Jott Note 4(7): 2709-2712

First record of the Long-horned Beetle Sarothrocera Iowii White, 1846 (Cerambycidae: Lamiinae: Lamiini) from India

Hemant V. Ghate 1, Sophio Riphung 2 & N.S.A. Thakur³

¹ Head, Department of Zoology, Modern College, Shivajinagar, Pune, Maharashtra 411005, India

² Plant Protection Officer (Entomology), Central Integrated Pest Management Centre, Opp. Commerce, R.G. Buruah Road, Guwahati, Assam 781003, India

³ Pricipal Scientist and HOD, Division of Entomology, Indian Council for Agricultural Research, Umaim, Meghalaya 793103, India

Email: 1 hemantghate@gmail.com (corresponding author), ² sophioriphung@gmail.com, ³ nsa thakur@yahoo.com

The cerambycid fauna of India is quite rich. Beeson (1941) stated the number of species to be greater than 1200, and several hundred species have been described since then. A comprehensive and upto-date work listing all known species has not been published so far. Gahan (1906) compiled the 'non-Lamiinae' subfamilies as the 'Fauna of British India'

Date of publication (online): 26 July 2012 Date of publication (print): 26 July 2012 ISSN 0974-7907 (online) | 0974-7893 (print)

Editor: Francesco Vitali

Manuscript details: Ms # o2890 Received 26 July 2011 Final received 06 May 2012

Finally accepted 04 June 2012 Citation: Ghate, H.V., S. Riphung & N.S.A. Thakur (2012). First record of the Long-horned Beetle Sarothrocera lowii White, 1846 (Cerambycidae:

2712. Copyright: © Hemant V. Ghate, Sophio Riphung & N.S.A. Thakur

2012. Creative Commons Attribution 3.0 Unported License. JoTT allows unrestricted use of this article in any medium for non-profit purposes. reproduction and distribution by providing adequate credit to the authors and the source of publication.

Lamiinae: Lamiini) from India. Journal of Threatened Taxa 4(7): 2709-

Acknowledgements: The authors are grateful to the Indian Council for Agricultural Research, Delhi, for its support through NPIB project at North East Region, Umiam, and to the Department of Zoology, Modern College, Pune, for providing facilities related with identification. HVG is particularly grateful to Mr. Carolus Holzschuh, Villach (Austria) and Mr. Daniel J. Heffern, Houston (USA) for their continuous support in work on this group. We are also grateful to Mr. Francesco Vitali (Luxembourg) for his generous help with literature, encouragement and comments on the first draft of this paper. The work on Cerambycidae was supported by a grant from BCUD, Pune University

OPEN ACCESS | FREE DOWNLOAD





volume, but in spite of the fact that they are numerous and difficult to diagnose, Lamiinae are not yet put in a single volume and hence identification of its members is a difficult task.

While studying the collection of Cerambycidae from northeastern India, we have come across a species (Ukhrul District, Manipur, ix.2009, coll. S. Riphung, presently preserved in Modern College, Pune, Maharashtra 411005, as NE-Ceramb 25) that is not recorded from Indian territories before.

This species has been identified as a female of Sarothrocera lowii White, 1846 on the basis of keys by Rondon & von Breuning (1970). Detailed characters of the species, as given by the original author (White 1846), and the diagnosis given by Pascoe (1866) were also checked. In addition, the characters given by von Breuning (1943) were confirmed.

White (1846) described the genus Sarothrocera to accommodate a species from Borneo collected by Mr. Hugh Low, as Sarothrocera lowii. In brief, diagnosis of the genus given by White is: "Antennae with the first joint thick and furnished at the end on the inside with a tuft of hairs, 2nd joint very small, with one or two hairs, 3rd to 7th joints behind fringed with longish hairs, the hairs on the 3rd & 4th very thickly distributed and extending over a considerable part of hind edge. Thorax alomost as long as wide, with a short spine on each side. Legs with the femora compressed, especially above; the tibiae much compressed, slender at the base, getting thicker towards the middle, and then dilated at the end, with the sides nearly parallel, etc." White mentions of color as "of a rich brown, slightly tinged with ochraceous, the scutellum is of pale yellow; the base of the elytra is verrucose above, the small warts not extending the middle, etc." (Image 1).

Later, von Breuning (1943) provided additional features, some of which are: "...head non retractile; pronotum transverse with prominent lateral spines; antennae robust, one-fourth or more longer in female or twice longer than body in male. Scape and following antennomeres II-VIII densely covered with long black Scape moderately long, very strong, with complete cicatrix; 3rd article longer than 4th, threefourth longer than scape; antennal tubercles close, very elevated; eyes coarsely faceted, inferior lobe

First record of Sarothrocera lowii H.V. Ghate et al.



Image 1. Sarothrocera Iowii White, dorsal view of female

longer than broad; elytra elongated, convex, rounded at the apex; prosternal process short, feebly elevated; legs moderately long, very robust; protibiae flattened, metatibiae with a dorsal furrow, claws divaricated...".

In ventral view, the body appears to be covered with thin recumbent light brown pubescence (Image 2). In lateral view (Image 3), one can see dense antennal hairs from scape to 8th antennomere, a character seen in female; in male the dense hairs are present only up to the base of 4th antennomere, as pointed out by Breuning (1943) and Rondon & Breuning (1970). The frontal close-up of head (Image 4) shows nature of antennal tubercles and shape of the forehead, while the dorsal close-up of head and pronotum (Image 5) reveals a furrow between the eyes, lateral prothoracic spine and tongue-like scutellum.

Rondon & von Breuning (1970) mentioned its distribution to be in Myanmar, Indonesia and Laos. Borneo, Sumatra and West Malaysia are additional known places where this beetle is found (Breuning 1943).

Mukhopadhyay & Halder (2004) first compiled



Image 2. Sarothrocera Iowii White, ventral view

the list of Cerambycidae from Manipur. This list was based on earlier collection records as well as fresh surveys and it contains 43 species belonging to 33 genera and five subfamilies. Only eight of them belonged to the Lamiinae and *S. lowii* was not among the species mentioned therein. Hence, the species becomes the first record for Manipur.

Similarly, publications on Cerambycidae of the other regions of northeastern India also did not record the presence of *S. lowii*. Sengupta & Sengupta (1981) listed nine Lamiinae-species from Arunachal Pradesh, Mukhopadhyay & Biswas (2000b) listed eight species from Tripura, Mukhopadhyay & Biswas (2000a) compiled the list of Cerambycidae from Meghalaya including 48 Lamiinae; and Mukhopadhyay & Halder (2003) listed 44 Lamiinae from Sikkim. These lists were based on earlier collection records as well as fresh surveys in most cases and do not mention *S. lowii*. Since this species is not known from any other

First record of Sarothrocera lowii H.V. Ghate et al.

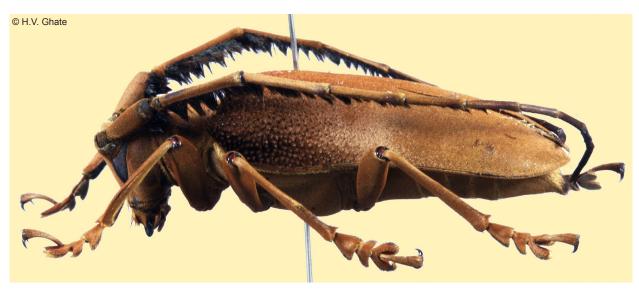


Image 3. Sarothrocera Iowii White, lateral view



Image 4. Sarothrocera lowii White, frontal view of the head

region of India, it is also an addition to the Indian Cerambycidae fauna.

According to Beeson (1941), the beetles emerge in May-July and the host-plants are *Engelhardtia spicata* Lesch. ex Blume (Juglandaceae) and *Stereospermum suaveolens* DC. (Bignoniaceae).



Image 5. Sarothrocera lowii White, head and pronotum, dorsal view

REFERENCES

Beeson, C.F.C. (1941). The Ecology and Control of the Forest Insects of India and the Neighbouring Countries. (1993-Edition by Bishen Singh Mahendra Pal Singh, Dehradun), 1007pp.

First record of Sarothrocera lowii H.V. Ghate et al.

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

- Mukhopadhyay, P. & S. Biswas (2000a). Coleoptera: Cerambycidae, pp. 41–67. In: Director, Zoological Survey of India (ed.). *Zoological Survey of India, State Fauna Series 4, Fauna of Meghalaya, Part 5*, 666pp.
- Mukhopadhyay, P. & S. Biswas (2000b). Coleoptera: Cerambycidae, pp. 139–142. In: Director, Zoological Survey of India (Ed.), Zoological Survey of India, State Fauna Series 7, Fauna of Tripura, Part 3, 390pp.
- Mukhopadhyay, P. & S.K. Halder (2003). Insecta: Coleoptera: Cerambycidae, pp. 181–199. In: Director, Zoological Survey of India (Ed.), Zoological Survey of India, State Fauna Series 9, Fauna of Sikkim, Part 3, 411pp.
- Mukhopadhyay, P. & S.K. Halder (2004). Insecta: Coleoptera: Cerambycidae, pp. 421–431. In: Director, Zoological Survey of India (Ed.), Zoological Survey of India, State Fauna Series 10, Fauna of Manipur, Part 2, 625pp.

- Pascoe, F. P. (1864–1869). Longicornia Malayana. *Transactions of the Entomological Society of London Third Series*, Vol. III (all parts I–VII combined) 712pp + plates (the description of *Sarothrocera lowii* was published in 1866, vol. 3, part III).
- Rondon, J.A. & S. von Breuning (1970). Lamiines du Laos. pp. 315–571. In: Gressitt, J.L., Rondon J.A. & S. Breuning, von, *Cerambycid-beetles of Laos (Longicornes du Laos)*. *Pacific Insects 'Monograph 24*, Bernice P. Bishop Museum, Hawaii, USA, 651pp.
- Sengupta, C.K. & T. Sengupta (1981). Cerambycidae (Coleoptera) of Arunachal Pradesh. *Records of Zoological Survey of India* 78: 133–154.
- White, A. (1846). Description of four apparently new species of Longicorn Beetles in the collection of the British Museum. *Annals and Magazine of Natural History* XVIII: 47–49.
- von Breuning, S. (1943). Études sur les Lamiaires, Douzième tribu: Agniini Thomson. *Novitates Entomologicae* 3rd supplement 106: 273–280.

