

AN ADDITION TO THE KNOWN RANGE OF *MARUMBA IRATA* JOICEY & KAYE, 1917 (LEPIDOPTERA: SPHINGIDAE) IN NORTHEASTERN INDIA

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The genus *Marumba* Moore, 1882 occurs in the Oriental and Palearctic regions; nine species of *Marumba* have been reported in the Indian sub-region: *gaschkewitschii* (Bremer & Grey, 1853), *dyras* (Walker, 1856), *indicus* (Walker, 1856), *sperchius* (Menetries, 1857), *cristata* (Butler, 1875), *spectabilis* (Butler, 1875), *nympha* (Rothschild & Jordan, 1903), *poliottis* Hampson, 1907, *harutai* Eitschberger & Ihle, 2012 (Bell & Scott 1937; Kitching et al. 2014). The forewing of the genus features three transverse fasciae at basal to discal mark and three distal to it and the outer two double back subternally to form a loop containing a dark central spot on the dorsum. The forewing apex and the angle of the tornus are weakly falcate and have an irregular wing

margin. Two dark brown patches are usually present at the hindwing tornal area associated with a slightly looped fascia (Holloway 1987).

Marumba irata was, until recently, considered to be a subspecies of *Marumba gaschkewitschii*. This species complex was recently revised by Eitschberger (2012), who reinstated it to species status based only on the lectotype in the Natural History Museum, London (NHML) and its original labels. The origin of that specimen is not fully known but was said to be from “Tibet” at about 1000m elevation (Eitschberger 2012). The early stages and biology of the species are completely unknown. The species has been reported from Myanmar, China and at higher altitudes of northern Vietnam (Pittaway & Kitching 2000–2015).

Marumba irata have forewing with ground-colour violet pink. The forewing basal area dark brown with a bunch of four transverse lines across the center of the cell, the outer two of which are greatly curved and parallel. Forewing discoidal spot small and black. Outside the cell is a group of three transverse lines very close together, followed by a very wavy parallel line at a short distance and ends near tornus in a large chocolate-coloured spot; below this still nearer to tornus is a squarish similarly coloured spot (Eitschberger 2012). *Marumba irata* can be easily distinguished by hindwing



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Marumba irata



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Image 1. *Marumba irata* photographed at (a) Khonoma, Kohima District, Nagaland and (b) Mao, Senapati District, Manipur.

pink, brownish towards outer margin while *Marumba gaschkewitschii* have hindwing red shaded with brown distally (Bell & Scott 1937; Eitschberger 2012).

In the present paper, we report encountering *Marumba irata* at different locations of northeastern India. The species was encountered by the first author when collecting data on moths at Khonoma, Kohima District of Nagaland (India) (25°38'39.9"N & 94°1'19.06"E, 1950m) (Fig. 1) when, on the night of 21 May 2012, a single specimen of *Marumba irata* appeared on the light screen, which was a 1.8m by 1.5m white cloth illuminated by a 160W mercury vapour bulb. The moth appeared at 20:00hr and settled on the cloth with the left hindwing exposed (Image 1a).

Later, on the night of 19 July 2014, a second specimen was photographed by second author at Mao, Senapati District of Manipur State (India) (25°30'25.57"N & 94°08'00.47"E, 1798m) (Fig. 1) on a concrete wall where a fluorescent bulb was kept switched on overnight. The moth settled on the wall with the hindwings mostly covered by the forewings, but with the abdomen exposed, this being bent upwards in the manner characteristic of the genus (Image 1b).

The present records from the two states of northeastern India represent a major extension of the known range of the species and are the westernmost known distributional records. Both localities lie in the outer Himalayan ranges below 2000m, altitudes comparable with those at which the species is found in northern Vietnam (1500–2400 m; specimens in the NHML; I.J. Kitching, pers. comm. 14 November 2014), but contrasting with the higher altitudes, above 2500m, at which the species has been reported in Xizang/Tibet: Bomi, 2750m; Nyingchi, Namjagbarwa region, 3050m; Zayü, 3000m (Pittaway & Kitching 2000–2015). Further detailed studies are advisable to understand fully the

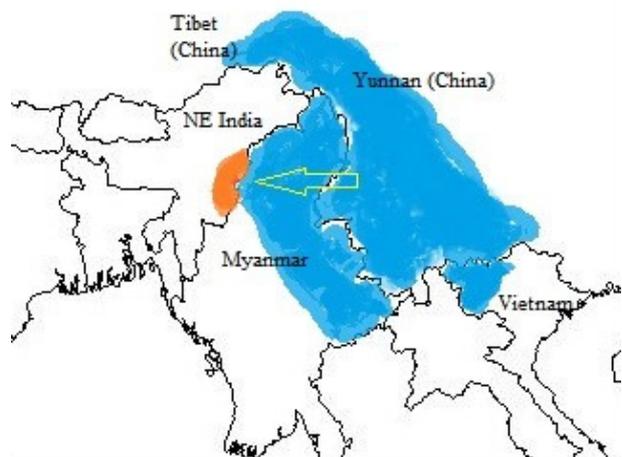


Figure 1. Map showing collecting localities Khonoma, Nagaland and Mao, Manipur of northeastern India (Red colour) and distribution area (Blue colour) of the *Marumba irata*.

extent of this species in other parts of the northern Indian region.

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