

A new apterous Lamiinae from The Mt. Kinabalu National Park, Sabah, Borneo (Coleoptera: Cerambycidae)

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Abstract

Rucentra smetanai HÜDEPOHL sp.n. from the peak region of Mt. Kinabalu, Sabah, Borneo, is described and illustrated. The variability of the species is briefly discussed and the habitat data are given.

Key words: Cerambycidae, Lamiinae, Apomecinini, new species, *Rucentra smetanai*, Mt. Kinabalu, Borneo.

In 1987 and 1988, the junior author collected a series of lamiine longhorn beetles, while sifting for terricolous fauna in the peak region (around 4000 m) and in the montane forest (around 3200 m) of Mt. Kinabalu, Sabah, northern Borneo. The beetles were subsequently found to belong to one variable, apterous species of the tribe Apomecynini, which is described as new below.

The junior author thanks the authorities at the Headquarters of the Mt. Kinabalu National Park for their invaluable assistance during his fieldwork in the Park.

Rucentra smetanai HÜDEPOHL, sp.n.

Figs. 1, 5 - 7



Head strongly and rather densely punctured (size of punctures more or less equal to distance between them), more densely so between antennal insertions and on vertex. Frons transverse. Lower eye lobes as long as genae; width of upper eye lobes almost half of distance between them. Antennae shorter than body in most specimens, rarely as long as body (see discussion), scape swollen medially, segment 3 slightly shorter than segment 4. Pronotum transverse (ratio width:length = 1.2:1), base very slightly wider than apex, sides evenly rounded; disc somewhat uneven, with indistinct depression medio-apically; punctation coarser than that on head. Elytra widened from humeri to middle and then narrowed toward apex, each elytron separately rounded at apex in most specimens, rarely somewhat obliquely subtruncate.

Fig. 1: *Rucentra smetanai* sp.n., holotype. Photo Hüdepohl

Punctuation of elytra as coarse as that on pronotum, rather irregular in basal half, seriatelly arranged in apical half; each elytron with feeble, oblong tubercle behind middle of base and with some more or less elevated intervals between rows of punctures.

Prosternal process angularly enlarged between coxae, sloping apically, with some coarse punctures. Mesosternal process sloping basally. Metasternum short; both mesosternum and metasternum coarsely punctured laterally. Apterous. Abdomen with micropunctuation, otherwise impunctate. Male fifth sternite with small, semicircular emargination apically. Female fifth sternite rounded apically. Hind tarsi shorter than tibiae.

Integument reddish to dark brown. Pubescence brown and yellow. Head with thin yellow pubescence lying in different directions. Pronotum clothed with small patches of thin yellow pubescence on disc, and, more densely so, on lateral parts. Elytra dark brown, with yellow pubescence on, around and behind humeri, on a large, premedian trapezoid common spot, and with some small yellow spots on apical half; a very small, almost white spot near each lateral margin at end of middle third. Ventral face and legs thinly clothed with yellowish pubescence, tibiae annulate. Antennae brown, segments 3-11 yellowish in basal half.

Holotype ♂ (Fig. 4), length 5.4 mm, width 1.9 mm. Borneo, Sabah, Mt. Kinabalu N.P., north base St. John's Peak, 4000 m, 8.VIII.88, A. Smetana. **Paratypes**: 14 ♂♂ and 12 ♀♀, same locality, 4000 m or 3900 m, 7. and 20.V.87, and 8.VIII.88, A. Smetana; 2 ♂♂, Laban Rata, 3150 m, 7.VIII.88, A. Smetana; 1 ♀, Laban Rata, 3200 m, 4-8.87, flight intercept trap, A. Smetana; 1 ♀, Paka Cave, 2995 m, 5.V.87, A. Smetana. Length 4.3 - 8.2 mm. Holotype and 24 paratypes in the collection Hübepohl, Breitbrunn, Germany; 6 paratypes in the Muséum d'Histoire naturelle, Geneva, Switzerland.

Discussion: The genus *Rucentra* SCHWARZER, 1931 includes at present seven apterous species, all occurring at high mountain elevations on Java, Sumatra, Sulawesi and Luzon. The present new species is the first one known from Borneo. It differs from *R. celebensis* BREUNING, 1943, by the frons wider than high, and by the coarse punctuation of the vertex of head and the pronotum; it differs from the other species by the rounded apices of the elytra (but see below).

The new species shows high variability in the size (range 4.3 - 8.2 mm) and in several other external characters, as apterous Cerambycidae usually do. The pale pubescence may be very distinct or almost obsolete, the elytral punctuation may be more or less seriatelly arranged, and the elevation of the intervals on the elytra varies from distinct to indistinct. In addition, in the four specimens collected at lower elevations of about 3000 m at Laban Rata and Paka Cave, the premedian yellow spot is more expanded and connected with humeral spots, the elytral apices are somewhat obliquely subtruncate, and the male antenna is longer, as long as the body. However, the examination of the genitalia (Figs. 5-7) of a series of males seems to prove that all 31 specimens collected on Mt. Kinabalu belong to the same species.

Bionomics: Most adults of *R. smetanai* sp.n. were collected on the summit plateau of Mt. Kinabalu, at elevations around 4000 m, by sifting layers of debris, fallen leaves, moss and dead twigs among the dense growths of *Styphelia suaveolens* KOORD., *Coprosma hookerii* STATF., *Photinia davidiana* CARDOT, etc. on sheltered places near the base of St. John's Peak (Figs. 2, 3). The species presumably develops in dead twigs of the bushes mentioned above.

The few adults taken at lower elevations (see above) were collected by sifting fallen leaves and other debris under a group of tall, dense *Rubus* sp. bushes, by sifting fallen leaves, dead twigs and other debris under dense bushes at Paka Cave, and in the flight intercept trap erected near the edge of montane forest at the Laban Rata Hut (Fig. 4). The specimen taken from the trap apparently crawled into the bottom trough of the trap which functions also as a pitfall trap.

Zusammenfassung

Rucentra smetanai HÜDEPOHL, sp.n. vom Mt. Kinabalu, Sabah, Borneo, wird beschrieben. Die Variabilität der Art wird kurz diskutiert, und die Fundumstände werden angegeben.

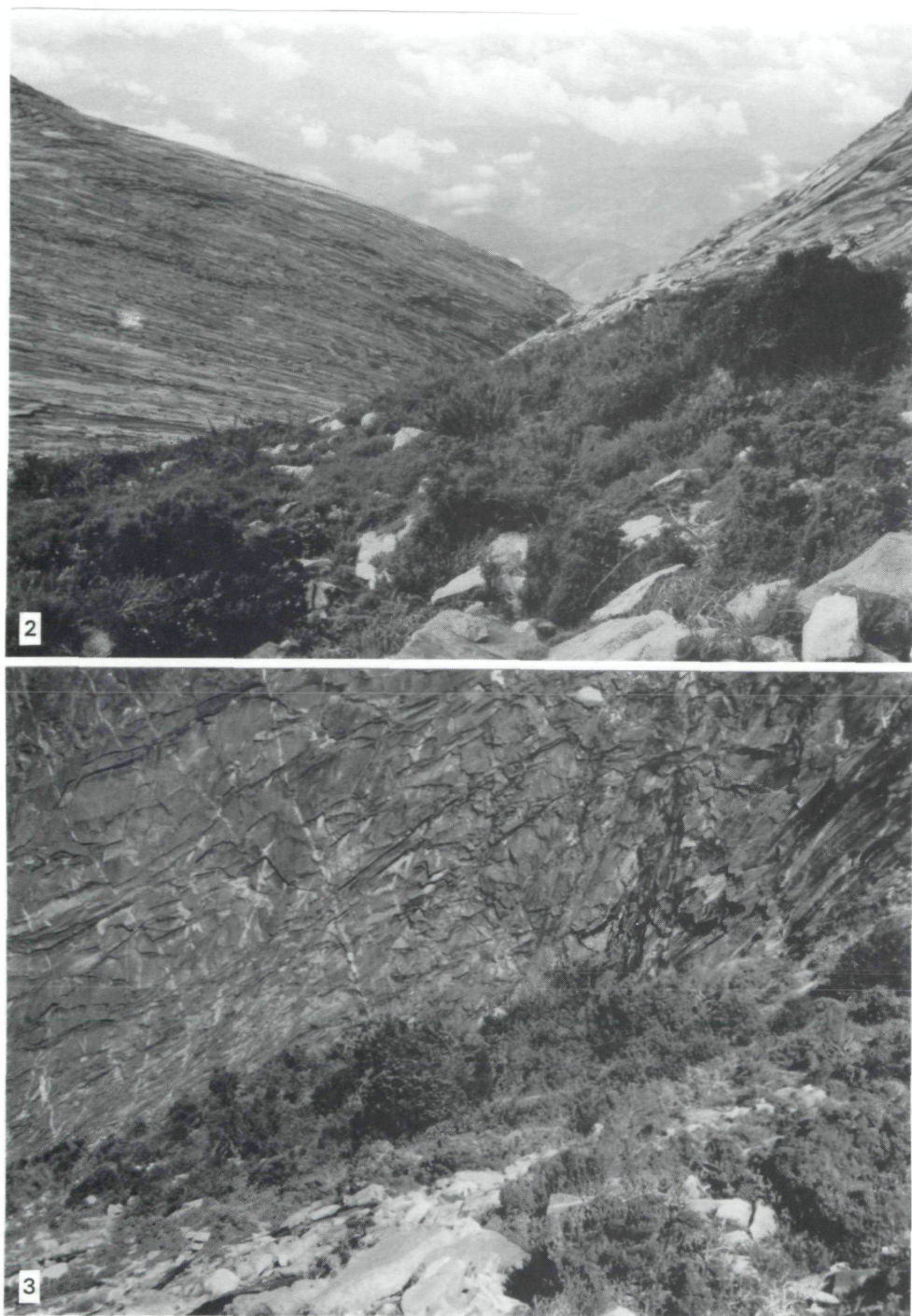


Fig. 2 - 3: Habitat of *Rucentra smetanai*, (2) near the base of St. John's Peak, elevation 4000 m. Photo A. Smetana, May 20, 1987, (3) at north base of St. John's Peak, elevation 3900 m. Photo A. Smetana, August 8, 1988.

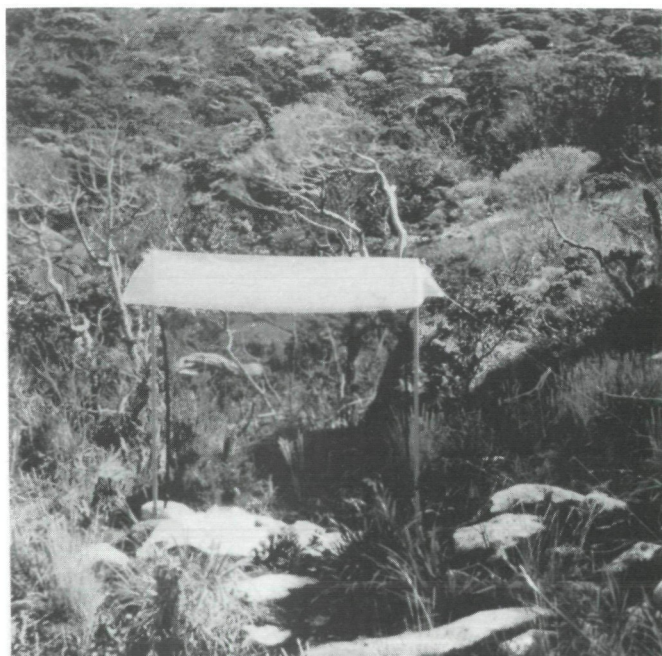
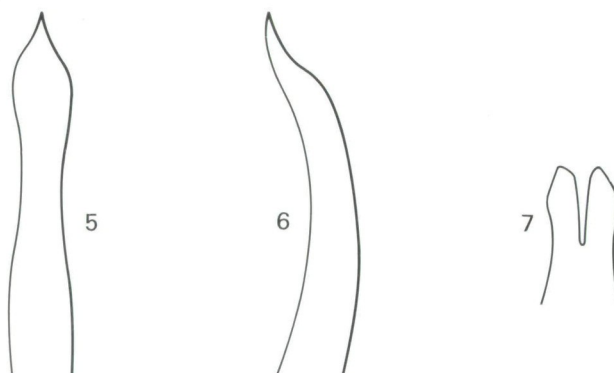


Fig. 4: Flight intercept trap at Laban Rata Hut, elevation 3200 m. Photo A. Smetana, May 4, 1987.

References

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Figs. 5-7: Aedoeagus of *Rucentra smetanai*. Fig. 5, median lobe, dorsal view; Fig. 6, median lobe, lateral view; Fig. 7, paramere.

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