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***Stictane imorod* sp. n. from Lanyu Island (Taiwan)** (Insecta, Lepidoptera: Erebidae, Arctiinae, Lithosiini)

Contribution to the moths of Taiwan 13¹

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Abstract

The species *Stictane imorod* sp. n. from Lanyu Island (Taiwan) is described and illustrated. The genus *Stictane* is detected and recorded for the first time for Lanyu (Orchid) Island and also for Taiwan. The new species differs significantly from other species of the genus in wing markings as well as in genitalic structures.

Introduction

Entomological research in Taiwan was conducted by the authors since more than 15 years starting with the DAAD project (No.: ID D/0039914 PPP-Taiwan) together with the National Chung Hsing University Taichung (CHU) in the year 2001. Further excursions were made later in cooperation with the Highland Experimental Farm Meifeng (National Taiwan University) and with the Da-Yeh University.

Several publications already resulted from these studies (e. g. BUCHSBAUM & CHEN 2013, 2018, BUCHSBAUM & MILLER 2001, BUCHSBAUM et al. 2006, 2018a, 2018b, BUCHSBAUM & GREHAN 2018, CHEN et al. 2013).

Lanyu Island, also called Orchid Island, is a small island southeast of Taiwan and north of the Philippines. This small island covers an area of about 45 km². Two thirds of Lanyu Island are covered with natural forest.

The special biogeographical situation is described by REICHHOLF 2003, and SCHINTLMMEISTER 2003, and further details about Lanyu Island are summarized by HSU et al. (2018) (in this volume).

***Stictane* HAMPSON, 1900**

This genus contains 29 species which are known from India, Japan, China, Thailand, Cambodia, Vietnam, Indonesia (Sumatra, Java), Sri Lanka, the Philippines, Peninsular Malaysia, and Borneo (BAYARSAIKHAN & BAE 2015, BUCSEK 2012, 2014, HOLLOWAY 2001, CERNY & PINRATANA 2009, FANG 2000, SINGH KIRTI et al. 2013). The world checklist is published by BAYARSAIKHAN & BAE (2015). The genus *Stictane* is not listed for Taiwan (HEPPNER & INOUE 1992). This genus is thus recorded new for Taiwan with the present new species.

Material, Methods and Locality

All specimens were collected at a 250 W mercury lamp which was placed at an exposed position on the hill beside the weather station on Lanyu Island with a view over the surrounding forest.

The moths were collected with poison glasses and after death pinned/papered for transport. Later, the moths were spread on normal spreading boards.

Genitalia preparation was done with KOH 10% and the genitalia mounted in Euparal. The genitalia slides were scanned with Nikon supercool Scan 3000 and prepared for publication with Adobe Photoshop 7.0.1.

The type locality is a hill in the south central mountains of Lanyu Island beside the weather station with an exposed view over the forest around (see HSU et al. 2018, in this volume). Weather was almost always warm, about 25°C, few clouds and little wind, during all the collection dates.

¹ Contribution to the moths of Taiwan 12: HSU et al. (2018) (in this volume).

***Stictane imorod* sp. n.** (Figs 1 – 6)

Holotype: ♂ 24. May 2018, South Taiwan, Lanyu Island, Weather Station, 22°02'15N/121°33'29E, leg. Mei-Yu Chen & Ulf Buchsbaum. Holotype in Collection Zoologische Staatssammlung München (ZSM), later to be deposited in the National Museum of Nature Science (NMNS) Taichung

Paratypes: 3 ♂, 12 ♀ 06 May 2017; 8 ♂, 10 ♀, 23. May 2018; 11 ♂, 9 ♀ 24. May 2018; 9 ♂, 25 ♀ 25. May 2018, South Taiwan, Lanyu Island, Weather Station, 22°02'15N/121°33'29E, leg. Mei-Yu Chen & Ulf Buchsbaum; Paratypes in Collection ZSM, NMNS, and in Collection Ding-Jia Chen (Taichung, Taiwan).

Description and differential diagnoses:

♂ wingspan 14 – 15 mm, Ø: 14.5 mm, forewing length: 6 mm, Ø: 6 mm.

♀ wingspan 11 – 13 mm, Ø: 11.8 mm, forewing length: 5 – 6 mm, Ø: 5.6 mm.

Head, body and abdomen greyish brown. Antennae brown. Labial palps brown. Legs greyish brown. Forewings: Basal area yellowish grey. Sharply bordered straight black medial band becoming gradually paler towards postdiscal region. Postdiscal area with a black spot in middle. Apex with a fuscous patch with a black spot in submarginal area. Terminal fascia spotted black. Termen brownish. Hindwings greyish with brownish apex.

S. obscura INOUE, 1976 is similar, but with darker hindwings. The medial band is tortuous and smaller in *S. obscura*. *S. elegans* BUCSEK, 2012 has a smaller dark band in the postdiscal region.

Male genitalia: Uncus slim, tapering with small spine at tip. Valvae narrow, long, hairy. In *S. elegans*, the valvae are narrower and saccus is tapering. Costa with flat thickening in the middle. Saccus extensions with curved clasper. In *S. pectinata* HOLLOWAY, 2001 not curved. Saccus rounded. Juxta less sclerotized with curved clasper also in *S. pectinata* not curved. Aedeagus stocky, less sclerotized. Four longer and three short cornuti and a band with 14 very short cornuti with two longer at the end. In *S. pectinata* without cornuti and long tapered. In *S. elegans*, the aedeagus contains less and only small cornuti, all of the same length.

Female genitalia: Papillae anales sclerotized with thin, long apophyses posteriores. Apophyses anteriores also thin and half time shorter. Corpus bursae rounded, with large sclerotized signum. Ductus bursae short, wide, sclerotized.

Distribution: *Stictane imorod* sp. n. is only known from the type locality Lanyu Island, weather station. Furthermore this genus is for the first time recorded from Taiwan. This species is so far known an endemic on Lanyu Island.

Phenology: *S. imorod* sp. n. is only recorded in May with the most specimens at the end of May.

Etymology:

Imorod is the name of the village of the aborigines and the weather station where the new species was collected is in the territory of that village.

Remarks:

Next similar species *S. obscura* occurs in Japan and *S. pectinata* is known from Borneo in mountains of about 1000 m asl and also *S. elegans* occurs in Borneo in the high mountains above 1500 m asl. (BUCSEK 2012, HOLLOWAY 2001).

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Zusammenfassung

Die Art *Stictane imorod* sp. n. wird von Lanyu Island (Taiwan) beschrieben und abgebildet. Diese Gattung wird damit zum ersten Mal von der Insel Lanyu (Orchid) und auch in Taiwan nachgewiesen. Die neue Art unterscheidet sich deutlich von den anderen Arten der Gattung sowohl in der Flügelzeichnung als auch in den Genitalstrukturen.



Fig. 1a: *Stictane imorod* sp. n., ♂, holotype.



Fig. 1b: *Stictane imorod* sp. n., ♂, holotype, underside.



Fig. 2a: *Stictane imorod* sp. n., ♀, paratype.



Fig. 2b: *Stictane imorod* sp. n., ♀, paratype underside.

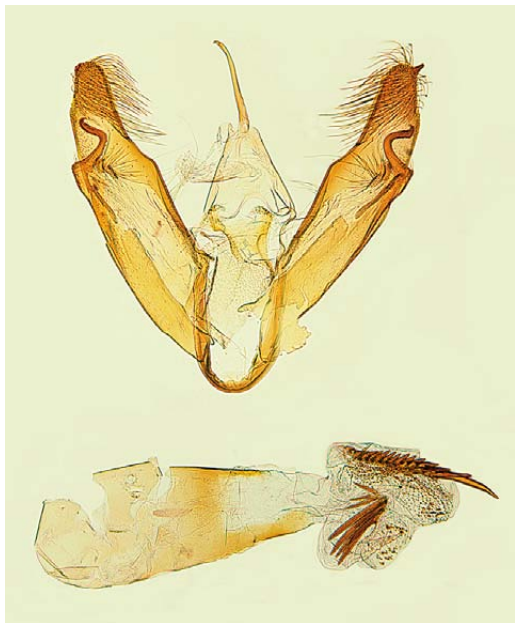


Fig. 3: Male genitalia.



Fig. 4: Female genitalia.



Fig. 5: *Stictane imorod* sp. n., paratype ♂, resting on screen, **Fig. 6:** *Stictane imorod* sp. n., paratype ♀, resting on wood.

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(more references see Hsu et al., in this volume)

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