

**LYMANTRIA (PORTHETRIA) APICEBRUNNEA (INSECTA:
EREBIDAE: LYMANTRIINAE) IN ARUNACHAL PRADESH:
AN ADDITION TO THE INDIAN FAUNA**

PETER SMETACEK¹ AND AMBICA AGNIHOTRI²

¹*Butterfly Research Centre, Bhimtal, Uttarakhand, India 263 136*

petersmetacek@gmail.com

²*JRF, Uttarakhand Forest Research Institute, Haldwani, Uttarakhand 263 139*

Reviewer: Sankararaman H.

Lymantria Hubner, [1819] is a large Palaearctic and tropical Asian genus of moths, many of which are confusingly similar. *Lymantria (Porthetria) apicebrunnea* Gaede, 1932 was described from Sichuan, China and also recorded from Guangxi and Yunnan provinces (Pogue & Schaefer, 2007). Males are somewhat variable.

During a survey of the Dibang valley, Arunachal Pradesh, three males of this species were collected. This confirms the occurrence of this species in India and is an addition to the known fauna of the country.

Material examined: 3 males. Forewing length: 26 – 30 mm.; expanse: 56 - 66 mm. India, Arunachal Pradesh, Lower Dibang Valley district, 17 km NE of Hunli, elevation ca. 600 m. 5.vii.2019; x 3; *Leg. et Coll.* Peter Smetacek, Butterfly Research Centre, Bhimtal, Uttarakhand. (Figures 1 and 2).

Diagnosis: We dissected two males (figure 1b, 1c and 2b, 2c) and compared genitalia with that illustrated in Pogue & Schaefer (2007); both matched *L. apicebrunnea*.

Pogue & Schaefer (2007) re-described male *L. apicebrunnea* with the following features:

Head: front and vertex white; scape white with a few pink scales medially, antenna white at base becoming dark brown, bipectinate; labial palpus white.

Thorax: a narrow line of pink scales between head and thorax; remainder of thorax white; forefemur white long pink and white fringe, foretibia white, lateral border with white

fringe, tarsi white, segments 3-4 dark grey; middle and hind femora white with pink scales apically, tibiae white with white fringe, tarsi white, segments 3 – 4 grey; underside pink medially, white laterally.

Forewing: Length 25-28 mm (n=3); ground colour white; basal area with two black dots, one at costa and one at M vein; antemedial line a black dash from costa to R vein; orbicular spot absent; reniform spot not evident, incorporated into postmedial line; postmedial line brown, crenulate, from costa to posterior margin; submarginal line brown, crenulate, from costa to posterior margin; outer margin a wide brown band; fringe white with dark brown spots between veins.

Hindwing: Ground colour white; costal margin a wide brown band solid to Rs cell; fringe white with faint brown spots between veins, usually not extending to inner margin of wing. Abdomen: entirely white both dorsally and ventrally; tymbal absent on third sternite.

Pogue & Schaefer (2007) distinguish between males of *L. apicebrunnea* and *L. brunneoloma* Pogue & Schaefer, 2007 using the following features:

Forewing length is shorter in *L. brunneoloma* and the outer margin has a much wider brown border than in *L. apicebrunnea*. The subterminal line is not as deeply scalloped in *L. brunneoloma* as in *L. apicebrunnea*. The postmedial line is discernable only as a faint spot along the posterior margin of the forewing in *L. brunneoloma*, but it is a well-defined

crenulate line in *L. apicebrunnea*. The male genitalia has a straight dorsal process in the valve of *L. brunneoloma* and in *L. apicebrunnea* it is curved towards the apex. The saccus is short with a truncated apex in *L. brunneoloma*, and elongate and narrow with a rounded apex in *L. apicebrunnea*.

From *L. (Porthetria) xyлина* Swinhoe 1903 Pogue & Schaefer (2007) distinguish *L. apicebrunnea* by the following features:

L. xyлина lacks the brown forewing outer margin that is present in *L. apicebrunnea*. Also, and unlike *L. apicebrunnea*, *L. xyлина* is pink on the legs and has a pink neck and underside. The labial palpus is larger and black in *L. xyлина* and white in *L. apicebrunnea*. In *L. xyлина* the saccus in the male genitalia is wider and stouter than that in *L. apicebrunnea*. From *L. (Porthetria) brotea* (Stoll, 1780), Pogue & Schaefer (2007) distinguish *L. apicebrunnea* by the lack of a wide brown margin on the forewing that is present in *L. apicebrunnea*. There also can be a pale pink flush in the posterior area of the hindwing in *L. brotea* that is absent in *L. apicebrunnea*. The male genitalia differ from those of other *Lymantria (Porthetria)* species in that the costal margin of the valve is relatively short and slightly curved.

Remarks

The material examined lacks any pink scales and the palpi are dirty white. It is possible that the use of ammonia in curating them caused the scales to change colour, as in the case of several other pigments. Alternately, it is possible that the Arunachal Pradesh population lacks pink, unlike the population from China.

The three moths were found flying singly between 11 am and 1 pm along the motor road. The flight was very erratic, quite unlike any butterfly but somewhat like Geometridae and other members of Lymantriinae. They were not found to be attracted to artificial light at night, or flowers, wet mud, animal droppings during the daytime. They inhabit dense forest and were completely absent from open areas.

Acknowledgement

We are grateful to Jibi Pulu, Roing, for many kindnesses that made the trip possible and to Pranob Gogoi, Dibrugarh, for constant support and to P.W. Schaefer, Newark, for literature.

Reference

Pogue, M.G. & P.W. Schaefer. 2007. *A review of selected species of Lymantria Hubner [1819] including three new species (Lepidoptera: Noctuidae: Lymantriinae) from subtropical and temperate regions of Asia, some potentially incasive to North America*. Forest Health Technology Transfer Team. FHTET-2006-07. vii + 223 pp.

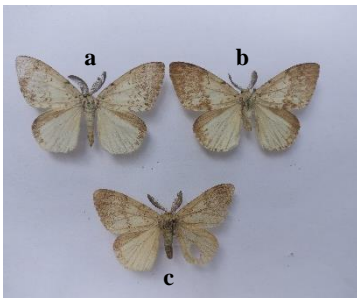


Fig.1: *Lymantria apicebrunnea*, view

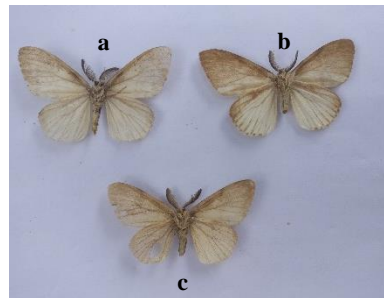


Fig.2: *Lymantria apicebrunnea*, view