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A New and Two Unrecorded Species of *Idiophantis* from Thailand (Lepidoptera, Gelechiidae)[1)]

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Abstract Three species of *Idiophantis* MEYRICK are recorded or described from Thailand, with illustrations of moths, venation and male genitalia. These are: *I. chiridota* MEYRICK, *I. melanosacta* MEYRICK and *I. maelamunensis* sp. n. *Idiophantis* is recorded from Thailand for the first time.

Key words: Lepidoptera; Gelechiidae; *Idiophantis*; new species; Thailand; new record.

Idiophantis MEYRICK, 1904, is a distinctive genus, the moths of which have the forewings of extraordinary shape (*i.e.*, the termen with a deep excavation between produced apex and tornus, as shown in Fig. 4). This gelechiine genus includes about 20 species, principally inhabiting the Indo-Australian region, but also extending into Seychelles, Madagascar and S. Africa, and has hitherto been unrecorded from Thailand.

Three Thai species of *Idiophantis* are dealt with in this paper. One is described as new to science and the others are *I. chiridota* MEYRICK originally described from Sri Lanka and *I. melanosacta* MEYRICK from Coorg (India); the male of *melanosacta* has previously been unknown.

All the specimens treated in this paper are preserved in the collection of Entomological Laboratory, University of Osaka Prefecture, Sakai.

Idiophantis chiridota MEYRICK

(Figs. 1, 5)

Idiophantis chiridota MEYRICK, 1914, 201. — MEYRICK, 1925, 108, pl. 2, fig. 45. — GAEDE, 1937, 318. — CLARKE, 1969, 195, pl. 97, figs. 4–4 b.

♂. 13 mm in Thai specimen. The adult was illustrated in colour by MEYRICK (1925). The male lectotype was illustrated by CLARKE (1969). In the specimen examined, the forewing has the vein M_1 (described by MEYRICK (1914) as "6 [M_1] absent").

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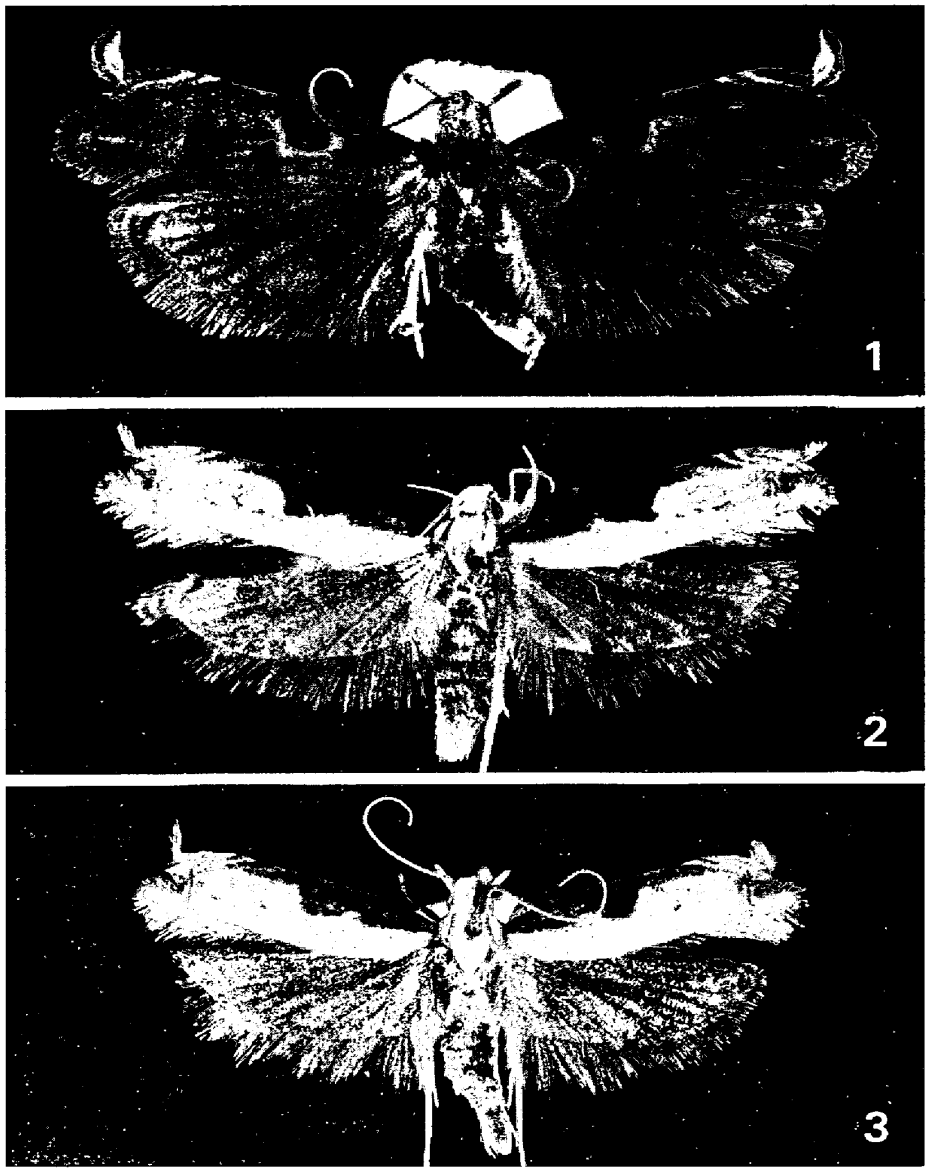


Figs. 1–3. *Idiophantis* spp., ♂. —— 1, *I. chiridota* MEYRICK; 2, *I. melanosacta* MEYRICK; 3, *I. maelamunensis* sp. n., holotype.

Male genitalia (Fig. 5): Illustrated by CLARKE (1969). Uncus with ventral margin swollen before middle. Gnathos short but rather broad. Anellar lobe long. Valva very broad in basal half and constricted before apex. Aedeagus with a pair of large apical lobes.

Female genitalia: Unknown.

Material examined. 1 ♂, Thailand, Nakhon Nayok, Khao Yai, *ca.* 800 m, 18.VI.1983 (KUROKO, MORIUTI, ARITA & YOSHIYASU).

Distribution. New to the fauna of Thailand, known previously from Sri Lanka, West Malaysia, Java and Fiji.

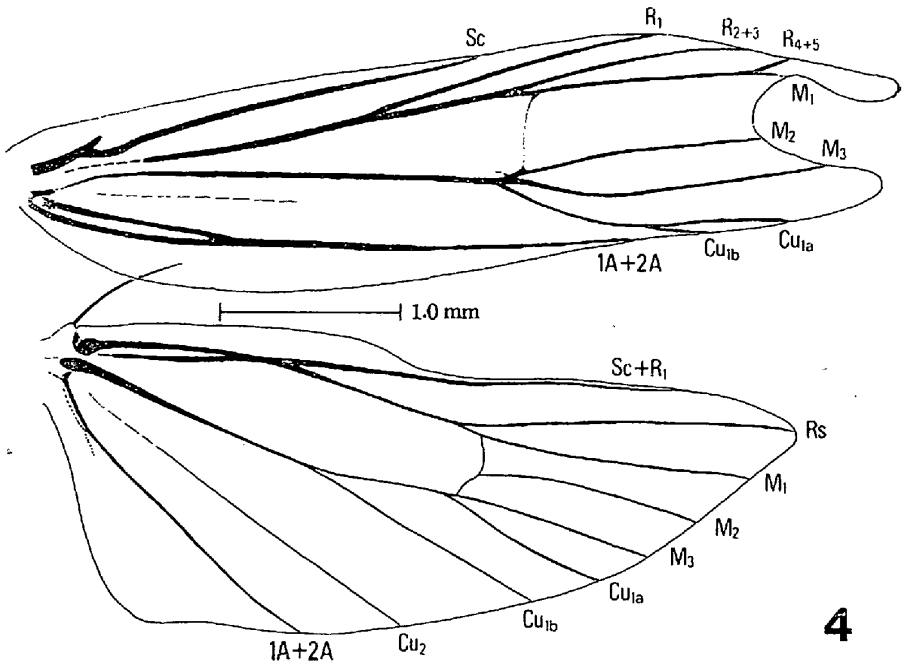


Fig. 4. *Idiophantis maelamunensis* sp. n., ♂, holotype, venation.

Host-plant. MEYRICK (1914) wrote: "two in British Museum from Perodeniya, bred in May from galls produced by a Psyllid on *Eugenia* (RUTHERFORD)."

Remarks. This species is somewhat similar in colour and markings to the following two species, but may be easily separated from them by the forewing with the ground-colour greyish-ochreous instead of whitish-ochreous.

Idiophantis melanosacta MEYRICK

(Figs. 2, 6)

Idiophantis melanosacta MEYRICK, 1907, 148. — MEYRICK, 1925, 108. — GAEDE, 1937, 318. — CLARKE, 1969, 196, pl. 98, figs. 3–3 b.

♂. 11.5 mm in Thai specimen. The female lectotype was illustrated by CLARKE (1969). In the original description the vein 6 [M_1] is said to be absent; it is present in the Thai specimen. The venation is quite similar to that of the next species (Fig. 4).

Male genitalia (Fig. 6): Hitherto unknown. Uncus bending outwardly. Gnathos long and slender. Anellar lobe short and narrow. Valva broad, nearly parallel-sided, with a short, rather broad subbasal process near ventral margin; distal margin rounded. Aedeagus simple.

Female genitalia: Illustrated by CLARKE (1969).

Material examined. 1 ♂, Thailand, Nakhon Nayok, Khao Yai, *ca*. 800 m, 11–19.XI.1985 (MORIUTI, SAITO & ARITA).

Distribution. Previously known from Coorg (India), this is the first record of this species from Thailand.

Host-plant. Unknown.

Remarks. The three original Indian specimens of *melanosacta* are females (CLARKE, 1969); the Thai specimen is male. Although I have been unable to compare them in the genital characters, I am inclined to think that the Thai specimen is, judging from the original description and a photograph of the female lectotype given by CLARKE (1969), identical with *melanosacta*.

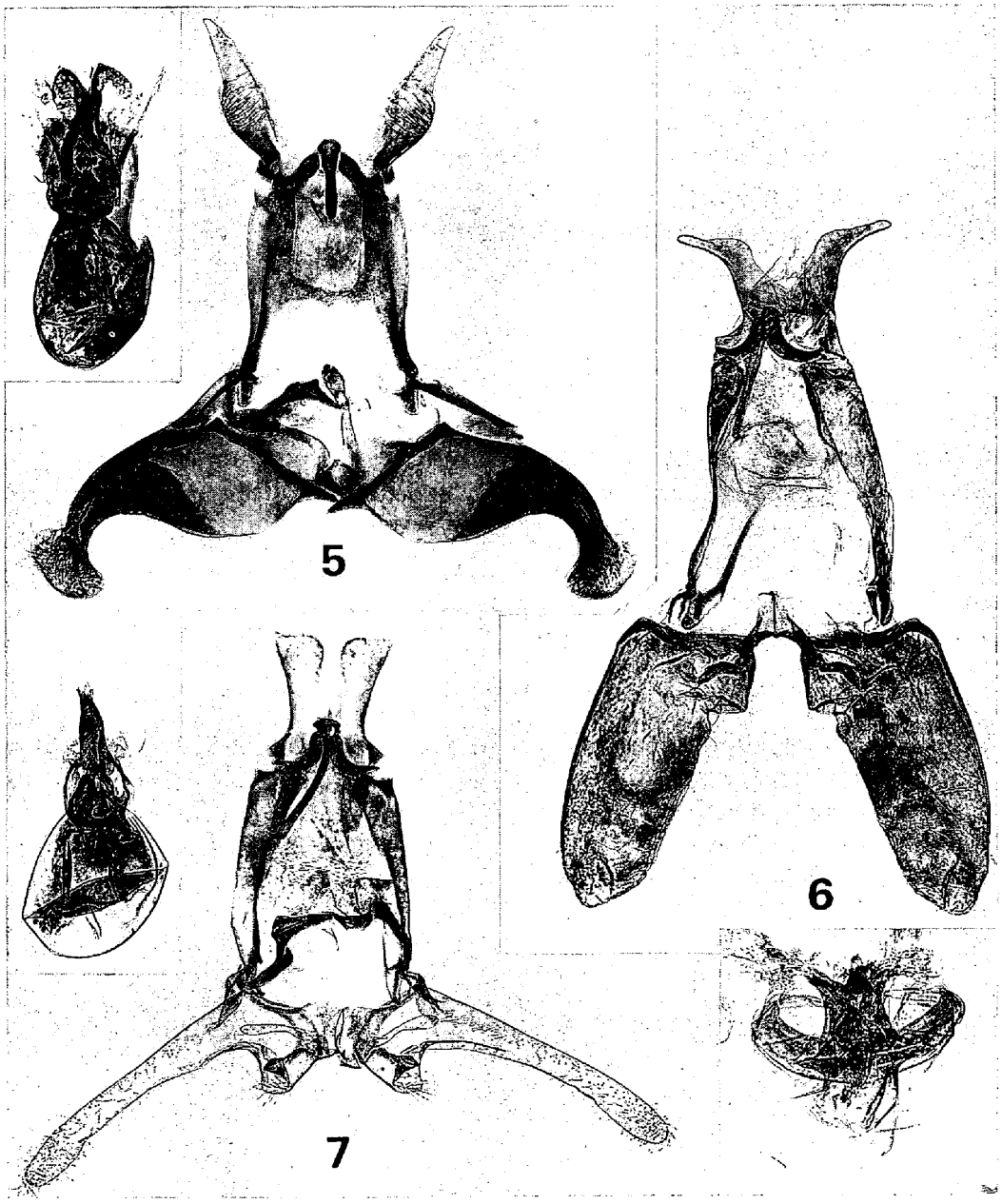
This species is similar to the next species, from which it can not be clearly distinguishable by the external characters, but may be readily separable by the genital characters, as will be noted under the next species.

Idiophantis maelamunensis sp. n.

(Figs. 3–4, 7)

♂. 10.5 mm. Head and thorax whitish-ochreous; face more whitish; tegula dark fuscous towards base. Antenna pale ochreous, infuscated basally. Palpus whitish, with third segment infuscated frontally. Legs nearly white; fore and mid tibiae-tarsi largely suffused with blackish-brown; hind tibia and tarsus ochreous. Wings as shown in Figs. 3 and 4. Forewing with both apex and tornus strongly produced into prominences; R_1 from two-thirds; R_2 and R_3 coincident from a little before angle, R_4 and R_5 coincident and stalked with M_1, the common stalk rising from upper angle and being widely remote from and running nearly parallel with M_2; M_2, M_3 and Cu_1 approximated at base; Cu_{1a} and Cu_{1b} long-stalked; transverse vein very weakly present; whitish-ochreous; a broad blackish streak along costa from base, fading away into dark grey beyond middle, the lower edge forming two broad subtriangular projections at one-fourth and before middle, reaching about half across wing, and the outer edge of posterior projection being nearly straight; two blackish dots longitudinally placed in disc, the inner being vestigially present at middle and the outer being distinct at two-fifths; an angulated whitish line from two-thirds of costa to dorsum before tornal prominence, edged with dark brown on both sides and on costa with blakish-brown; a fine oblique dark brown line beyond this from costa to termen on upper third; a small blackish spot, mixed with bronzy-metallic lustre, on termen at base of tornal prominence; cilia pale whitish-ochreous, within terminal excavation with a blackish subbasal line towards apex of both prominences. Hindwing over 1; eight-veined; Sc fused with R for a short distance before middle of cell; Rs from before angle; M_3 and Cu_{1a} separate; Cu_{1a} from slightly before angle; transverse vein visible; pale grey, slightly tinged with ochre; cilia grey. Abdomen: colouration not observed; pregenital abdomen not modified.

Male genitalia (Fig. 7): Uncus gradually broadening apically, with a dull-pointed outer corner and a rounded inner corner. Gnathos long and slender. Anellar lobe short and narrow. Valva very long, slender and nearly straight;



Figs. 5–7. *Idiophantis* spp., male genitalia. —— 5, *I. chiridota* MEYRICK, right half of vinculum removed; 6, *I. melanosacta* MEYRICK, vinculum stuck on aedeagus and aedeagal basal part damaged; 7, *I. maelamunensis* sp. n., holotype.

basal part roundly dilated ventrally, armed with a distinct process. Aedeagus simple.

♀. Unknown.

Material examined. Holotype ♂, Thailand, Kanchanaburi, Mae La Mun, *ca.* 400 m, 25–26.XI.1985 (MORIUTI, SAITO & ARITA).

Distribution. Thailand.

Host-plant. Unknown.

Remarks. This new species is very similar to *melanosacta* in superficial appearance, and it is difficult to separate, with certainty, the former from the latter. However, it seems that the outer edge of posterior projection of costal streak on the forewing tends to be nearly straight in *maelamunensis* while inwardly concave in *melanosacta*. In male genitalia it is easy to distinguish them by the structure of uncus and valva, as shown in Figs. 6 and 7.

Etymology. Named after the type-locality.

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