamnurgides cyperi Beeson, C. F. C. 1929. *Insects of Samoa*, (Coleoptera) 4 (4) : 230, *Type-locality* : Apia, Samoan Island.

Thamnurgides indicus Eggers, H. 1936. *Ann. Mag. nat. Hist.*, 17 (10) : 631, *Type-locality* : Sakalaspur, Karnataka, India ; Wood, S. L. 1978. *Gt. Basin. Nat.*, 33 (4) : 397.

Xyleborus conspectus Schedl, K. E. 1936. *Archiv. Inst. Biol. Veg. Rio de Janeiro*, 3 : 110, *Type-locality* : Not given, presumably Brazil ; Wood, S. L. 1978. *Gt. Basin. Nat.*, 33 (3) : 179.

Poecilips piliforms Browne, F. G. 1970. *J. Nat. Hist.*, **4** : 568, *Type-locality* : Nilgiri Hills, India ; Schedl, K. E. 1972. *Ent. Arb. Mus. Frey.*, **23** : 257.

Coccotrypes cyperi (Beeson), Wood, S. L. 1978. *Gt. Basin. Nat.*, **38** (4) : 397.

Material : Two Females from Mantham (alt. 625 m), 20 km. N. Sikkim, R. K. Varshney and party coll., 7.iv.1981, ex. "tender soft wood of an unknown log".

Measurements (in mm) : Total length of body, 2.24 ; Max. width of head, 0.53 ; Max. length of pronotum, 0.92 ; Max. width of pronotum, 0.84 ; Max. length of elytra, 1.34 ; Max. width of elytra, 0.86.

Distribution : Sikkim : Mantham (present record), *Elsewhere* : ORIENTAL REGION : India : Assam, West Bengal ; *Burma* ; *Indonesia*, *Java* ; *China*, OCEANIAN SUB-REGION : Samoa.

SUMMARY

The present report is based on a small collection of scolytid-beetles collected from Sikkim during 1980-1981 by the survey parties of the Zoological Survey of India. Prior to the presentation of this report, only two species, namely, *Cnestus nitidipennis* (Schedl) and *Xyleborus asperipennis* Eggers are known from the area which have not been included here due to lack of material.

The paper deals with some nine species under seven genera with regard to their synonymy, measurement, distribution, taxonomic remarks, etc. All the species are recorded for the first time from Sikkim. The species are as follows : *Euwallacea interjectus* (Blandford), *Eccoptopterus spinosus* (Olivier), *Microperus mus* (Eggers), *Xyleborinus artestriatus* (Eichhoff), *Xyleborus cristatus* Hagedorn, *Xyleborus similis* Ferrare, *Xylosandrus discolor* (Blandford), *Xyleborus gravidus* Blandford and *Coccotrypes cyperi* (Beeson).

ACKNOWLEDGEMENT

Grateful acknowledgement is made to Dr. B. K. Tikader, Director, Zoological Survey of India, for providing necessary facilities, to Dr. R. K. Varshney and B. N. Nandi, Zoological Survey of India, for collection of material and to Prof. S. L. Wood, Professor of Entomology, Brigham Young University, Provo, Utah, U. S. A., for kindly confirming some of our identification.

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