# Hollowayana, a new genus for Arctia landaca Moore, 1859 and Diacrisia sumatrensis javanica Rothschild, 1910 (Lepidoptera, Arctiidae) from Java

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**Abstract** The new genus *Hollowayana* gen. n. is described for *Arctia landaca* Moore, 1859 from Java. The latter species is synonymized with *Diacrisia sumatrensis javanica* Rothschild, 1910. The new genus is characterized by oval valvae and a strongly modified eighth abdominal sternite.

Arctia landaca Moore, 1859 was described from Java without exact locality. Later, this species was described once more, as a new subspecies Diacrisia sumatrensis javanica Rothschild, 1910. Van Eecke (1927), based on the type figures in Rothschild in Seitz (1914), considered that at least the female of the latter belongs to D. landaca (Moore), while the male might be an aberration of D. strigatula Wlk. Nevertheless, the species from Sumatra and Malakka Peninsula, which has the correct spelling Spilarctia sumatrana (Swinhoe, 1905), not S. sumatrensis auct., is quite different from Arctia landaca Moore, and D. sumatrensis javanica Rothschild. The investigation of the male genitalia of Arctia landaca Moore from Java has shown strong differences from other known genera, thus we decided to describe a new genus for this species, see the description below.

The material examined is deposited in the following museums and collections: BMNH – the Natural History Museum, London; ZMA – Zoölogisch Museum, Amsterdam, Netherlands; SZMN – Siberian Zoological Museum of the Institute of Animal Systematics and Ecology, SB RAS, Novosibirsk, Russia; YK – collection of Y. Kishida (Tokyo, Japan).

## Hollowayana Dubatolov et Kishida, gen. nov.

Type species: Arctia landaca Moore, 1859.

Gender: feminine.

Etymology: the genus is named after the famous researcher of the Sundaland moths, Dr. Jeremy Holloway.

The external features are common with the majority of species of the *Spilosoma-Spilarctia*-group. Antennae nearly 1/2 of forewing length, bipectinated in males, pectination gradually decreasing towards apex. Eyes large, strongly convex, ovoid and naked. Palpi stout, slightly longer than dense frons hairs. Proboscis present but short. Fore tibiae simple, without apical spine. Epiphysys slightly shorter than fore tibia. Middle tibiae with one pair, hind tibiae with two pairs of short stout spurs. Claws with an incision at middle. Pulvilli as long as claws. Vein R2 on forewings stalking with vein R3+5 (venation type C, according to Sotavalta, 1964). Tympanum with a small flattened inflation.

Wings grayish-brown, forewing with traces of diffuse narrow fasciae, and rows of small dark dots of the *Spilarctia*-type.

Male genitalia. Uncus triangular, flat. Tegumen with a narrow but clearly visible widening of

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Figs 1–9. *Hollowayana landaca* (Moore). 1–2. Lectotype of *Arctia landaca* Moore, moth (1) and its labels (2). 3–4. Lectotype of *Diacrisia sumatrensis javanica* Rothschild, 1910, moth (3) and its labels (4). 5–6. Male from Java, Mt. Argapura, IV. 1995. 7–8. Male from Bali, Tamblingan, VI. 2004. 9. Female. By courtesy of Dr R. de Vos (ZMA).

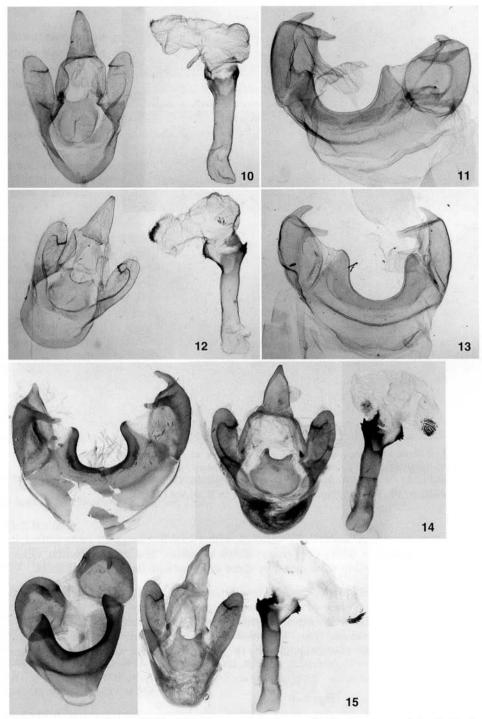
its proximal part, forming a "collar". Valvae oval, with a keel-like ledge on inner surface in subapical part. Aedeagus with two groups of apical spines, vesica with cornuti fields. Sternite VIII modified, forming a strongly sclerotized structure with finger-like processes.

Notes on systematics. The type species of the new genus is very similar in external features to many other East Asiatic species of the *Spilarctia* type, especially to the *S. sumatrana* (Swinhoe, 1905) group. However, the male genitalia show very strong modifications from those of the *Spilosoma-Spilarctia* type. The most striking apomorphic character is a strong modification of sternite VIII; another apomorphy is the short oval valva without any processes or teeth on its edges.

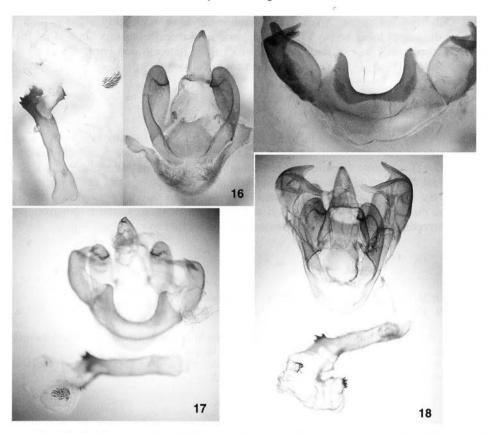
#### Hollowayana landaca (Moore) (Figs 1-6)

Arctia landaca Moore, 1859; Cat. lepid. Insects Mus. nat. Hist. East Ind. House 2: 358; type locality: Java. Diacrisia sumatrensis javanica Rothschild, 1910; Novit. Zool. 17: 147; type locality: Djember, Besoeki Residency, Java, 1399-2500 m.

Type material. Indonesia:  $1 \delta$  (the lectotype of landaca, designated herewith, for the



Figs 10-15. Male genitalia of Hollowayana landaca. 10-11. Lectotype of Arctia landaca Moore, genitalia slide No. 2799. 12-13. Lectotype of Diacrisia sumatrensis javanica Rothschild, 1910, genitalia slide No. 2798. 14. Java, Mt Argapura, IV. 1995. 15. Bali, Tamblingan, VI. 2004. 10, 12: 8th sternite.



Figs 16–18. Male genitalia of Hollowayana landaca. 16. Bali, Tamblingan, VI. 2004. 17. Bali, Batoeriti, X. 1939. 18. Flores, Ruteng, 3. IV. 1954. 17–18. By courtesy of Dr R. de Vos (ZMA).

nomenclature stabilization's sake), Java, Horsfield (BMNH); 1 ♂ (the lectotype of *javanica*, designated herewith, for nomenclature stabilization's sake, since Dr M. Honey informed us kindly that the type series is heterogeneous), Java, Djember, Res.[idency] Besoeki, 1300-2500', 1892, Möllinger (BMNH).

Material. Indonesia: 2 ♂, E. Java, Mt. Argapura, IV. 1995, native collector leg. (SZMN, YK); 2 ♂, Bali, Tamblingan, VI. 2004, native collector leg. (SZMN); 1 ♂, Bali, Batoeriti, 1100 m, X. 1939, J. P. A. Kalis leg. (ZMA); 4 ♂, Bali, Git-Git, 1500 m, V. 1936, J. P. A. Kalis leg. (ZMA); 1 ♂, Flores, Ruteng, 1200 m, 3. IV. 1954, J. M. A. v. Groenendael (ZMA).

Wing pattern strongly diffuse, not contrasted. Forewing postdiscal and medial bands are just diffuse darkenings. Hind angle of discal vein with two contrasted dark dots.

Male genitalia (Figs 10–18). Valvae oval, twice longer than width. Lateral lobes of VIII abdominal sternite with two processes on each lobe, the ventral one is slightly longer than the dorsal one. The male genitalia structure of the lectotypes of *Arctia landaca* Moore and *Diacrisisa sumatrensis javanica* Rothschild are identical (Figs 10–13).

Variation. The specimens from Bali have the wing pattern more delicate and contrasted than the specimens from Java, but these characters do not correlate with the characters in male genitalia. Only two specimens from Bali, Tamblingan have noticeably shorter ventral prosessus of the lateral lobes of the VIII sternite, in one of them being very short (Fig. 15). Nevertheless, these structures of the specimens from Bali, Batoeriti and Git-Git, as well as from Flores, Ruteng (Fig. 17–18), are nearly identical to those of the specimens from Java.

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