A New Record of Euproctis wilemani (Lepidoptera: Lymantriidae) from Hainan Island

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A NEW RECORD OF *EUPROCTIS WILEMANI* (LEPIDOPTERA: LYMANTRIIDAE) FROM HAINAN ISLAND

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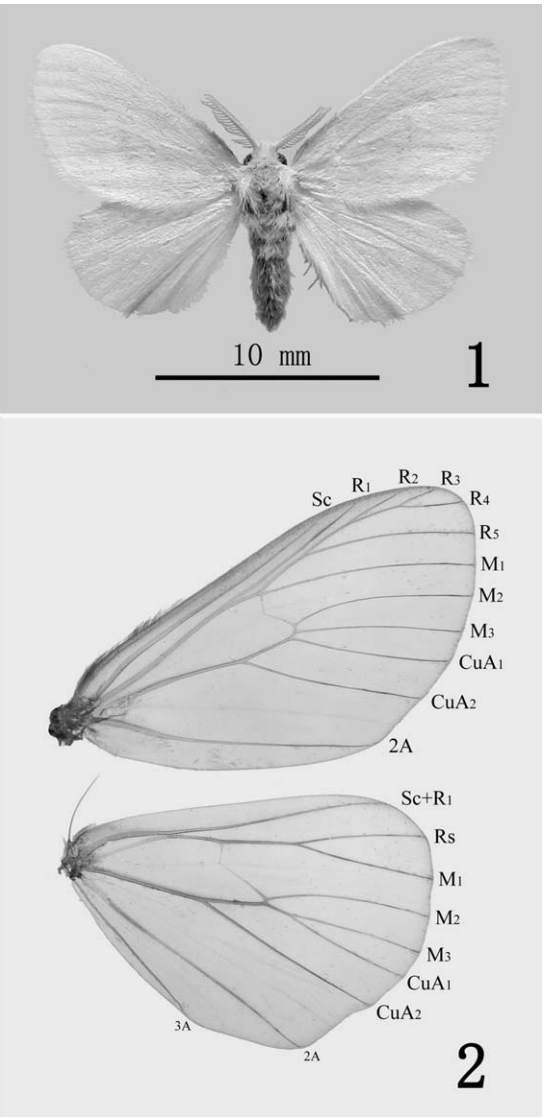
Hainan Island, with an area of about 33920 km^2 located at the northern margin of tropical Asia, (Zhang 2004), has exceptional high species richness and is considered a hotspot region for biodiversity research (Myers et al. 2000). On 11 Apr 2009, we conducted a survey of Lepidoptera in Jianfengling National Nature Reserve, southwest of Hainan Island, as a part of Lepidoptera inventory initiated several years ago (Wang & Huang 2005). Two male lymantrid specimens of Nygmiini collected by light traping were confirmed as *Euproctis wilemani* based on the male genitalia compared with the literature. The species was first described by Collenette in 1929 and previously recorded only from regions of the Malay Archipelago including The Philippines, Borneo, and Sumatra (Holloway 1999). We report here the occurrence of *E. wilemani* from Hainan Island as well as China for the first time and describe morphological characters.

Male adult (Figs. 1 and 2): Wingspan 22 mm. Head covered with yellow scales. Antenna bipectinate, pale yellow. Labial palpus short, upturned, thickened with somewhat rough yellow scales. Thorax and tegula yellow. Forewing evenly yellow, fringe white; venation with R_2 branching off more distally than R_5, R_5 stalked with R_{2+3+4}, M_1 arising from upper angle of distal cell, M_3 from under angle of distal cell, M_2, M_3 and CuA_1 isolated. Hindwing yellowish white, fringe white; venation with Rs and M_1 stalked at basal 1/3, M_2 and M_3+CuA_1 arising from under angle of distal cell, M_3 stalked with CuA_1 at 1/5 basally. Abdomen dark yellow.

Male genitalia (Fig. 3): Uncus bifid at base. Valves square, cucullus slightly convex medially. Saccus strong, V-shaped. Juxta deeply convex on anterior margin at middle. Aedeagus wide, longer than valves in length; a single, heavily sclerotized cornutus present in the vesica, broad basally, acute apically.

The present discovery greatly extends the distribution range of *E. wilemani* from the Malay Archipelago, which is mainly a tropical rainforest climate, to Hainan Island, which has a tropical monsoon climate. However, Hainan Island has close association and shares a common origin with Malay Archipelago in some insect species (Zhang 2004; Huang 2002). *Euproctis wilemani* from Hainan has no distinct difference from those of Borneo and Sumatra, except the Hainan specimens are smaller and the forewing facies are yellow. These small differences seem likely to be intraspecific variation due to geographical isolation.



Figs. 1 and 2. Adult and venation of *Euproctis wilemani* Collenette, 1929, 1. Male adult, upperside. 2. Venation, male.

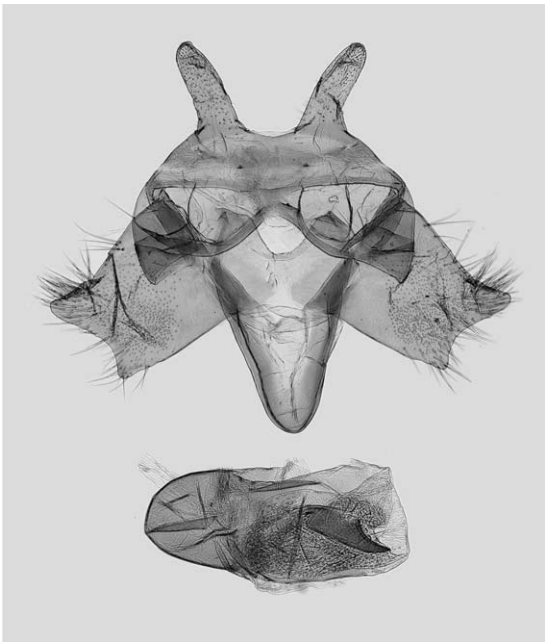


Fig. 3. Male genitalia of *Euproctis wilemani* Collenette, 1929

Summary

Euproctis wilemani Collenette, 1929, previously recorded in Philippines, Borneo, and Sumatra, is reported from Hainan Island for the first time. The adult male, wing venation, and the male genitalia are illustrated.

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