Three new species of *Stictane* Hampson, 1900 from Flores Island, eastern Indonesia (Lepidoptera: Erebidae: Arctiinae: Lithosiini)

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The genus *Stictane* Hampson, 1900 (Lepidoptera: Erebidae: Arctiinae: Lithosiini) contains 31 species, the ranges of which extend from India and Sri Lanka to Japan, the Philippines, and Sulawesi (Holloway 2001; Bayarsaikhan & Bae 2015; Bayarsaikhan *et al.* 2019). The maximum species richness of this genus is supposedly situated in Cambodia, Malaysia, and on Borneo, although the number of sampling efforts and taxonomic works can bias this pattern (Holloway 2001; Bucsek 2012, 2014; Bayarsaikhan & Bae 2015; Bayarsaikhan *et al.* 2019). None *Stictane* species was known to occur on the East Nusa Tenggara Islands in eastern Indonesia. However, three diminutive and still undescribed species of this genus from Flores Island are presented in the collection of the Russian Museum of Biodiversity Hotspots [RMBH], N. Laverov Federal Center for Integrated Arctic Research of the Ural Branch of the Russian Academy of Sciences, Arkhangelsk, Russia. Here, we describe these species as *Stictane miniursa* sp. nov. [West Flores: Borong], *S. berliosi* sp. nov. [West Flores: Labuan Bajo], and *S. pseudofuscus* sp. nov. [Central Flores: Bajawa]. The specimens and genitalia processing and photographing followed those described in our earlier works (Spitsyn *et al.* 2018, 2019; Spitsyn & Bolotov 2020; Spitsyn & Potapov 2020).

**Taxonomy**

Family Erebidae Leach, [1815]
Subfamily Arctiinae Leach, [1815]
Tribe Lithosiini Billberg, 1820

Genus *Stictane* Hampson, 1900
   Type species: *Pitane fractilinea* Snellen, 1880

*Stictane miniursa* sp. nov.
Figs 1A, 2A
https://zoobank.org/urn:lsid:zoobank.org:act:2F5F4522-FB8F-4BDA-9F7D-E60DAA2A68AD
THREE NEW SPECIES OF STICTANE HAMPSON, 1900 FROM FLORES ISLAND

**Holotype.** INDONESIA: East Nusa Tenggara, Flores Island, Borong, 8°49'05"S, 120°37'33"E, alt. 100 m, dry monsoon forest and banana plantations, 24–27.i.2020, ♂, V. Spitsyn & E. Spitsyna leg. [RMBH Sph 0875].

**Diagnosis.** This species can be distinguished from all other congeners by having a specific shape of the male genitalia structure. It remotely resembles that of *Stictane pectinata* Holloway, 2001 but has a narrower valva and a longer saccular process (as long as the valva).

**Description. Male morphology:** Wingspan 9 mm, forewing length 4 mm. Eye black. Antenna bipectinate, gray. Labial palpus very thin, gray. Head, thorax, patagium, tegula, legs, and abdomen gray. Upperside of the forewing: ground color gray; antemedial line dark grey; marginal area darkened. Upperside of the hindwing and underside of both wings gray. **Male genitalia:** Uncus long; tegumen v-shaped; saccus u-shaped. Valva long, acute apically, distal saccular process elongated and thin. Aedeagus broad; vesica with one large, narrow, sickle-like, curved spike. **Female:** Unknown.

**Etymology.** The species’ name means “small bear” in Latin, reflecting its small size and uniform “grizzly” coloration.

**Distribution.** This species is not known beyond its type locality (Borong) in West Flores.

**Figure 1.** Holotypes of new *Stictane* spp. from Flores Island, Indonesia: A) *S. miniursa* sp. nov. [RMBH Sph 0875; West Flores: Borong]; B) *S. berliosi* sp. nov. [RMBH Sph 0876; West Flores: Labuan Bajo]; C) *S. pseudofuscus* sp. nov. [RMBH Sph 0878; Central Flores: Bajawa]. Scale bar = 5 mm. Photos: Vitaly M. Spitsyn.

*Stictane berliosi* sp. nov.
Figs 1B, 2B
https://zoobank.org/urn:lsid:zoobank.org:act:89B3BB8D-BB53-4A7E-9791-5403204FC85F

**Holotype.** INDONESIA: East Nusa Tenggara, Flores Island, Labuan Bajo, 8°32'17"S, 119°53'05"E, alt. 70 m, disturbed monsoon forest, 21–22.i.2020, ♂, V. Spitsyn & E. Spitsyna leg. [RMBH Sph 0876].

**Paratype.** The same locality, date, and collectors, 1♂ [RMBH Sph 0877].

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**Diagnosis.** This species can be distinguished from all other congeners by having a specific uncus structure and three very large, leaf-like spikes in the vesica.

**Description.** Male morphology: Wingspan 10 mm, forewing length 5 mm. Heads of both type specimens lost. Thorax, patagium, tegula, legs, and abdomen gray. Upperside of the forewing: ground color light gray; antemedial line dark gray; two black postdiscal spots; wing apex darkened. Upperside of the hindwing and underside of both wings gray. Male genitalia: Uncus very short; tegumen v-shaped; saccus u-shaped. Valva long, with claw-like, acute distal process; distal saccular process large, strongly curved. Aedeagus broad; vesica with three very large, broad, leaf-like spikes. Female: Unknown.

**Etymology.** The new species is named in memory of Louis-Hector Berlioz (1803-1869), a French Romantic composer.

**Distribution.** This species is not known beyond its type locality (Labuan Bajo) in West Flores.

*Stictane pseudofuscus* sp. nov.
Figs 1C, 2C
https://zoobank.org/urn:lsid:zoobank.org:act:3F9134CB-1073-4FEA-8829-5B822D2E3B37

**Holotype.** INDONESIA: Flores Island, Bajawa, Manulalu Ecolodge, 8°51'45"S, 120°59'40"E, altitude 1100 m, eucalyptus plantation with patches of natural vegetation, 01–02.ii.2020, ♂, V. Spitsyn & E. Spitsyna leg. [RMBH Sph 0878].

![Figure 2](https://zoobank.org/urn:lsid:zoobank.org:act:3F9134CB-1073-4FEA-8829-5B822D2E3B37)

**Figure 2.** Holotype male genitalia and aedeagus of new *Stictane* spp. from Flores Island, Indonesia: A) *S. miniursa* sp. nov. [RMBH Sph 0875; West Flores: Borong]; B) *S. berliosi* sp. nov. [RMBH Sph 0876; West Flores: Labuan Bajo]; C) *S. pseudofuscus* sp. nov. [RMBH Sph 0878; Central Flores: Bajawa]. Photos: Vitaly M. Spitsyn.
Three New Species of Stictane Hampson, 1900 from Flores Island

**Diagnosis.** Morphologically, the male genitalia of the novel species are somewhat similar to *Stictane fuscus* Bucsek, 2014. However, the new species can be distinguished from *S. fuscus* by the following combination of characters: larger and stronger distal process of the valva (vs smaller and narrower); irregular valva apex (vs. rounded); and valva with its distal process and distal saccular process of the same length (vs distal saccular process protrudes much further than the apex of valva’ distal process).

**Description.** *Male morphology:* Wingspan 14 mm, forewing length 6 mm. Eye black. Antenna bipectinate, gray. Labial palpus very thin, gray. Head, thorax, patagium, tegula, legs, and abdomen gray. Upperside of the forewing: ground color light gray; three basal black spots; antemedial line broad, dark gray; two postdiscal black spots followed by a dashed postmedial black line; dashed black line along termen. Upperside of the hindwing and underside of both wings gray. *Male genitalia:* Uncus long; tegumen v-shaped; saccus u-shaped. Valva long, with straight distal process apically; distal saccular process very large. Aedeagus broad; vesica with one very large, leaf-like, slightly curved spike with rounded base, other leaf-like spike of moderate size, and a rhombus-shaped sclerotized area. *Female:* Unknown.

**Etymology.** The species’ name indicates that it bears an external resemblance to *S. fuscus*.

**Distribution.** This species is not known beyond its type locality (Bajawa) in Central Flores.

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