

Distributional and Ecological Notes on *Pachyrhynchus apoensis* (Coleoptera, Curculionidae, Entiminae)

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Pachyrhynchus apoensis belonging to the tribe Pachyrhynchini, subfamily Entiminae was described by YOSHITAKE (2012) from Mt. Apo, Mindanao, the Philippines. In contrast to the detailed morphological description based on a large number of museum specimens labelled as “Mt. Apo”, the precise distribution of this species in Mt. Apo, which is a large mountain mass with the country’s highest peak, has been unknown to date. In addition, nothing has hitherto been known about its ecology. From October to November, 2015, we conducted field surveys for Pachyrhynchini weevils along the following three trails in Mount Apo Natural Park: 1) Mandarangan Trail, Barangay Ilomavis, Kidapawan City, Cotabato, 2) Balutakay Trail, Barangay Managa, Bansalan, Davao del Sur, and 3) Bongolanon Trail, Barangay Bongolanon, Magpet, Cotabato. As a result of our field observations, we obtained some distributional and ecological data of *P. apoensis* as reported below. We thank A. DACULA, G. EPHAN, D. A. HERDILES, K. JUMAWAN and G. NIQUE for their various help in the course of this study.

Pachyrhynchus apoensis YOSHITAKE, 2012

Pachyrhynchus apoensis YOSHITAKE, 2012: 32 (type locality: “Mindanao I., Mt. Apo”; type depository: National Institute for Agro-Environmental Sciences, Tsukuba).

Pachyrhynchus sp.: SAKAGUTI, 1979: 90, pl. 23, fig. 8 (Japanese name: Oo-akagane- katazou; Mt. Apo, Mindanao).

Diagnosis. See YOSHITAKE (2012, p. 32).

Specimens examined. The Philippines: Mindanao. 83 exs., Mandarangan Trail, Barangay Ilomavis, Kidapawan City, Cotabato, 9–12.XI.2015, H. YOSHITAKE *et al.*; 10 exs., Balutakay Trail, Barangay Managa, Bansalan, Davao del Sur, 28–30.XI.2015, A. A. CABRAS *et al.*; 15 exs., Bongolanon Trail, Barangay Bongolanon, Magpet, Cotabato, 4–5. XIII.2015, A. A. CABRAS *et al.*

Distribution. Presently, *Pachyrhynchus apoensis* is considered endemic to Mt. Apo, Mindanao, the Philippines. Our field observations suggested that the vertical distribution of *P. apoensis* in Mt. Apo ranges from 1,200 to 2,000 meter above sea level (masl). Along Mandarangan Trail (Fig. 1), *P. apoensis* was found from the upstream of Marbel River (1,200 masl) via Lake Agco (1,230 masl) to Ko-ong (1,867 masl). This species was rare in an area from upstream of Marbel River to Mandarangan (1,208 masl), but very abundant in Mati-ao (1,400 masl) (Fig. 1), one of the camping grounds in the trail. It was found, but very rare, near Ko-ong (1,867 masl). We could not find this species in an area higher than Ko-ong to Lake Venado (2,200 masl), as well as along Peak Trail from Lake Venado to the summit of Mt. Apo (2,954 masl). Similarly, this species was not found in areas lower than 1,200 masl. Along Bongolanon Trail, *P. apoensis* was abundant in Bob’bong (1,812 masl), one of the camping grounds in the trail. Also, this species was found along Bansalan Trail in an area ranging from 1,200 to 1,500 masl, though not abundant.

Ecology. *Pachyrhynchus apoensis* adults (Fig. 2) were found on understory of natural evergreen broad-



Figs. 1–6. *Pachyrhynchus apoensis*. — 1, Mati-ao camping ground, a habitat in Mandarangan trail, Mt. Apo, Cotabato, Mindanao, the Philippines; 2, a pair of adults copulating on *Diplazium davaoense* (Woodsiaceae); 3, one of the adult food plants, *Impatiens platypetala*; 4, ditto, *Melastoma* sp. (Melastomaceae); 5, ditto, *Diplazium davaoense* (Woodsiaceae); 6, ditto, *Saurauia* sp. (Actinidiaceae).

leaved forests. They were most abundant in relatively sunny forest floors, which were densely covered with *Impatiens platypetala* (Balsaminaceae) (Fig. 3). SCHULTZE (1923, p. 610) mentioned for Pachyrhynchini weevils in general as “Favored localities are rather open, mixed forests with a dense undergrowth along rivers and ravines or on ridges and mountains.” In our field observations, *P. apoensis* showed a higher abundance at sites in close proximity to rivers, such as Mati-ao in Mandarangan Trail. *Pachyrhynchus apoensis* adults were frequently observed feeding and copulating on the leaves of *I. platypetala*, suggesting that this plant is preferred by them as food resource. Also, they were sometimes observed feeding and copulating on *Melastoma* sp. (Melastomaceae) (Fig. 4). Only a few individuals were found on *Diplazium davaoense* (Woodsiaceae) (Fig. 5) and *Saurauia* sp. (Actinidiaceae) (Fig. 6), though they fed on the plant bodies. Therefore, this species is considered to have a rather wide range of adult food plants, but possesses a preference to certain plants. Seasonal prevalence of this species is still unclear, but previous records (YOSHITAKE, 2012) suggested that *P. apoensis* adults occur all year around. The immature stages are still unknown.

References

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Manuscript received 1 March 2016;
revised and accepted 15 March 2016.