

CORYPTILUM MOTHS IN SOUTHEAST ASIA (LEPIDOPTERA: TINEIDAE)

JOHN B. HEPPNER¹ AND HSIAU-YUE WANG

Florida State Collection of Arthropods, DPI, FDACS, P.O. Box 147100, Gainesville, Florida 32614-7100, USA and
Taiwan Museum, Dept. of Zoology, 48 Hsu-Chou Rd., Taipei, Taiwan, ROC

ABSTRACT.— The Oriental tropical moth genus, *Coryptilum* (Tineidae), includes some of the most colorful tineid moths in the world. Two of the species are illustrated: one from Malaysia and one from Taiwan. Other species of the genus occur from India to the Solomon Islands. Species of the genus are day-flying, but other biological data remains unknown.

KEY WORDS: behavior, distribution, Indonesia, Malaysia, New Guinea, Oriental, Philippines, Solomon Islands, Southeast Asia, Taiwan, Tineinae.

Species of the tineid genus *Coryptilum* are brilliantly colored day-flying moths. They are currently placed in the subfamily Tineinae (Tineidae), but may belong in another subfamily (Robinson, pers. comm.). The genus has only 4 known species described from various areas, from India to the Solomon Islands. Perhaps the most well-known species is *Coryptilum klugii* Zeller (Fig. 1), from mainland Malaysia, illustrated below from Cameron Highlands. Malaysia also has the more yellow-spotted species, *Coryptilum rutilellum* (Walker) (Fig. 2), ranging north to Taiwan (Davis, 1992). Other species occur in the Philippines (*C. luteum* Diakonoff, [1968]), various islands of Indonesia, and the Solomon Islands, east of New Guinea. There may well be more species yet to be discovered.

These colorful moths are all diurnally active, typically flying at a slow pace in bright sunshine (Robinson *et al.*, 1994). In Taiwan, *C. rutilellum* has been seen by the authors as flying in daytime in lowland forest openings over secondary growth herbaceous plants and wildflowers. At one site in northern Taiwan (Taian, Miaoli Co., 600m), the moths were also taken at light but this was in proximity to their daytime flight area (day-flying moths, just as some butterflies, sometimes do come to light if aroused from a nearby nocturnal resting site). Biologies for all the species of *Coryptilum* remain unknown: elucidation of the biology and life history of any of the species of this genus would add much to our understanding of these atypical tineid moths.

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Fig. 1-2. *Coryptilum* species: 1) *C. klugii* resting on leaf, Cameron Highlands, Malaysia (© 1998 G. O. Krizek). 2) *C. rutilellum*, Taiwan.

LITERATURE CITED

- Davis, D. R.**
1992. Tineidae. In J. B. Heppner and H. Inoue (eds.), *Lepidoptera of Taiwan. Volume 1. Part 2: Checklist*, 63-65. Gainesville: Assoc. Trop. Lepid.
- Diakonoff, A. N.**
[1968]. *Microlepidoptera of the Philippine Islands*. Washington: Smithsonian Inst. Pr. 484pp. (1967) (Bull. USNM 257).
- Robinson, G. S., K. R. Tuck, and M. Shaffer**
1994. *A Field Guide to the Smaller Moths of South-East Asia*. Kuala Lumpur: Malaysian Nature Soc. 309pp (32 col. pl.).