# New species of Reptilisocia and Trophocosta with some additional data of other genera (Lepidoptera: Tortricidae, Tortricini) in Papua

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Abstract: Tortricini from Papua Indonesia, particularly the closely allied genera Reptilisocia Diakonoff, 1983 and Trophocosta Razowski, 1964, are discussed. Reptilisocia gunungana Razowski, 2013, Asterolepis brandti Common, 1965, A. glycera Meyrick, 1910 and Beryllophantis cochlias Meyrick, 1938 are recorded for the first time for Papua, Indonesia. Ten new species are described: Reptilisocia oculuflavana spec. nov., R. rectasignana spec. nov., R. ingeae spec. nov., R. yahukimonana spec. nov., R. variana spec. nov., R. auranigreoana **spec. nov.**, R. baratana **spec. nov.**, Trophocosta nikyae **spec. nov.**, T. reneeae **spec. nov.**, and *T. elkeae* **spec. nov.** The adults and genitalia are illustrated.

Rangkuman: Tortricini dari Papua, Indonesia, khususnya dua genera yang berdekatan, Reptilisocia Diakonoff, 1983 dan Trophocosta Razowski, 1964, didiskusi. Reptilisocia gunungana Razowski, 2013, Asterolepis brandti Common, 1965, A. glycera Meyrick, 1910 dan Beryllophantis cochlias Meyrick, 1938 untuk pertama kali ditemukan di Papua, Indonesia. Sepuluh spesies baru dideskripsi: Reptilisocia oculuflavana spec. nov., R. rectasignana spec. nov., R. ingeae spec. nov., R. yahukimonana spec. nov., R. variana spec. nov., R. auranigreoana spec. nov., R. baratana spec. nov., Trophocosta nikyae spec. nov., T. reneeae spec. nov., dan T. elkeae spec. nov. Gambar bentuk dewasa dan gambar genitalia disajikan.

Keywords: Papua, Papua Barat, New Guinea, Indonesia, Oriental, Tortricini, new species.

#### Introduction

The genera Trophocosta Diakonoff, 1983 and Reptilisocia Razowski, 1964 are found in the Oriental and Australian region, except *Trophocosta tucki* Razowski, 1986 which also occurs in the Palaearctic region.

The genus Trophocosta is distributed from Nepal to New Guinea. Its distribution is similar to that of other tortricid genera as Paratorna Meyrick, 1907, Isotenes Meyrick, 1938 and Peridaedala Meyrick, 1925. The genus Reptilisocia occurs from India to New Guinea and has a more southern distribution.

The moths were collected by several collectors during surveys to Papua Indonesia. An overview of the history of the expeditions to Papua is published on the website: www.papua-insects.nl/history. The author visited Papua twice. In 2011, accompanied by Marion van Eyken, Rinto Mambrasar and Rosalina Giovani Mandowen, to the Star Mountains and Walmak, district Nipsan in the Jayawijaya Mountains. In 2014 the regions of Fakfak and the Arfak Mountains were visited together with Piet Zumkehr, Siep and Jannie Sinnema.

Most of the material discussed is collected at Walmak. In September, 2011 we had the opportunity to visit the village for one week. During our stay, there was a heavy rain for two evenings. We were lucky: thousands of moths came to the light during these rainy evenings. Figures 1 and 2 give an impression of these wonderful evenings.





**Figs 1-2**. Impression of collecting moths with a lighttrap at Walmak (Nipsan district), Jayawijaya Mountains, Papua, Indonesia in September 2011.

On those two evenings we collected and provisionally stored a large number of Tortricidae. Among them several new species to science or new to Papua, Indonesia (Groenen, 2012; 2013a; 2013b; 2014; 2020a; 2020b).

In this paper, new species of the genera *Reptilisocia* and *Trophocosta* are described which all were collected at Walmak, except *Reptilisocia oculuflavana* spec. nov. and *R. baratana* spec. nov.

Razowski (1964) separated the genus *Trophocosta* from *Spatalistis* Meyrick, 1907 on base of the wing venation and the development of the terminal pointed sacculus in the male genitalia. In the female genitalia *Trophocosta* was characterized by the large lamella antevaginalis and the shape of the signum. He included eighth species, all from the Oriental region.

Diakonoff (1983) in his turn, separated the genus *Reptilisocia* from *Trophocosta* based on the characteristic long ribbon-like socii in the male genitalia. In the female genitalia the thin long thorned signum, on a dilated base, is characteristic. He placed two species in the new genus. The moths of both genera are externally rather similar and dissection of the genitalia is necessary for a reliable identification. Using external characters the species can be divided into four groups:

-wings elongate, long and variable brown and yellow to orange:

- R. paraxena Diakonoff, 1983
- R. oculuflavana spec. nov.
- R. solomonensis Razowski, 2012
- R. paryphaea Meyrick, 1907
- R. rectisignana spec. nov.
- T. argyrosperma Diakonoff, 1953

- -wings broad, medium sized, brown and yellow:
- R. baratana spec. nov
- R. tarica Razowski, 2012
- T. elkeae spec. nov.
- T. conchodes Meyrick, 1910
- -wings smaller and orange:
- R. gunungana Razowski, 2013
- R. ingeae spec. nov.
- R. variana spec. nov.
- R. yahukimonana spec. nov.
- R. auranigreoana spec. nov.
- T. aurea Razowski, 1966
- T. nikyae spec. nov.
- T. reneeae **spec. nov**.
- T. cyanoxantha Meyrick, 1907
- T. nitens Razowski, 1964
- T. nummifera Meyrick, 1910
- T. hilarochroma Diakonoff, 1951
- T. tucki Razowski, 1986
- T. maculifera Kuznetsov, 1992
- -small species, brown and green:
- R. impetigo Razowski, 2012

Determination of a single specimen on external characters alone is unreliable, however, when comparing series of adults, most can be separated into species.

In the male genitalia the genera Trophocosta and Reptilisocia are easily separated by the shape of the socii. An exception forms T. conchodes Meyrick which has kidney shaped socii. Examination of Reptilisocia-species, i.e. R. gunungana Razowski, R. ingeae spec. nov., R. yahukimonana spec. nov and R. auranigreoana spec. nov., based on male genitalia only, is difficult. However uniform differences are found in the presence and shape of a sclerotized structure in the bulbus ejaculatorius in combination with the number and shape of the cornuti and the general appearance of the genitalia.

In both genera the female genitalia differ more distinctly. In Trophocosta the ductus bursae is in general more slender than in Reptilisocia. The species within the genera generally differ distinctly. Reptilisocia rectisignana spec. nov. is distinguished from R. oculuflavana spec. **nov**., in one female, based on the differences in the length of the arms of the eighth tergite in relation to the width of the ostium and the shape of the signum. It is not clear if there is any variation in the shape of the signum in this species group. More research is required.

The genus Reptilisocia includes six species, the genus Trophocosta nine (Gilligan et al, 2018). In this paper seven new species of Reptilisocia and three of Trophocosta are treated. Some additional information on other Tortricini is given. For the morphological terminology Razowski (2008) is used.

### Checklist of Reptilisocia:

paryphaea Meyrick, 1907 (India) solomonensis Razowski, 2012 (Solomon Islands) oculuflavana spec. nov. (Papua) rectisignana spec. nov. (Papua) tarica Razowski, 2012 (Papua New Guinea) baratana spec. nov. (Papua) paraxena Diakonoff, 1983 (Sumatra) gunungana Razowski, 2013 (Seram) ingeae spec. nov. (Papua) variana spec. nov. (Papua) yahukimonana spec. nov. (Papua) auranigreoana spec. nov. (Papua) impetigo Razowski, 2012 (New Guinea)

### **Checklist of** *Trophocosta*:

argyrosperma Diakonoff, 1953 (Papua New Guinea) aurea Razowski, 1966 (Borneo) conchodes Meyrick, 1910 (New Guinea) cyanoxantha Meyrick, 1907 (Sri Lanka) hilarochroma Diakonoff, 1951(Java) elkeae spec. nov.. (Papua) nikyae spec. nov. (Papua) reneeae **spec. nov.** (Papua) nitens Razowski, 1964 (Papua New Guinea) nummifera Meyrick, 1910 (Papua New Guinea) tucki Razowski, 1986 (Nepal) maculifera Kuznetsov, 1992 (Vietnam)

#### Materials and methods.

Specimens were collected with light traps at several locations. In the mountain areas of Papua and Papua Barat provinces, collecting took place between 900 and 2500 meters above sea level. After collecting the insects were pinned or stored in paper bags, and dried for shipping. The material was relaxed for further research, and if necessary mounted and spread. From all species, the genitalia were dissected and mounted on glass slides in Euparal. Photographs of the moths were made with a Nikon D5100 camera, using a NikonMicro Nikkor 40 mm lens with 20 mm extension. Genitalia photographs were made with an Olympus triocular microscope and a MDC320 digital camera.

The collected material is deposited into the following collections: Holotypes are deposited in RMNH. Paratypes and other material are deposited in the collections of the RMNH and the authors collection. The nomenclature follows T@RTS: Online World Catalogue of the Tortricidae (Ver. 4.0).

#### **Abbreviations**

FG – Acronym for slide numbers, made by the author GNL - Private Collection Frans Groenen, Bergeijk, The Netherlands RMNH – Collection of Naturalis Biodiversity Center, Leiden, The Netherlands (former Rijksmuseum voor Natuurlijke Historie)

RMNH.INS. – Acronym for unique collection numbers of specimens and slides in RMNH ZMA.INS. – Acronym of the former Zoological Museum of Amsterdam (at present in RMNH)

#### Systematic part

# Reptilisocia oculuflavana spec. nov. (figs 3, 4, 15, 22)

urn:lsid:zoobank.org:act: 133F0758-CF84-4CE9-9737-707A8594D52D

Holotype: RMNH.INS.1283149: ♂, Indonesia, Papua, Kab. Yahukimo, Lelambo, (Distr. Kangguruk), 4°01′ S – 139°47′ E, 900m at light, 24-26.x.2008, leg. P.J. Zumkehr, slide FG4055 **Paratypes** (14  $\circlearrowleft$  $\circlearrowleft$ , 21  $\circlearrowleft$  $\circlearrowleft$ ): RMNH.INS.1283150: 1 $\circlearrowleft$ , Indonesia, Star Mountains, Abmisibil, 1970m, 4°40′S – 140°34′E, 19.xi-3.xii.2001, leg. H.J. van Maastricht, slide FG4047; RMNH.INS.1283151: 1♀, Indonesia, Irian Jaya, Pass Valley, 49 km north of Wamena, 2140m, at light, 25.x.1993, leg. A.J. de Boer, A.L.M. Rutten & R. de Vos; RMNH.INS.1283152-1283153: 2 ♀♀, Indonesia, Papua, Kecamatan Abenaho, Pass Valley, 1950 m, 3°51′S − 139°05'E, 11-25.ii.2005, at light, disturbed mountain forest, leg. UNCEN-ZMA expedition Papua Indonesia 2005; RMNH.INS.1283154-1283155: 2 ♀♀, Indonesia, Papua, Kecamatan Nipsan, Walmak, 1710 m, 4°07′S – 138°36′E, 31.i-09.ii.2005, leg. UNCEN-ZMA expedition Papua Indonesia 2005, slide FG4042; RMNH.INS.1283156-1283160: 5 ♀♀ (3 exx. abdomen missing), Indonesia, Papua, Kecamatan Nipsan, Walmak, 4°07′S - 139°36′E, 1710 m, 24-29.x.2008, leg. R. de Vos & P.J. Zumkehr; GNL: 14  $\circlearrowleft$  $\circlearrowleft$ , 10  $\circlearrowleft$  $\circlearrowleft$ , Indonesia, Papua, Kecamatan Nipsan, Walmak, 4°07′S 138°38′E, 20-25.ix.2011, at light, leg. F. Groenen, Marion van Eyken, Rinto Mambrasar & Rosalina Giovani Mandowen, slides ♂FG2360,♀FG2361, ♀FG2362,  $\bigcirc$ FG2375,  $\bigcirc$ FG2376,  $\bigcirc$ FG2467,  $\bigcirc$ FG2468,  $\bigcirc$ FG2469,  $\bigcirc$ FG2470,  $\bigcirc$ FG2472,  $\bigcirc$ FG2478, ♂FG2479.

Diagnosis: Varied shining brown and orange species with at end of cell of forewing a typical small yellow, usually orange bordered, spot. Externally very similar to Trophocosta argyrosperma, Reptilisocia solomonensis, R. paryphaea and R. rectasignana spec. nov. Male genitalia with socii typical for the genus Reptilisocia. Reptilisocia solomonensis differs in the female genitalia by the long and slender ductus bursae, R. rectasignana spec. nov. is separated by the longer arms of the eighth tergite, the more slender ductus and the shape of the signum.

Description: 13-17 mm. Male, holotype: Rather worn specimen. Head beige. Labial palpi about two times diameter eye, second segment dorsal widening, rather smooth, long scales at ventral edge, beige, in basal part with black scattered scaling, third segment protruding, robust, beige. Antenna beige. Thorax and tegulae beige overlaid with a mixture of orange and black. Forewings elongate, costa slightly curved, almost parallel to dorsum, apex pointed, termen straight. Costal fold slender, to a quarter of wing length. Ground colour yellow overlaid with orange, all markings brown, marbled with black. Small dots of black raised scales present all over the wing. Strigulae indicated by yellow orange, dividings black.

Bands of silver spots present. At base along dorsum a band to a quarter of wing length, connected in middle of wing by an oblique band to the large prominent triangle costal field. This triangle field reaches from end of fold towards termen, reaching to middle. At end of cell a distinct yellow spot. Along termen a small band. Fringes yellow orange, at tornus grey. Hindwings elongate, white, apically fuscous. Fringes along dorsum white, at termen fuscous. Abdomen cream-coloured.

Female, paratype: Forewing shining brown, transverse bands shining silver brown. Dots of raised black scales and yellow spot at end of cell present. Hindwing in distal half brown overlaid. Fringes brownish.

Male genitalia: Tegumen moderate. Socii long and very slender, distally with a tiny hook, dorsally haired. Tuba analis distinct. Aedeagus robust, broad, one separated short cornutus and a bundle of short cornuti to half-length of aedeagus present. Bulbus ejaculatorius a long tube, about three times longer as tegumen, with a large and complex sclerotized structure, distally with a prominent ventral proces. Valva rectangular, haired at inner side, caudal angle rounded. Sacculus a sclerotized band, some setae present. Valva neck about one-third width of valva. Cucullus bird-head-shaped, ventrally with long hairs, apex with a small sharp process.

**Female genitalia:** Papillae anales in basal half strongly narrowing. Apophyses posterior as longs as papillae anales. Apophyses anterior short. Sterigma broad, posterior with two, semicircular spined projections. Ostium circular, spined. Lamella antevaginalis a spined rim. Arms of eighth tergite short, laterally ending in triangle projections. Ductus bursae membranous, widening below antrum. Origin of ductus seminalis located at connection of ductus bursae with corpus bursae. Corpus bursae ovate, about 4 to 5 times length of signum, distinctly spined. Signum slender, curved and smooth.

**Distribution:** Found at altitudes between 900-2200 meter in the Jayawijaya Mountains and Star Mountains, Papua, Indonesia.

**Etymology**: The name *oculuflavana* (Latin: oculus = eye, flavor = yellow) refers to the yellow spot on the forewing.

#### **Reptilisocia rectasignana spec. nov.** (figs 5, 23)

urn:lsid:zoobank.org:act: DB939D1C-1C2C-4315-B6CF-AC16E4A35079

**Holotype:** RMNH.INS.1283180: ♀, Indonesia, Papua, Kecamatan Nipsan, Walmak, 20-25.ix.2011, 4°07′S 138°38′E, at light, leg. F. Groenen, Marion van Eyken, Rinto Mambrasar & Rosalina Giovani Mandowen, slide FG2466.

**Diagnosis**: Externally similar to *Trophocosta argyrosperma*, *Reptilisocia paryphaea*, *R. solomonensis* and *R. oculuflavana* **spec. nov**. From *Trophocosta argyrosperma* it differs in the broader ductus and smaller signum. It is closely allied to *R. solomonensis* but differs in the unequal width of the ductus bursae and the shorter and straight signum. In *Reptilisocia oculuflavana* **spec. nov.** the arms of eighth tergite are shorter than in *R. rectasignana* **spec. nov.** 

Male unknown.

Description: 17 mm. Rather worn specimen. Head brown. Labial palpi two times diameter of eye, straight, third segment little drooping, beige mixed with brown. Antenna beige ringed dark brown. Thorax and tegulae brown. Forewings elongate, costa slightly curved, almost parallel to dorsum, apex pointed, termen slightly sinuate. Small dots of black raised scales present. Bands indicated by silver dots. Forewing shining brown, near termen mixed with black. From one quarter of dorsum to tornus a triangular pale brown field, connected to yellowish spot at end of cell. Spot bordered orange. Fringes beige with darker mixture, at tornus brown.

Hindwings shining white, near termen and dorsum suffused with brown. Fringes beige.

Female genitalia: Papillae anales in lower half narrowing. Apophyses posterior as long as papillae anales. Apophyses anterior about half length of apophyses posterior. Sterigma moderate, posterior with two, semicircular spined projections. Ostium ovate, spined. Lamella antevaginalis a slender rim. Arms of eighth tergite short, lateral ending in triangle projections. Ductus bursae membranous, at origin as broad as ostium, somewhat widening before middle, in distal half little narrower as at origin of ductus. Origin of ductus seminalis located at connection of ductus bursae with corpus bursae Corpus bursae ovate, about 5 times length of signum. Signum gradually tapering, straigth and smooth.

**Distribution:** Known by the female holotype only, found in the Jayawijaya Mountains at an altitude of 1700 meter, Papua, Indonesia.

Etymology: The name rectasignana refers to the straight signum (Latin: recta = straight) in the female genitalia.

#### **Reptilisocia ingeae spec. nov.** (figs 6, 7, 16, 24)

urn:lsid:zoobank.org:act: 5A82001E-EED9-4860-96C4-48E86BB53102

Holotype: RMNH.INS.1283181: ♂, Indonesia, Papua, Kecamatan Nipsan, Walmak, 4°07′S 138°38'E, 20-25.ix.2011, at light, leg. F. Groenen, Marion van Eyken, Rinto Mambrasar & Rosalina Giovani Mandowen, slide FG2363.

**Paratypes:** RMNH.INS.1283161: 1  $\circlearrowleft$ , Indonesia, Papua, Kecamatan Nipsan, Walmak, 1710 m, 4°07'S - 138°36'E, 31.i-09.ii.2005, leg. UNCEN-ZMA expedition Papua Indonesia 2005, slide FG3673; GNL: 2 ♂♂, 5 ♀♀, Indonesia, Papua, Kecamatan Nipsan, Walmak, 4°07′S – 138°38'E, 20-25.ix.2011, at light, leg. F. Groenen, Marion van Eyken, Rinto Mambrasar & Rosalina Giovani Mandowen, slides  $\bigcirc$ FG2449,  $\bigcirc$ FG2451,  $\bigcirc$ FG2475,  $\bigcirc$ FG2476.

Diagnosis: Species with bright orange forewings, sometimes with a large black field present, and whitish hindwings. Characterized in the male genitalia by the long bundle cornuti and by the absence of a small ovate structure in the bulbus ejaculatorius. In the female genitalia distinguished by the very long, curved and smooth signum.

**Description:** ♂ 10-11 mm, ♀ 12 mm. Male head golden yellow. Labial palpi two times diameter eye, straight, second segment dorsal strongly widened in distal half, long scales at ventral edge, terminal segment partly yellow-white, second segment beige tinged. Antenna

yellow, ringed with beige, with finely short white setae. Thorax and tegulae basally yellow, in the middle and distally crossed by an orange band.

Forewings gradually broadening towards termen. Costal fold to one-third of wing length. Costa convex, dorsum straight, termen slightly sinuate. Strigulae indicated yellow, divided by orange blocks. Forewing yellow overlaid with orange. Shiny silver spots irregularly spread over wing except for a transverse band in middle, and in distal part of wing a row of marginal spots. Dots of raised scales present. Fringes orange.

The male holotype is a rather worn specimen. In some specimens at the forewing a large, parallelogram-shaped black spot present in apical half of wing.

Hindwings white, distally tinged beige. Fringes white.

Female with hindwings more beige. Fringes orange tinged.

Male genitalia: Tegumen moderate. Uncus absent. Socii long and very slender, distally with a tiny hook, dorsally haired. Aedeagus tube shaped with a bundle of cornuti as long as aedeagus. Bulbus ejaculatorius ovate. Valva rectangular, haired at inner side, caudal angle rounded. Sacculus a sclerotized band, some setae present. Valva neck about two-fifth width of valva. Cucullus bird-head-shaped, ventrally long haired, ending in a small sharp process.

**Female genitalia**: Papillae anales in basal half narrowing. Apophyses posterior shorter as papillae anales. Apophyses anterior about one-third length of apophyses posterior. Sterigma moderate, posteriorly spined. Ostium oval, spined. Lamella antevaginalis a slender rim. Arms of eighth tergite long and tapering, longer as width of ostium, laterally ending in triangle projections. Ductus bursae sinuate, membranous, at origin somewhat narrower than ostium. Origin of ductus seminalis near corpus bursae. Corpus bursae ovate, about one to one and a half times length of signum. Signum very long, tapering, strongly curved, smooth, capitulum medium sized.

**Distribution:** Found in the Jayawijaya Mountains at an altitude of 1700 meter, Papua, Indonesia.

**Etymology:** This species is named in honour of Inge, daughter of the author, which fulfilled my promise to name a species after her.

#### Reptilisocia variana spec. nov. (figs 8, 17, 25)

urn:lsid:zoobank.org:act: C82282D5-430D-4F6F-B82A-5D7C1A844C38

**Holotype:** RMNH.INS.1283162:  $\circlearrowleft$ , Indonesia, Papua, Star Mountains, Abmisibil, 1970m, 4°40′S – 140°34′E, 29.i-9.ii.2005, UNCEN-ZMA.expedition, leg. P.J. Zumkehr, slide FG3078. **Paratypes:** RMNH.INS.1283163: 1  $\stackrel{\frown}{}$ , as holotype, slide FG4051; GNL: 1  $\stackrel{\frown}{}$ , 2  $\stackrel{\frown}{}$ , Indonesia, Papua, Walmak, Kab. Yahukimo, Nipsan District, Jayawijaya Mts, 1710 m, 4°07′ S – 139°38′ E, 20-25.ix.2011, at light, leg. F. Groenen, Marion van Eyken, Rinto Mambrasar & Rosalina Giovani Mandowen, slides  $\stackrel{\frown}{}$  FG2448,  $\stackrel{\frown}{}$  FG2450.

**Diagnosis:** Externally very similar to *Reptilisocia yahukimonana* **spec. nov.** and *R. auranigreoana* **spec. nov.** but differs in the male genitalia in having three cornuti. In the female genitalia a curved and serrate signum present.

Description: 11-14 mm. Male: Head yellow. Labial palpi two times diameter eye, sinuate, second segment dorsally strongly widened in distal half, apically with long scales, with beige tinged area, apical segment partly hidden under scales of second segment, yellow-white. Antenna beige, ringed brown, with finely short white cilia. Thorax yellow with orange bands. Tegulae orange, apically yellow.

Forewings rather broad, costa curved, dorsum straight, apex protruding, termen slightly concave. Basal half orange, distal half orange brown. Slender costal fold reaching to median band. Dots of raised scales present all over the forewing. Strigulae indicated by yellow spots. Markings in basal half consisting of two silver spots just behind fold and a number of shining white spots. Median band running from costa to dorsum, oblique, broadening in dorsal half, interrupted in middle, in dorsal half consisting of a group of silver dots. In distal half a group of silvery, white bordered, dots of different size and shape. Fringes orange. Hind wings shining white in basal one-third, in distal part with orange tinge. Fringes white, tinged orange.

Female: Hindwings shining grey. Fringes white, basally tinged orange.

Male genitalia: Tegumen moderate. Uncus absent. Socii long and slender, distally with a tiny hook, dorsally haired. Aedeagus tube-shaped with two long, curved cornuti and one short straight cornutus. Bulbus ejaculatorius basal tube-shaped and distally with a rounded sack with at the inside a circular structure. Valva rectangular, at inner side haired, caudal angle rounded. Sacculus a sclerotized band, some setae present. Valva neck about one-third the width of valva. Cucullus bird-head-shaped, ventrally long haired, apically with a small sharp process.

Female genitalia: Papillae anales in basal half narrowing. Apophyses posterior shorter as papillae anales. Apophyses anterior about half length of apophyses posterior. Sterigma moderate, posterior with two semicircular spined projections. Ostium rounded, spined. Lamella antevaginalis a slender rim. Arms of eighth tergite long and slender, laterally ending in triangle projections. Ductus bursae membranous, at origin equally broad as ostium, with a bulbous widening before middle. Between this widening and ductus seminalis narrower, distal of ductus seminalis broad. Origin of ductus seminalis at about two-third of ductus bursae. Corpus bursae ovate, about three times length of signum. Signum regular and curved with sharp apex, serrate capitulum large.

**Distribution:** Found in the Jayawijaya Mountains and Star Mountains at altitudes between 1700-2000 meter, Papua, Indonesia.

**Etymology:** The name *variana* refers to the variable spots and coloration of the forewing.

#### Reptilisocia auranigreoana spec. nov. (figs 9, 18, 26)

urn:lsid:zoobank.org:act: 6AD8B17B-9E5A-4E46-B935-DA29AD68F3F8

Holotype: RMNH.INS.1283182: ♂, Indonesia, Papua, Kecamaten Nipsan, Walmak, 4°07' S – 138°38' E, 20-25.ix.2011, at light, leg. F. Groenen, Marion van Eyken, Rinto Mambrasar & Rosalina Giovani Mandowen, slide FG2445.

**Paratypes:** GNL: 4  $\circlearrowleft$  , 4  $\circlearrowleft$  , as holotype, slides  $\circlearrowleft$  FG2446,  $\circlearrowleft$  FG2462,  $\circlearrowleft$  FG2475,  $\circlearrowleft$  FG4058.

**Diagnosis:** External very similar to *Reptilisocia yahukimonana* **spec. nov.** and *R. variana* **spec. nov. nov.** *Reptilisocia auranigreoana* **spec. nov.** differs in the male genitalia in having two cornuti. In the female genitalia it is, compared with the other *Reptilisocia* species, separated by the robust and curved signum. Variable species in external characters. One male with a black field on forewing. Forewing of females in general appearance more orange.

**Description:** 11-12 mm. Male: Head beige. Labial palpi one and a half to two times diameter eye, second segment straight, strongly broadening with ventral and dorsal projecting scales, beige in basal half mixed brown. Third segment slightly drooping, beige. Antenna brown. Thorax and tegulae beige, orange tinged.

Forewings elongate, costa slightly curved, apex protruding, termen and dorsum straight. Costal fold to one-third reaching median fascia, beige and black coloured. Black dots of raised scales present, in basal half beige dots present. Bands indistinct, except for median band, indicated by silver dots. Median band with at dorsum a triangular brown spot. Fringes orange. Hindwings shining beige. Fringes beige.

Female: Hindwings grey. Fringes basally grey, apically orange, at tornus grey.

Male genitalia: Tegumen moderate. Uncus absent. Socii long and slender, distal with a tiny hook, dorsally haired. Aedeagus tube shaped with one long curved and one short curved cornutus. Bulbus ejaculatorius a rounded sack. Valva rectangular, haired at inner side, caudal angle rounded. Sacculus a sclerotized band, some setae present. Valva neck about one-third width of valva. Cucullus bird-head-shaped, ventrally long haired, apically with a small sharp process.

**Female genitalia:** Papillae anales in basal half strongly narrowing. Apophyses posterior somewhat shorter as papillae anales. Apophyses anterior short. Sterigma broad, posterior with two, semicircular spined projections. Ostium circular, spined. Lamella antevaginalis a slender rim. Arms of eighth tergite as long as widening of ostium, lateral ending in triangle projections. Ductus bursae membranous, at origin as broad as ostium. Origin of ductus seminalis located at connection of ductus bursae with corpus bursae. Corpus bursae ovate, about three times length of signum. Signum slender, curved, serrate.

**Distribution:** The species has been found in the Jayawijaya Mountains at an altitude of 1700 meter, Papua, Indonesia.

**Etymology:** The name *auranigreoana* refers to the orange (= aurantiacus) with sometimes a black (= nigreos) coloration of the forewing.

### Reptilisocia yahukimonana spec. nov. (figs 10, 19, 27)

urn:lsid:zoobank.org:act: BEEC87D2-73AA-41AC-977A-433550CF9100

**Holotype:** RMNH.INS.1283164: ♂, Indonesia, Papua, Kab. Yahukimo, Walmak (distr. Nipsan), 4°07′S – 139°36′E, 1710 m, 24-29.x.2008, leg. R. de Vos & P.J. Zumkehr, slide FG4044.

**Paratypes:** RMNH.INS.1283165: 1  $\bigcirc$ , Indonesia, Papua, Kecamatan Nipsan, Walmak, 1710 m, 4°07′S – 138°36′E, 31.i-09.ii.2005, leg. UNCEN-ZMA expedition Papua Indonesia 2005, slide FG4045; GNL: 1  $\bigcirc$ , Indonesia, Papua, Walmak, Kab. Yahukimo, Nipsan District, Jayawijaya

Mts, 1710 m, 4°07' S – 139°38' E, 20-25.ix.2011, at light, leg. F. Groenen, Marion van Eyken, Rinto Mambrasar & Rosalina Giovani Mandowen, slide FG2447.

**Diagnosis**: A small species. External very similar to *Reptilisocia variana* spec. nov. and *R*. auranigreoana spec. nov.. Reptilisocia yahukimonana spec. nov. differs in the male genitalia by the presence of a sclerite in the bulbus ejaculatorius in combination with the relatively long valva, slender cucullus and the bundle of cornuti at the aedeagus. In the female genitalia the slender, straight and distal upward bent signum is characteristic.

Description: 10-12 mm. Male: Head orange yellow. Labial palpi one and a half to two times diameter eye, second segment strongly widening, third segment drooping, cream-coloured. Antenna beige, ringed brown, finely short white cilia. Thorax and tegulae orange. Forewings elongate, gradually widening, costa slightly curved, dorsum straight, apex slightly protruding, termen oblique. Costal fold slender, reaching to median band. Dots of raised black scales present. Forewing orange coloured. In basal half several white dots present. Median fascia indicated by an oblique row of silver spots. In apical half several silver spots present. Fringes orange. Hindwings shining off-white. Fringes off-white.

Female: Hindwings shining fuscous. Fringes off-white.

Male genitalia: Tegumen moderate. Uncus absent. Socii long and slender, distally with a tiny hook, dorsally haired. Aedeagus tube-shaped with a bundle of long cornuti. Bulbus ejaculatorius a pear-shaped sack and with a short ovate structure. Valva rectangular, haired at inner side, caudal angle rounded. Sacculus a sclerotized band, some setae present. Valva neck about one-third width of valva. Cucullus bird-head- shaped, slender, ventrally long haired, ending in a small sharp process.

Female genitalia: Papillae anales in basal half narrowing. Apophyses posterior shorter as papillae anales. Apophyses anterior about one-third length of apophyses posterior. Sterigma moderate, posterior spined. Ostium rounded, spined. Lamella antevaginalis a slender rim. Arms of eighth tergite slightly longer as widening ostium, laterally ending in triangular projections. Ductus bursae membranous, with bulbous widening just behind ostium, narrowing towards ductus seminalis. Ductua seminalis originates ventral of ductus bursae and close to corpus bursae. Corpus bursae ovate, about three times length of signum. Signum slender, straigth, apically curved upwards, smooth.

Distribution: Found in the Jayawijaya Mountains at an altitude of 1700 meters, Papua, Indonesia.

Etymology: The name yahukimonana refers to Kabupaten Yahukimo where the types were collected.

#### Reptilisocia gunungana Razowski, 2013

Reptilisocia gunugana: Razowski (2013: 34)

**Additional data:** RMNH.INS.1283166: 1 ♂, Indonesia, Papua, Kecamatan Nipsan, Walmak, 1710 m, 4°07′S - 138°36′E, 31.i-09.ii.2005, leg. UNCEN-ZMA expedition Papua Indonesia 2005; RMNH.INS.1283167: 1 ♂, Indonesia, Papua, Kecamatan Nipsan, Walmak, 1710 m, 4°07′S – 138°36′E, 31.i-16.ii.2005, leg. UNCEN-ZMA expedition Papua Indonesia 2005; RMNH.INS.1283168: 1 ex., Indonesia, Papua, Kecamatan Nipsan, Walmak, 4°07′S – 139°36′E, 1710 m, 24-29.x.2008, leg. R. de Vos & P.J. Zumkehr (abdomen missing); RMNH.INS.1283169: 1 ♂, Indonesia, Papua Barat, Birdshead Peninsula, Arfak Mountains, Mokwam, 1510 m, 1°06′S – 133°54′E, 6-10.xi.2011, at light, leg. Papua Insects Foundation, slide FG4048; GNL: 1 ♂, Indonesia, Papua, Kecamatan Nipsan, Walmak, 4°07′S 138°38′E, 20-25.ix.2011, at light, leg. F. Groenen, Marion van Eyken, Rinto Mambrasar & Rosalina Giovani Mandowen, slide FG2464; GNL: 1 ♂, Indonesia, Papua Barat, Birdshead Peninsula, Arfak Mountains, Mokwam, 1510 m, 1°06′S – 133°54′E, 21-24.x.2014, at light, Papua Insects Foundation expedition, leg. F. Groenen, slide FG2908.

**Distribution:** Seram (Moluccas), Arfak Mountains (Papua Barat), and Jayawijaya Mountains (Papua), Indonesia. The species has been recorded for the first time for New Guinea.

### Reptilisocia baratana spec. nov. (figs 11, 28)

urn:lsid:zoobank.org:act: E708E374-1B78-41A7-B832-3BE8CD035D24

**Holotype:** RMNH.INS.1283183: ♀, Indonesia, Papua Barat, Birdshead Peninsula, Arfak Mountains, Mokwam, 1510 m, 1°06′S − 133°54′E, 21-24.x.2014, at light, PIF-exp., leg. F. Groenen, slide FG3080.

**Diagnosis:** Dark brown species with yellow costa and whitish hindwings. Typical is the very broad lamella antevaginalis in combination with the small signum. Male unknown.

**Description:** 12 mm. Head golden yellow. Labial palpi about two times diameter eye, sinuate and slender. Second segment distally with long scales, yellow with orange median coloration. Third segment large, straight and somewhat drooping. Antenna yellow ringed pale brown. Thorax and tegulae basally golden yellow with distal part dark brown.

Forewings broader towards termen, costa convex, dorsum straight, termen sinuate, apex blunt, protruding. Fascia indicated by silver dots. Tufts of black raised scales present. Dark brown, except for yellow costa and termen. Between the yellow and brown a more orange coloration. Costa interrupted at one-third and two-third by dark brown bands. Fringes yellow, dark brown at tornus.

Hindwings and fringes shining beige.

**Female genitalia**: Papillae anales in basal half slightly narrowing. Apophyses posterior shorter than papillae anales. Apophyses anterior about one-third length of apophyses posterior. Sterigma moderate, posterior spined. Ostium ovate, spined. Lamella antevaginalis a slender rim. Arms of eighth tergite about twice as longer as widening ostium, laterally ending in rounded projections. Ductus bursae membranous, of equal width, medially with a sclerotization. Origin of ductus seminalis located at three quarters length of ductus bursae. Corpus bursae ovate, about six times length of signum. Signum small, base diamond shaped.

**Distribution:** Only known by the holotype which was found in the Arfak Mountains, Papua Barat, Indonesia.

Etymology: The name baratana refers to the province Papua Barat where the holotype was collected.

### **Trophocosta elkeae spec. nov.** (figs 12, 29)

urn:lsid:zoobank.org:act: 678F6BA0-9BBD-4B1B-8F6C-E55E5CB23859

Holotype: RMNH.INS.1283170: ♀, Indonesia, Papua, Kecamatan Nipsan, Walmak, 1710 m, 4°07′S – 138°36′E, 31.i-16.ii.2005, leg. UNCEN-ZMA expedition Papua Indonesia 2005, slide FG4041.

Paratypes: ZMA.INS.765036: 2 ♀♀, Indonesia, Papua, Kecamatan Abenaho, Pass Valley, 1950 m, 3°51′S – 139°05′E, 11-25.ii.2005, at light, disturbed mountain forest, leg. UNCEN-ZMA expedition Papua Indonesia 2005; RMNH.INS.1283171-1283172: 2 \(\Qmathcal{Q}\), Indonesia, Papua, Kecamatan Nipsan, Walmak, 4°07′S – 139°36′E, 1710 m, 24-29.x.2008, leg. R. de Vos & P.J. Zumkehr, slide FG4043; RMNH.INS.1283173: 1 \(\cappa\), Indonesia, Papua, Kab. Yahukimo, Lelambo, (Distr. Kangguruk), 4°01′ S – 139°47′ E, 900 m at light, 24-26.x.2008, leg. P.J. Zumkehr; RMNH.INS.1283174: 1 ♀, Indonesia, Papua Barat, Birdshead Peninsula, Arfak Mountains, Mokwam, 1510 m, 1°06′S – 133°54′E, 6-10.xi.2011, at light, leg. Papua Insects Foundation; GNL: 2 👓, Indonesia, Papua, Walmak, Kab. Yahukimo, Nipsan District, Jayawijaya Mts, 1710 m, 4°07' S – 139°38' E, 20-25.ix.2011, at light, leg. F. Groenen, Marion van Eyken, Rinto Mambrasar & Rosalina Giovani Mandowen, ♂ slide FG2461.

Diagnosis: The dark brown forewing in combination with golden yellow costa and termen is characteristic. Male unknown.

Description: 13-15 mm. Head golden-yellow. Labial palpi straight, about three times diameter eye, second segment strongly widened in distal half, golden-yellow, second segment with cream-coloured and darker bordered field. Antenna yellow, ringed brown, ciliated. Thorax and tegulae basal golden-yellow with remaining part dark brown.

Forewings broader towards termen, costa slightly convex, dorsum straight, apex protruding, termen oblique, somewhat sinuate. Fascia indicated by silver dots. Tufts of black raised scales present. Dark brown, mixed with orange, except for golden-yellow costa and termen. Costa interrupted at one-third and two-third by dark brown bands, distally partly mixed with orange brown, surrounding silver spots. Fringes beige, orange tinged.

Hindwings shining fuscous, apex whitish. Fringes off-white.

Female genitalia: Papillae anales moderate. Apophyses posterior about as long as papillae anales. Apophyses anterior about half length of apophyses posterior. Sterigma broad, posterior spined and haired. Ostium ovate, spined. Lamella antevaginalis a slender rim. Arms of eighth tergite short, laterally ending in large rounded projections. Ductus bursae of equal width, in distal half with a looping, sclerotized from just behind ostium till end of looping. Origin of ductus seminalis located near corpus bursae. Corpus bursae ovate, about three times length of signum. Signum consisting of two serrate blades of unequal length.

Distribution: Found in the Jayawijaya Mountains (Papua) and the Arfak Mountains (Papua Barat), Indonesia, at altitudes between 900-2000 meter.

**Etymology:** This species is named in honour of Elke, daughter of the author, which fulfilled my promise to name a species after her.

### Trophocosta reneeae spec. nov. (figs 13, 20, 30)

urn:lsid:zoobank.org:act: 84FB79A0-B6DF-41A2-8C83-462C512C874F

**Holotype:** RMNH.INS.1283184: ♂, Indonesia, Papua, Walmak, Kab. Yahukimo, Nipsan District, Jayawijaya Mts, 1710 m, 4°07' S – 139°38' E, 20-25.ix.2011, at light, leg. F. Groenen, Marion van Eyken, Rinto Mambrasar & Rosalina Giovani Mandowen, slide FG2459.

**Diagnosis:** Orange-yellow species with in some specimens in apical third of forewing a black transverse band. Hindwings creamy-white. This species has a smaller and darker appearance as *T. nikyae* **spec. nov**. The black spot between termen and yellow spot in centre of wing is absent or only indicated in worn specimens. The male genitalia are distinguished, compared to the other *Trophocosta* species, by the more pronounced shape of the cucullus and broader valva neck. In the female genitalia the smooth part of de ductus bursae between the ostium and the sclerite in the ductus is characteristic.

**Description:** 12 mm. Head golden-yellow. Labial palpi two times diameter eye, straight, second segment strongly widened in distal half, apical segment partly hidden in scales of second segment, golden-yellow, second segment with orange field. Antenna yellow, ringed orange, ciliated. Thorax and tegulae golden-yellow with basally, centrally and distally crossed by an orange band.

Forewings elongate, gradually broadening towards termen. Costa convex, dorsum straight, termen slightly sinuate. Strigulae golden-yellow, divided by thin orange lines, interspaces indicated by silver dots. Forewing marbled with orange resulting in an irregular scattered pattern of orange and golden-yellow. Bands indicated by numerous silver shining spots with in distal part of wing three rows of these spot parallel with termen. A distinct irregular shaped golden-yellow spot in cell forming an incomplete median band. Between this spot and termen an oblique black to brown field, reaching from one-third to dorsum. Dots of raised scales present. Fringes golden-yellow.

Hindwings white, in distal half tinged beige. Fringes white, tinged beige.

Abdomen shining white. Forelegs checkered brown and yellow, mid- and hind legs yellow.

Male genitalia: Tegumen moderate. Uncus absent. Socii semi-rectangular with a rounded apex, haired. Aedeagus simple, tube-shaped, two short and a bundle of short cornuti present. Valva rectangular, haired at inner side, costally with some long setae, caudal angle rounded. Sacculus a sclerotized band. Valva neck about two-third width of valva. Cucullus

bird-head-shaped with a distinct dorsal lobe, ventrally long haired, ventrally ending in a sharp process.

Female genitalia: Papillae anales moderate. Apophyses very slender. Apophyses posterior about as long as papillae anales. Apophyses anterior about half length of apophyses posterior. Sterigma broad, posterior spined. Ostium ovate, spined. Lamella antevaginalis only indicated. Arms of eighth tergite short, laterally ending in large rounded projections. Ductus bursae of equal width, smooth, with just below middle a curved sclerotization. Corpus bursae ovate, about four times length of signum. Signum slender, serrate, base almost as long as signum.

Distribution: Found in the Jayawijaya Mountains and Star Mountains at an altitude of 1600-1700 meter, Papua, Indonesia.

Etymology: This species is named in honour of Renee, daughter of the author, which fulfilled my promise to name a species after her.

### **Trophocosta nikyae spec nov.** (Figs 14, 21, 31)

urn:lsid:zoobank.org:act: DD0510F9-10E1-4720-A816-4FC4ADD4B333

**Holotype:** RMNH.INS.1283185: ♂, Indonesia, Papua, Walmak, Kab. Yahukimo, Nipsan District, Jayawijaya Mts, 1710 m, 4°07' S – 139°38' E, 20-25.ix.2011, at light, leg. F. Groenen, Marion van Eyken, Rinto Mambrasar & Rosalina Giovani Mandowen, slide FG2452.

**Paratypes:** GNL:  $1 \circlearrowleft 4 \circlearrowleft 2$ , as holotype, slide  $\circlearrowleft$ FG2453.

Diagnosis: The yellow, marbled orange, forewing and the remarkable yellow spot at the end of the cell in combination with the white hindwings are characteristic for the species. Trophocosta reneeae spec. nov. has a smaller and darker appearance as T. nikyae spec. nov. In the male the presence of two short cornuti, the small cucullus and slender valva neck are characteristic. In the female genitalia the ductus bursae is folded between the ostium and the sclerite in the ductus.

Description: 11-13 mm. Head golden-yellow. Labial palpi one and a half times diameter eye, straight, second segment dorsally strongly widened in distal half, long scales at ventral edge, apical segment partly hidden in scales of the second segment, golden-yellow, second segment with orange field. Antenna yellow, ringed orange, ciliated. Thorax and tegulae golden-yellow with basally, centrally and distally crossed by an orange band.

Forewings elongate, gradually broadening towards termen. Costa convex, dorsum straight, termen slightly sinuate. Strigulae golden-yellow, divided by thin orange lines, interspaces indicated by silver dots. Forewing marbled with orange resulting in an irregular scattered pattern of orange and golden-yellow. Bands indicated by numerous silver shining spots, with in distal part of wing three rows of these spot parallel with termen. A distinct irregular shaped golden-yellow spot in cell connected with a triangular tooth to dorsum, with near dorsum a few raised black scales at its outside. At one-third, close to dorsum, a few raised black scales present. Fringes golden-yellow.

Hindwings white, in distal half tinged beige. Fringes white, tinged beige.

Abdomen shining white. Forelegs checkered brown and yellow, mid- and hind legs yellow.

Male genitalia: Tegumen moderate. Uncus absent. Socii semi-triangular with rounded apex, haired. Aedeagus simple, tube-shaped. Valva rectangular, haired at inner side, at costa with some long setae, caudal angle rounded with short projection. A group of very short setae in center of excavation just above sacculus. Sacculus a sclerotized band. Valva neck about onethird width of valva. Cucullus bird-head-shaped, long haired, apically ending in a sharp process.

Female genitalia: Papillae anales moderate. Apophyses posterior about as long as papillae anales. Apophyses anterior about half length of apophyses posterior. Sterigma broad, posterior spined. Ostium ovate, spined. Lamella antevaginalis a slender punctate rim. Arms of eighth tergite short, laterally ending in large sharp hooked projections. Ductus bursae and ostium of equal width, folded, with sclerotization just below middle, length about one-third of length ductus. Origin of ductus seminalis located at top of corpus bursae. Corpus bursae ovate, about three times length of signum. Signum a slender, sinuate and upward turned horn, serrate, with a small base.

**Distribution:** The species has been found in the Jayawijaya Mountains at an altitude of 1700 meter, Papua, Indonesia.

Etymology: This species is named in honour of Niky, daughter of the author, which fulfilled my promise to name a species after her.

## Polemograptis chrysodesma Diakonoff, 1952

Polemograptis chrysodesma: Diakonoff (1952: 651)

Additional material: GNL: 1 ♀, Indonesia, Papua Barat, Fakfak, Werba, 52°53′S – 132°13′E, 30.x-1.xi.2014, PIF Exp., leg F. Groenen, slide FG2907.

**Distribution:** Moluccas, Papua (Indonesia).

# Asterolepis glycera (Meyrick, 1910)

Tymbarcha glycera: Meyrick (1910: 286)

**Additional material:** GNL: 1 ♂, Indonesia, Papua Barat, Fakfak, Huri Mber, 2°53′S – 132°18′E, 1.x1-3.xi.2014, PIF Exp., leg F. Groenen, slide FG3079; 2 ♂♂, Indonesia, Papua Barat, Fakfak, Werba, 52°53′S – 132°13′E, 30.x-1.xi.2014, PIF Exp., F. Groenen.

**Distribution:** Papua (Indonesia), Papua New Guinea. New for Papua.

# Asterolepis brandti Common, 1965

Asterolepis brandti: Common (1965: 644)

Additional material: GNL: 1 3, Indonesia, Papua, Kabupaten Bintang, Oksibil, 5°04'S – 140°38'E, 14-16.ix.2011, disturbed montain forest, leg. leg. F. Groenen, Marion van Eyken, Rinto Mambrasar & Rosalina Giovani Mandowen, slide FG3113.

**Distribution:** Papua (Indonesia), Australia. New for Papua.

### Beryllophantis cochlias Meyrick, 1938

Beryllophantis cochlias: Meyrick (1938: 509); Horak & Sauter (1979: 792)

**Additional material:** GNL: 1 ♀, Indonesia, Papua Barat, Birdshead Peninsula, Arfak Mountains, Mokwam, 1510 m, 1°06′S – 133°54′E, 21-24.x.2014, at light, PIF-exp., leg. F. Groenen, slide FG4056.

**Distribution:** Papua (Indonesia), Papua New Guinea. New for Papua.

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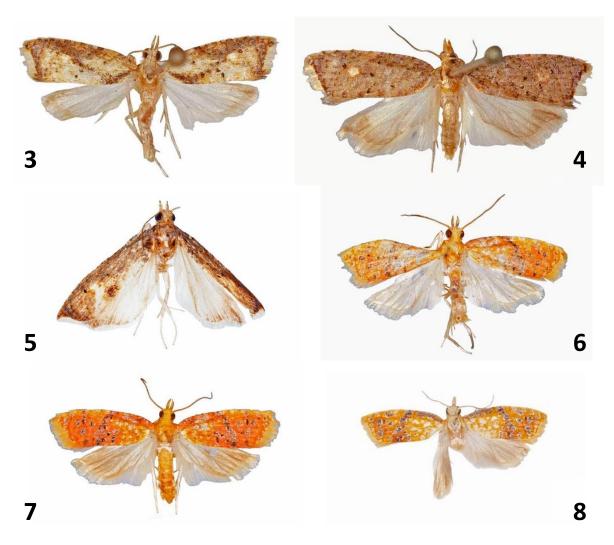
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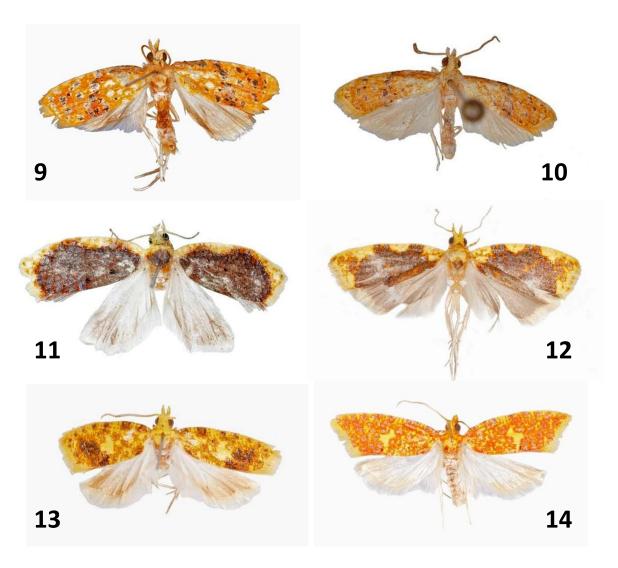
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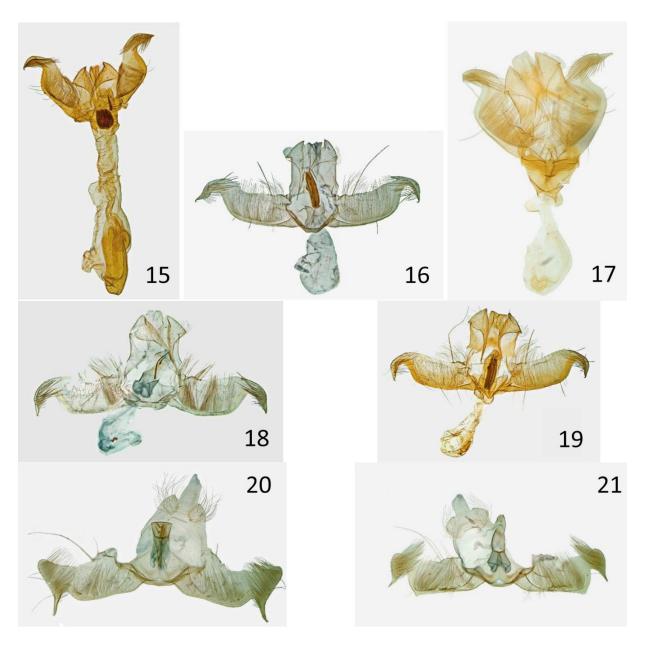
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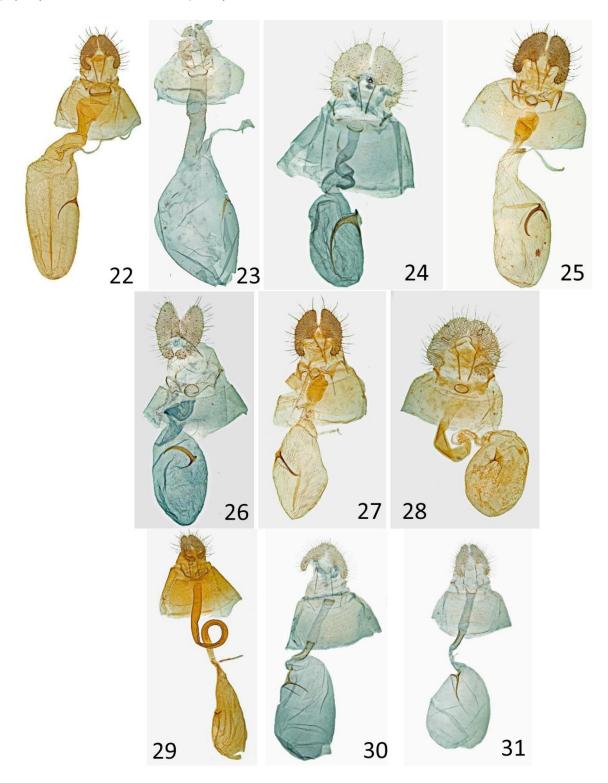
Figs 3-8. Adults of *Reptilisocia* species. 3. *Reptilisocia oculuflavana* spec. nov., ♂ holotype, RMNH.INS. 1283149; **4.** *R. oculuflavana* **spec. nov.**,  $\bigcirc$  paratype, RMNH.INS. 1283154; **5.** *R.* rectasignana spec. nov., ♀ holotype, RMNH.INS.1283180; 6. R. ingeae spec. nov., ♂ holotype, RMNH.INS.1283181; **7.** *R. ingeae* **spec. nov.**, ♀ paratype, RMNH.INS. 1283161; **8.** *R. variana* **spec. nov.**, ♂ holotype, RMNH.INS.1283162.



**Figs 9-14.** Adults of *Reptilisocia* and *Trophocosta* species. **9.** *Reptilisocia auranigreoana* **spec. nov.**,  $\circlearrowleft$  holotype, RMNH.INS.1283182; **10.** *R. yahukimonana* **spec. nov.**,  $\circlearrowleft$  holotype, RMNH.INS.1283164; **11.** *R. baratana* **spec. nov.**,  $\updownarrow$  holotype, RMNH.INS.1283183; **12.** *Trophocosta elkeae* **spec. nov.**,  $\updownarrow$  holotype, RMNH.INS.1283184; **14.** *T. nikyae* **spec. nov.**,  $\circlearrowleft$  holotype, RMNH.INS. 1283185.



Figs 15-21. Male genitalia of Reptilisocia and Trophocosta species. 15. Reptilisocia oculuflavana spec. nov., slide FG4055; 16. R. ingeae spec. nov., slide FG2363; 17. R. variana spec. nov., slide FG3078; 18. R. auranigreoana spec. nov., slide FG2445; 19. R. yahukimonana spec. nov., slide FG4404; 20. Trophocosta reneeae spec. nov., slide FG2459; **21.** *T. nikyae* **spec. nov.**, slide FG2452.



**Figs 22-31.** Female genitalia of *Reptilisocia* and *Trophocosta* species. **22.** *Reptilisocia* oculuflavana **spec. nov.**, slide FG4047; **23.** *R. rectasignana* **spec. nov.**, slide FG2466; **24.** *R. ingeae* **spec. nov.**, slide FG3673; **25.** *R. variana* **spec. nov.**, slide FG4051; **26.** *R. auranigreoana* **spec. nov.**, slide FG2446; **27.** *R. yahukimonana* **spec. nov.**, slide FG4045; **28.** *R. baratana* **spec. nov.**, slide FG3080; **29.** *Trophocosta elkeae* **spec. nov.**, slide FG4041; **30.** *T. reneeae* **spec. nov.**, slide FG2455; **31.** *T. nikyae* **spec. nov.**, slide FG2453.