

Synopsis of the Genus *Hygroplasta* Meyrick in the World with Description of a New Species (Lepidoptera: Lecithoceridae)

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Chun-Sheng Wu (1998) Synopsis of the genus *Hygroplasta* Meyrick in the world with description of a new species (Lepidoptera: Lecithoceridae). *Zoological Studies* 37(3): 197-200. In a systematic synopsis of the genus *Hygroplasta* Meyrick, 4 species are recognized from South and Southeast Asia: *H. spoliatella* (Walker) from Sri Lanka and India, *H. lygaea* (Meyrick) from Kashmir and Nepal, *H. monodryas* (Meyrick) from India, and *H. notolatra* sp. n. from Malaysia. A key to the species based on the male and female genitalia is provided; adults and genitalia of the type species and new species are described and illustrated.

Key words: Taxonomy, *Hygroplasta*, Lecithocerid moths, Lepidoptera.

The genus *Hygroplasta* was described by Meyrick (1925) based on *Gelechia spoliatella* Walker from India and Sri Lanka, and he included another 3 species in this genus: *Hygroplasta lygaea* (Meyrick) from Kashmir, *H. monodryas* Meyrick from India, and *H. continctella* (Walker) from Sri Lanka. Gozmany (1978) redescribed *Hygroplasta lygaea* (Meyrick) from Nepal and transferred *H. continctella* (Walker) to a membership in the Xyloryctidae.

The paratype series of all the known 4 species of *Hygroplasta* in the collections of the National Museum of Natural History (NMNH) provided me with the opportunity to synopsise this genus.

In this paper, I redescribed the type species, *H. spoliatella*, including a description of the male genitalia which has not previously been known, and described a new species from Malaysia. The type specimens are deposited in NMNH, Smithsonian Institution, Washington, D.C.

MATERIALS AND METHODS

Specimens examined are based on collection made by G. F. Hevel in 1983. All paratypes of the previously known species in NMNH are also examined to compare with new materials. Illustrations

were made with a camera lucida. Methods of dissection, morphometric characters, and terminology follow Gozmany (1978) and Wu (1997).

SYSTEMATIC ACCOUNTS

Genus *Hygroplasta* Meyrick, 1925

Hygroplasta Meyrick, 1925: 244; Clarke 1965: 99; Gozmany 1978: 229-230. Type species: *Gelechia spoliatella* Walker, 1864.

Diagnosis: This genus is superficially similar to *Torodora* Meyrick, but differs from the latter by the forewing with R_4 and R_5 coincident.

Distribution: Malaysia, Kashmir, Nepal, India, and Sri Lanka.

Key to the species of *Hygroplasta* based on male genitalia *

1. Valva short and wide; aedeagus longer than valva 2
Valva long and narrow; aedeagus shorter than valva
..... *H. notolatra* sp. n.
2. Juxta with wide caudal process; vinculum very long ventrally *H. spoliatella*
Juxta with narrow caudal process; vinculum short ventrally *H. lygaea*

* The key does not include the species *H. monodryas* because the abdomen of the male is missing and so the male genitalia is unknown.

Key to the species of *Hygroplasta* based on female genitalia

1. Corpus bursae with a sclerotized signum 2
Corpus bursae without sclerotized signum *H. monodryas*
2. Signum "Z"-shaped *H. spoliatella*
Signum plate-shaped 3
3. Ductus bursae with a plate bearing dents; corpus bursae with an accessory sac *H. lygaea*
Ductus bursae without such a plate; corpus bursae without accessory sac *H. notolatra* sp. n.

***Hygroplasta spoliatella* (Walker, 1864)
(Fig.1)**

Gelechia spoliatella Walker, 1864, List of Specimens of Lepidop. Insects Col. Br. Mus., 29: 659.

Hygroplasta spoliatella: Clarke 1965, 5: 99, pl. 49, fig. 1-1c.

Material examined: 1 male, Chapra Bengal Mackenzie, gen. slide no. 88219.

Description: Wing expanse 25 mm. Antennae light yellowish brown. Labial palpi brown, terminal segment yellowish brown. Head brown. Thorax brown. Forewing yellowish brown, pattern blackish brown; cell-dot and discocellular spot big; cilia grayish yellow. Hindwing gray; cilia gray.

Male genitalia (Fig. 4): Uncus long; gnathos

wide, hook small and short; valva short and wide, widening at basal 1/3 of costa, apex pointed; juxta plate-shaped, caudal process bearing hairs short and wide; vinculum very long ventrally; aedeagus longer and narrower than valva, vesica with scrobiculation.

Female genitalia: see Clarke's fig.1b-1c.

Distribution: India and Sri Lanka.

Remarks: The male genitalia is described and illustrated for the 1st time.

***Hygroplasta lygaea* (Meyrick, 1911)**

Pachnistis lygaea Meyrick, 1911, J. Bombay Nat. Hist. Soc., 20: 707.

Hygroplasta lygaea: Clarke 1965, 5: 99, pl. 49, fig. 2-2b; Gozmany 1978, MP 5: 230-231, fig. 155.

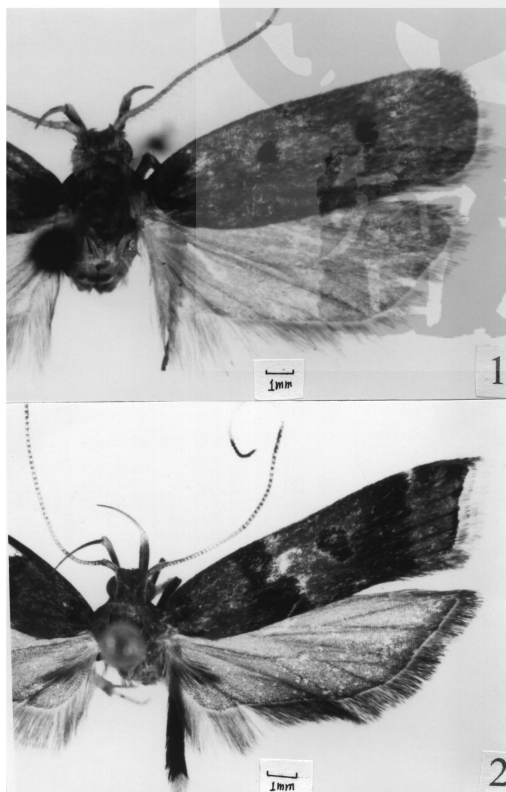
Material examined: 1 male, Blimtal Kumra B. 1372 m. 9. 22. Wing expanse 24 mm.

Male and female genitalia: as shown in Gozmany's fig. 155.

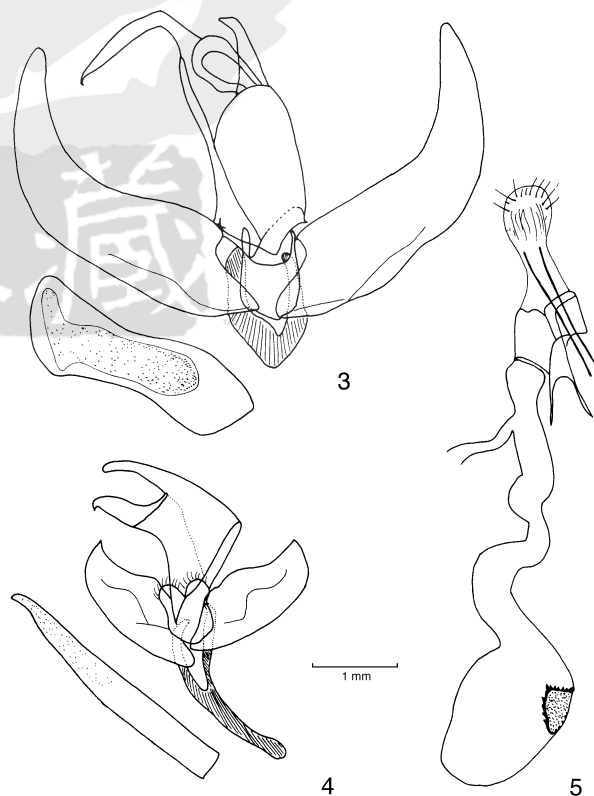
Distribution: Kashmir and Nepal.

***Hygroplasta monodryas* (Meyrick, 1914)**

Pachnistis monodryas Meyrick, 1914, J. Bombay Nat. Hist. Soc., 22: 737.



Figs. 1-2. Adults. 1. *Hygroplasta spoliatella* (Walker); 2. *Hygroplasta notolatra* sp. n.



Figs. 3-4. Male genitalia; **Fig. 5.** Female genitalia. 3. 5. *Hygroplasta notolatra* sp. n.; 4. *Hygroplasta spoliatella* (Walker).

Hygroplasta monodryas: Clarke 1965, 5: 99, pl.49, fig. 3-3b.

Material examined: 1 female, Nilgiri Hills, H. L. Andrewes, VIII. 07, 1060 m. Wing expanse 24-27 mm.

Female genitalia: as shown in Clarke's fig. 1a-1b.

Distribution: India.

***Hygroplasta notolatra* Wu, sp. n.**
(Fig. 2)

Holotype: Male. Malaysia: Sabahi, Kinabalu National Park, Headquarters area at 1560 m, collected by G.F. Hevel on 6 Sept. 1983, gen. slide no. 88129.

Paratype: 1 female. Malaysia: Sabahi, 1 km S of Kundasang at 1530 m, collected by G.F. Hevel on 28 Aug. 1983, gen. slide no. 88130.

Diagnosis: This new species differs from all known species by the narrow valva and the color pattern of the forewing with a humeral dot and 2 fasciae.

Description: Wing expanse 22 mm. Antennae blackish brown on base, apex, and middle; yellowish white on remainder. Labial palpi ochreous inside, terminal segment and outside blackish brown. Head and thorax ochreous. Forewing ochreous brown; pattern blackish brown: humeral dot small; inner fascia wide, edges wavy; outer fascia wider, terminal edge tinged ochreous yellow; cell-dot absent; discocellular spot big; cilia ochreous yellow. Hindwing yellowish brown; cilia brown.

Male genitalia (Fig. 3): Uncus short; gnathos narrow and long; valva narrow and long, curving at middle and tapering to a pointed apex; juxta shield-shaped, caudal process long, fingered; aedeagus shorter than valva, vesica with a scrobiculation, without obvious cornuti.

Female genitalia (Fig. 5): Antrum indistinctive; ductus bursae wide and long, without spines; ductus seminalis narrow, originating in caudal 1/6 of ductus bursae; corpus bursae small; signum long,

heart-shaped, with dents which are biggest at upper margin.

Etymology: The name is derived from the Greek "notos" (= back) and "latron" (= salary).

Distribution: Malaysia.

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世界濕祝蛾屬(*Hygroplasta*)之分類綜論，兼記該屬一新種 (鱗翅目：祝蛾科)

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本文整理了濕祝蛾屬(*Hygroplasta* Meyrick)世界已記載的全部種類，且記述一新種。本屬已知四種均分布於南亞和東南亞：模式種 *H. spoliatella* (Walker)產於斯里蘭卡和印度、暗濕祝蛾 *H. lygaea* (Meyrick)產自克什米爾和尼泊爾、神濕祝蛾 *H. monodryas* (Meyrick)產於印度、背濕祝蛾 *H. notolatra* sp. n.產於馬來西亞。文中提供本屬各種之檢索表，且首次描述模式種的雄性外生殖器。

關鍵詞：分類學，濕祝蛾屬，祝蛾科，鱗翅目。

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