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A first record of *Oplatocera halli* Lepesme, 1956 (Coleoptera: Cerambycidae) from western India

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A cerambycid specimen collected by one of us (HVG) in Mulshi, Pune, Western Ghats of Maharashtra, turned out to be a species of the genus *Oplatocera* White, 1853 but it did not match any of the species described in Gahan (1906). Dr. Carolus Holzschuh, helped us in identifying it as *Oplatocera halli* Lepesme, 1956.

A type of this species was collected from the Nilgiri Hills by H.L. Andrewes in 1922 (preserved in British Museum of Natural History, now NHM, London); the only other report comes from Tamil Nadu (Namboodiri & Thirumalai 2009), but there is neither description nor an image of this specimen. As this species has not been recorded from any other part of India until now, the present record considerably extends the range of this species northward and westward.

Gahan (1906) has given a detailed description of the genus *Oplatocera,* though, the original description of *O. halli* by Lepesme (1956) is short and is in French. Hence we are providing salient morphological characters of this beetle for the benefit of people doing biodiversity assessments in India. Moreover, since there are neither colour illustrations nor photos of this interesting species anywhere, we provide them along with a description.

***Oplatocera* White, 1853**

***Oplatocera halli* Lepesme, 1956**

Material: Ceramb 67 and 68, ix.2005, 1 male and 1 female, Mulshi, Pune, coll. H.V. Ghate, preserved in Modern College.

Body length 29mm; width at humerus 8mm (Types: body length 37–41 mm; width at humerus 8–11 mm, as per Lepesme).

Body slender, narrowed towards apex, elongate, dorsally pale reddish to reddish-brown, some area on the prothorax and of the inter-costal regions of elytra dark brown to black; apex of antennomeres, femora and tibia almost black (Image 1); ventrally pale brown.

Head almost as long as broad, broadest at the level of the eyes, covered above with golden pubescence right up to the base of mandibles; mandibles strong but small, their outer and inner edge dark brown to black; clypeus distinct; frons short and oblique, genae short. Eyes large, coarsely faceted, deeply emarginate, lower lobe bulging, upper lobes widely separated above. Antennal tubercles flattened, the area in between concave and rugulose punctate with sparse golden

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Image 1. *Oplatocera halli* Lepesme, Dorsal view (female). Note coloration of antennae, prothorax, elytra as well as legs.

Image 2. *Oplatocera* head, dorsal view (male).

pubescence; vertex also slightly concave anteriorly and flat posteriorly; a thin rusty red furrow runs mid-dorsally throughout the vertex between the antennal tubercles, right up to the base of the clypeus (Image 2).

Antennae long, extending beyond the tip of the elytra with at least three antennomeres in the male, reaching just the elytral apex in the female; covered with a golden pubescence, black at the apex of each antennomere, sparse above but dense beneath. Scape somewhat thicker than other antennomeres, broad distally, rugulose-punctate; antennomere III longest, all finely punctate; some punctures darker in colour.

Prothorax broader than long, finely punctate, pubescent, anterior margin sinuate, posterior margin straight, the deep basal groove extends laterally to the outward extension of the coxal cavity; with strong lateral tubercles, which have a broad base and each is slightly turned upward at apex (Image 3). Scutellum small, broadly rounded.

Elytra about three times as long as wide, wider than the prothorax at the level of the lateral tubercle, broader at the base, humerus rounded, apex rounded but sutural angle is slightly turned outside on either side and is somewhat pointed. Disk with four prominent distinctly raised costae. The first (sutural) costa starts at the base, slightly away from scutellum, it is bifurcated near about the apical third, where it sends a thin costa to the suture and continues towards the apex without reaching it. The second costa starts a little behind the humeral region, slightly away from the first one, it is somewhat curved inward as it runs down to the apex and meets, with a short connection, with the first costa at the point where it sends the branch towards the suture then it continues as a separate costa towards the apex. The third costa starts from the basal fourth and continues down ending a little before the apex; it has a short connection with the second costa in its middle region. The fourth (humeral) costa starts laterally from the humeral region where it is dark in colour and continues laterally along the elytra and ends just before the apex. Surface devoid of hairs, except lateral margins, covered with golden pubescence. Costae brown, intercostal area dark brown to black and finely granulate; remaining entire region near to scutellum reddish except a dark brown or blackish V-shaped area adjoining the scutellum (see Images 1 & 3).

Gula transversely wrinkled and sparsely punctured; with two small deep oblique notches, one on either side of the midline of the basal region.

Prosternum is very narrow between the coxae, not elevated above the coxal plane. Mesosternum compressed between the coxae distally, flat proximally; part of the area lateral to coxae and adjoining the mesepisternum black. Mesepisternum is densely granular. Metasternum covered with a long golden pubescence, punctured and with a distinct dark brown, shallow, median furrow. Metepisternum depressed, black at the inner, distal and outer margins, also covered with long pubescence (Image 4).

Image 3. *Oplatocera* head and prothorax, dorsal view (male).

Image 4. *Oplatocera* ventral view showing metasternum (male).

Urosternites pale yellowish-brown, each ventrite finely punctured except in the middle and covered with thin golden pubescence arising out of the punctures; all segments almost equally long, their width gradually decreasing towards the apex. Urosternite IV with a dark brown half-moon shaped ring at the margin; pygidium apically sinuate.

Legs moderately long, flattened, finely punctate and covered with a golden pubescence; apex of coxae, femora and tibiae dark brown to black. Procoxae prominent, very close to each other; coxal cavities angulate on outer side; mesocoxae prominent, globular, their distal edge brown to black; metacoxae somewhat depressed, distally black with blackness extending down up to the base of the trochanter; basal region of trochanter also black. Metafemora not extending beyond the tip of the abdomen.

Discussion: The original description of the genus [Type-species *O. callidioides* from northern India] by White (1853) is brief and is given verbatim here. Gahan (1906), however, gave a more elaborate description. "Head with strong, short, wide mandibles not toothed on the inner edge, the base elevated and covered with hairs. Antennae with the basal joint thick, the third joint much longer than the fourth, the others gradually diminishing in length to the end, the third, fourth, fifth, sixth and seventh joints armed with a few short spines on the outer margin; the spines are at right angles with the joints. Thorax wider than long, sides bulging, somewhat depressed above. Legs simple, femora slightly compressed".

Gressitt (1951) divided this genus into two subgenera: *Oplatocera* s. str. and *Epioplatocera,* on the basis of the presence or absence of prothoracic constriction before and behind the lateral tubercle, nature of the lateral prothoracic tubercle: prominent or small, and some antennomeres with or without spines.

In *O. halli* there is a distinct constriction at anterior and posterior margin of the pronotum, the lateral tubercle is prominent and no antennomere is spined. Consequently, this species is here formally recognised as belonging to the subgenus *Epioplatocera*. The current valid name is *Oplatocera* (*Epioplatocera*) *halli* Lepesme, 1956 n. status.

Gahan (1906) included *Oplatocera callidioides* White, 1853 (from northern India) and *O. oberthuri* Gahan, 1906 (from Darjeeling), as the only two species present in India, under the "group" (now Tribe) Oemini of the subfamily Cerambycinae. Gressitt & Rondon (1970) recorded *O. callidioides* from Laos, including it under the tribe Methiini. Two further species are now known from India: *O. halli* (from Nilgiri Hills) and *O. khasimontana* Hayashi, 1984 (from Khasi Hills, northeastern India). Hayashi (1984) described this last species as *O. (?Epioplatocera) khasimontana* and also placed it in Methiini. There are problems with these two tribes, namely Oemini and Methiini, and a brief discussion on this topic can be found in Lingafelter (2010). According to Vitali & Rezbanyai-Reser (2003), Oemini, Methiini and Xystrocerini have characters that do not allow the distinction of three tribes, and Xystrocerini should be the valid name for this tribe.

Thus, four *Oplatocera* species are now known from India. *O. halli* can be easily distinguished from all other Indian species as it lacks the distinctive oblique brown bands or spots on the elytra that are almost invariably present in other species. Besides, in *O. oberthuri* the elytral costae are weak and less in number, while *O. callidioides* has weak prothoracic tubercles. *O. khasimontana* has a pair of spots and prominent brown bands on the elytra, weak costae, along with a rather densely pubescent prothorax. *O. siamensis* Hüdepohl, 1994 from Thailand, which is likely to occur in India, differs from *O. halli* in having broad oblique bands on elytra (Hüdepohl 1994).

It is evident from the literature that most *Oplatocera*-species are present in northeastern India and south-western Asia. *O. halli* is perhaps the only southern as well as western Indian species. Its distribution represents probably the southern and western limits of the whole genus, since it is unknown from Sri Lanka (Makihara et al. 2008).

Note added in proof: During the time this paper was in press a good picture of the "type" of this species preserved in Natural History Museum, London, has been made available on the internet at http://www.flickr.com/photos/nhm_beetle_id/10814577524/

REFERENCES

Gahan, C.J. (1906). *The Fauna of British India including Ceylon and Burma. Coleoptera Volume 1 Cerambycidae*. Originally published by Taylor and Francis, London. Indian reprint by Today and Tomorrows Printers and Publishers, New Delhi, 329pp.

Gressitt, J.L. (1951). Longicorn Beetles of China. *Longicornia, Volume 2. Études et notes sur les longicornes, publiées sous la direction de P. Lepesme*. P. Lechevalier, 667 pp

Gressitt, J.L. & J.A. Rondon (1970). Cerambycids of Laos (Disteniidae, Prioninae,Philinae, Aseminae, Lepturinae, Cerambycinae), pp. 1–315. In: Cerambycid-beetles of Laos. *Pacific Insects Monograph* 24: 651pp.

Hayashi, M. (1984). Study of Asian Cerambycidae, (Coleoptera) VI. *The Entomological Review of Japan* 39 (1): 85–90.

Hüdepohl, K.E. (1994). Über südostasiatische Cerambyciden (Coleoptera, Cerambycidae). *Entomofauna (Zeitschrift für Entomologie*) 15: 185–196.

Lepesme, P. (1956). Description d'un nouvel *Oplatocera* (Col. Cerambycidae). *Annals and Magazine of Natural History,* series 12, IX: 623–624.

Lingafelter, S.W. (2010). Methiini and Oemini (Coleoptera: Cerambycidae: Cerambycinae) of Hispaniola. *The Coleopterists Bulletin* 64(3): 265–269; http://dx.doi.org/10.1649/0010-065X-64.3.265.14

Makihara, H., A. Mannakkara, T. Fujimura & A. Ohtake (2008). Checklist of longicorn Coleoptera of Sri Lanka (1) Vesperidae and Cerambycidae excluding Lamiinae. *Bulletin of Forestry and Forest Products Research Institute (FFPRI)*, 7(2) (No.407): 95–110

Namboodiri, M.P.S. & G. Thirumalai (2009). Insecta : Coleoptera: Cerambycidae, 91–97. In: *Fauna of Tamil Nadu, State Fauna Series* 17. Zoological Survey of India, Kolkata.

Vitali, F. & L. Rezbanyai-Reser (2003). Beiträge zur Insektenfauna von Jamaika, Westindien (Karibik). 5. Bockkäfer (Coleoptera, Cerambycidae). *Les Cahiers Magellanes* 26: 1–16.