

Description of a new species of *Xylotrechus* Chevrolat, and notes on the synonymy of some other *Xylotrechus* species (Coleoptera: Cerambycidae: Cerambycinae)

by

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Abstract - A new species of *Xylotrechus* Chevrolat (Coleoptera: Cerambycidae: Cerambycinae: Clytini) is described from Malaysia. Brief comments concerning the synonymy of other *Xylotrechus* taxa are also provided. It appears that *X. brevicornis* Pascoe is a synonym of *X. buqueti* Laporte & Gory, while *Clytus sappho* Pascoe, *X. lyratus* Pascoe and *X. quadripes* Chevrolat are synonyms of *X. javanicus* (Laporte & Gory). The two species *Xylotrechus scenicus* Pascoe and *X. decoratus* Pascoe are transferred to the genus *Chlorophorus* Chevrolat.

Riassunto - Viene descritta di Malesia una nuova specie di *Xylotrechus* (Col., Cerambycidae). Sono presenti note sinonimiche riguardanti altri taxa del genere: *X. brevicornis* Pascoe è probabile sinonimo di *X. buqueti* Laporte & Gory; *Clytus sappho* Pascoe, *X. lyratus* Pascoe e probabilmente anche *X. quadripes* Chevrolat sono sinonimi di *X. javanicus* (Laporte & Gory). *X. scenicus* Pascoe e *X. decoratus* Pascoe vengono trasferiti al genere *Chlorophorus*.

INTRODUCTION

The tribe Clytini (Coleoptera: Cerambycidae) is one of the most complicated taxonomically of the family Cerambycidae. More or less accurate descriptions of eastern Asian members have been provided, e.g. by LAPORTE & GORY (1836), WHITE (1855), CHEVROLAT (1863), THOMSON (1864), PASCOE (1864-69), GAHAN (1894, 1906), AURIVILLIUS (1928), GRESSITT (1951) and GRESSITT, RONDON, VON BREUNING (1970).

The genus *Xylotrechus* Chevrolat is widespread throughout the world, especially in tropical regions. Adults are active both nocturnally and diurnally and can be collected from dead wood or dying trees. The diagnostic characteristics of the genus are (a) antennal insertions widely separated, and (b) front of head with distinct carinae on frons.

At the end of May 1990, the senior author collected mating pairs and single specimens of a previously unknown *Xylotrechus* species on stems of cut jungle trees in Malaysia, south-east Asia. A description of this species, as well as a comparison with its nearest relative, *Xylotrechus buqueti* Laporte & Gory and some other members of this genus, are provided below.

DESCRIPTION

Xylotrechus rosinae Dauber & Hawkeswood, sp. nov. Figs. 1, 2b

Female. Length: 9-12 mm; width: 2.7-3.1 mm. Integument blackish-brown; antennal segments 1-2 and 8-11, mouth-parts, palpal segments, last abdominal segment and last tarsal joints reddish-brown; basal third of middle and hind femora, basal half of epipleurae, elytra (partially among the bands) and the elytral apices pale brownish. Head distinctly contracted in front; eyes large; five carinae present, one strongly raised beside each eye, two median carinae converging in front to form a single, broad carina, and diverging in upper half around a reticulate area with coarse puncturation, and one poorly developed narrow carina on vertex; occiput coarsely punctured; pubescence between eyes and on median carinae, genae, occiput and underside of head yellow; underside with white, erect bristles. Antennal segment 1 as long as segments 2 and 3 combined, rounded; remaining segments gradually broadening, flattening and decreasing in length, reaching end of basal 1/5 of elytron; all segments with sparse white pubescence.

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Fig. 1: Holotype female of *Xylotrechus rosinae* sp. nov. Scale line = 3 mm (Photo: D. Dauber).

Pronotal length and greatest width ratio = 0.93-1.02; pronotum at base slightly narrower than width of head, gradually widening from base to the beginning of apical 1/4, then rapidly narrowing; small, rounded pustules present on sides of pronotum and more transverse ones on disk; pubescence as follows: basal (except for central part) and on a narrow apical margin, yellowish; majority of underside of prothorax with sparser yellowish pubescence; pronotal disk with a large black pubescent oblong band widening slightly at base and extending from there to near apex, narrowing after middle; a large, oblong black pubescent patch at each side of pronotum, extending from disk to lateral margins and partially to underside; pubescence of this patch being sparser from apex to base; underside more yellow-whitish in colour; prosternum dark-brown, sparsely pubescent; yellowish pubescent stripes among central area and lateral patches narrow. Scutellum semicircular, with base black, remaining part yellowish tomentose. Elytra 2.15-2.25 times as long as broad, gradually narrowed from base to apex; apex somewhat obliquely truncate, outer margin feebly dentate; elytra patterned with five, yellowish pubescent stripes as follows: one short, basal band touching scutellum but not reaching humerus; one beginning a short distance from scutellum and extending along suture to the end of basal 1/3, then diverging perpendicularly and outwards towards lateral margins, gradually decreasing in thickness; another short, transverse stripe situated between the first and second bands at the end of basal 1/5 beginning near lateral margin, somewhat curving towards the second band but not reaching it; a fourth narrow, triangular band, with its inner portion not extending along suture and with hind margin slightly concave; and the fifth, a narrow apical patch which extends along suture reaching the beginning of elytral apical 1/6; elytra among bands with blackish, shiny pubescence. Legs with hind femora not reaching elytral apex, and with whitish hairs and long, erect, black bristles amidst; tibiae black-haired; tarsal segment 1 of hind leg twice as long as segments 2 and 3 combined. Ventral surface with whitish, erect hairs; pubescence yellow-white. Mesepisternum white; mesepimeron black; metepisternum with basal and upper areas yellowish, a central, triangle-shaped portion with black pubescence (covering about the half of total area); apical half of abdominal segment 1, apical 4/5 of segments 2 and 3, and all of remaining segments yellowish-tomentose (for the apical border of last abdominal segment of female see fig. 2).

Male. Males also have a pronotal length / greatest width ratio of 0.93-1.02, but differ from females mostly in the pubescence of head and pronotum, which is paler, whitish, and of elytra, underside of the body and legs, which is more whitish in colour.

Holotype: female, Fraser's Hill, Selangor, West Malaysia, 23.5.1990, leg. Diethard and Rosina Dauber; paratypes: 20, same data as for holotype (in the collection of Dr D. Dauber, Austria).

Etymology - This species is dedicated to the senior author's wife Rosina, who accompanied him on all their entomological excursions. The specific name is therefore feminine.

RELATED SPECIES OF *XYLOTRECHUS*

Species with similar features as *X. rosinae* sp. nov. are as follows: *Xylotrechus buqueti* Laporte & Gory (Assam, India, Burma, Thailand, Laos, Java), *Xylotrechus pedestris* Pascoe (Sarawak), *Xylotrechus idoneus* Gahan (Sumatra), *Xylotrechus consocius* Gahan (Malaysia), *Xylotrechus brevicornis* Pascoe (Sarawak). According to the original descriptions, these relatives can be differentiated from *X. rosinae* sp. n. as follows:

X. buqueti Laporte & Gory: the body of this species is narrower than that of *X. rosinae* sp.

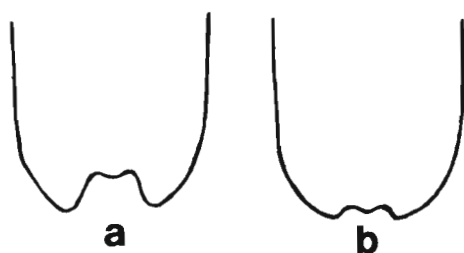


Fig. 2: Apical margins of last abdominal segments of females of *Xylotrechus* species. a: *X. buqueti* Laporte & Gory; b: *X. rosinae* sp. nov.

nov.; the united, median, frontal carinae are very narrow; the central pronotal patch is narrower and the lateral patches are smaller; the granulation on the pronotal disk is much finer; the elytron is banded and coloured differently; the second elytral band is rectangular in shape while the third band touches the second band at the suture; ventral surfaces are clothed with denser and more erect hairs; the blackish patch on the abdominal segment 1 is tomentose on the apical 2/3 only, while the remaining segments are completely tomentose; the apical border of the last abdominal segment in the female is

quite different from that of *X. rosinae* (see fig. 2).

X. pedestris Pascoe: in this species the median carinae on the head are very short and united throughout, the pubescence is ashy and the pronotum and elytra are banded differently.

X. idoneus Gahan: in this species there are only four carinae on the head, the pubescence is grey and the pronotum has one median band only.

X. consocius Gahan: in this species the pubescence is grey and the second and third bands on the elytra are different from those of *X. rosinae*.

X. brevicornis Pascoe: in this species the integument is darker brown, the pronotum is differently patterned from that of *X. rosinae*, the lateral patches on the pronotum are smaller and situated closer to the apex, the second and third elytral bands are united at the suture.

SYNONYMIES

According to GAHAN (1906), the British Museum of Natural History (MBNH) and AURIVILLIUS (in Junk & Schenkling, 1912), *Xylotrechus siamensis* Chevrolat, 1863 is a synonym of *Xylotrechus buqueti* Laporte & Gory. According to its original description, *Xylotrechus brevicornis* Pascoe, 1869 could also be a synonym of this species. The authors have not seen the type material of *X. brevicornis*, but the descriptions of both species are very similar.

Other synonymies should be brought to notice: *Xylotrechus lyratus* Pascoe, 1869 is a synonym of *X. javanicus* (Laporte & Gory) (*Clytus javanicus* Laporte & Gory, 1836). *Clytus sappho* Pascoe, 1858 is also a synonym of *X. javanicus*. The senior author has examined the type materials of *X. lyratus* and *C. sappho*. *Xylotrechus lyratus* Pascoe, 1869 is also possibly a synonym of *Xylotrechus quadripes* Chevrolat, 1863, since their descriptions are identical concerning the patterning of the pronotum and the carination on the front of the head. We have stated above that *X. lyratus* is a synonym of *X. javanicus*, hence *X. quadripes* must also be a synonym of *X. javanicus*.

After studying the type materials, it is evident that the two species *Xylotrechus decoratus* Pascoe, 1869 and *Xylotrechus scenicus* Pascoe, 1869 must be assigned to the genus *Chlorophorus* Chevrolat. It is possibly because of the presence of a single, poorly developed, frontal carina that they had been placed initially in the genus *Xylotrechus*, but their antennal insertions are narrowly separated, whereas in *Xylotrechus*, the antennal insertions are widely separated (see also AURIVILLIUS in Junk & Schenkling, 1912).

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REFERENCES

- AURIVILLIUS C., 1912 - *Cerambycidae: Cerambycinae* (Part LXIX, Clytini). In: Junk W. & Schenkling S., *Coleopterorum Catalogus*, Junk, 39: 1-574.
- , 1928 - Revision of the Philippine species of the Clytini (Coleoptera, Longicornia) - *Philippine Journal of Science*, 36: 307-323.
- CHEVROLAT A., 1863 - Clytides d'Asie et d'Océanie - *Memoirs de la Société Royale des Sciences de Liège*, 1863: 254-348.
- LAPORTE F. L. N. & GORY H. L., 1836 - Monographie du genre *Clytus* - Paris.
- GAHAN C. J., 1894 - *Annali del Museo Civico di Storia Naturale di Genova*, 14: 1-104.
- , 1906 - The Fauna of British India including Ceylon and Burma - *Coleoptera*, Vol. 1, *Cerambycidae*.
- GRESSITT J. L., 1951 - Longicorn beetles of China - *Longicornia*, 2: 1-667.
- GRESSITT J. L., RONDON J. A., VON BREUNING S., 1970 - Cerambycid beetles of Laos - *Pacific Insects Monograph*, 24: 1-651.
- PASCOE F. P., 1864-1869 - *Longicornia Malayana*, etc. - *Transactions of the Entomological Society of London* (3rd Series), 3: 1-711.
- THOMSON J., 1864 - *Systema Cerambycidarum*, etc. Part 2, Group Clytidae - Paris, 183-195.
- WHITE A., 1855 - Catalogue of Coleopterous Insects in the Collection of the British Museum. Part VII: *Longicornia*, 1 - *Catalogue of the Zoological Collections of the British Museum*, 8: 1-412.