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SHORT COMMUNICATION

REPORT OF A LONGHORN BEETLE CYRTONOPS PUNCTIPENNIS WHITE, 1853 (COLEOPTERA: CERAMBYCIDAE) FROM MAHARASHTRA, INDIA

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REPORT OF A LONGHORN BEETLE CYRTONOPS PUNCTIPENNIS WHITE, 1853 (COLEOPTERA: CERAMBYCIDAE) FROM MAHARASHTRA, INDIA



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Abstract: Cyrtonops punctipennis White, 1853 (Coleoptera: Cerambycidae) is being reported from three different localities for the first time from Maharashtra, India. The species has been described briefly with photographic illustrations showing important diagnostic characters. A brief description of male genitalia is also included along with illustrations.

Keywords: Aedeagus, *Cyrtonops punctipennis*, first report, illustrations, longhorn beetle.

Three specimens collected from different parts of Maharashtra were identified as *Cyrtonops punctipennis* White, 1853 based on keys in Gahan (1906). The characters of the genus and species were also confirmed on the basis of the original description by White (1853). *Cyrtonops* is an interesting genus showing sexually dimorphic characters with respect to maxillary palps: interestingly enough this very character was treated as a 'curious malformation' by White (1853).

The species *C. punctipennis* is known so far from Himalaya, Assam, Burma (=now Myanmar) and Sumatra as per Gahan (1906). In subsequent years (until now) there have been no reports of this species from any

part of India although it was listed among the species found in Maharashtra, without specific locality data, by Ghate (2012). It is also known to occur in Laos, China and Taiwan ('actual locality Arisan', in former 'Formosa' as given by Kano) (Kano 1930; Gressitt 1940; Gressitt et al. 1970).

The present report thus forms the first detailed record of *C. punctipennis* from different localities in Maharashtra, India, indicating a stable population and considerable westward distribution of this species.

Although this species has been described very well by Gahan (1906), there is neither an illustration of the adult morphology nor of the male genitalia. This paper gives additional structural details along with illustrations of maxillary palps and of male genitalia.

MATERIALS AND METHODS

Material studied: Ceramb 23, one female, 2005, Amboli, Maharashtra, coll. student; Ceramb 67, vii.2007, one male, Phansad, Maharashtra, coll: Amol; Ceramb 110, vi.2016 one male, Pendur, Maharashtra, coll. Narendra M. Naidu. All specimens are preserved in the

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Competing interests: The authors declare no competing interests.

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Department of Zoology, Modern College.

The specimens collected were dry preserved and were studied under Leica MZ6 stereo zoom and photographed with attached Canon PowerShot S55. Many images were taken at different focal planes and then stacked as described in Paripatyadar et al. (2015).

The male abdomen was laterally cut at the tip to remove the aedeagus. The aedeagus was boiled in 10% KOH for clearing and then observed and photographed. Terminology for aedeagus follows Ehara (1954).

DESCRIPTION

Male and Female: Measurements in mm. *Cyrtonops* male/female. Head length 3/3.75 & breadth 3.25/4; prothorax length 2.5/3.5 & breadth 4/5.25; elytra length 14.5/19; total length 21/27.

Colouration and Vestiture: Overall colour cinnamon brown; head and prothorax darker; extended appendix of fourth segment of maxillary palpi pale yellow and hairy; body beneath slightly paler than dorsal, more yellowish brown than reddish-brown; all legs similar to ventral colouration, distal tips of femora blackish-brown, tibia slightly darker than femora.

Head and pronotum dorsally finely punctured; elytra coarsely punctured, fine punctures in between coarse punctures; ventrally finely punctured especially on abdomen and metasternum; underside of head and prosternum very sparsely punctured. All body covered with golden pubescence, setae particularly dense on lateral edge of elytra; setae on antennae also dense obscuring punctures.

Overall female longer and robust than male; head and pronotum more densely punctured in female; elytra more or less identical; antennae shorter, antennomeres slender and less densely pubescent than that of male; abdomen projecting behind elytra in female but not in male; elytral costae more distinct in female than in male.

Distinct sexual dimorphism in size: female being long and robust; male small with long maxillary palps and slightly longer antennae (Image 1).

Head: Head longer than broad; mandibles projecting slightly obliquely in front, curved at their tip, the cutting edge dark black; frontal area depressed; antenniferous tubercles situated in front of eyes, prominently raised above with a deep sulcus in between; eyes coarsely faceted, large, almost entire; a fine median sulcus in between eyes that does not extend to base; basal area of head dorsally more strongly punctured than that between eyes; antenna long but shorter than body; all antennomeres coarsely punctured, first one broad at apex, almost as long as third, remaining antennomeres



Image 1. Cyrtonops punctipennis. Dorsal view of female (left) and male (right).



Image 2. Cyrtonops punctipennis. Dorsal view of head and pronotum showing characteristic maxillary palps in male.

sub-equal, eleventh longest, with constriction in distal 1/3rd; labial and maxillary palps distinct, the latter very long in the male, with a long membranous hairy appendix on fourth segment, which is typical of the genus (Image 2).

Thorax: Pronotum broader than long due to lateral tubercles that have a broad base; discal area slightly depressed with sparse punctures than lateral areas; its anterior border more or less straight while posterior border gently sinuate, a shallow transverse



Image 3. Cyrtonops punctipennis. Ventral view of male (left) and female (right).



Image 4. Cyrtonops punctipennis. Ventral view of male showing sterna.

sulcus behind anterior border and in front of posterior border; scutellum small, tongue shaped, almost as long as broad. Prosternum transversely wrinkled in anterior half, smooth and almost vertical in distal half; prosternal process triangular extending shortly between procoxae. Mesosternum narrow, produced between mesocoxae posteriorly and meeting anteriorly directed triangular projection of metasternum. Metasternum broad, much longer than pro- and mesosternum, with fine, dark brown, median sulcus. Mesocoxae open to epimera, procoxal cavity laterally angulate. Procoxae almost vertical, very closely approximating each other; mesocoxae and metacoxae well apart (Images 3 & 4).

Elytra: Long, parallel sided except at distal one-fifth, apices rounded; breadth at humerus slightly more than that of prothorax; elytra partly shining, especially in posterior three-fourth where punctures are shallower. There are at least two smooth costae, which are clearly visible only in oblique light. Entire lateral border of elytra and apical region with dense golden setae; setae on other areas sparse (Image 5).

Legs: Compressed; tarsal segments with dense setae underneath; claws dark brown, sharp, widely separated.

Abdomen: Abdominal sternites more or less of same length; first sternite with anterior triangular projection in between metacoxae.

Male genitalia: Aedeagus in dorsal view shows lateral lobes with rounded distal tips (parameres) and long setae, ejaculatory duct with long thread-like process is visible, sclerotization is moderate (Image 6). In ventral view the median foramen as well as median orifice are visible, struts of median lobe are narrow, in between which internal sac can be seen; also note a pair of sclerotized rods seen in the endophallus, a character seen in other members of Disteniinae (Image 7).

DISCUSSION

Our specimens fully match with *Cyrtonops* punctipennis without any doubt. In addition we have compared our specimens with the image of the 'type' kindly provided by Larry Bezark. We had also sent several images to Dr. Sharon Shute (Former Curator of Coleoptera at Natural History Museum, London), who also confirmed the status of our species (pers. comm. 2 April & 25 September 2008). The only other species, *Cyrtonops nigra* Gahan, 1906, described from India (Gahan 1906), can be easily differentiated on the basis of colouration and elytral puncturation.

Earlier *Cyrtonops punctipennis* was included in the family Cerambycidae and sub-family Disteniinae (Gahan 1906). Subsequently Gressitt (1940) erected a separate



Image 5. Cyrtonops punctipennis. Dorsal view of elytra to show details of pubescence and punctures.

tribe Cyrtonopini to accommodate this species. In later years, Gressitt et al. (1970) placed this species in the family Disteniidae, sub-family Disteniinae and tribe Cyrtonopini. This arrangement was followed because Linsley (1962) had treated Cerambycidae and Disteniidae as separate families.

Santos-Silva & Hovore (2007) have given chronological history of treatment of this group: 'Disteniinae or Distenidae', so it is not reiterated here. In recent years Disteniidae has again been treated as Disteniinae under Cerambycidae (Bousquet et al. 2009). For this reason we are also maintaining this species under Cerambycidae.

There were no previous photographic illustrations of the interesting maxillary palps and the male genitalia of this species. Villiers (1961) had given comparative drawings of maxillary palps of many Disteniinae, including *C. punctipennis*. Our photographic illustrations, which are presented here, suppoprt those obseravtions. Male genitalia of this species, however, have never been described or illustrated before. The aedaegus of *C. punctipennis* is broadly very similar to that described for various species of the genus *Distenia* (Ehara 1954; Bi & Lin 2013).

Extensive surveys for Cerambycidae are necessary in the Western Ghats to properly assess their diversity in this region.



Image 6. Cyrtonops punctipennis. Aedeagus in dorsal view.



Image 7. Cyrtonops punctipennis. Aedeagus in ventral view.

REFERENCES

Bi, W.X. & M.Y. Lin (2013). Description of a new species of *Distenia* (Coleoptera, Disteniidae, Disteniini) from Southeastern China, with records and diagnoses of similar species. *ZooKeys* 275: 77–89; http://doi.org/10.3897/zookeys.275.4700

Bousquet, Y., D.J. Heffern, P. Bouchard & E.H. Nearns (2009). Family-group names in Cerambycidae. *Zootaxa* 2321: 1–80.

Ehara, S. (1954). Comparative anatomy of male genitalia in some Cerambycid beetles. *Journal of the Faculty of Science Hokkaido University Series VI. Zoology* 12(1–2): 61–115.

Gahan, C.J. (1906). The Fauna of British including Ceylon Burma, Coleoptera - Vol I (Cerambycidae). Taylor & Francis, London, xviii+329pp.

Ghate, H.V. (2012). Insecta: Coleoptera: Cerambycidae. Fauna of Maharashtra, State Fauna Series. Zoological Survey of India 20(Part-2): 503–505.

Gressitt, J.L. (1940). The longicorn beetles of Hainan Island. Coleoptera: Cerambycidae. *The Philippine Journal of Science* 72(1–2): 598.

Gressitt, J.L., J.A. Rondon & S. von Breuning (1970). Cerambycid beetles of Laos (Longicornes du Laos). *Pacific Insects Monograph-24, Bernice Bishop Museum, Hawai* 650pp.

Kano, T.F. (1930). New and unrecorded Longicorn beetles from the Japan-empire. *Insecta Matsumurana* 5(1–2): 41–48.

Linsley, E.G. (1962). The Cerambycidae of North America, Part II. Taxonomy and classification of the Parandrinae, Prioninae, Spondylinae, and Aseminae. *University of California Publications in Entomology* 19. (Not seen in original)

Paripatyadar, S.V., S. Riphung & H.V. Ghate (2015). First report of the female of *Cheirochela assamensis* Hope, 1841 (Hemiptera: Heteroptera: Naucoridae) from northeastern India. *Journal of Threatened Taxa* 7(1): 6815–6820; http://doi.org/10.11609/JoTT. o4162.6815-20

Santos-Silva, A. & F.T. Hovore (2007). Divisão do gênero Distenia Lepeletier & Audinet-Serville, notas sobre a venação alar em Disteniini, homonímias, sinonímia e redescrições (Coleoptera, Cerambycidae, Disteniinae). Papéis Avulsos de Zoologia 47(1): 1–29.

Villiers, A. (1961). Sur la structure des palpes maxillaires de quelques Disteniinae (Coleoptera Cerambycidae). Verhandlungen XI Internationaler Kongress für Entomologie Band 1: 382–385

White, A. (1853). Catalogue of Coleopterous insects in the collection of the British Museum. Part vii. Longicornia I. Taylor & Francis, London, 184pp.





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