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## **Contribution to the study of the genus *Brunia* MOORE, 1878 (Erebidae, Arctiinae, Lithosiini)**

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### **Abstract**

This work deals with currently known species of this genus, with the description of a new species *Brunia kishidai* nov.sp. and transfer of species *Eilema nigriprosoma* FANG, 2000, *Ovenna agonchae* (PLÖTZ, 1880), *Ovenna guineacola* (STRAND, 1912) and *Ovenna simplex* (BIRKET-SMITH, 1965) to the genus *Brunia* MOORE, 1878.

Key words: Arctiinae, Lithosiini, *Brunia*, new species, taxonomy, genitalia.

### **Zusammenfassung**

Diese Arbeit behandelt die derzeit bekannten Arten dieser Gattung, mit der Neubeschreibung von *Brunia kishidai* nov.sp. und der Neukombination der Arten *Eilema nigriprosoma* FANG, 2000, *Ovenna agonchae* (PLÖTZ, 1880), *Ovenna guineacola* (STRAND, 1912) und *Ovenna simplex* (BIRKET-SMITH, 1965) in die Gattung *Brunia* MOORE, 1878.

## Introduction

Genus *Brunia* was described by MOORE in 1878. As a representative of this genus was determined species *Lithosia antica* WALKER, 1854 from Sri Lanka (Ceylon), see HOLLOWAY, 2000.

HOLLOWAY incorporated into this genus also other species: *Brunia sarawaca* (BUTLER, 1877), *Brunia apicalis* (WALKER, 1862), *Brunia cucullata* (MOORE, 1878), *Brunia dorsalis* (WALKER, 1866), *Brunia ekeikei* (BETHUNE-BAKER, 1904), *Brunia testacea* (ROTHSCHILD, 1912), *Brunia nebulifera* (HAMPSON, 1900) and African species *Brunia vicaria* (WALKER, 1854). Meyrick in 1886 assigned to this genus *Brunia replana* (LEVIN, 1805) and Dubatolov assigned in 2012 species *Brunia gibonica* (ČERNÝ, 2009) from Thailand. DUBATOLOV & ZOLOTUCHIN 2011 also included here *Brunia fumidisca* (HAMPSON, 1894) from Sikkim-India. On the basis of distorted male genitalia this genus also includes *Brunia nigriprosoma* (FANG, 2000) nov.comb. from China. After comparing habitual and genital characters belong to this genus also three other African species *Brunia agonchae* (PLÖTZ, 1880) nov.comb., *Brunia guineacola* (STRAND, 1912) nov.comb. and *Brunia simplex* (BIRKET-SMITH, 1965) nov.comb. These species were according the work of BIRKET-SMITH, 1965 included into the genus *Ovenna* BIRKET-SMITH, 1965.

This work includes also the description of a new species *Brunia kishidai* nov.sp., holotypus is deposited in Museum Thomas Witt, Munich (MWM).

It is likely that *Brunia nebulifera* (HAMPSON, 1900) from Borneo and Peninsular Malaysia is a synonym to *Brunia badrana* (MOORE, 1859) from Java and Bali, as these two species are very similar habitually and will need a comparison of the genitals or DNA analysis.

*Brunia terminalis* (MOORE, 1878) from East India is probably a synonym of *Brunia sarawaca* (BUTLER, 1877).

*Brunia (Eilema) lacrima* (ČERNÝ, 2009) based on the comparison of the habitus and genitalia clearly belongs to the genus *Macotasa* MOORE, 1878 (narrow and pointed uncus, vinculum wide at the base and the absence of large cornutus in aedeagus), see BUCSEK, 2014.

Species *Brunia antica* (WALKER, 1854), *Brunia sarawaca* (BUTLER, 1877), *Brunia apicalis* (WALKER, 1862), *Brunia cucullata* (MOORE, 1878), *Brunia dorsalis* (WALKER, 1866), *Brunia replana* (LEWIN, 1805), *Brunia fumidisca* (HAMPSON, 1894), *Brunia vicaria* (WALKER, 1854), *Brunia agonchae* (PLÖTZ, 1880), *Brunia guineacola* (STRAND, 1912) and *Brunia simplex* (BIRKET-SMITH, 1965) have well-developed sexual dimorphism.

Male genitalia is characterized by thick bent uncus, with a spike at the end, saccular process is robust and short, on the ventral side sometimes angular, vinculum is long and strongly narrowed. Aedeagus is short and wide, vesica has several broad and irregular diverticula and in some are often placed huge cornutus.

The female genitalia has extended ductus bursae in the basal part until middle sclerotized, in the corpus bursae are usually two small signa.

## Abbreviations

BMNH... British Museum Natural History, London  
ZMAN... Zoologisch Museum Universiteit van Amsterdam  
AM..... Australian Museum, Sydney  
MWM.... Museum Thomas Witt, München  
CKB ..... coll. Karol Bucek, Bratislava

## Systematic section

### ***Brunia* MOORE, 1878**

Type species: *Lithosia antica* WALKER, 1854 (Sri Lanka=Ceylon)

#### **1. *Brunia antica* (WALKER, 1854) (Pl. 1, 2, 8, 10: fig. 1.-1z.)**

*Lithosia antica* WALKER, 1854, List Spec. lep. Ins. Colln Br. Mus. 2: 505.

*Lithosia brevipennis* WALKER, 1854, List Spec. lep. Ins. Colln Br. Mus. 2: 509.

*Lithosia natara* MOORE, 1859 (1860), Cat. Lep. Ins. Mus. E. Ind. Co., 2: 304.

*Ilema atrifrons* HAMPSON, 1907, Ann. Mag. Nat. Hist. (7), 19: 231.

*Eilema kosemponensis* STRAND, 1917, Arch. Naturgesch. 82 (A3): 113.

*Lithosia horishanella* MATSUMURA, 1927, J. Coll. Agric. Hokkaido Imp. Univ., 19 (1): 64.

*Lithosia vicaria* [sic] *antica* WALKER, 1854, DANIEL, 1954, Bonn. zool. Beitr. 5 (1-2): 118.

*Brunia antica* WALKER: HOLLOWAY, 2001, Moths of Borneo 7: 324, pl. 3, figs 112, 114.

*Brunia antica* WALKER: CERNY, PINRATANA, 2009, Moths of Thailand, vol. 6: 149, pl. 30: 301.

*Brunia antica* WALKER: BUCSEK, 2012, Erebidae, Arctiinae of Malay Peninsula–Malaysia, 122, pl. 21:303, 303a, 303b, 303c, gen. Mall68a.

W i n g s p a n : ♂ 24-25 mm, ♀ 25-29 mm.

T y p e l o c a l i t y : Sri Lanka=Ceylon.

G e o g r a p h i c a l r a n g e : Sri Lanka, India, China, Thailand, Laos, Vietnam, Cambodia, Peninsular Malaysia, Taiwan, Sundaland, Nikobar Is., Philippines-Palawan, Luzon.

N o t e : Males due to wide geographical spread exhibit variability in brown dusting on the outside of the forewing-at marginal.

**2. *Brunia sarawaca* (BUTLER, 1877) (Pl. 3, 8, 10: fig. 2.-21.)**

*Lithosia sarawaca* BUTLER, 1877, Trans. Ent. Soc. 1877: 350.

*Eilema griseadisca* HOLLOWAY, 1982: in Barlow, Introduction to Moths South-east Asia: 210.

*Brunia sarawaca* BUTLER: HOLLOWAY, 2001, Moths of Borneo 7: 325, pl. 3, figs 110, 115.

*Brunia sarawaka* [sic, recte *sarawaca*] BUTLER: CERNY, PINRATANA 2009, Moths of Thailand, vol. 6: 149, pl. 30: 300a, 300b.

*Brunia sarawaca* BUTLER: BUCSEK, 2012, Erebidae, Arctiinae of Malay Peninsula-Malaysia, 121-122, pl. 21:302, 302a.

W i n g s p a n : ♂ 22-24 mm, ♀ 25-29 mm.

T y p e l o c a l i t y : Borneo-Sarawak.

G e o g r a p h i c a l r a n g e : N.E. Himalaya, China, Thailand, Cambodia, Laos, Vietnam, Peninsular Malaysia, Java, Borneo, Philippines-Palawan.

**2A. *Brunia terminalis* (MOORE, 1878) nov.comb.**

*Katha terminalis* MOORE, 1878, Proc. zool. Soc. Lond. 1878: 17, pl. 1, f. 14.

*Katha semifusca* ELWES, 1890, Proc. Zool. Soc. Lond. 1890: 388.

*Ilema terminalis* MOORE: HAMPSON, 1900, Cat. Lep. Phalaenae Br. Mus. 2: 159.

*Eilema terminalis* MOORE: SINGH, SINGH & JOSHI, 2014, Rec. Zool. Survey India. Occ. Pap 367: 35

W i n g s p a n : ♂ 28-32 mm.

T y p e l o c a l i t y : India-West Bengal (Darjiling).

G e o g r a p h i c a l r a n g e : India-West Bengal (Darjiling), Sikkim.

N o t e : This species is probably a synonym of *Brunia sarawaca* BUTLER, although published wingspan is different in both species. Status of this species has to be verified.

**3. *Brunia fumidisca* (HAMPSON, 1894) (Pl. 1: fig. 3.)**

*Lithosia fumidisca* HAMPSON, 1894, Fauna Br. India (Moths) 2: 80.

*Ilema fumidisca* HAMPSON: HAMPSON, 1900, Cat. Lep. Phalaenae Br. Mus. 2: 164, pl. 22, f. 24.

*Eilema fumidiscum* HAMPSON: DUBATOLOV, TSHISTJAKOV & VIIDALEPP, 1993, Atalanta 24 (1/2): 173.

*Lithosia fumidisca* HAMPSON: SINGH, SINGH & JOSHI, 2014, Rec. Zool. Survey India. Occ. Pap 367: 40.

*Brunia fumidisca* HAMPSON: DUBATOLOV & ZOLOTUHIN, 2011, Euroasian Ent. J. 10 (34): 376.

W i n g s p a n : ♀ 24 mm.

T y p e l o c a l i t y : India-Sikkim.

G e o g r a p h i c a l r a n g e : India-Sikkim, Meghalaya, Myanmar=Barma.

N o t e : The species has been described by the female, which is habitually most similar to *B.sarawaca* BUTLER, but the basal sclerotized part of corpus bursae at *B. sarawaca* BUTLER is much wider and in the bottom part are the signa placed side by side, while for *B. fumidisca* HAMPSON is basal sclerotized portion of the corpus bursae narrow and signa are located on opposite sides.

**4. *Brunia nigriprosoma* (FANG, 2000) nov.comb.** (Pl. 8: fig. 4.)

*Eilema nigriprosoma* FANG, 2000, Fauna Sinica, Insecta 19: 257-258, pl. XII, fig. 16, gen. fig. 178.

Wingspan: 26-30 mm.

Type locality: China-Hainan (Jianfeng Ling).

Geographical range: China-Hainan (Jianfeng Ling).

Note: This species, based on the drawings of male genitalia (see FANG 2000) in the shape corresponds to the main feature of the genus *Brunia* MOORE, 1878 (uncus rough, short and sturdy sacculus process and mighty cornutus in diverticula). Sacculus process exhibits in this species significantly narrowed peaks, unlike other species in the genus, occurring in SE Asia.

**5. *Brunia apicalis* (WALKER, 1862)** (Pl. 1, 3, 8: fig. 5.-5e.)

*Lithosia apicalis* WALKER, 1862, J. Proc. Linn. Soc. (Zool.) 6: 104.

*Katha apicalis* WALKER: SWINHOE, 1892, Cat. Het. Mus. Oxf. 1: 127, pl. 4: 9.

*Pelosia apicalis* WALKER: KIRBY, 1892, Cat. Het. 1892: 329.

*Ilema apicalis* WALKER: HAMPSON, 1900, Cat. Lep. Phalaenae Br. Mus. 2: 159, pl. 22, f. 9.

*Lithosia apicalis* WALKER: DRAUT, 1914: in SEITZ, 1914, Macrolep. World 10:140, pl. 18e.

*Eilema apicalis* WALKER: STRAND, 1922, Lep. Cat. 26: 534.

*Eilema apicalis* WALKER: FANG, 1982, Icon. het. Sin. 2: 200, fig. 1461, [probably *sarawaca*].

*Eilema apicalis* WALKER: FANG, 2000, Fauna Sin., Ins. 19, Lep. Arctiidae: 259-260, pl. 12: 18, [probably *sarawaca*].

*Brunia apicalis* WALKER: HOLLOWAY, 2001, Moths of Borneo 7: 326, pl. 3, f. 111, 116.

*Brunia apicalis* WALKER: BUCSEK, 2014, Erebidae, Arctiinae of Malay Peninsula-Malaysia, Suppl., 31, pl. 6: 68, gen. MalS48.

Wingspan: ♂ 24 mm, ♀ 24-28 mm.

Type locality: Borneo.

Geographical range: Malay Peninsula, Laos, Borneo, Philippines-Palawan.

Note: Males due to wide geographical spread exhibit variability in brown dusting on the outside of the forewing-at marginal.

**6. *Brunia kishidai* nov.sp.** (Pl. 4, 9, 11: fig. 6.-6h.)

**H o l o t y p u s :** 1 ♂ CAMBODIA, Kirirom Nat. Park, 780m, 11° 21' 23" N, 104° 4' 38" E, 2.-17. I. 2000, leg. M. & S. Murzin, MWM.

**P a r a t y p e s :** 1 ♂ like holotypus, 1 ♂, PHILIPPINES, Mindanao, Agusan Sur, 10km SE of Trento Sta. Maria, 185m, 08° 01.615' N, 126° 12.322' E, 27-28 April 2008, JH Lourens leg., 3 ♀♀, CAMBODIA, Kirirom Nat. Res, 650m, 7-9.II. 2007, leg. S. Murzin, 1 ♀, LAOS centr., Khammouan prov., Nakai env., 17° 43' N, 105° 09' E, 22.V.-8.VI. 2001, alt. 500-600m, E. Jendek & O. Šauša leg., CKB, 1 ♂, CAMBODIA (Kep), 2013. VIII. 19., Bee Y.S., Ju Y.D., Park B.S., Na S.M., Kim J.W., N10°29' 37.80", E 104° 18'5.40", in coll. Ulzizjargal Bayar-saikhan.

**W i n g s p a n :** ♂ 22-26 mm, ♀ 27-31 mm.

**H o l o t y p u s :** ♂ 25 mm, antennae are brown, fine pectinated, forehead is dark brown, back of the head and patagia are yellowish-brown. Mesothorax is dark brown, abdomen ocher colored, from its middle are dark yellow pubescence. Forewings ocher, brown spot at the apex is almost square shaped and extends approximately to middle of termen, in the second half of termen the brown colorization narrows and disappears. Setae are dark yellow. Hindwings dark yellow-ocher.

Uncus is robust and rather short, in the end with a with a strong spike. Valva is along the entire length of equal width, at the end rounded with pubescence. Sacculus is sclerotized, saccular process is narrow blunt-ended and is longer than in other species of genus *Brunia*. Vinculum is long and strongly narrowed. Aedeagus is relatively short and thick, with two irregular diverticula and three massive cornutus.

**F e m a l e :** antennae are filiform, dark brown, thorax and abdomen are greyish brown, the head is a little brighter. Forewings greyish brown, costa has along full length narrow dark ocher band. The hindwings are ocher-lighter than a male.

Ductus bursae is huge barrel-shaped, bursa copulatrix is from basal about halfway sclerotized, approximately evenly broad, irregularly shaped, the lower part is spherical with two signa, these are located on opposite sides.

**D e r i v a t i o n o m i n i s :** The new species is named in honour of my deeply appreciated friend and excellent entomologist Dr. Yasunori Kishida (Lepidoptera), Tokyo.

**7. *Brunia cucullata* (MOORE, 1878)** (Pl. 1: fig. 7., 7a.)

*Katha cucullata* MOORE, 1878, Proc. zool. Soc. Lond. 1878: 17.

*Ilema cucullata* MOORE: HAMPSON, 1900, Cat. Lep. Phalaenae Br. Mus. 2: 160, pl. 22, f. 11.

*Eilema cucullata* MOORE: in SEITZ, 1914, Gross-Schmett. Erde 10: 209, pl. 15 b.

*Eilema cucullata infuscata* DRAUDT, 1914: in SEITZ, 1914, Gross-Schmett. Erde 10: 209.

*Eilema cucullata* MOORE: ARORA, 1983, Rec. Zool. Surv. India, Occ. Paper 60: 24.

*Brunia cucullata* MOORE: HOLLOWAY, 2001, Moths of Borneo 7: 324 (note).

*Brunia cucullata* MOORE: SINGH, SINGH & JOSHI, 2014, Rec. Zool. Survey India. Occ. Pap 367: 27.

**W i n g s p a n :** 30-32 mm.

**T y p e l o c a l i t y :** Andamans.

**G e o g r a p h i c a l r a n g e :** Andamans, East India- Assam (Hampson).

**8. *Brunia dorsalis* (WALKER, 1866)** (Pl. 1, 4: fig. 8.-8g.)

*Lithosia dorsalis* WALKER, 1866, List Spec. Lepid. Insects Colln Br. Mus. 35: 1883.

*Brunia harpophora* MEYRICK, 1886, Proc. Linn. Soc. N.S.W. (2) 1 (3): 701.

*Ilema testacea louisiadensis* ROTHSCHILD, 1912, Novit. Zool. 19 (2): 221.

*Ilema dorsalis* WALKER: HAMPSON, 1900, Cat. Lep. Phalaenae Br. Mus. 2: 159, pl. 22, f. 10.

*Ilema dorsalis* WALKER: HAMPSON, 1914, Cat. Lepid. Phalaenae Br. Mus. (Suppl.) 1: 498.

*Ilema harpophora* MEYRICK: HAMPSON, 1900, Cat. Lep. Phalaenae Br. Mus. 2: 167, pl. 22, f. 27.

*Ilema harpophora* MEYRICK: HAMPSON, 1914, Cat. Lepid. Phalaenae Br. Mus. (Suppl.) 1: 501

*Lithosia dorsalis* WALKER: in SEITZ, 1914, Gross-Schmett. Erde 10: 209, pl. 15 b.

*Lithosia harpophora* MEYRICK: in SEITZ, 1914, Gross-Schmett. Erde 10: 209, pl. 15c.

*Brunia dorsalis* WALKER: HOLLOWAY, 2001, Moths of Borneo 7: 324 (note).

W i n g s p a n : ♂ 28-34 mm, ♀ 34 mm.

T y p e l o c a l i t y : Sula Is.

G e o g r a p h i c a l r a n g e : Sula Is., New Guinea, Louisiade Archipelago, Nord Australia.

**9. *Brunia ekeikei* (BETHUNE-BAKER, 1904)** (Pl. 5: fig. 9.-9e.)

*Ilema ekeikei* BETHUNE-BAKER, 1904, Novit. Zool. 11 (2): 419, pl. 5, f. 16.

*Ilema germana* ROTHSCHILD, 1912, Novit. Zool. 19 (2): 219.

*Ilema perplexa* ROTHSCHILD, 1912, Novit. Zool. 19 (2): 219.

*Ilema eceicei* [sic, recte *ekeikei*] HAMPSON, 1914, Cat. Lepid. Phalaenae Br. Mus. (Suppl.) 1: 500.

*Ilema ekeikei* BETHUNE-BAKER: ROTHSCHILD, 1916, Novit. Zool. 23 (3): 325.

*Brunia ekeikei* BETHUNE-BAKER: HOLLOWAY, 2001, Moths of Borneo 7: 324 (note).

W i n g s p a n : 38-40 mm.

T y p e l o c a l i t y : Papua New Guinea -Ekeikei.

G e o g r a p h i c a l r a n g e : Papua New Guinea.

**10. *Brunia replana* (LEWIN, 1805)** (Pl. 5: fig. 10., 10a.)

*Lithosa*[sic] *replana* LEWIN, 1805, Prodr. Ent.: 16, pl. 15.

*Lithosia dispar* LEACH, 1814, Zool. Miscell. 1: 109, pl. 49, f. 1-3.

*Ilema replana* LEWIN: HAMPSON, 1900, Cat. Lep. Phalaenae Br. Mus. 2: 162.

*Brunia replana* LEWIN: MEYRICK, 1886, Revision of Australian Lep. I. Proceedings of the Linnean Society of New South Wales 2-n.s. 1(3): 687-802 [701].

W i n g s p a n : ♂ 34 mm, ♀ 34-40 mm.

T y p e l o c a l i t y : Australia-New South Wales.

G e o g r a p h i c a l r a n g e : Australia-New South Wales, Queensland.

**11. *Brunia testacea* (ROTHSCHILD, 1912) (Pl. 1: fig. 11.)**

*Ilema testacea* ROTHSCCHILD, 1912, Novit. Zool. 19 (2): 221.

*Ilema testacea* ROTHSCCHILD: HAMPSON, 1914, Cat. Lepid. Phalaenae Br. Mus. (Suppl.) 1: 498, pl. 27, f. 13.

*Eilema truncata* FLETCHER, 1957 in WOLFF, Nat. Hist. Rennell Island, 2: 37.

*Eilema minorata* FLETCHER, 1957 in WOLFF, Nat. Hist. Rennell Island, 2: 37.

*Eilema angulata* FLETCHER, 1957 in WOLFF, Nat. Hist. Rennell Island, 2: 37.

*Brunia testacea* ROTHSCCHILD: HOLLOWAY, 2001, Moths of Borneo 7: 324 (note).

Wingspan: ♂ 34 mm.

Type locality: Solomon Islands-Treasury Island.

Geographical range: Solomon Islands.

**12. *Brunia vicaria* (WALKER, 1854) (Pl. 1, 5: fig. 12., 12a.)**

*Lithosia vicaria* WALKER, 1854, List Spec. Lepid. Insects Colln Br. Mus. 2: 505.

*Lithosia imitans* MABILLE, 1878, Bull. Soc. zool. Fr. 3: 87.

*Lithosia simulans* MABILLE, 1878, Bull. Soc. zool. Fr. 3: 87.

*Eilema desiccata* KIRIAKOFF, 1954, Bull. Inst. r. Sci. nat. Belg 30 (29): 5.

*Ilema simulans* MABILLE: HAMPSON, 1900, Cat. Lep. Phalaenae Br. Mus. 2: 160, pl. 22, f. 12.

*Ilema vicaria* WALKER: HAMPSON, 1900, Cat. Lep. Phalaenae Br. Mus. 2: 165 (part).

*Ilema vicaria* WALKER: HAMPSON, 1914, Cat. Lepid. Phalaenae Br. Mus. (Suppl.) 1: 500.

*Eilema vicaria* WALKER: ARORA, 1983, Rec. Zool. Surv. India, Occ. Paper 60: 24., [incorrect determination].

*Eilema vicaria* WALKER: SINGH, SINGH & JOSHI, 2014, Rec. Zool. Survey India. Occ. Pap 367: 35, [incorrect determination].

*Brunia vicaria* WALKER: HOLLOWAY, 2001, Moths of Borneo 7: 324 (note).

Wingspan: ♂ 30 mm.

Type locality: Congo.

Geographical range: West Africa, Congo, Natal.

**13. *Brunia agonchae* (PLÖTZ, 1880) nov.comb. (Pl. 6, 9, 11: fig. 13.-13f.)**

*Lithosia agonchae* PLÖTZ, 1880, Stettin ent. Ztg 41 (1-3): 80.

*Eilema subgriseola* STRAND, 1912, Archiv Naturg. 78 A (9): 98.

*Ilema callidescens* HAMPSON, 1914, Cat. Lepid. Phalaenae Br. Mus. (Suppl.) 1: 502, pl. 27, f. 25.

*Eilema subgriseola* STRAND: HAMPSON, 1914, Cat. Lepid. Phalaenae Br. Mus. (Suppl.) 1: 822.

*Eilema heringi* KIRIAKOFF, 1954, Revue Zool. Bot. afr. 50: 177, pl. 2, f. 12.

*Ovenna subgriseola* STRAND: BIRKET-SMITH, 1965, A revision of the W. African eilemic moth., Pap. Fac. Sci. Haile Selassie I Univ. (C) 1: 95-98.

*Ovenna agonchae* PLÖTZ: BIRKET-SMITH, 1965, A revision of the W. African eilemic moth., Pap. Fac. Sci. Haile Selassie I Univ. (C) 1: 107.



Wingspan: ♂ 24-26 mm, ♀ 25-27 mm.

Type locality: West Africa-Agoncha.

Geographical range: Cameroon, Congo, Nigeria.

Note: BIRKET-SMITH in his work, present this species as *subgriseola* STRAND, 1912. But later he writes about *agonchae* PLÖTZ, 1880, that it was probably a synonym of *guineacola* (STRAND, 1912). Genitals shown here are the same as drawing in the work of BIRKET-SMITH (like *subgriseola* STRAND, 1912).

**14. *Brunia guineacola* (STRAND, 1912) nov.comb.** (Pl. 6, 9: fig. 14., 14a.)

*Eilema guineacola* STRAND, 1912 Archiv Naturg. 78 A (7): 179.

*Ovenna guineacola* STRAND: BIRKET-SMITH, 1965, A revision of the W. African eilemic moth., Pap. Fac. Sci. Haile Selassie I Univ. (C) 1: 98-99.

Wingspan: ♂ 28 mm.

Type locality: Guinea.

Geographical range: Guinea, Cameroon, Nigeria.

**15. *Brunia simplex* (BIRKET-SMITH, 1965) nov.comb.**

*Ovenna simplex* BIRKET-SMITH, 1965, Pap. Fac. Sci. Haile Selassie I Univ. (C) 1: 101.

Wingspan: ♂ 24 mm.

Type locality: Nigeria-Ibadan.

Geographical range: Nigeria.

**16. *Brunia badrana* (MOORE, 1859) (Pl. 1: fig. 16., 16a.)**

*Lithosia badrana* MOORE, 1859 in HORSFIELD & MOORE, Cat. Lep. Ins. Mus. Nat. East India House 2: 304.

*Ilema badrana* Moore: HAMPSON, 1900, Cat. Lep. Phalaenae Br. Mus. 2: 160, pl. 22, f. 25

*Lithosia badrana* MOORE: in SEITZ, 1914, Gross-Schmett. Erde 10: 209, 15b.

*Brunia badrana* MOORE: HOLLOWAY, 2001, Moths of Borneo 7: 326 (note).

Wingspan: ♀ 25 mm.

Type locality: Java.

Geographical range: Java, Bali.

Note: This and the following species are habitually very similar and the geographical distribution is close to each other, it is therefore possible that *Brunia nebulifera* HAMPSON, 1900 will be in future reclassified as a synonym of *Brunia badrana* MOORE, 1859.

**17. *Brunia nebulifera* (HAMPSON, 1900)** (Pl. 1, 6: fig. 17.-17c.)

*Ilema nebulifera* HAMPSON, 1900: Cat. Lep. Phalaenae Br. Mus. 2: 161, pl. 22, f. 21.

*Lithosia nebulifera* HAMPSON: in SEITZ, 1914, Gross-Schmett. Erde 10: 209, 15b.

*Brunia nebulifera* HAMPSON: HOLLOWAY, 2001, Moths of Borneo 7: 326, pl. 3, f. 113, 117.

*Brunia nebulifera* HAMPSON: BUCSEK, 2012, Erebidae, Arctiinae of Malay Peninsula-Malaysia, 122, pl. 21: 304, 304a.

W i n g s p a n : ♂ 19-20 mm, ♀ 22-23 mm.

T y p e l o c a l i t y : Singapore.

G e o g r a p h i c a l r a n g e : Borneo, Peninsular Malaysia.

**18. *Brunia gibonica* (ČERNÝ, 2009)** (Pl. 7, 9, 10, 11: fig. 18.-18u.)

*Eilema gibonica* ČERNÝ, 2009, ČERNÝ, PINRATANA 2009, Moths of Thailand, vol. 6: 148, pl. 30: 299a, 299b.

*Brunia gibonica* ČERNÝ: DUBATOLOV, 2012, Euroasian Ent. J. 11 (6): 511.

*Brunia gibonica* ČERNÝ: KIRTY & SINGH, 2015, Arctiid Moths of India Vol. 1, 118-119.

W i n g s p a n : ♂ 20-24 mm, ♀ 23-27 mm.

T y p e l o c a l i t y : SE Thailand.

G e o g r a p h i c a l r a n g e : India-Aruchanal Pradesh, Thailand, Vietnam, Laos, Cambodia.

N o t e : Variability in the size and shape of dark spot on the front wing and slight differences in the shape of genitalia are probably due to wide geographical spread of the species.

### Acknowledgements

First of all, I want to thank Dr. Rob de Vos, Zoologische Museum Universiteit van Amsterdam for the photos and expert advice, Dr. Derek Smith, Australian Museum, Sydney, Dr. Thomas Baron, Istanbul and Mr. Ding Jia Chen, Taichung City for the photos for this article. I also thank to Dr. Willy De Prins, Naturalis Biodiversity Center, Leiden for providing the personal contacts and providing literature, Mr. Henrich Novák, Bratislava for translation into English.

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[http://www.jpmoth.org/~dmoth/Digital\\_Moths\\_of\\_Asia](http://www.jpmoth.org/~dmoth/Digital_Moths_of_Asia)

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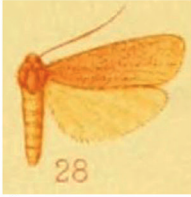
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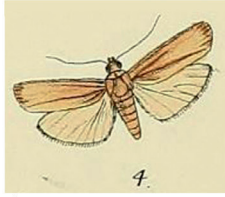
## Plate 1

1. *Brunia antica* WALKER, 1854 like *Ilema atrifrons*; HAMPSON, 1914, Cat. Lepid. Phalaenae Br.Mus. (Suppl.) 1: 504, pl. 27, f. 28
- 1a. *Brunia antica* WALKER, 1854 like *Katha brevipennis*; MOORE, 1882, Lepid. Ceylon 2 (1): 56, pl. 101, f. 4 - male
- 1b. *Brunia antica* WALKER, 1854; MOORE, 1878, Proc. zool. Soc. Lond. 1878 : 15, pl. 1, f. 9; MOORE, 1882, Lepid. Ceylon 2 (1): 56, pl. 101, f. 3 - female
3. *Brunia fumidisca* HAMPSON, 1894 like *Ilema fumidisca* HAMPSON: HAMPSON, 1900, Cat. Lep. Phalaenae Br. Mus. 2 : 164, pl. 22, f. 24 - female
5. *Brunia apicalis* WALKER, 1862 like *Ilema apicalis* WALKER: HAMPSON, 1900, Cat. Lep. Phalaenae Br. Mus. 2: 159, pl. 22, f. 9 - male
- 5a. *Brunia apicalis* WALKER, 1862 like *Lithosia apicalis* WALKER: DRAUDT, 1914: in SEITZ, 1914, Macrolep. World 10:140, pl. 18e - male
7. *Brunia cucullata* MOORE, 1878 like *Ilema cucullata* MOORE, 1878: HAMPSON, 1900, Cat. Lep. Phalaenae Br. Mus. 2 : 160, pl. 22, f. 11 - male
- 7a. *Brunia cucullata* MOORE, 1878 like *Eilema cucullata* DRAUDT, 1914: in SEITZ, Gross-Schmett. Erde 10: 209, pl. 15 b - male
8. *Brunia dorsalis* WALKER, 1866 like *Ilema dorsalis* WALKER, 1866: HAMPSON, 1900, Cat. Lep. Phalaenae Br. Mus. 2 : 159, pl. 22, f. 10 - male
- 8a. *Brunia dorsalis* WALKER, 1866 like *Ilema harpophora* MEYRICK: HAMPSON, 1900, Cat. Lep. Phalaenae Br. Mus. 2 : 167, pl. 22, f. 27 - female.
- 8b. *Brunia dorsalis* WALKER, 1866 like *Lithosia dorsalis* WALKER: in SEITZ, 1914, Gross-Schmett. Erde 10: 209, pl. 15 b - male
- 8c. *Brunia dorsalis* WALKER, 1866 like *Lithosia harpophora* MEYRICK: in SEITZ, 1914, Gross-Schmett. Erde 10: 209, pl. 15c - female
11. *Brunia testacea* ROTHSCHILD, 1912 like *Ilema testacea* ROTHSCHILD: HAMPSON, 1914, Cat. Lepid. Phalaenae Br. Mus. (Suppl.) 1: 498, pl. 27, f. 13
12. *Brunia vicaria* WALKER, 1854 like *Ilema simulans* MABILLE: HAMPSON, 1900, Cat. Lep. Phalaenae Br. Mus. 2 : 160, pl. 22, f. 12 - male
16. *Brunia badrana* MOORE, 1859 like *Ilema badrana*; HAMPSON, 1900, Cat. Lep. Phalaenae Br. Mus. 2 : 160, pl. 22, f. 25 - ?female
- 16a. *Brunia badrana* MOORE, 1859 like *Lithosia badrana* MOORE, 1859 : in SEITZ, Gross-Schmett. Erde 10: 209, 15b - ?female
17. *Brunia nebulifera* HAMPSON, 1900 like *Ilema nebulifera* HAMPSON, 1900: Cat. Lep. Phalaenae Br. Mus. 2: 161, pl. 22, f. 21 - ?male
- 17a. *Brunia nebulifera* HAMPSON, 1900 like *Lithosia nebulifera* HAMPSON: in SEITZ, 1914, Gross-Schmett. Erde 10: 209, 15b - ?male

Plate 1



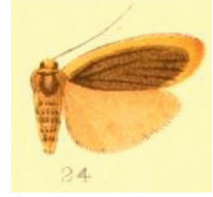
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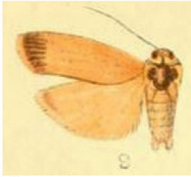
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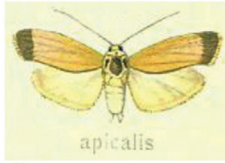
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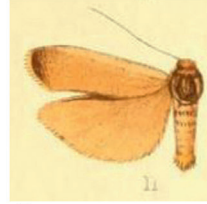
3.



5.



5a.



7.



7a.



8.



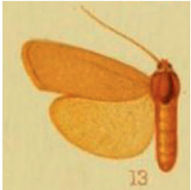
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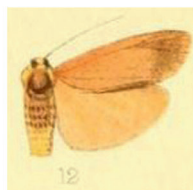
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8c.



11.



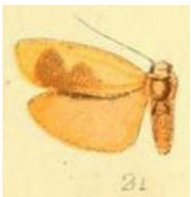
12.



16.



16a.



17.



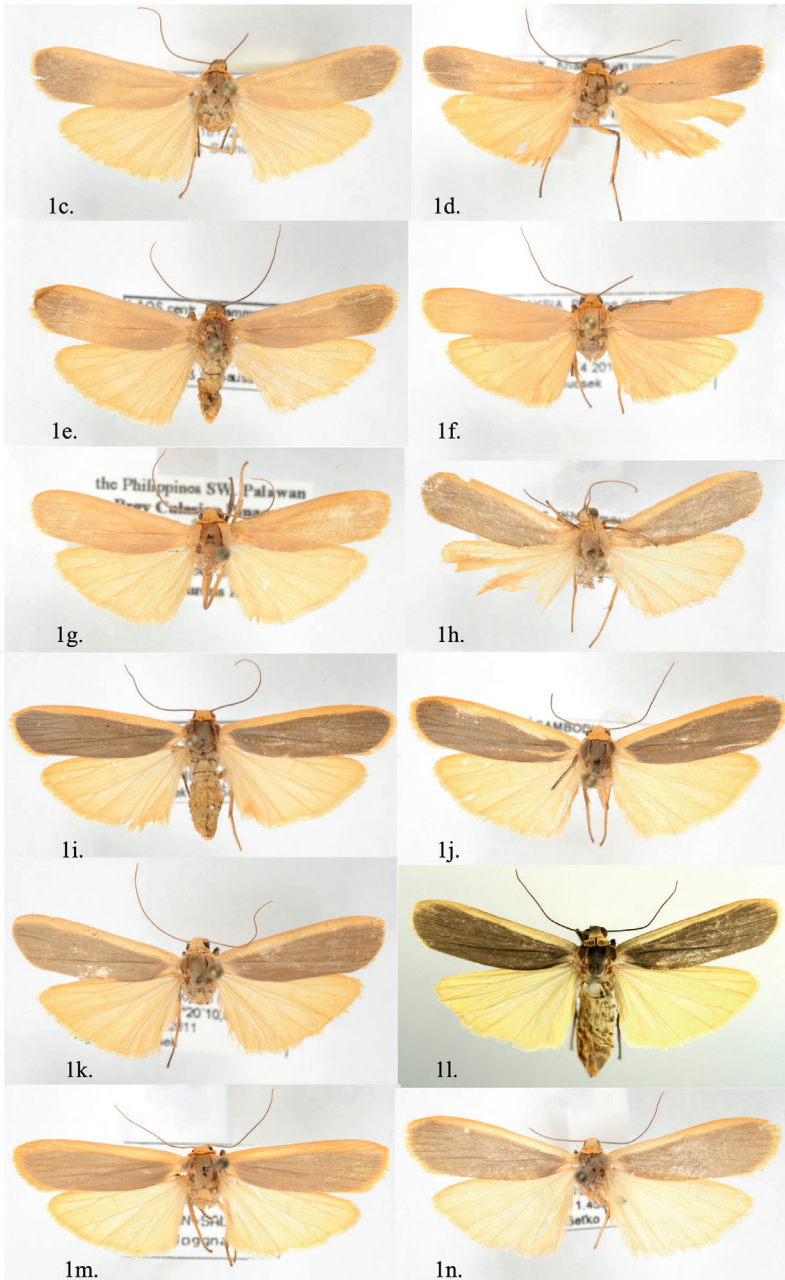
17a.

## Plate 2

- 1c. *Brunia antica* WALKER, 1854, ♂, C THAILAND, Nakhon Nayok, Khao Yai NP, Khao Khieho, 752m, 14° 24' 20" N, 101° 22' 14" E, 23. X.2005, leg. Sukhumalind
- 1d. *Brunia antica* WALKER, 1854, ♂, LAOS centr., Khammouan prov., Nakai env., 17° 43' N, 105° 09' E, 22.V.-8.VI. 2001, alt. 500-600m, E. Jendek & O. Šauša leg.
- 1e. *Brunia antica* WALKER, 1854, ♂, LAOS centr., Khammouan prov., 10-13.VI.2001, Ban Khoun Ngeun prov., 18° 07' N, 104° 29' E, alt. 250m, E. Jendek & O. Šauša leg.
- 1f. *Brunia antica* WALKER, 1854, ♂, MALAYSIA, Pahang distr., Endau Rompin State Park, Camping by the Kincin River, 50m, 2° 37' 10,4" N, 103° 20' 10,9" E, 28.3-9.4.2010, leg. Karol Bucsek
- 1g. *Brunia antica* WALKER, 1854, ♂, PHILIPPINES, SW Palawan, Brgy Culasian Pinagar, Primary forest edge 37m, 8° 48.460' N, 117° 28.530' E, 8-10 Dec. 2007, JH Lourens leg.
- 1h. *Brunia antica* WALKER, 1854, ♀, LAOS c., Khammouan prov., Ban Khoun Ngeun prov., 20. -25.V.2004, 250m, leg. R. Štefanovič & M. Štrba
- 1i. *Brunia antica* WALKER, 1854, ♀, LAOS centr., Khammouan prov., 10-13.VI.2001, Ban Khoun Ngeun prov., 18° 07' N, 104° 29' E, alt. 250m, E. Jendek & O. Šauša leg.
- 1j. *Brunia antica* WALKER, 1854, ♀, CAMBODIA, Kirirom Nat. Res., 650m, 7.-9. XI. 2007, leg. S. Murzin
- 1k. *Brunia antica* WALKER, 1854, ♀, MALAYSIA, Pahang distr., Endau Rompin State Park, Camping by the Kincin River, 50m, 2° 37' 10,4" N, 103° 20' 10,9" E, 1.3-13.3.2011, leg. Karol Bucsek
- 1l. *Brunia antica* WALKER, 1854, ♀, TAIWAN, Lanyu, Taitung county, 24.IV.2015. leg. Ding Jia Chen
- 1m. *Brunia antica* WALKER, 1854, ♀, PHILIPPINES, Palawan, 7.-9. 3. 2000, Napsan Salakot, leg. Jognnath
- 1n. *Brunia antica* WALKER, 1854, ♀, PHILIPPINES, Luzon, Baguio, cannyon road, 19.2.-10.3.2007, 1.250-1.450m, leg. B. Beťko



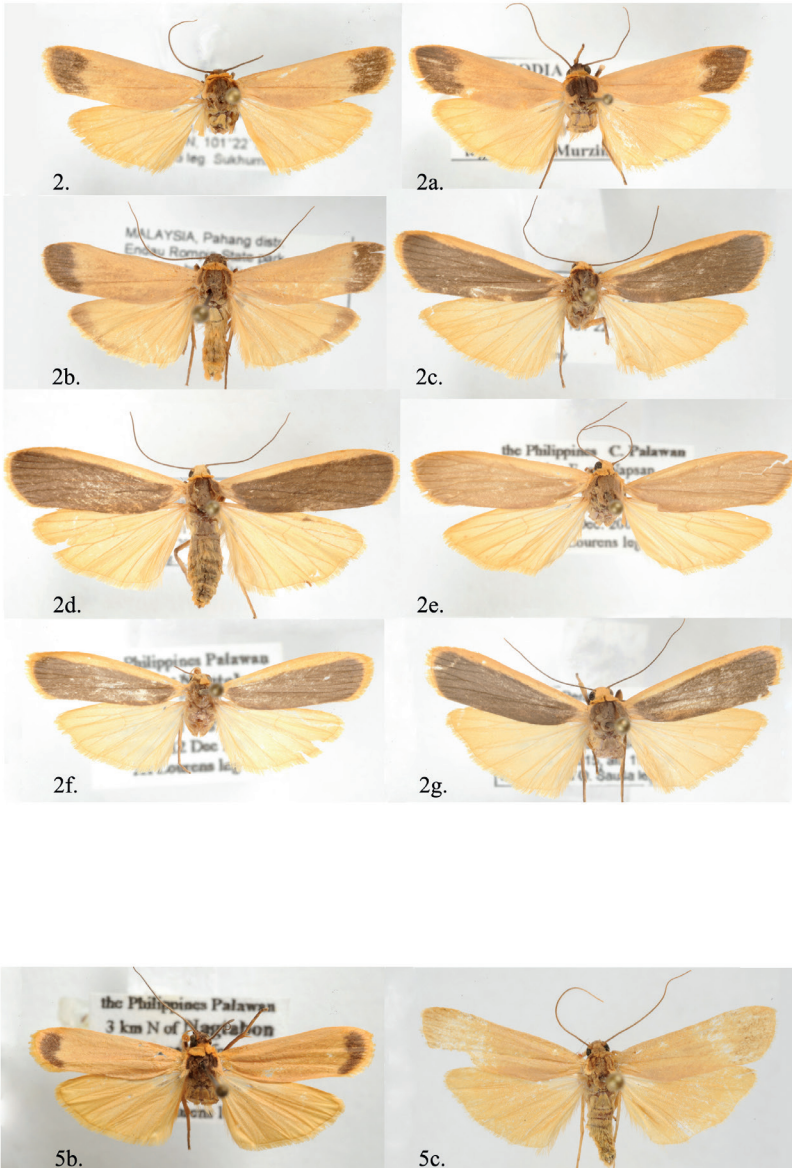
**Plate 2**



### Plate 3

2. *Brunia sarawaca* (BUTLER, 1877), ♂, C THAILAND, Nakhon Nayok, Khao Yai NP, Khao Khieho, 752m, 14° 24' 20" N, 101° 22' 14" E, 23. X. 2005, leg. Sukhumalind
- 2a. *Brunia sarawaca* (BUTLER, 1877), ♂, CAMBODIA, Kirirom Nat. Park, 780m, 11° 21' 23" N, 104° 4' 38" E, 2.-17. I. 2000, leg. M. & S. Murzin
- 2b. *Brunia sarawaca* (BUTLER, 1877), ♂, MALAYSIA, Pahang distr., Endau Rompin State Park, Camping by the Kincin River, 50m, 2° 37' 10,4" N, 103° 20' 10,9" E, 1.3-13.3.2011, leg. Karol Bucsek
- 2c. *Brunia sarawaca* (BUTLER, 1877), ♀, C THAILAND, Nakhon Nayok, Khao Yai NP, Khao Kheiho, 752m, 14° 24' 20" N, 101° 22' 14" E, 23. X.2005, leg. Černý
- 2d. *Brunia sarawaca* (BUTLER, 1877), ♀, MALAYSIA, Pahang distr., Cameron Highlands, Kampung Kuala Boh vill. env., 850 - 1050m, 4° 27,9' N, 101° 34,8' E, 26.III. - 3.IV.2001, leg. Karol Bucsek
- 2e. *Brunia sarawaca* (BUTLER, 1877), ♀, PHILIPPINES, C Palawan, 5 km E of Napsan, Primary forest clearing, 9° 42.256' N, 118° 31.034' E, 1+2 Dec. 2007, JH Lourens leg.
- 2f. *Brunia sarawaca* (BUTLER, 1877), ♀, PHILIPPINES, C Palawan, 3 km N of Nagtabon, dry coastal forest, 9° 57.015' N, 118° 39.275' E, 220m, 12 Dec. 2007, JH Lourens leg.
- 2g. *Brunia sarawaca* (BUTLER, 1877), ♀, MALAYSIA, Perak, 50 km NE of Gerik (aerial path), Belum-Temenggor: Titiwangsa, 5° 36' 17.4" N, 101° 32' 34.0" E, 30.iii-13.iv.2015, alt. 1100m, E. Jendek & O. Šauša leg.
- 5b. *Brunia apicalis* (WALKER, 1862), ♂, PHILIPPINES, C Palawan, 3 km N of Nagtabon, dry coastal forest, 9° 57.015' N, 118° 39.275' E, 220m, 12 Dec. 2007, JH Lourens leg.
- 5c. *Brunia apicalis* (WALKER, 1862), ♂, MALAYSIA, Perlis, 200 m, Perlis State Park, 6° 42' 05,66" N, 100° 11' 55" E, 3. IV.-8. IV.2014, leg. Karol Bucsek

Plate 3



#### Plate 4

6. *Brunia kishidai* nov.sp., ♂, HOLOTYPUS, CAMBODIA, Kirirom Nat. Park, 780m, 11° 21' 23" N, 104° 4' 38" E, 2.-17. 1. 2000, leg. M. & S. Murzin
- 6a. *Brunia kishidai* nov.sp., ♂, PHILIPPINES, Mindanao, Agusan Sur, 10 km SE of Trento Sta. Maria, 185m, 08° 01.615' N, 126° 12.322' E, 27-28 April 2008, JH Lourens leg.
- 6b. *Brunia kishidai* nov.sp., ♀, CAMBODIA, Kirirom Nat. Res, 650m, 7-9.11. 2007, leg. S. Murzin
- 6c. *Brunia kishidai* nov.sp., ♀, CAMBODIA, Kirirom Nat. Res, 650m, 7-9.11. 2007, leg. S. Murzin
- 6d. *Brunia kishidai* nov.sp., ♀, LAOS centr., Khammouan prov., Nakai env., 17° 43' N, 105° 09' E, 22.V.-8.VI. 2001, alt. 500-600m, E. Jendek & O. Šauša leg.
- 8d *Brunia dorsalis* (WALKER, 1866), ♂, INDONESIA, Papua, Jayapura, Sentani Cyclops, ZMAN
- 8e. *Brunia dorsalis* (WALKER, 1866), ♂, AUSTRALIA, Qld.: Kuranda (335m elev.), (Top of the Range), 19 Butler Dr., 1-15 June 2004, D C F Rentz, K 194324, AM
- 8f. *Brunia dorsalis* (WALKER, 1866), ♀, INDONESIA, Papua, Meja Reserve Manokwari, ZMAN
- 8g. *Brunia dorsalis* (WALKER, 1866), ♀, AUSTRALIA, Qld.: Kuranda (335m elev.), (Top of the Range), 19 Butler Dr., 1-15 June 2004, D C F Rentz, K 194326, AM

**Plate 4**

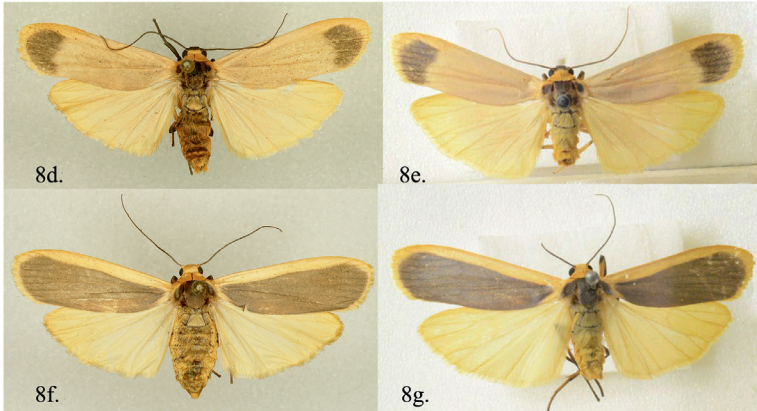
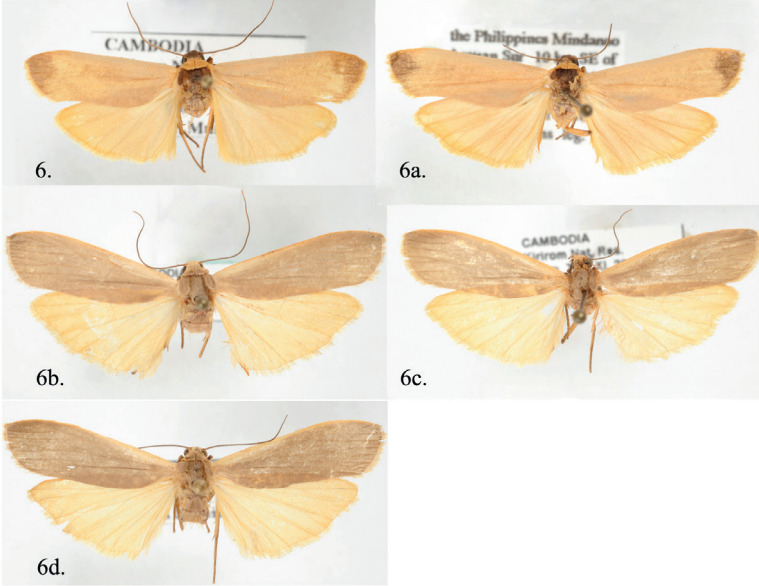
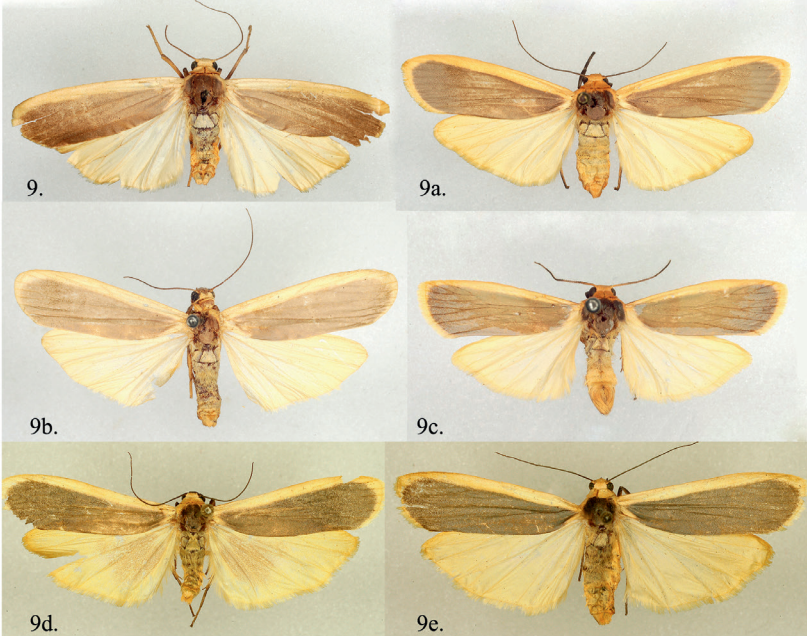


Plate 5

9. *Brunia ekeikei* (BETHUNE-BAKER, 1904), ♀, HOLOTYPUS, PNG, Ekeikei, BMNH (E)#1325489
- 9a. *Brunia ekeikei* (BETHUNE-BAKER, 1904), ♀, (HOLOTYPUS *Ilema germana* ROTH-SCHILD, 1912), PNG, Utkwa River, Snow Mts., BMNH (E)#1325491
- 9b. *Brunia ekeikei* (BETHUNE-BAKER, 1904), ♀, (HOLOTYPUS *Ilema perplexa* ROTH-SCHILD, 1912), PNG, Astrolabe Bay, BMNH (E)#1325492
- 9c. *Brunia ekeikei* (BETHUNE-BAKER, 1904), ♂, BMNH (E)#1325490
- 9d. *Brunia ekeikei* (BETHUNE-BAKER, 1904), ♂, INDONESIA, Papua, Irian Jaya, Wamena, ZMAN
- 9e. *Brunia ekeikei* (BETHUNE-BAKER, 1904), ♀, INDONESIA, Papua, Irian Jaya, Wamena, ZMAN
10. *Brunia replana* (LEWIN, 1805), ♂, AUSTRALIA, New South Wales, Whian Whian State Forest, near Limsore, M. V. Lamp, 25. Feb. 1965, D. K. McAlpine, R. Lossin, K 194047, AM
- 10a. *Brunia replana* (LEWIN, 1805), ♀, AUSTRALIA, New South Wales, Bruxner Park, near Coff's Harbour, M. V. Lamp, 21. Feb. 1965, D. K. McAlpine, R. Lossin, K 194046, AM
- 12a. *Brunia vicaria* (WALKER, 1854), ♀, RSA, Mpumalanga, Hazyview 5 km W, 24.3.06, leg. T. Baron

**Plate 5**



## Plate 6

13. *Brunia agonchae* (PLÖTZ, 1880) nov.comb., ♂, CAMEROON, Noth-West prov., Obang (near Bafut), Mezam river, 6° 10.298' N, 10° 04.564' E, 625m, 3.-8.xii.2009, J. Horák leg.

13a. *Brunia agonchae* (PLÖTZ, 1880) nov.comb., ♂, CAMEROON, Noth-West prov., Obang (near Bafut), Mezam river, 6° 10.298' N, 10° 04.564' E, 625m, 3.-8.xii.2009, J. Horák leg.

13b. *Brunia agonchae* (PLÖTZ, 1880) nov.comb., ♀, CAMEROON, Noth-West prov., Obang (near Bafut), Mezam river, 6° 10.298' N, 10° 04.564' E, 625m, 3.-8.xii.2009, J. Horák leg.

13c. *Brunia agonchae* (PLÖTZ, 1880) nov.comb., ♀, CAMEROON, Noth-West prov., Obang (near Bafut), Mezam river, 6° 10.298' N, 10° 04.564' E, 625m, 3.-8.xii.2009, J. Horák leg.

14. *Brunia guineacola* (STRAND, 1912) nov.comb., ♂, CAMEROON, Noth-West prov., Obang (near Bafut), Mezam river, 6° 10.298' N, 10° 04.564' E, 625m, 3.-8.xii.2009, J. Horák leg.

17b. *Brunia nebulifera* (HAMPSON, 1900), ♂, MALAYSIA, Pahang distr., Endau Rompin State Park, Camping by the Kincin River, 50m, 2° 37' 10,4" N, 103° 20' 10,9" E, 28.3-9.4.2010, leg. Karol Bucsek

17c. *Brunia nebulifera* (HAMPSON, 1900), ♀, MALAYSIA, Pahang distr., Endau Rompin State Park, Camping by the Kincin River, 50m, 2° 37' 10,4" N, 103° 20' 10,9" E, 28.3-9.4.2010, leg. Karol Bucsek



**Plate 6**



13.



13a.



13b.



13c.



14.



17b.

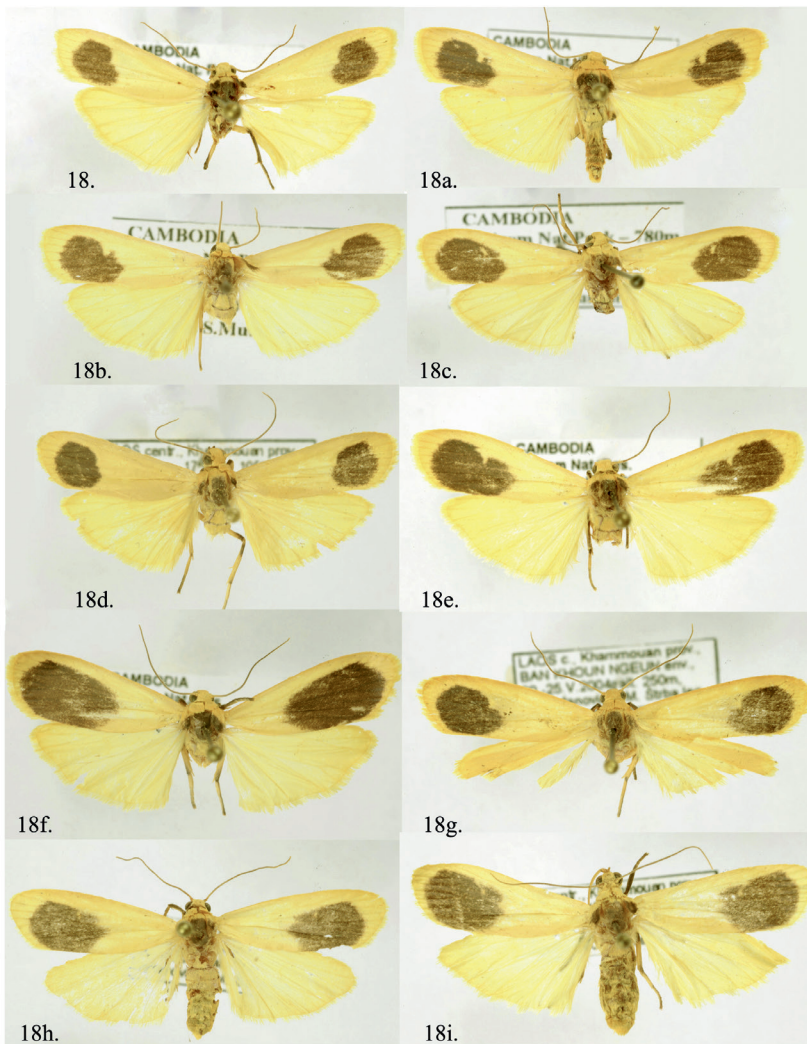


17c.

Plate 7

18. *Brunia gibonica* (ČERNÝ, 2009), ♂, CAMBODIA, Kirirom Nat. Res, 650m, 7-9.11. 2007, leg. S. Murzin
- 18a. *Brunia gibonica* (ČERNÝ, 2009), ♂, CAMBODIA, Kirirom Nat. Res, 650m, 7-9.11. 2007, leg. S. Murzin
- 18b. *Brunia gibonica* (ČERNÝ, 2009), ♂, CAMBODIA, Kirirom Nat. Park, 780m, 11° 21' 23" N, 104° 4' 38" E, 2.-17. 1. 2000, leg. M. & S. Murzin
- 18c. *Brunia gibonica* (ČERNÝ, 2009), ♂, CAMBODIA, Kirirom Nat. Park, 780m, 11° 21' 23" N, 104° 4' 38" E, 2.-17. 1. 2000, leg. M. & S. Murzin
- 18d. *Brunia gibonica* (ČERNÝ, 2009), ♂, LAOS centr., Khammouan prov., Nakai env., 17° 43' N, 105° 09' E, 22.V.-8.VI. 2001, alt. 500-600m, E. Jendek & O. Šauša leg.
- 18e. *Brunia gibonica* (ČERNÝ, 2009), ♀, CAMBODIA, Kirirom Nat. Res, 650m, 7-9.11. 2007, leg. S. Murzin
- 18f. *Brunia gibonica* (ČERNÝ, 2009), ♀, CAMBODIA, Kirirom Nat. Res, 650m, 7-9.11. 2007, leg. S. Murzin
- 18g. *Brunia gibonica* (ČERNÝ, 2009), ♀, LAOS c., Khammouan prov., Ban Khoun Ngeun prov., 20. -25.V.2004, 250m, leg. R. Štefanovič & M. Štrba
- 18h. *Brunia gibonica* (ČERNÝ, 2009), ♀, LAOS c., 50 km NE of Vientiane, Lao Pako resort env., 27. -29.V.2004, 50m, leg. R. Štefanovič & M. Štrba
- 18i. *Brunia gibonica* (ČERNÝ, 2009), ♀, LAOS centr., Khammouan prov., Nakai env., 17° 43' N, 105° 09' E, 22.V.-8.VI. 2001, alt. 500-600m, E. Jendek & O. Šauša leg.

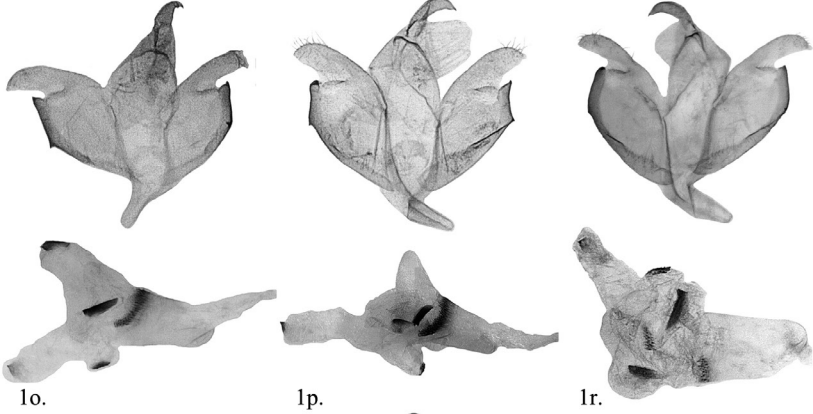
Plate 7



## Plate 8

- 1o. *Brunia antica* WALKER, 1854, ♂, LAOS centr., Khammouan prov., Nakai env., 17° 43' N, 105° 09' E, 22.V.-8.VI. 2001, alt. 500-600m, E. Jendek & O. Šauša leg.
- 1p. *Brunia antica* WALKER, 1854, ♂, LAOS c., Khammouan prov., Ban Khoun Ngeun prov., 20. -25.V.2004, 250m, leg. R. Štefanovič & M. Štrba
- 1r. *Brunia antica* WALKER, 1854, ♂, PHILIPPINES, SW Palawan, Brgy Culasian Pinagar, Primary forest edge 37m, 8° 48.460' N, 117° 28.530' E, 8-10 Dec. 2007, JH Lourens leg.
- 1s. *Brunia antica* WALKER, 1854, ♂, China, Canton; from the original description like *Lithosia vicaria antica* Daniel, 1954, Bonn. zool. Beitr.
- 2h. *Brunia sarawaca* (BUTLER, 1877), ♂, C THAILAND, Nakhon Nayok, Khao Yai NP, Khao Khieho, 752m, 14° 24' 20" N, 101° 22' 14" E, 23. X. 2005, leg. Sukhumalind
4. *Brunia nigriprosoma* (FANG, 2000) nov.comb., ♂, China, Hainan; from the original description (Fang, 2000)
- 5d. *Brunia apicalis* (WALKER, 1862), ♂, PHILIPPINES, C Palawan, 3 km N of Nagtabon, dry coastal forest, 9° 57.015' N, 118° 39.275' E, 220m, 12 Dec. 2007, JH Lourens leg.
- 5e. *Brunia apicalis* (WALKER, 1862), ♂, MALAYSIA, Perak, 50 km NE of Gerik (aerial path), Belum-Temenggor: Titiwangsa, 5° 36' 17.4" N, 101° 32' 34.0" E, 30.iii-13.iv.2015, alt. 1100m, E. Jendek & O. Šauša leg.

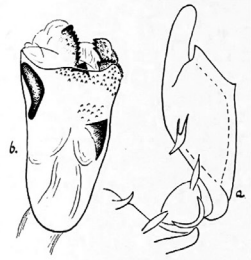
Plate 8



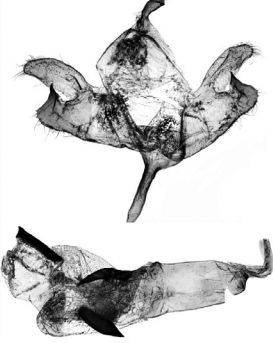
1o.

1p.

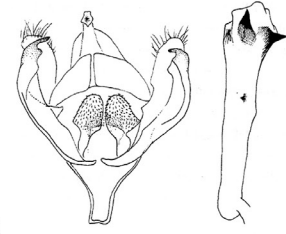
1r.



1s.

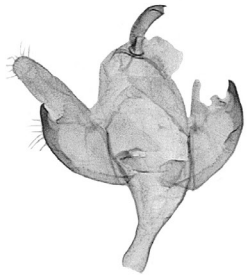


2h.



4.

图 178 前黑土苔蛾 *Eilema nigriprosoma* sp. nov. 雄外生殖器



5d.

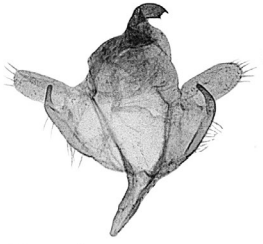


5e.

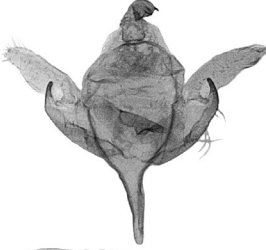
## Plate 9

- 6e. *Brunia kishidai* nov.sp., ♂, HOLOTYPUS, CAMBODIA, Kirirom Nat. Park, 780m, 11° 21' 23" N, 104° 4' 38" E, 2.-17. 1. 2000, leg. M. & S. Murzin
- 6f. *Brunia kishidai* nov.sp., ♂, PHILIPPINES, Mindanao, Agusan Sur, 10 km SE of Trento Sta. Maria, 185m, 08° 01.615' N, 126° 12.322' E, 27-28 April 2008, JH Lourens leg.
- 13d. *Brunia agonchae* (PLÖTZ, 1880) nov.comb., ♂, CAMEROON, Noth-West prov., Obang (near Bafut), Mezam river, 6° 10.298' N, 10° 04.564' E, 625m, 3.-8.xii.2009, J. Horák leg.
- 14a. *Brunia guineacola* (STRAND, 1912) nov.comb., ♂, CAMEROON, Noth-West prov., Obang (near Bafut), Mezam river, 6° 10.298' N, 10° 04.564' E, 625m, 3.-8.xii.2009, J. Horák leg.
- 18j. *Brunia gibonica* (ČERNÝ, 2009), ♂, CAMBODIA, Kirirom Nat. Res, 650m, 7-9.11. 2007, leg. S. Murzin
- 18k. *Brunia gibonica* (ČERNÝ, 2009), ♂, CAMBODIA, Kirirom Nat. Park, 780m, 11° 21' 23" N, 104° 4' 38" E, 2.-17. 1. 2000, leg. M. & S. Murzin
- 18l. *Brunia gibonica* (ČERNÝ, 2009), ♂, CAMBODIA, Kirirom Nat. Park, 780m, 11° 21' 23" N, 104° 4' 38" E, 2.-17. 1. 2000, leg. M. & S. Murzin
- 18m. *Brunia gibonica* (ČERNÝ, 2009), ♂, LAOS centr., Khammouan prov., Nakai env., 17° 43' N, 105° 09' E, 22.V.-8.VI. 2001, alt. 500-600m, E. Jendek & O. Šauša leg.

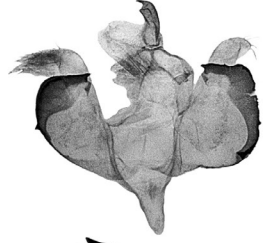
Plate 9



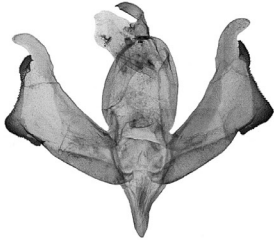
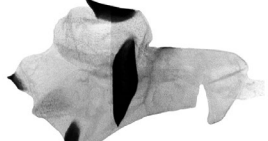
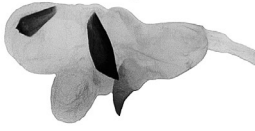
6e.



6f



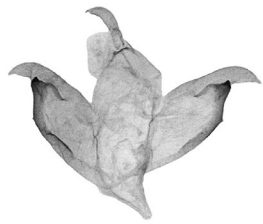
13d.



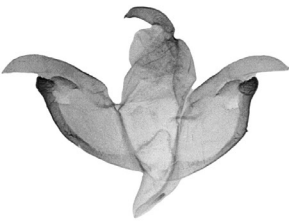
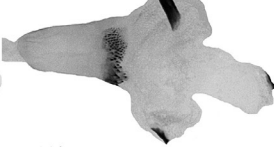
14a.



18j.



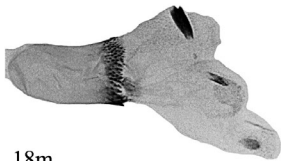
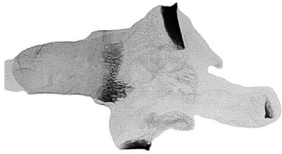
18k.



18l.



18m.

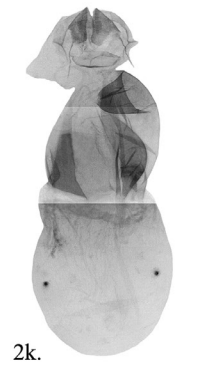
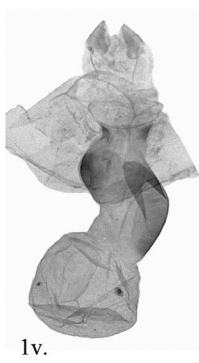
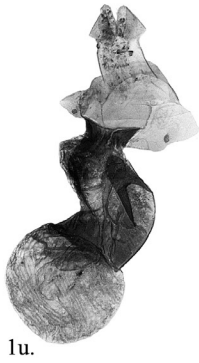
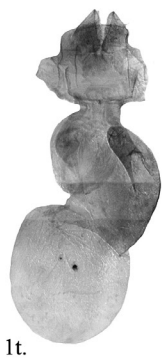
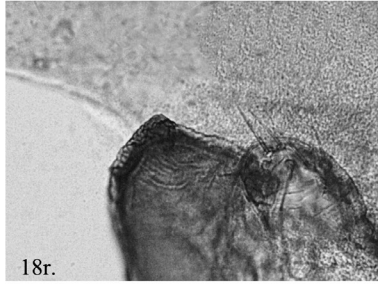
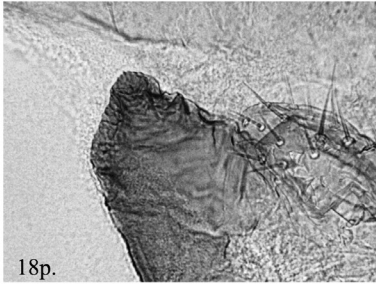
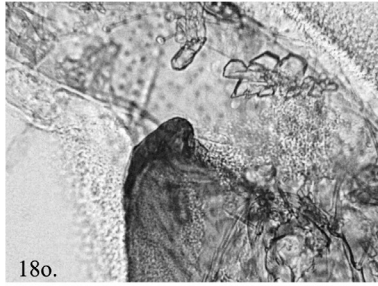
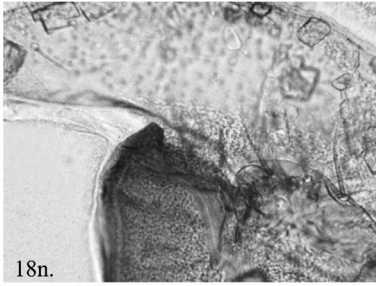


**Plate 10**

- 18n. *Brunia gibonica* (ČERNÝ, 2009), ♂, saccular process, CAMBODIA, Kirirom Nat. Res, 650m, 7-9.11. 2007, leg. S. Murzin
- 18o. *Brunia gibonica* (ČERNÝ, 2009), ♂, saccular process, CAMBODIA, Kirirom Nat. Park, 780m, 11° 21' 23" N, 104° 4' 38" E, 2.-17. 1. 2000, leg. M. & S. Murzin
- 18p. *Brunia gibonica* (ČERNÝ, 2009), ♂, saccular process, CAMBODIA, Kirirom Nat. Park, 780m, 11° 21' 23" N, 104° 4' 38" E, 2.-17. 1. 2000, leg. M. & S. Murzin
- 18r. *Brunia gibonica* (ČERNÝ, 2009), ♂, saccular process, LAOS centr., Khammouan prov., Nakai env., 17° 43' N, 105° 09' E, 22.V.-8.VI. 2001, alt. 500-600m, E. Jendek & O. Šauša leg.
- 1t. *Brunia antica* WALKER, 1854, ♀, LAOS c., Khammouan prov., Ban Khoun Ngeun prov., 20.-25.V.2004, 250m, leg. R. Štefanovič & M. Štrba
- 1u. *Brunia antica* WALKER, 1854, ♀, LAOS centr., Khammouan prov., 10.-13.VI.2001, Ban Khoun Ngeun prov., 18° 07' N, 104° 29' E, alt. 250m, E. Jendek & O. Šauša leg.
- 1v. *Brunia antica* WALKER, 1854, ♀, TAIWAN, Lanyu, Taitung county, 24.IV.2015. leg. Ding Jia Chen
- 1z. *Brunia antica* WALKER, 1854, ♀, PHILIPPINES, Luzon, Baguio, canyon road, 19.2.-10.3.2007, 1.250-1.450m, leg. B. Beřko
- 2i. *Brunia sarawaca* (BUTLER, 1877), ♀, C THAILAND, Nakhon Nayok, Khao Yai NP, Khao Kheiho, 752m, 14° 24' 20" N, 101° 22' 14" E, 23. X.2005, leg. Černý
- 2j. *Brunia sarawaca* (BUTLER, 1877), ♀, PHILIPPINES, C Palawan, 5 km E of Napsan, Primary forest clearing, 9° 42.256' N, 118° 31.034' E, 1+2 Dec. 2007, JH Lourens leg.
- 2k. *Brunia sarawaca* (BUTLER, 1877), ♀, PHILIPPINES, C Palawan, 3 km N of Nagtabon, dry coastal forest, 9° 57.015' N, 118° 39.275' E, 220m, 12 Dec. 2007, JH Lourens leg.
- 2l. *Brunia sarawaca* (BUTLER, 1877), ♀, MALAYSIA, Perak, 50 km NE of Gerik (aerial path), Belum-Temenggor: Titiwangsa, 5° 36' 17.4" N, 101° 32' 34.0" E, 30.iii-13.iv.2015, alt. 1100m, E. Jendek & O. Šauša leg.



**Plate 10**



**Plate 11**

- 6g. *Brunia kishidai* nov.sp., ♀, CAMBODIA, Kirirom Nat. Res, 650m, 7.-9.11.2007, leg. S. Murzin
- 6h. *Brunia kishidai* nov.sp., ♀, CAMBODIA, Kirirom Nat. Res, 650m, 7.-9.11.2007, leg. S. Murzin
- 13e. *Brunia agonchae* (PLÖTZ, 1880) nov.comb., ♀, CAMEROON, Noth-West prov., Obang (near Bafut), Mezam river, 6° 10.298' N, 10° 04.564' E, 625m, 3.-8.xii.2009, J. Horák leg.
- 13f. *Brunia agonchae* (PLÖTZ, 1880) nov.comb., ♀, CAMEROON, Noth-West prov., Obang (near Bafut), Mezam river, 6° 10.298' N, 10° 04.564' E, 625m, 3.-8.xii.2009, J. Horák leg.
- 18s. *Brunia gibonica* (ČERNÝ, 2009), ♀, CAMBODIA, Kirirom Nat. Park, 780m, 11° 21' 23" N, 104° 4' 38" E, 2.-17. 1. 2000, leg. M. & S. Murzin
- 18t. *Brunia gibonica* (ČERNÝ, 2009), ♀, CAMBODIA, Kirirom Nat. Res, 650m, 7-9.11. 2007, leg. S. Murzin
- 18u. *Brunia gibonica* (ČERNÝ, 2009), ♀, LAOS c., Khammouan prov., Ban Khoun Ngeun prov., 20.-25.V.2004, 250m, leg. R. Štefanovič & M. Štrba

**Plate 11**



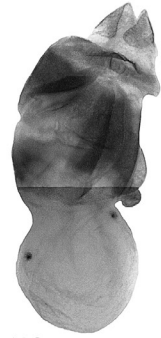
6g.



6h.



13e.



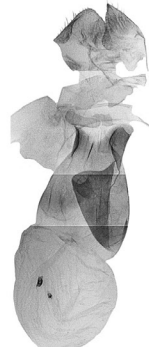
13f.



18s.



18t.



18u.

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