

Additional note on the genus *Syntherata* MAASSEN, 1873 (Lepidoptera: Saturniidae): A new species from Waigeo Island, Indonesia

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Abstract: In addition to the most recent review of the genus *Syntherata* a further species is described as new to science: *S. parili* sp. n. from Indonesia, West Papua province, Waigeo Island. It increases the number of known species in the genus to 34.

Key words: *Syntherata*, new species, Waigeo Island.

Ergänzende Bemerkung zur Gattung *Syntherata* MAASSEN, 1873 (Lepidoptera, Saturniidae): Eine neue Art von der Insel Waigeo, Provinz West Papua, Indonesien

Zusammenfassung: Ergänzend zur kürzlich publizierten Gesamtübersicht der Gattung *Syntherata* wird noch ein weiteres Taxon als neu für die Wissenschaft beschrieben: *S. parili* sp. n. aus Indonesien, Provinz West Papua, Insel Waigeo. Es sind nunmehr 34 valide Arten in der Gattung bekannt.

Introduction

The genus *Syntherata* MAASSEN, 1873 consists of relatively variable species of yellow, orange, reddish or brownish colour, occurring in Australia, New Guinea, and several islands in the Moluccan Sea in Indonesia. Most recently, the authors published descriptions of two new species in the genus and gave a complete overview about synonymies, distribution, literature, and an actualized checklist, with counting a total number of 33 valid taxa (NAUMANN & LANE 2020). The interpretation was based on adult and preimaginal (this only for Australian taxa) morphology, distributional records, and in addition on DNA barcoding results (BARCODE OF LIFE 2020). Already then, our interest was focused on a pair from Waigeo Island, off the northwestern coast of New Guinea near Vogelkop peninsula, received only little earlier in 2020. During preparation of the comprehensive manuscript confirmatory results in the barcoding campaign where not yet available, therefore the species was not handled there; meanwhile, the results are available, and, in addition to morphological and biogeographical aspects, show a clear specific status. To complete the list of known taxa in the genus *Syntherata*, we herewith add a short description and add *S. parili* sp. n. as 34th taxon to the checklist. BOLD BIN-Code: AEE2913 (= Barcode Index Number; an automatically assigned identifier for genetic clusters within BOLD, see RATNASINGHAM & HEBERT 2013, as of 7. XI. 2020)

Abbreviations used, Collections

CSNB Collection Stefan NAUMANN, Berlin, Germany. Dedicated to the Rainer SEEGERs Stiftung, to be deposited in MfN.

MfN Museum für Naturkunde, Berlin, Germany.

Other abbreviations

BC [no.] Barcode [with number].

GP [no.] Genitalia dissection [with number].

Systematic part

Syntherata parili sp. n.

(Figs. 1a & b, 2a & b, 3.)

Holotype ♂ (Figs. 1a & b): Indonesia, West Papua prov., Waigeo Island (no further data), 16. ix. 2017, leg. local collector, material exchanged with Jozef PAŘIL I. 2020; GP 2631/20 SNB; BC SNB 6557 (CSNB). A red holotype label will be fixed accordingly.

Paratype ♀ (Figs. 2a & b): Same data as holotype; BC SNB 6558 (CSNB). A blue paratype label will be fixed accordingly. Both holotype and paratype will be deposited within the Rainer SEEGERs Foundation in the collections of MfN Berlin.

Etymology: The name is a dedication to Jozef PAŘIL, Brno, Czech Republic, who kindly shared those interesting specimens.

Description

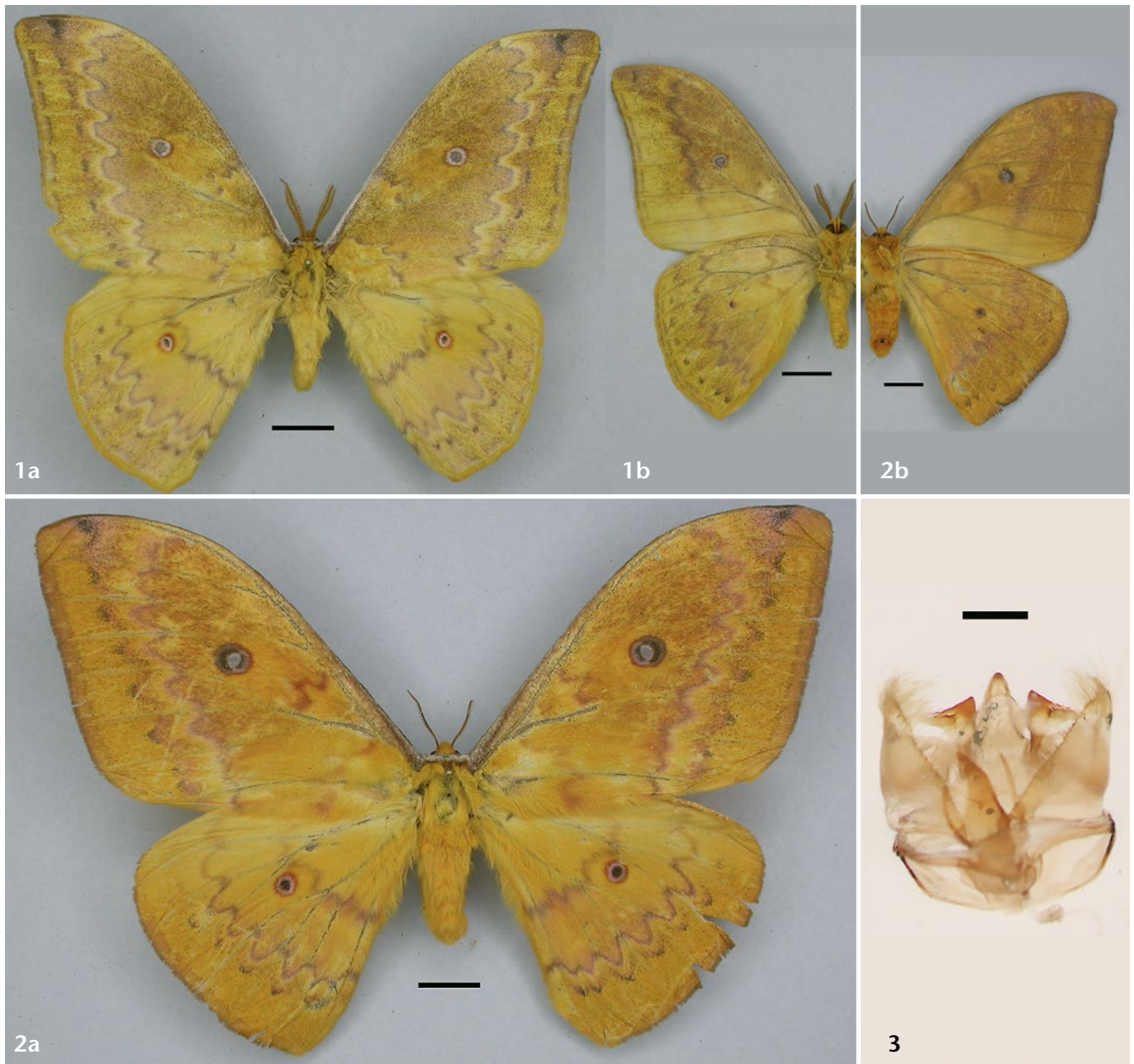
Male (Figs. 1a & b): The only known male specimen is of pale creamy yellow ground colour suffused with greyish-violet scales in the median area and posterior to that. Head, thorax and abdomen completely in ground colour.

Forewing length, from basis to apex, 56 mm, the apex little rounded, almost rectangular. Antennae broadly quadripectinate to the last 5 segments, of 13.0 mm length (right antenna incomplete), with longest rami of 2.5 mm, of dark ochreous colour.

Upperside forewing antemedian field yellow in its basal part, costa in basal half light greyish, the median field with a tiny violet greyish ante- and postmedian zigzag line. Forewing ocellus round, with central transparent portion, dark grey, bluish and outer red ring, of 4.0 mm diameter. The postmedian line is followed by a yellow line, postmedian area again in ground colour with a line of dark greyish dots between the veins, apically ending with a black patch. Marginal area again with such a dark greyish line, outer margin also dark grey. The forewing apical area pinkish violet.

Hindwing pattern very similar to that of the forewing, antemedian and median fields less suffused, more yellowish. Ante- and postmedian zigzag line violet, the central ocellus round, inner part black, with light blue and red outer ring, of 3.2 mm diameter. Postmedian area again in ground colour, pattern similar to forewing.

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Figs. 1–2: Specimens of *Syntherata parili* sp. n., a = dorsal, b = ventral view of same specimen. — **Fig. 1:** ♂ holotype, Waigeo Island (CSNB in MfN). **Fig. 2:** ♀ paratype, Waigeo Island (CSNB, in MfN). **Fig. 3:** ♂ genitalia of the holotype, GP 2631/20 SNB. — Specimens dorsal views approx. nature size; ventral sides smaller at different scales; scale bars 1 cm each. Genitalia scalebar: 1 mm. — All photos S. NAUMANN.

Underside similar to upperside but markings more obscure; the forewing antemedian field not separated by a line, and the postmedian line more intense, forewing outer margin broadly dark grey, that of the hindwing yellow. Fore- and hindwing ocellus without outer red ring.

Male genitalia (Fig. 3, dissection no. 2631/20 SNB): Uncus broad-based, bent to ventral side, ending with one central sclerotized tip. Valve apices with one acute apical tip, inner labides with three tips, the inner dorsal one triangular and more sclerotized, the outer dorsal and the ventral ones long and slender. Vesica round, with right and left lateral long slender processes, saccus triangular, small. Phallus relatively short and broad, vesica emerging to dorsal side.

Female (Figs. 2a & b): The singleton is of dark and intense yellow ground colour with violet markings, with a similar pattern as the male. Forewing length 67 mm, much broader than male, apex not acute, but almost rectangular, apical part a little rounded. Larger than the male, with typical sexual dimorphic characters (broader, more rounded wings, larger abdomen, antenna morphology). Antenna quadripectinate to the last 6 segments, there the rami reduced, length 11.5 mm, rami maximum length about 0.6 mm. The right antenna is damaged.

Upperside forewing with large ocellus, ovoid, with central transparent portion of 2.2 mm diameter, broad black, bluish and outer red ring, of 6.2 mm maximum diameter. Hindwing ocellus round, inner portion black, with bluish violet and red outer ring, of 3.1 mm diameter.

Underside similar to upperside but markings more obscure; fore- and hindwing antemedian fields not separated by a line, and the forewing postmedian line more straight, not a zigzag line. Fore- and hindwing ocellus without outer red ring. Outer margin of both fore- and hindwing dark grey.

Distribution

S. parili sp. n. is currently known only from the Indonesian island of Waigeo, the largest island of the Raja Ampat Archipelago, located northwest of the Vogelkop peninsula of the Indonesian West Papua province.

Notes. The description of *S. parili* sp. n. brings the number of *Syntherata* species to 34. On BOLD the new species ends up in a cluster with *S. melvilla* (WESTWOOD, 1853), *S. pristina* (WALKER, 1865), *S. malukuensis* (PAUKSTADT & PAUKSTADT, 2005) and *S. pierrei* NAUMANN et al., 2009, all together species which are not very similar to the here described taxon (overview in NAUMANN & LANE 2020). There are two other *Syntherata* species which overall look somewhat similar from pattern and originate from nearby areas: *S. bettinae* NAUMANN et al., 2009 from the Indonesian West Papua province, Arfak Mts., and *S. degroofi* PAUKSTADT et al., 2017, also from West Papua province, Misool Island. Especially the female holotype (and one yellow female in CSNB) of *S. degroofi* with its relatively large wing ocelli resembles the female paratype of *S. parili* sp. n., although the markings are less prominent in the latter. Not much can be said about variability of the new taxon, as only one male and one female are known so far. Judging from most other *Syntherata* species, there may exist also other colour morphs.

S. parili sp. n. is the second Saturniidae species known from Waigeo Island, after *Neodiphthera sciron* (WESTWOOD, 1881) and its younger objective synonym *N. ale-*

phoetra (SWINHOE, 1892). Further investigation on this remote island is necessary.

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Artikel/Article: [Additional note on the genus *Syntherata* Maassen, 1873 \(Lepidoptera: Saturniidae\): A new species from Waigeo Island, Indonesia 138-140](#)