

Notes on the Asian genus *Cricula* WALKER, 1855, with description of new species

(Lepidoptera, Saturniidae)

von

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Summary: A survey about new records and species of the genus *Cricula* WALKER, 1855 is presented. 15 species are described as new: *C. aungsansuukyi* spec. nov. from Myanmar and India; *C. falcata* spec. nov., *C. frederkingi* spec. nov., *C. schintlmeisteri* spec. nov., *C. griseorubrescens* spec. nov., *C. fansipanensis* spec. nov., *C. hoffmanni* spec. nov., *C. sponai* spec. nov., *C. hoabinhnguyeni* spec. nov., all from Vietnam; *C. pseudandrei* spec. nov. and *C. variabilis* spec. nov. from PR China; *C. maxalorensis* spec. nov., *C. separata* spec. nov. and *C. baliensis* spec. nov. from Indonesia, and *C. magnifenestrata* spec. nov. from Malaysia and Indonesia. Holotypes and allotypes where known, ♂♂ genitalia structures and paratype specimens plus related taxa are figured. All holotypes from the authors' collections will be given to the entomological collections of the „Zoologisches Museum der Humboldt-Universität zu Berlin“ (ZMHU).

Zusammenfassung: Es wird eine Übersicht zu neuen Arten und Erkenntnissen bei der Gattung *Cricula* WALKER, 1855 gegeben. 15 Arten werden als neu für die Wissenschaft beschrieben: *C. aungsansuukyi* spec. nov. aus Myanmar und Indien; *C. falcata* spec. nov., *C. frederkingi* spec. nov., *C. schintlmeisteri* spec. nov., *C. griseorubrescens* spec. nov., *C. fansipanensis* spec. nov., *C. hoffmanni* spec. nov., *C. sponai* spec. nov., *C. hoabinhnguyeni* spec. nov., alle aus Vietnam; *C. pseudandrei* spec. nov. und *C. variabilis* spec. nov. aus der Volksrepublik China; *C. maxalorensis* spec. nov., *C. separata* spec. nov. und *C. baliensis* spec. nov. aus Indonesien, und *C. magnifenestrata* spec. nov. aus Malaysia und Indonesien. Alle Holotypen und, soweit bekannt, die zugehörigen Allotypen, die ♂♂ Genitalstrukturen aller hier beschriebenen Arten sowie Paratypen und verwandte Arten zum Vergleich werden abgebildet. Alle Holotypen aus den Sammlungen der beiden Autoren werden an die entomologischen Sammlungen des Zoologischen Museums an der Humboldt-Universität zu Berlin (ZMHU) gegeben.

Key words: Saturniidae, *Cricula*, new species, Myanmar, India, Vietnam, PR China, Indonesia, Malaysia.

Introduction: The genus *Cricula* was described by WALKER (1855); its type species (by monotypy) is *Saturnia trifenestrata* HELFER, 1837. Major works on the genus were provided by JORDAN (1909), ROEPKE (1940), and NÄSSIG (1989), the later one published a revision of the genus (1995). The number of known and accepted species always increased, mainly during recent times; NÄSSIG (1995) counted 14 species in 5 species-groups, but since then several new species (and subspecies, which are not mentioned here) were described (e.g. NÄSSIG & TREADAWAY, 1997, 1998; NÄSSIG et al., 1999; BRECHLIN, 2001, 2004; U. & L. H. PAUKSTADT, 2009). So far safe determination of syntope occurring taxa often was problematic due to individual variability of the species, and sometimes even a variability in genitalia structures, not only in wing morphology, was discussed (NÄSSIG, 1995) which caused long time problems especially in Vietnamese populations where a high grade of diversification was found. Some of those local taxa were found to be undescribed only from their morphology, but the right specific handling sometimes was difficult, and so far we hesitated to publish on this genus.

During the last two years we started to submit legs of *Cricula* specimens to the BOLD project in Guelph, Canada (see RATNASINGHAM & HEBERT 2007), to receive barcode data of the mitochondrial DNA of the cytochrome c oxidase, subunit I, gene (COI). As expected from other studies (e.g., DECAËNS & ROUGERIE, 2008 [for Saturniidae: Hemileucinae]; VAGLIA et al., 2008 [for Sphingidae]), we looked for support of our ideas based on morphological characters by those studies; series of specimens were sorted by their external morphology, genitalic structures, and finally by their position in the taxon tree resulting from the BOLD project. In all cases our ideas were confirmed by this tree, but there additionally were some interesting grouping results within the genus (see discussion) which partly were not expected.

With easier access to remote areas in Southeast Asia a better survey of the Saturniidae fauna became possible during the last years. Countries like China or Myanmar opened themselves a little, local people had partly better access to collecting equipment, and although sometimes expeditions are dangerous, long lasting and expensive, a lot of interesting material was accumulated. Some of the new taxa were found during unexpected collecting times in winter, even during snowfall. Especially for China and Vietnam there was found an increasing number of species, and this paper is probably not the last one to describe new *Cricula* species. A revision, containing all new knowledge, should be prepared sometime. In this paper we describe 15 new species of the genus *Cricula* from Vietnam, PR China, Myanmar, India, Indonesia, and Malaysia. The known number of representatives of the genus thereby almost doubles itself. All holotypes and, where available, allotypes plus the male genitalia structures are figured, as well as some more specimens to show specific variability and possibilities to compare them with related taxa. All holotype specimens will be stored in the entomological collections of Museum für Naturkunde, Humboldt-Universität zu Berlin. The preimaginal instars of all taxa described herein remain unknown.

Description of new species

Cricula aungsansuukyi NAUMANN & LÖFFLER spec. nov.

Holotype ♂ (Figs. 1, 7): Myanmar, Sagaing State (N), E Ngalong Ga, SSE Kumki (India), Tarung Hka river fork, 1 km E Hkasi village, 1000 m, 27°7.875'N 96°53.105'E, 10.v.2008, genitalia no. 2108/09 NAUMANN, barcode SNB 1130, coll. S. NAUMANN. A red holotype label will be fixed accordingly. The holotype will be deposited in the ZMHU.

Paratypes: In total 46 ♂♂, 3 ♀♀, all from Northern Myanmar and Arunachal Pradesh, India, with data: 1 ♂ same data as holotype, 11.v.2008, coll. S. NAUMANN; 7 ♂♂, Myanmar (NE), Kachin State, Chinese borderline, Kanphant village, N 26°08'51.2"N 98°34'58.2"E, 1642 m, 24., 29. & 30.v.2006 at village lights, 1 ♂ 23.00 h, 1 ♂ 23.50 h, leg. S. NAUMANN, S. LÖFFLER, & M. LANGER.

¹⁾ 17th contribution to the knowledge of the Saturniidae from China. - 16th contribution: Naumann, Löffler & Kohl (2010): Bemerkungen zur Gattung *Salassa* Moore, 1859, mit Beschreibung einiger neuer Arten (Lepidoptera, Saturniidae). - The European Entomologist 2 (3-4): 93-123, Příbram.

genitalia no. 2107/09 NAUMANN, barcode SNB 1132 & 1192, coll. S. NAUMANN; 5 ♂♂, same data, coll. S. LÖFFLER; 1 ♂, Myanmar (NE), Kachin State, Chudu Razi Hills, 30 miles E Kawnlangphu, 1500 m, 25.IV.2008, leg. local collector, barcode SNB 1193, coll. S. NAUMANN; 9 ♂♂, 2 ♀♀ (1 ♀ allotype), Myanmar (N), [Kachin State], Zi Yar Dam, 65 km NW Putao, 1250 m, 27°50'N 97°01'E, 18.-21.V.1998, leg. S. MURZIN & V. SINIAEV, barcode SNB 1131, coll. S. NAUMANN; 2 ♂♂, same data, coll. S. LÖFFLER; 3 ♂♂, Myanmar (N), [Kachin State], Nan Thi, 50 km E Putao, 950 m, 27°21'N 97°55'E, 11.-16.V.1998, leg. S. MURZIN & V. SINIAEV, genitalia no. 448/00 NAUMANN, barcode SNB 1190, coll. S. NAUMANN; 6 ♂♂, Myanmar (N), [Kachin State], Nan Sa Bon, 25 km E Putao, 800 m, 27°21'N 97°40'E, 6.-9.V.1998, leg. S. MURZIN & V. SINIAEV, coll. S. NAUMANN; 1 ♂, Myanmar (N), [Kachin State], Nan Sa Bon, 21 km E Putao, 800 m, 27°21'N 97°37'E, 1.-5.V.1998, leg. S. MURZIN & V. SINIAEV, coll. S. NAUMANN; 2 ♂♂, Myanmar (N), [Kachin State], Putao, 900 m, 27°21'N 97°24'E, 27.IV.1998, leg. S. MURZIN & V. SINIAEV, genitalia no. 2109/09, barcode SNB 1191, coll. S. NAUMANN; 9 ♂♂, India (NE), Arunachal Pradesh, Dist. Along, near Rapum, 2000 m, N 28.53176° E 94.24941°, 9.-11.V.2009, leg. G. BRETSCHNEIDER, genitalia no. 2051/09 NAUMANN, barcode SNB 1564, coll. S. LÖFFLER; 1 ♀, India (NE), Arunachal Pradesh, Dist. Monigong, near Pidi, 1650 m, N 28.37601° E 94.21316°, 13.V.2009, leg. G. BRETSCHNEIDER, coll. S. LÖFFLER.
A red allotype label and blue paratype labels will be fixed accordingly.

Etymology: The species is named in honour of AUNG SAN SUU KYI, human rights activist in Myanmar and owner of the Nobel Peace Prize of 1991, in recognition of her work and activism concerning the civil rights in her country.

Diagnosis: Relatively small species, ♂♂ dark orange to chocolate brown, with falcate forewing apex, white outer margin of the forewing, and one to three forewing fenestrae. ♀♀ dark orange brown, lower parts of postmedian area with light violet shadow, forewing, as far as known from three specimens, with three large and two additional very small fenestrae.

Description: ♂ (figs. 1-9), forewing length, measured from basis to apex, 30-35 mm (holotype 32 mm). Length of antennae 6.8-7.1 mm (holotype 7.0 mm), they are of dark ochreous colour. The ground colour on both dorsal and ventral sides varies from dark orange brown to faded orange and chocolate brown; Indian specimens generally are darker than those from Myanmar. Head, thorax, abdomen, and wings in their dorsal antemedian and median area in ground colour, antemedian zigzag line and straight postmedian line dark greyish, postmedian area darker than ground colour, suffused with greyish scales. There are one to three forewing fenestrae, the costal one (when present) always broadly dark greyish bordered or represented as dark spot. The marginal (or single) fenestrum round, of 2-3 mm diameter. Hindwing with one central fenestrum, ante- and postmedian line do not touch each other. Forewing apex quite falcate, outer margin with white fringes. Ventral side of same colour and with same markings, but in antemedian and median area suffused with pinkish scales.

♂ genitalia (figs. 96-99): Uncus strongly sclerotized, with two lateral processes and deep furcation. Gnathos almost rectangular. Juxta with two lateral lobe-like processes, and a ventral tongue-like sella with furcation in its end. There are two long and tall dorsal processes of the valves, the sacculus is quite broad, the saccus short, broad, and rounded. The phallus has a sclerotized portion on dorsal side, the vesica is short and has four bulbs with each one sclerotized spine on their top, the longest one positioned to right ventrolateral direction.

♀ (figs. 10-13): There are mainly sexualdimorphic differences to the males, as usual for the genus. The ♀♀ are larger, have more rounded wings, and taller antennae. The variable ground colour and pattern elements are similar to the ♂♂, but ♀♀ have four to five forewing fenestrae, the basal ones (one or two) surrounded by dark greyish scales, and a forewing length of 35-38 mm (allotype 35 mm).

Cricula falcata LÖFFLER & NAUMANN spec. nov.

Holotype ♂ (figs. 14, 15): Vietnam (S), Gebirgspass Phu Mi, Gemeinde Phu Son, Kreis Lam Ha, Lam Dong, 27.-29.IV.2003, leg. BINH, genitalia no. 989/04 NAUMANN, barcode SNB 1183, coll. S. LÖFFLER. A red holotype label will be fixed accordingly. The holotype will be deposited in ZMHU.

Paratypes: In total 13 ♂♂, all from South Vietnam, Lam Dong Province, with data: 1 ♂, Vietnam (S), Prov. Lam Dong, Phu Son, Lam Ha, Regenwald, 1320m, N 11°55.079' E 108°10.711' 18./19.VII.2002, leg. S. LÖFFLER & M. HOFFMANN, coll. S. LÖFFLER, genitalia no. 812/02 NAUMANN, barcode SNB 1202; 6 ♂♂, Vietnam (S), Prov. Lam Dong, Gemeinde Phu Son, Kreis Lam Ha, Gebirgspass Phu Mi, Regenwald, 1320m, N 11°55.079' E 108°10.711', 27.-29.IV.2003, leg. HOA BINH NGUYEN, coll. S. LÖFFLER; 1 ♂, Vietnam (S), Gebirgspass Phu Mi, 2.-3.V.2003, leg. BINH, coll. S. LÖFFLER; 3 ♂♂, Vietnam (S), Prov. Lam Dong, Phu Son, Lam Ha, Regenwald, 1320m, N 11°55.079' E 108°10.711', 9.-12.VI.2005, leg. HOA BINH NGUYEN, coll. S. LÖFFLER, genitalia no. 2084/09 NAUMANN; 1 ♂, Vietnam (S), Prov. Lam Dong, ca. 19 km Di Linh - Phan Thien, Regenwald, 1207m, N 11°27.501' E 108°03.617', 16./17.VII.2002, leg. S. LÖFFLER & M. HOFFMANN, coll. S. LÖFFLER, genitalia no. 815/02 NAUMANN; 1 ♂ same locality, 24.-26.IV.2003, leg. HOA BINH NGUYEN, coll. S. LÖFFLER. Blue paratype labels will be fixed accordingly.

Etymology: The species is, almost selfexplanatory, named after its typical very falcate forewing apex by which it differs from its syntope occurring congeneric *C. trifenestrata* (H.).

Diagnosis: *C. falcata* spec. nov. differs from the syntope occurring *C. trifenestrata* (H.) (genitalia no. 2084/09 NAUMANN, barcode SNB 1206), which generally looks very similar, by its very falcate forewing apex, the darker and broader postmedian line, and by the ante- and postmedian line of the hindwing which touch each other completely or almost near to the upper wing margin. In addition, there are differences in ♂ genitalia.

Description: ♂ (figs. 14, 15), forewing length, measured from basis to apex, 33-5 mm (holotype 34 mm), the wings generally are taller than those of *C. trifenestrata* (H.). Length of antennae 7.4-7.7 mm (holotype 7.6 mm), they are of light ochreous colour. The ground colour on both dorsal and ventral sides is an ochreous orange; syntope occurring *C. trifenestrata* (H.) are a little more faded orange. Head, thorax, abdomen, and wings in their dorsal antemedian and median area in ground colour, antemedian zigzag line very faint and almost reduced, the straight postmedian line dark purplish grey, broader and darker than in *C. trifenestrata* (H.). Postmedian area darker than ground colour, suffused with pinkish grey scales. There are always one fenestrum and an additional

dark greyish costal dot in the forewing, the fenestrum very small, of 0.6-1.4 mm diameter. Hindwing with one central greyish dot, ante- and postmedian line are confluent or nearly touch each other near to the upper wing margin, while in *C. trifenestrata* (H.) both are always well separated. Forewing apex very falcate (name !), outer margin with pinkish white frindges. Ventral side of lighter colour, suffused with white and pinkish scales. The antemedian line is much reduced, of pinkish colour [*C. trifenestrata* (H.): grey], the postmedian line pinkish grey, almost straight [*C. trifenestrata* (H.): wavy, grey].

♂ genitalia (figs. 100, 101): Uncus with two tall lateral processes and wide furcation in between. Gnathos rectangular, but with indentation on the dorsal margin. Juxta with lateral triangular processes and a tongue-like sella bent to dorsal direction which ends rounded. The dorsal process of the valves long and slender, the little lower situated ventral one (more or less the “second dorsal one”) with an acute tip. Basal parts of the sacculus bent inward, the saccus is round and short. The vesica has four bulbs, the right ventrolateral being the longest; all bear a very acute sclerotized spine on the top, the left dorsal one sometimes even two. The ♀ remains unknown.

Cricula frederkingi LÖFFLER & NAUMANN **spec. nov.**

Holotype ♂ (figs. 16, 17): Vietnam (C), Provinz Thua Thien - Hue, Kreis A Luoi, GEMEINDE A RONG, DORF KHE CHA LENH / 809 M, NATURSCHUTZGEBIET, REGENWALD, N 16°05. 374' E 107°27.559', 12./13.VIII.2004, LEG. S. LÖFFLER, P. SPONA & T. FREDERKING, genitalia 1135/05 NAUMANN, barcode SNB 1128, coll. S. LÖFFLER. A red holotype label will be fixed accordingly. The holotype will be deposited in ZMHU.

Paratypes: In total 11 ♂♂, 1 ♀ (allotype), all from Central Vietnam, Thua Thien - Hue Province, with same data as holotype, ♂ genitalia no. 1119/05, 2085 & 2086/09 NAUMANN, barcode SNB 1127, 1203, 1204, & 1205, coll. S. LÖFFLER. A red allotype label and blue paratype labels will be fixed accordingly.

Etymology: The species is named after one of the collectors of the type series, THOMAS FREDERKING.

Diagnosis: A dark ochreous species (in ♂♂) with intensive dark greyish markings and relatively unfalcate forewing apex.

Description: ♂ (figs. 16, 17), forewing length, measured from basis to apex, 33-37 mm (holotype 33 mm), the wings are more square-like and of more compact form than in other species. Length of antennae 7.4-8.0 mm (holotype 7.6 mm), they are of ochreous colour. Both dorsal and ventral sides are of ochre ground colour, suffused with dark greyish scales. Head, thorax, abdomen, and wings in their dorsal antemedian and median area in ground colour, the markings in dark grey colour. Antemedian zigzag line faint, the straight postmedian line broad, ending at the anal margin with a little curve inward. Postmedian area darker than ground colour, suffused with lots of grey scales, darkest near to the little falcate apex. There are always one fenestrum and in most specimens an additional dark greyish costal dot in the forewing, the fenestrum of 1.2-1.4 mm diameter. Hindwing with one central greyish dot, in some specimens (e.g. in holotype) with small hyaline centre, ante- and postmedian line are confluent or nearly touch each other near to the upper wing margin. Outer margin with white frindges. Ventral side of same colour, suffused with greyish scales. The antemedian line is much reduced, of violet greyish colour with pinkish touch, the postmedian line grey, almost straight, only in the lower parts to the anal margin little wavy.

♂ genitalia (figs. 102-104): Uncus with two almost triangular lateral processes and wide furcation in between, in the tips quite sclerotized. Gnathos rectangular, with hinted indentation on dorsal margin. Juxta with rounded triangular lateral processes and a bent tongue-like sella. The dorsal process of the valves very long, the ventral one shorter, rounded, and more sclerotized. Sacculus not very remarkable, the saccus relatively long and tall. The phallus has a vesica with four bulbs in total, the ventral being longest, the three dorsal ones of almost same size. All four bear an acute, triangular, strongly sclerotized tip.

♀ (figs. 18, 19): Only a singleton is known so far, which easily could be assigned to the ♂♂ by its intensive markings; the assignment was supported by DNA analysis. The ♀ is larger, has a forewing length of 40 mm, rounder wings and taller antennae of 8.0 mm length. Ground colour is a purplish brown, with dark grey markings. There are three forewing fenestrae and a single hindwing fenestrum, anal parts of the postmedian areas of both fore- and hindwings are widely suffused with pink scales. On ventral side antemedian and median area are lighter than dorsal ground colour, the postmedian area is more reddish brown.

Cricula maxalorensis NAUMANN & LÖFFLER **spec. nov.**

Holotype ♂ (figs. 20, 21): Indonesia, Nusa Tenggara Timur Province, Alor Island, 5 km NW Kalabahi, 150 m, 1.-8.III.2006, leg. S. JAKL, genitalia no. 2102/09 NAUMANN, coll. S. NAUMANN. A red holotype label will be fixed accordingly. The holotype will be deposited in ZMHU.

Paratypes: In total 5 ♂♂, all from Indonesia, Alor and Pantar Islands, with data: 4 ♂♂, same data as holotype, barcode SNB 1004 & 1005, coll. S. NAUMANN; 1 ♂, Indonesia, Nusa Tenggara Timur Province, Pantar Island, Tanah Labang env., 350 m, 9.-21.III.2006, leg. S. JAKL, genitalia no. 2101/09 NAUMANN, barcode SNB 1006, coll. S. NAUMANN. Blue paratype labels will be fixed accordingly.

Etymology: The name of the new species is an artificial combination remembering the large size and its origin on Alor Island.

Diagnosis: Generally one of the largest *Cricula* species with one forewing fenestrum plus additional grey dot. It is the nearest relative of *C. hayatae* PAUKSTADT & SUHARDJONO, 1992 from nearby Flores Island which is smaller, a more acute forewing apex, and more variation in number of ♂ forewing fenestrae and colour.

Description: ♂ (figs. 20-23), forewing length, measured from basis to apex, 37-40 mm (holotype 40 mm), the wings are of quite compact form than in other species. Length of antennae 7.6-8.4 mm (holotype 8.3 mm), they are of ochreous colour. Both dorsal and ventral sides are of greyish ochre ground colour, some specimens with a little reddish brown tone, on ventral side suffused with some white scales. Head, thorax, abdomen, and wings in their dorsal antemedian and median area in ground colour, the markings in greyish violet colour. Antemedian zigzag line quite faint, the postmedian line almost straight, a little bent outward apically. Post-

median area lighter than ground colour, suffused with lots of greyish white scales, apical field a little pinkish, apex rounded. There are always one costal dark grey dot and in most specimens an additional fenestrum in the forewing which sometimes is reduced to a small grey dot. In the nearest relative, *C. hayatae* P. & S., occur specimens with none to five fenestrae. Hindwing with one central greyish dot, in some specimens with small hyaline centre, ante- and postmedian line are confluent or nearly touch each other near to the upper wing margin; in *C. hayatae* P. & S. they are always well separated. Outer margin of most parts of the wings with white fringes. Ventral side of same colour, suffused with some white scales. Antemedian and postmedian lines are much fainter, of violet greyish colour, the postmedian line bordered marginally with pink area.

♂ genitalia (figs. 105, 106): Uncus with two strongly sclerotized, almost triangular processes. Gnathos broad, strongly sclerotized as well, and almost rectangular. Juxta with two lateral bent triangular processes, the spoon-sella, bent to dorsal direction, ends with two lateral sclerotized rounded processes. Both dorsal and ventral process of the valves rounded and short, at the dorsal base of the valves is a small plate with lots of bristles situated. The sacculus is broad only at the ventral base, the saccus broad, long, and rounded. The Vesica bears four bulbs of almost similar size, each with a sclerotized tip on its top. The right dorsolateral one is much longer than the others, more spatulate. The ♀ remains unknown.

Cricula schintlmeisteri NAUMANN & LÖFFLER **spec. nov.**

Holotype ♀ (figs. 24, 25): Vietnam (N), Lao Cai Province, Sa Pa Cat-Cat Frontier Base Camp, 22°19'36.4"N 103°49'46.1"E, 1250 m, 23.VIII.1998, leg. A. KUN, barcode SNB 1126, coll. S. NAUMANN. A red holotype label will be fixed accordingly. The holotype will be deposited in ZMHU.

Paratype: 1 Vietnam (N), Mt. Fan Si Pan, N-Seite, Cha-pa (= Sapa), 1600 m, 22°17'N 103°44'E, prim. Urwald, 26.X.-3.XI.1994, leg. SINIAEV & local collector, barcode SNB 1078, coll. S. NAUMANN. A blue paratype label will be fixed accordingly.

Etymology: Named after ALEXANDER SCHINTLMEISTER who carried out several expeditions to the type locality around 1994, and by whom the paratype specimen kindly was presented to the senior author.

Diagnosis: The ♀♀ are of dull orange colour, relatively small, with greyish markings and typical basal violet patches of the postmedian areas.

Description: ♀ (figs. 24, 25), Forewing length, measured from basis to apex, 37 mm (holotype) & 32.5 mm (paratype), the wings are of typical ♀ rounded form with an acute apical tip. Length of antennae 7.5 mm (holotype) & 7.4 mm (paratype). Both dorsal and ventral sides are of dull reddish orange ground colour, the dorsal postmedian area and the ventral median area are widely suffused with white and pink scales. Head, thorax, abdomen, and wings in their dorsal antemedian and median area in ground colour, the markings of dark violet colour. Antemedian zigzag line broad, the postmedian line a little bent outward; it is followed by a white shadow. The two ♀♀ have two (holotype) and three (paratype) fenestrae on their forewing, and a single rounded one on the hindwing. Ante- and postmedian line are nearly confluent near to the upper wing margin, but the separate to that margin. Outer margin of most parts of the forewing with white fringes, that of the hindwing with yellow ones. Ventral side in the median area highly suffused with white scales which give the specimens a pink tone. Antemedian line almost missing, only indicated as transition from darker antemedian to lighter, pink median area, the postmedian lines of pinkish white colour, bordered marginally in basal parts of both fore- and hindwings with some pink scales.

When the two ♀♀ were achieved they first were assigned with *C. vietnama* NÄSSIG et al., 1999 but recent DNA sequencing clearly showed the separated specific status. The ♂ remains unknown.

Cricula pseudandrei NAUMANN & LÖFFLER **spec. nov.**

Holotype ♂ (figs. 26, 29): PR China, Guangxi province, Zhongshan County, Lianshan, 1600 m, near Liangjiang, Guangdong borderline, III.2005, leg. Yi et al., genitalia no. 2103/09 NAUMANN, barcode SNB 1090, coll. S. NAUMANN. A red holotype label will be fixed accordingly. The holotype will be deposited in ZMHU.

Paratypes: In total 46 ♂♂, 2 ♀♀ all from PR China, south central Chinese provinces of Guangxi, Guangdong, Hunan, and Fujian, with data: 2 ♂♂, same data as holotype, coll. S. NAUMANN; 3 ♂♂, PR China, Guangxi Province, Dayao Shan, Jingxiu, 100 km SE Liuzhou, 1200 m, 23°45'N 109°45'E, VIII.2005, 1200m, leg. local collector, bought from S. SINIAEV, ♂ barcode SNB 1089, coll. S. NAUMANN; 4 ♂♂, same locality, IV.2005, leg. V. SINIAEV, coll. S. LÖFFLER; 1 ♂, PR China, Guangxi Province, Jinxiu County, Dayaoshan, 1700 m, late IV.2006, leg. Yi et al., barcode SNB 1088, coll. S. NAUMANN; 12 ♂♂, PR China, Guangxi Province, E. Yunnan borderline, Laogongshan Mt., Xiling, 1800m, VI.2002, leg. Li, coll. S. LÖFFLER; 2 ♂♂, same data, genitalia no. 1000/04 NAUMANN, coll. S. NAUMANN; 3 ♂♂, PR China, Hunan Province (E), near Jiangxi borderline, Baimianshan, 1700 m, II.2004, leg. YING et al., barcode SNB 1092, coll. S. NAUMANN; 5 ♂♂, PR China, Hunan Province (E), Baimianshan, 1800 m, Yanling, III.2004, leg. YING et al., coll. S. LÖFFLER; 3 ♂♂, PR China, Hunan Province (W), near Hubei border, 1700m, Zhangjiajie (Shizishan), Dayong, VI.2004, leg. WEN, coll. S. LÖFFLER; 1 ♂, PR China, Hunan Province, Nanling Shan, Shikengkong Mt., 24°54'N 112°57'E, 1300 m, 15.-30.IV.2006, leg. V. SINIAEV & local collector, genitalia no. 2104/09, barcode SNB 1091, coll. S. NAUMANN; 1 ♀ (allotype), same locality, but XI.2006, coll. S. NAUMANN; 6 ♂♂, PR China, Guangdong Province, Shikangkong, Yuyuan, 1800 m, ca. 25°20'N 113°10'E, IX.2001, leg. YIN, genitalia nos. 604 & 605/01, 2105/09 NAUMANN, barcode SNB 1085 & 1086, coll. S. NAUMANN; 2 ♂♂, 1 ♀, PR China, Guangdong Province, Shaoguan, Nanling Mt., 1100m, 26.III.2004, leg. Y. KISHIDA, coll. S. LÖFFLER; 1 ♂, PR China, Fujian Province, Shangang, Longda, IV.1998, leg. Li, genitalia no. 1207/98 NÄSSIG, barcode SNB 1103, coll. S. NAUMANN. A red allotype label and blue paratype labels will be fixed accordingly.

Etymology: The species is named after the overall similarity of the ♂ specimens with the Himalayan *C. andrei* JORDAN, 1909.

Diagnosis: A southeastern Chinese equivalent to the Himalayan *C. andrei* JORDAN. Generally it is smaller than this species, has a less falcate forewing apex, confluent hindwing ante- and postmedian lines and differences in ♂ genitalia structures.

Description: ♂ (figs. 26-31), forewing length, measured from basis to apex, 31.5-39 mm (holotype 33 mm), the wings are a little squarelike and have a falcate apex. Length of antennae 7.7-8.1 mm (holotype 7.9 mm), they are of dark ochreous colour. The dorsal

side is of intensive light to dark orange ground colour, the ventral side much lighter and less intensively coloured. Head, thorax, abdomen, and wings in their dorsal antemedian and median area in ground colour, the markings in dark violet grey colour. Antemedian zigzag line little faint, the straight postmedian line broad and intensively coloured. Postmedian area suffused with lots of grey and violet scales, darkest near to the falcate apex. In the forewing there are always one fenestrum of 1.0-1.8 mm diameter and an additional dark greyish costal dot which in some specimens has a small fenestrum. Hindwing with one central greyish bordered fenestrum. Ante- and postmedian line of hindwing are confluent near to the upper wing margin, in some specimens they again separate in the marginal area. Outer margin with fringes in the ground colour. Ventral side much lighter and more greyish but generally with same suffused ground colour. The antemedian line of the forewing is almost missing, that of the hindwing faint and of violet colour, the postmedian line greyish violet, followed marginally by portion of white scales, and almost straight.

♂ genitalia (figs. 107-111): Uncus with two short, little rounded lateral processes. The gnathos is broad, almost rectangular, a little indented on dorsal margin. Juxta with two lateral triangular processes, the long sella with two tall lateral dorsal processes and a rounded central indentation on dorsal side. The dorsal process of the valves much longer than the ventral one, rounded, the ventral one is more acute and more sclerotized. The saccus is long and almost triangular. The vesica with two left lateral short bulbs and a longer right ventrolateral one, all three ending with acute dentated sclerites. The phallus has, as continuation of the left dorsolateral sclerite, a more sclerotized area distal left lateral with some sclerotized tips on it.

♀ (figs. 32, 33): Only two specimens are known so far, therefore not much can be said about the variability. The ♀ is larger than the ♂♂, has a forewing length of 38 mm, rounder wings and taller antennae of 8.2 mm length. The ground colour is a dark purplish orange, with dark grey markings. There are three forewing fenestrae and a single hindwing fenestrum, anal parts of the postmedian areas of both fore- and hindwings are little suffused with pinkish violet scales. The postmedian line is followed marginally by a white shadow. On ventral side antemedian and median area are lighter than dorsal ground colour, suffused highly with white scales, the postmedian area again in the ground colour. Markings are similar to the dorsal side, but less indicated.

Cricula griseorubrescens LÖFFLER & NAUMANN **spec. nov.**

Holotype ♂ (figs. 34, 35): Vietnam (C), Provinz Thua Thien - Hue, Kreis A Luoi, Gemeinde A Rong, Dorf Khe Cha Lenh, 809 m, Naturschutzgebiet, Regenwald, N 16°05.374' E 107°27.559', 12./13.VIII.2004, leg. S. LÖFFLER, P. SPONA & T. FREDERKING, coll. S. LÖFFLER, genitalia no. 1121/05 NAUMANN, barcode SNB 1186. A red holotype label will be fixed accordingly. The holotype will be deposited in ZMHU.

Paratypes: In total 2 ♂♂ with same data as holotype, 1 ♂ with genitalia no. 2106/09, 1 ♂ with barcode SNB 1222, coll. S. LÖFFLER. Blue paratype labels will be fixed accordingly.

Etymology: The species is named after its typical combination of intensive reddish orange and greyish colour.

Diagnosis: As mentioned already in the etymology, ♂ specimens of *C. griseorubrescens* **spec. nov.** can easily be determined by their typical combination of intensive reddish orange and grey colouration. They resemble somewhat northern Vietnamese specimens of *C. jordani* BRYK, 1944, from which they can be separated easily by their much narrower, more falcate wings, smaller fenestrae, more reddish colour and genitalia structures.

Description: ♂ (figs. 34, 35), forewing length, measured from basis to apex, 36-37 mm (holotype 36 mm), the wings are tall and have a falcate apex. Length of antennae 8.1-8.2 mm (holotype 8.1 mm), they are of ochreous colour. Dorsal and ventral sides are of intensive reddish orange ground colour, the ventral side a little lighter. Head, thorax, abdomen, and wings in their dorsal antemedian and median area in ground colour, the markings in dark violet colour. The postmedian area is suffused with lots of grey and, mainly to marginal parts, yellow scales. The forewing is very tall at all, and the apex quite acute. In the forewing there are always one fenestrum of 1.2-1.4 mm diameter, bordered purplish, and an additional dark violet grey costal dot. Hindwing with one central violet grey spot. Ante- and postmedian line of hindwing are confluent near to the upper wing margin. Outer margin with fringes of yellow colour. Ventral side little lighter, suffused with lots of white scales. The antemedian line of the forewing is almost missing, that of the hindwing faint and of violet colour, the postmedian line pinkish white, followed marginally by a yellowish orange postmedian area.

♂ genitalia (figs. 112, 113): Uncus with two almost triangular acute lateral processes, bent ventrad. Gnathos broad and short, rectangular, with indentation on dorsal margin. The juxta with lateral triangular processes, little indented on ventral margin, the bent sella fork-like with two slender long lateral processes. The dorsal process of the valves long and rounded, the ventral one very short, small and also rounded. Saccus not well developed, the saccus being long and slender. The phallus with a sclerotized plate on distoventral side and a vesica made from one long bulb which ends with an acute sclerite on its top. On dorsal side there are near to the phallus margin two very small lateral sclerites.

In comparison has the superficially similar *C. jordani* Br. differences in ♂ genitalia structures as follows: rounded gnathos, lateral juxta processes very long, slender and acute, the sella with deeper furcation, and the vesica with three well developed bulbs with a well sclerotized spine on each end. The ♀ remains unknown.

Cricula fansipanensis LÖFFLER & NAUMANN **spec. nov.**

Holotype ♂ (figs. 36, 37): Vietnam (N), Huanglingshan, Fan Si Pan Mt., Shaba [Chapa?], 3000m, VIII.2003, leg. Tu, coll. S. LÖFFLER, genitalia no. 994/04 NAUMANN, barcode SNB 1117. A red holotype label will be fixed accordingly. The holotype will be deposited in ZMHU.

Paratypes: In total 2 ♂♂ with same data as holotype, barcode SNB 1220 & 1221, coll. S. LÖFFLER. Blue paratype labels will be fixed accordingly.

Etymology: Named after its origin, the high plateau of Fan Si Pan Mountain in Northern Vietnam.

Diagnosis: The species looks like a very small representative of *C. zubsiana* NÄSSIG, 1985 but differs from that taxon by the much smaller size, taller hindwings, a completely missing hindwing hyaline fenestrum in the central dot, and details in ♂ genitalia structures.

Description: ♂ (figs. 36, 37), forewing length, measured from basis to apex, 27.5-30.5 mm (holotype 29 mm), the wings are rounded and have an almost rectangular forewing apex. Length of antennae 9.1 - 9.2 mm (holotype 9.1 mm), they are of ochreous orange

colour. Head, thorax, abdomen, and wings in their dorsal antemedian and median area in ground colour, the markings in dark greyish violet colour. Antemedian zigzag line broad, the postmedian line broad as well, a little bent outward, straight in the lower parts, apically a little undulate. Postmedian area suffused with lots of grey and violet scales. In the forewing there are always one fenestrum of 1.5-1.8 mm diameter which is bordered broadly with dark violet scales, and an additional faint dark greyish costal dot. Hindwing with one central dark grey dot of around 1.5 mm diameter. Ante- and postmedian line of hindwing are well separated to the upper wing margin. Outer margin with some pink fringes. Ventral side completely of same ground colour as dorsally. The antemedian line of both fore- and hindwings is broad and dark greyish violet, the postmedian line of same colour and undulate.

Unfortunately the only three known specimens were damaged by pests before they came into our hands; thereby two abdomina were completely destroyed, the holotype left forewing apex was little damaged, and parts of antennae of two specimens got lost. Anyway, one genitalic dissection was still possible, and general appearance of that relict originating from the top plateau of Fan Si Pan Mt. is easily visible. It easily can be separated from *C. zubsiana* N. by its smaller size (forewing length of *C. zubsiana* N. ♂♂ 33-36 mm; 12 specimens in total in our collections), the taller hindwing, the dark greyish dot of the hindwing which is replaced in *C. zubsiana* N. by a larger dot with fenestrum, less vivid ground colour, and details in male genitalia structures described below. For comparison we figure some specimens of *C. zubsiana* N.: 1 ♂ (figs. 38, 41) from PR China, Yunnan, Sanfengshan, 2897 m, VII.2000, coll. S. LÖFFLER; 1 ♂ (figs. 39, 42) from Myanmar, Kachin State, Chudu Razi Mt. Range, Kawnlanghpui, VII.2006, coll. S. NAUMANN; and 1 ♀ (figs. 40, 43) from Myanmar with same data as the ♂, coll. S. LÖFFLER. *C. zubsiana* N. is also a member of the Tibetan fauna (specimens in coll. S. NAUMANN), and is found in Northwestern Yunnan, Eastern Myanmar, and Southeastern Tibet in altitudes from around 2800-4500 m.

♂ genitalia (fig. 114): Uncus with two lateral processes bent outward which end almost rounded. Gnathos rectangular with indentation on dorsal margin. Juxta with two lateral acute processes and a sella with deep central furcation and two widely separated lateral processes, ending broad and rounded. The valves have an acute long dorsal process and a smaller rounded ventral one. The sacculus forms a stucture similar to a third, most ventral process of the valves little more ventrad of the ventral one, the saccus is round. The vesica has three processes, a long ventrad one and two shorter left and right dorsolateral ones, each ending with a sclerotized dentated tip. There are not many differences to the genitalic structures of the nearly related *C. zubsiana* N., which differs little by having a less indented gnathos, more rounded uncus and sella processes, and lines of connecting sclerites situated on the vesica between the three spines. The structures of this species are shown in figs. 115 and 116 (♂ genitalia nos. 370 & 371/99, both from Yunnan). The ♀ remains unknown.

Cricula hoffmanni NAUMANN & LÖFFLER **spec. nov.**

Holotype ♂ (figs. 44, 45): Vietnam (S), Prov. Lam Dong, Bhu Son, Lam Ha, Regenwald, 1320m, N 11°55.079' E 108°10.711', 10.-11.VII.2002, leg. S. LÖFFLER & M. HOFFMANN, coll. S. LÖFFLER, genitalia no. 813/02 NAUMANN, barcode SNB 1121. A red holotype label will be fixed accordingly. The holotype will be deposited in ZMHU.

Paratypes: In total 3 ♂♂, all from South Vietnam, Lam Dong Province, with data: 1 ♂, Vietnam (S), same locality as holotype, 9.-12.VI.2005, leg. HOA BINH NGUYEN, coll. S. LÖFFLER, genitalia no. 1378/05 NAUMANN, barcode SNB 1207; 1 ♂, Vietnam (S), Prov. Lam Dong, ca. 19 km von Di Linh nach Phan Thien, Regenwald, 1207m, N 11°27.501' E 108°03.617', 24.-26.IV.2003, leg. HOA BINH NGUYEN, coll. S. LÖFFLER; 1 ♂, Vietnam (S), Lam Dong Prov., Gebirgspass Phu Mi, Gemeinde Phu Son, Kreis Lam Ha, 27.-29.IV.2003, leg. HOA BINH NGUYEN, coll. S. LÖFFLER, genitalia no. 992/04 NAUMANN, barcode SNB 1181. Blue paratype labels will be fixed accordingly.

Etymology: The species is named in honour of one of the collectors of the holotype, MATHIAS HOFFMANN, who accompanied the junior author to Vietnam in 2002.

Diagnosis: A species which resembles the syntope occurring *C. trifenestrata* (H.); it can be separated from that by its smaller size, little darker colour, more acute forewing apex, darker pattern, and details in male genitalia structures.

Description: ♂ (figs. 44, 45): Forewing length, measured from basis to apex, 29-31.5 mm (holotype 30 mm), the wings are more rectangular and have a more acute forewing apex than those of *C. trifenestrata* (H.). Length of antennae 7.4-7.9 mm (holotype 7.8 mm), they are of ochreous colour. The ground colour on both dorsal and ventral sides is a dark ochreous orange; syntope occurring *C. trifenestrata* (H.) are of lighter ochreous orange colour. Head, thorax, abdomen, and wings on dorsal and ventral side in ground colour, only the forewing dorsal and ventral postmedian area is somewhat darker, suffused with dark grey scales. Antemedian zigzag line very faint, the straight postmedian line dark greyish brown. There are one fenestrum and one or two additional dark greyish costal dots in the forewing median area, the fenestrum very small, of 0.3-1.4 mm diameter, one specimen with completely reduced fenestrum. Hindwing with one very small central greyish dot, ante- and postmedian line are well separated near to the upper wing margin, similar to *C. trifenestrata* (H.). Forewing apex with a falcate tip, outer margin with pinkish white fringes in the forewing and yellow ones in the hindwing. Ventral side of little lighter colour. The antemedian line is much reduced, of pinkish colour [*C. trifenestrata* (H.): grey], the postmedian line pinkish grey and undulate.

Cricula hoffmanni **spec. nov.** is known only from the southern Vietnamese province of Lam Dong.

♂ genitalia (figs. 117-119): Uncus with two lateral short processes and triangular indentation in between. Gnathos trapezoid, upper margin straight, juxta with two lateral triangular processes, sella with very slender base and two long slender lateral processes. The dorsal and ventral process of the valves almost of same length, sacculus little developed at the base of the valves, saccus rounded. The vesica with two longer right and left ventrolateral bulbs and two shorter right and left dorsolateral ones, all four with a slender spine on the top. On dorsal vesica side all four spines are dentate and connected via a faint band of small sclerites. The superficially similar *C. trifenestrata* (H.) has completely different genitalic structures, such as rectangular gnathos, tongue-like slender sella, more compact, rounded valves, and very large vesica sclerites of different number. The ♀ remains unknown.

Cricula sponai LÖFFLER & NAUMANN **spec. nov.**

Holotype ♂ (figs. 46, 47): Vietnam (C), Provinz Thua Thien – Hue, Kreis A Luoi, Gemeinde A Rong, Dorf Khe Cha Lenh, 809 m, Naturschutzgebiet, Regenwald, N 16°05.374' E 107°27.559', 12./13.VIII.2004, leg. S. LÖFFLER, P. SPONA & T. FREDERKING, coll. S. LÖFFLER, genitalia no. 1134/05 NAUMANN, barcode SNB 1114. A red holotype label will be fixed accordingly. The holotype will be deposited in ZMHU.

Paratypes: In total 7 ♂♂, 1 ♀ (allotype) with same data as holotype, ♂ genitalia no. 1118/05 & 1379/05, ♀ genitalia 1122/05 NAUMANN, barcode SNB 1115 (♂) and 1116 (♀), coll. S. LÖFFLER. A red allotype label and blue paratype labels will be fixed accordingly.

Etymology: This delightful species is named after PETER SPONA, companion of S. LÖFFLER during several expeditions to SE Asia, in recognition of his longterm friendship.

Diagnosis: *C. sponai spec. nov.* is easily recognizable by the unique dark chocolate brown colour of its males which is known in the genus only for the South Indian *C. agria* JORDAN, 1909 and *C. trifenestrata agrioides* NÄSSIG, 1989 and from some specimens of *C. variabilis spec. nov.* described below from Central China. ♀♀ are of dark orange brown colour, the singleton known was collected during day activity.

Description: ♂ (figs. 46, 47), forewing length, measured from basis to apex, 27.5-32 mm (holotype 32 mm), the wings are a little squarelike and have a falcate apex. Length of antennae 7.2-8.0 mm (holotype 8.0 mm), they are of dark brown colour. The dorsal and ventral sides are of dark chocolate brown ground colour. Head, thorax, abdomen and wings completely in ground colour, the markings in even darker greyish brown colour. The dorsal antemedian zigzag line broad, the straight postmedian line broad, bent apically a little outward. Postmedian area suffused with some grey scales in some specimens. In the forewing median area are always one lower dark brown dot which has in some specimens a fenestrum of 0.2-1.2 mm diameter, and a second dark brown costal dot. Hindwing with one central dark brown dot. Ante- and postmedian line of hindwing are separated always but approach each other near to the upper wing margin. Outer margin with white fringes in the forewing and yellow ones in the hindwing. Ventral side with a reduced antemedian line, the postmedian line undulate.

♂♂ specimens showed an activity only from 0.00 to 1.00h in the early morning. *C. sponai spec. nov.* resembles from its colour the two mentioned South Indian species (*C. agria* J.: fig. 50 for comparison) but has a much more rectangular forewing and less pronounced forewing apex.

♂ genitalia (figs. 120-123): Uncus with two very small acute, well sclerotized processes. Gnathos almost rectangular, with straight dorsal margin. Juxta with two rounded lateral processes, sella medium-sized with two lateral slender processes. The valves are very slender, the dorsal process with a tip, the ventral little rounder, shorter, and more sclerotized, at the dorsal base of the valves a small plate with lots of bristles. Saccus not well developed, saccus short and rounded. Vesica with four bulbs, two longer right and left ventrolateral ones and two shorter right and left dorsolateral ones. All four bear a little sclerotized spine on their tip which is dentate to two sides each. For comparison we figure ♂ genitalic structures of the South Indian *C. agria* J., of which specimens bear also the very dark chocolate brown colour (fig. 124, ♂ genitalia no. 1133/05). It differs, as to be awaited, much from *C. sponai spec. nov.*, by having a different uncus, more rounded valves, acute lateral juxta processes and a rounded sella plus only two much reduced vesica spines.

♀ (figs. 48, 49): The ♀ is larger than the ♂♂, and has typical sexualdimorphic characters such as rounder wings, broader abdomen and taller antennae of 7.2 mm length. Ground colour is a dark orange brown with dark purplish grey markings. The number of the forewing fenestrae is no longer visible, a single hindwing fenestrum is bordered broadly with dark purplish grey scales. The postmedian area (of the hindwing) is of dark purplish brown colour, the outer margin has yellow fringes. On ventral side antemedian and median area are lighter than dorsal ground colour, suffused with white scales, the postmedian area again in the ground colour. Markings are similar to the dorsal side.

The singleton known is hardly damaged; it was collected during daytime, approaching the collecting site through the underwood. It remains unknown if it is the first known *Cricula* species in which ♀♀ are day-active or if it just was disturbed and was therefore on its wings. It did not deposit any eggs.

Cricula hoabinhnguyeni LÖFFLER & NAUMANN **spec. nov.**

Holotype ♂ (figs. 51, 54): Vietnam (N), Binh Trach, ca. 5 km from Ba Be to Cao Bang, 26.XI.2001, leg. HOA BINH NGUYEN, coll. S. LÖFFLER, genitalia no. 647/02 NAUMANN, barcode SNB 1119. A red holotype label will be fixed accordingly. The holotype will be deposited in ZMHU.

Paratypes: In total 34 ♂♂, 3 ♀♀, all from North Vietnam, Cao Bang and Thai Nguyen Provinces, with data: 15 ♂♂, 3 ♀♀ (including allotype), Vietnam (N), Umg. Bau Pieng, Cao Chi, Ba Be Lake Nationalpark, 1450m, 13.X.1999, leg. & coll. S. LÖFFLER, ♂ genitalia nos. 996, 997, & 998/04 NAUMANN, ♂ barcode SNB 1124, 1187, ♀ barcode SNB 1125 (allotype); 3 ♂♂, Vietnam (N), Eingang zum Ba Be Lake N.P., 25.XII.2001, leg. T. IHLE, coll. S. LÖFFLER, genitalia no. 646/02 NAUMANN, barcode SNB 1118; 1 ♂, Vietnam (N), Ba Be Lake N.P., X.2004, leg. HOA BINH NGUYEN, coll. S. LÖFFLER; 1 male, same locality, 8.XII.2004, 4.30h, leg. HOA BINH NGUYEN, coll. S. LÖFFLER, barcode SNB 1219; 2 ♂♂, Vietnam (N), Provinz Cao Bang, Ba Be Lake N.P., LF, Primärwald, 500m, 29.XI.2005, 3.20 & 4.05h, leg. HOA BINH NGUYEN, coll. S. LÖFFLER; 2 ♂♂, same locality, 25.XI.2006, 2.10 & 4.50h, leg. HOA BINH NGUYEN, barcode SNB 1218, coll. S. LÖFFLER; 2 ♂♂, same locality, IV.2007, leg. HOA BINH NGUYEN, coll. S. LÖFFLER; 1 ♂, same locality, VI.2007, leg. HOA BINH NGUYEN, coll. S. LÖFFLER; 1 ♂, same locality, XII.2007, leg. HOA BINH NGUYEN, coll. S. LÖFFLER; 2 ♂♂, same locality, III.2008, leg. HOA BINH NGUYEN, coll. S. LÖFFLER, barcode SNB 1216; 1 ♂, same locality, VI.2008, leg. HOA BINH NGUYEN, coll. SWEN LÖFFLER, barcode SNB 1217; 1 ♂, same locality, X.2008, leg. HOA BINH NGUYEN, coll. S. LÖFFLER; 1 ♂, Vietnam (N), Provinz Cao Bang, Ba Be, Primärwald, 12. & 13.XI.2002, LF, leg. M. HOFFMANN, genitalia no. 993/04 NAUMANN, barcode SNB 1120, coll. S. LÖFFLER; 1 ♂, Vietnam (N), Prov. Thai Nguyen, Kreis Dong Hy, Gemeinde Tan Long, Dorf Bac Lau, Mo Ba, Primaerwald, 300 m, 5.-7.IX.2008, leg. HOA BINH NGUYEN, coll. S. LÖFFLER, barcode SNB 1215. A red allotype label and blue paratype labels will be fixed accordingly.

Etymology: The taxon is named after HOA BINH NGUYEN, collector of many interesting Vietnamese specimens and also of most of the type specimens of *C. hoabinhnguyeni spec. nov.*, in recognition of his friendship and help in various ways.

Diagnosis: A variable species of light ochreous to greyish ochre ground colour in males and light to intensive orange with strong markings in ♀♀. It is known from lowlands in Northern Vietnam and mainly flies in the winter months of October to December during cold season.

Description: ♂ (figs. 51-54), forewing length, measured from basis to apex, 29-33 mm (holotype 32 mm), the wings are a little rectangular and have an acute forewing apex. Length of antennae 7.4-7.9 mm (holotype 7.6 mm), they are of ochreous colour. The ground colour on both dorsal and ventral sides varies from light ochreous to more or less dark greyish ochre, the holotype is of light

greyish ochre; syntope occurring *C. trifenestrata* (H.) are of lighter ochreous orange colour. Head, thorax, abdomen, and wings on dorsal and ventral side in ground colour, only the forewing dorsal and ventral postmedian area is somewhat darker or more greyish, suffused with grey scales. Markings in dark grey colour. Antemedian zigzag line little faint, the postmedian line is bent a little outward in the apical area and bent inward near to the lower wing margin. There are variably one to three (holotype) fenestra in the forewing, the costal one in most specimens indicated only as additional dark grey dot. Hindwing with one small central dark grey dot, ante- and postmedian line are well separated near to the upper wing margin, similar to *C. trifenestrata* (H.). The outer margin with pinkish white fringes in the fore- and hindwing. Ventral side of little lighter colour. The antemedian line is much reduced, of greyish violet colour [*C. trifenestrata* (H.): grey], the postmedian line grey and undulate.

Cricula hoabinhnguyeni **spec. nov.** is known only from the northern Vietnamese lowlands, most specimens were collected during the cold season from October to December, some even during snow fall, only singletons in other months, and always from 2.00 to 3.00h in the morning.

♂ genitalia (figs. 125 – 128): Uncus short, with two short little rounded processes and a small indentation in between. Gnathos a little trapezoid, relatively slender, juxta with two short triangular processes, the sella with slender base and two lateral spread slender processes. Dorsal process of the valves broad and rounded, the ventral one shorter, more acute and sclerotized. Sacculus almost reduced, saccus broad and rounded. The vesica has four bulbs, two right and left ventrolateral longer ones and two very short right and left dorsolateral ones, all ending with an acute, hardly sclerotized, dentate spine. The two dorsolateral ones are connected with a band of sclerites on the distal parts of the phallus.

♀ (figs. 55 – 57): It is larger than the ♂♂, has a forewing length of 36–39 mm (allotype 39 mm), rounder wings and taller antennae of 8.0 mm length. Ground colour is a light to intensive orange, with intensive dark purplish grey markings. There are three forewing fenestrae and a single hindwing fenestrum, one female has an additional hindwing dot. The anal parts of the postmedian areas of both fore- and hindwings are little suffused with pinkish violet scales. On ventral side antemedian and median area are lighter than dorsal ground colour, suffused with white scales, the postmedian area again in the ground colour. Markings are similar to the dorsal side, but less indicated, the forewing postmedian line is little undulate.

Cricula variabilis NAUMANN & LÖFFLER **spec. nov.**

Holotype ♂ (figs. 58, 62): PR China, Guangxi Province, Dayao Shan, Jinxiu, 24°07'N 110°14'E, 1700 m, 15.-20.XI.2006, leg. V. SINIAEV, genitalia no. 1583/07 NAUMANN, barcode SNB 1200, coll. S. NAUMANN. A red holotype label will be fixed accordingly. The holotype will be deposited in ZMHU.

Paratypes: In total 66 ♂♂, 9 ♀♀ with data: 56 ♂♂, 7 ♀♀ (including allotype) with same data as holotype, ♂ genitalia nos. 1582 & 1584/07 NAUMANN, ♂ barcode SNB 1133, 1196, 1198, 1199, ♀ barcode SNB 1197 & 1198, coll. S. NAUMANN; 2 ♂♂, same data, coll. Y. KISHIDA, Tokyo; 1 ♂, same data, coll. R. S. PEIGLER, San Antonio; 7 ♂♂, same data, coll. S. LÖFFLER; 2 ♀♀, PR China, Guangxi Province, 11 km SE Meng Shan, 24°05'N 110°33'E, 12.-16.I.2008, leg. V. SINIAEV, barcode SNB 1201, coll. S. NAUMANN. A red allotype label and blue paratype labels will be fixed accordingly.

Etymology: *Cricula variabilis* **spec. nov.** is named after the immense intraspecific variability of the adults; the colour ranges from orange to dark brown, and ♂♂ have from zero up to five patches with fenestrae on their forewings.

Diagnosis: *Cricula variabilis* **spec. nov.** is the Central Chinese analogon to *C. hoabinhnguyeni* **spec. nov.** described above. It is even more variable in colour and in number of forewing fenestra, has a very acute forewing apex, a large hindwing ocellus, a broad forewing postmedian area, and was collected so far only in the month of November in the Chinese province of Guangxi.

Description: ♂ (figs. 58-63), forewing length, measured from basis to apex, 28.5-32 mm (holotype 32 mm), the wings are a little rectangular and have a very acute forewing apex. Length of antennae 7.6-9.2 mm (holotype 9.1 mm), they are of dark brown colour. The ground colour on both dorsal and ventral sides varies from light ochreous orange over dark ochre to more or less dark greyish brown (some specimens being almost as dark as *C. agria* J. or the above described *C. sponai* **spec. nov.**), the holotype is of dark ochreous orange colour. Head, thorax, abdomen, and wings on dorsal side in ground colour, only the fore- and hindwing postmedian area is somewhat darker or more greyish, suffused with grey scales. Markings in dark grey colour. Antemedian zigzag line little faint in some specimens, the almost straight postmedian line is bent a little outward in the apical area. There are variably none to four (holotype) fenestra in the forewing, the more costal ones in most specimens indicated only as additional dark grey dot. All fenestra are broadly surrounded by dark grey patches. Hindwing with one large central dark grey dot, which in some specimens has a very small hinted fenestrum, ante- and postmedian line are well separated near to the upper wing margin. The outer margin with reddish brown fringes in the fore- and hindwing. Ventral side of little lighter colour. The antemedian line is much reduced, of greyish violet colour, the postmedian line grey and a little undulate. The marginal parts of the fore- and hindwing are darkened somewhat by grey scales.

Cricula variabilis **spec. nov.** known only from the Central Chinese province of Guangxi, all specimens were collected during very cold weather, partly in snow, in the month of November.

♂ genitalia (figs. 129-131): Uncus short, with two lateral, almost triangular acute processes, gnathos trapezoid, with small indentation on dorsal margin. Juxta with two short lateral triangular processes, sella small, slender and with two dorsal tips. Dorsal processes of the valves little rounded, the ventral ones shorter, more acute and more sclerotized. Sacculus in the basal half of the valves developed, saccus short and rounded. The phallus is relatively short, has a more sclerotized area left lateral at its distal end, and the vesica is very short (the situation shown on the three figures represents that shortness very well, this is almost no artifact by preparation), with four processes and four acute and slender spines.

♀ (figs. 64, 65): It is larger than the ♂♂, has a forewing length of 35-39 mm (allotype 39 mm), rounder wings and taller antennae of 8.0 mm length. Ground colour is a reddish or orange brown, suffused with lots of violet scales, with intensive dark purplish grey markings. All known specimens have three forewing fenestrae and a single hindwing fenestrum. The anal parts of the median and the postmedian areas of both fore- and hindwings are highly suffused with pinkish violet scales and give the specimens a white shadow. On the ventral side antemedian and median area are lighter than dorsal ground colour, suffused with lots of white scales.

the postmedian area again in the ground colour. Markings are similar to the dorsal side, but less indicated, the forewing postmedian line is little undulate and followed marginally by a white portion.

Cricula separata NAUMANN & LÖFFLER **spec. nov.**

Holotype ♂ (figs. 66, 67): Indonesia, West Sumatra, Mt. Sanggul, 1250-1450 m, VI.-VII.2007, leg. S. JAKL, barcode SNB 1167, coll. S. NAUMANN. A red holotype label will be fixed accordingly. The holotype will be deposited in ZMHU.

Paratypes: In total 30 ♂♂, 1 ♀ (allotype), all from Indonesia, Sumatra Island, with data: 3 ♂♂, West Sumatra, Mt. Sanggul, 1250-1450 m, VI.-VII.2007, leg. S. JAKL, barcode SNB 1167, 1 ♂ genitalia no. 2093/09 NAUMANN, coll. S. NAUMANN; 2 ♂♂, West Sumatra, Mt. Sanggul, 1200 m, VII.2004, leg. S. JAKL, received via J.-M. CADIOU, coll. S. NAUMANN; 1 ♂, West Sumatra, Mt. Talang, 1500 m, III.-IV.2005, received via J.-M. CADIOU, coll. S. NAUMANN; 1 ♀ (allotype), Mt. Talang, 1500-1700 m, VI.2006, leg. S. JAKL, coll. S. NAUMANN; 1 ♂, same data, exchanged with S. NAUMANN, coll. S. LÖFFLER; 3 ♂♂, West Sumatra, Mt. Kerinci, 1200 m, III.2005, 1 ♂ genitalia no. 2092/09 NAUMANN, 1 ♂ barcode SNB 1168, coll. S. NAUMANN; 14 ♂♂, West Sumatra, 2 km N Puncak Lawang, 1300 m, 5., 7. & 15.X.2007, 0.00-3.00 h, leg. P. SCHMIT, coll. S. LÖFFLER; 2 ♂♂, West Sumatra, 3 km S Padangar, Mt. Korinji, 1000 m, 10.X.2007, 4.00 h, leg. P. SCHMIT, coll. S. LÖFFLER; 3 ♂♂, West Sumatra, 2 km N Talangbarbungo, 1280 m, 9.X.2007, 5.00 h, leg. P. SCHMIT, coll. S. LÖFFLER; 1 ♂, West Sumatra, Lembah Anei, Mt. Tandikat, 680 m, 4.X.2007, 4.00 h, leg. P. SCHMIT, coll. S. LÖFFLER. A red allotype and blue paratype labels will be fixed accordingly.

Etymology: *Cricula separata* **spec. nov.** for long time was determined as *C. elaezia* JORDAN, 1909 in most collections. Only recently, when larger series became available, it easily could be “separated” from that species.

Diagnosis: A large species within the so-called *elaezia*-group with very tall and acute forewings, and ochreous brown ground colour in the ♂♂. Hence only one ♀ is known, it is not clear if it really has diagnostic characters. *C. separata* **spec. nov.** is an endemic of Sumatra.

Description: ♂ (figs. 66, 67), forewing length, measured from basis to apex, 34-41 mm (holotype 38 mm), the wings are tall and have a very acute forewing apex. Length of antennae 7.1-7.5 mm (holotype 7.3 mm), they are of ochre colour. The ground colour on dorsal side varies from ochreous to more or less reddish or greenish brown, the holotype is of dark ochreous brown colour. Head, thorax, abdomen, and wings on dorsal side in ground colour, only the fore- and hindwing postmedian area is somewhat darker or more greyish, suffused with grey scales. Markings in dark grey colour. Antemedian zigzag line little fainted in some specimens, the almost straight postmedian line is bent a little outward in the apical area and followed in some specimens in the postmedian area by a dark shadow. There are variably none to three (holotype) fenestra in the forewing, the costal one in some specimens indicated only as an additional dark grey dot; one specimen has no fenestra or dots. Hindwing with one central fenestrum, ante- and postmedian line are confluent or almost confluent near to the upper wing margin. The outer margin with pinkish white fringes in the fore- and hindwing, the forewing apex has a portion of violet scales. Ventral side of little darker, more intensive colour, and more homogeneous, markings reduced compared to dorsal side. The antemedian line is much reduced, of greyish violet colour, the postmedian line grey and undulate, and followed by a row of white scales.

♂ genitalia (fig. 132, 133): Uncus with two little rounded well sclerotized lateral processes, gnathos trapezoid with straight dorsal margin. The juxta has two lateral short rounded processes, sella slender, tongue-like with almost no indentation on its end. Dorsal process of the valves ear-like, the ventral one larger, rounded and more sclerotized, sacculus well developed, saccus almost reduced. The vesica rounded, without any sclerites, and of no diagnostic relevance inside the *elaezia*-group. Compared to those genitalia structures, nearby occurring *C. elaezia* J. (fig. 134: ♂ genitalia no. 2094/09, from West Java; fig. 135: ♂ genitalia no. 2098/09, from South Kalimantan) has much more acute and more sclerotized processes of the uncus with smaller indentation in between, less rounded ventral processes of the valves, and less rounded, little longer lateral processes of the juxta with a little more indented sella.

♀ (figs. 68, 69): Only a singleton is known so far, thereby it is unclear if it really bears diagnostic characters; this singleton is well distinguishable from females of *C. elaezia* J. by the single forewing fenestrum, widely separated hindwing ante- and postmedian lines, and the postmedian line which is strongly bent and positioned more to marginal side.

The ♀ is larger than the ♂♂, has a forewing length of 40 mm, rounder wings with an very acute apical tip, and taller antennae of 7.3 mm length. Ground colour is an orange brown, suffused with lots of violet scales in the anal parts of the postmedian areas of both fore- and hindwings, with intensive dark purplish grey markings. In both fore- and hindwings the ♀ shows a very tall, strip-like fenestrum which is bordered on the hindwing with grey scales. The postmedian band of the forewing is very strong and bent outward in its central part, ante- and postmedian line of the hindwing are widely separated, thereby the hindwing postmedian area is relatively small. On ventral side antemedian and median area are lighter than dorsal ground colour, suffused with lots of white scales, the postmedian area again in the ground colour. Markings are similar to the dorsal side, but less indicated, and the forewing postmedian line is undulate and followed marginally by a white portion.

Cricula magnifenestrata NAUMANN & LÖFFLER **spec. nov.**

Holotype ♂ (figs. 70, 72): Malaysia, Sabah, Trus Madi, 1600 m, IV.1997, leg. B. & C. MARTINI, barcode SNB 1166, coll. S. NAUMANN. A red holotype label will be fixed accordingly. The holotype will be deposited in ZMHU.

Paratypes: In total 19 ♂♂, 4 ♀♀ (including allotype) with data: Borneo, East Malaysia, Sabah: 2 ♂♂, same data as holotype, 1 ♂ genitalia no. 524/01 NAUMANN, barcode SNB 1165, coll. S. NAUMANN; 1 ♂, same data as holotype, coll. S. LÖFFLER; 2 ♂♂, entrance to Mt. Kinabalu N.P., 6°00.182'N 116°32.688'E, 1509 m, 19.-28.III.2001, leg. S. LÖFFLER, coll. S. LÖFFLER; 1 ♂, 1 ♀ (allotype), Borneo, Indonesia, Kalimantan Tengah (Central) Province, Mt. Payang, 400-800 m, III.2008, leg. local collector, ♂ genitalia no. 2091/09 NAUMANN, coll. S. NAUMANN; 3 ♂♂, West Malaysia, Cameron Highlands, Tanah Rata, ca. 1500 m, XII.1993-II.1994, leg. WONG TET FATT, 1 ♂ genitalia no. 344/99 NAUMANN, coll. S. NAUMANN; 3 ♂♂, Cameron Highlands, Tanah Rata, 1400-1500 m, XII.2000- V.2001, leg. local collectors, coll. S. LÖFFLER; 1 ♂, Tanah Rata, 1400 m, xii.1995-III.1996, leg. FATT SENG, coll. BROSCHE; 2 ♀♀, Cameron Highlands, Tanah Rata env., 1600 m, XI.2002, leg. local collector, barcode SNB 1162, coll. S. NAUMANN; 1 male, Cameron Highlands, Gunung Brinchang, 2000 m, 19.IX.2001, Bergnebelwald, leg. H. DEUMER & E. GÖRGNER, coll. S. LÖFFLER; 1 ♂, Fraser's Hill, 1300 m, 8.VIII.1991, leg. B. TURLIN, barcode SNB 1161, coll. S. NAUMANN; 1 ♂, Fraser's Hill, 1.-14.III.1999, leg. P. SPONA, coll. S. LÖFFLER; 1 ♀, Kelantan, Gua Musang,

VI.2003, coll. S. LÖFFLER; 1 ♂, Perak [probably mislabelled], II.1993, coll. S. NAUMANN; 2 ♂♂, Perak, Taiping env., 21.IV.1988, trader's material [probably mislabelled], coll. BROSCH. A red allotype and blue paratype labels will be fixed accordingly.

Etymology: *Cricula magnifenestrata* spec. nov. is named after its generally large forewing fenestrum.

Diagnosis: One of the largest *Cricula* species at all; it easily can be determined by its large fore- and hindwing fenestrum and the homogenous ochreous ground colour of the ♂♂, and the large size and the almost missing apical tip in the forewing of the orange ♀♀. In literature it so far was handled as *C. elaezia* J., originating from Borneo and West Malaysia.

Description: ♂ (figs. 70-72), forewing length, measured from basis to apex, 36-42 mm (holotype 41 mm), the wings are broad, almost rectangular at the lower angle, and have a little rounded forewing apex. Length of antennae 6.8-7.4 mm (holotype 7.0 mm), they are of ochre colour. The ground colour on dorsal side varies from homogenous ochreous to little reddish ochre. Head, thorax, abdomen, and wings on dorsal side in ground colour, only the fore- and hindwing postmedian area is somewhat darker or more greyish violet, suffused with grey scales. Markings in dark greyish violet colour. Antemedian line of zigzag form, the prominent almost straight postmedian line is bent a little inward at the lower wing margin. There is always one large fenestrum of 2.0-2.5 mm diameter in the forewing, plus in some specimens a costal dot which in one specimen even bears a small fenestrum. Hindwing with one central fenestrum, ante- and postmedian line touch each other near to the upper wing margin in all Bornean specimens, while in those from West Malaysia both lines are well separated. The outer margin with pinkish white fringes in the fore- and hindwing, the forewing apex has a portion of violet scales. Ventral side of little darker, more intensive colour, and more homogenous, markings less indicated. The antemedian line is much reduced, of greyish violet colour, the postmedian line grey and little undulate, and followed by a row of white scales.

In Borneo occurs also the taxon *C. elaezia* J., which immediately can be separated from *C. magnifenestrata* spec. nov. by being much smaller and of greyish green colour, having a much more falcate forewing apex and different numbers, namely one to three, of forewing fenestra, plus differences in male genitalia structures. While *C. magnifenestrata* spec. nov. so far was recorded on that island only in the northern and central parts, all known records of *C. elaezia* J. originate from South Kalimantan Province.

genitalia (figs. 136, 137): Uncus with two short well sclerotized lateral processes, gnathos slender and trapezoid. The juxta with two lateral very short rounded processes, the sella slender, with two lateral processes which are longer than in other species of the *elaezia*-group. Dorsal process of the valves almost round, shorter than the ventral one which is more sclerotized and not completely rounded. Saccus short and round, the vesica emerging to ventral side from the phallus and without significance for determination inside the *elaezia*-group.

Main differences between different species within this group is the form of the uncus, which e.g. in *C. elaezia* J. (fig. 134: ♂ genitalia no. 2094/09, from West Java; fig. 135: ♂ genitalia no. 2098/09, from South Kalimantan) shows shorter and more acute processes, and details of the juxta and sella.

♀ (figs. 73, 74): It is larger than the ♂♂, has a forewing length of 42-47 mm (allotype 47 mm), rounder wings with an almost rectangular apex which is just a little bent outward, and taller antennae of 8.0 mm (allotype) length. Ground colour is an orange brown, suffused with lots of violet scales the postmedian areas of both fore- and hindwings and around the fenestra, with intensive dark purplish grey markings. The forewing has three large and one very small fenestra which are bordered with greyish violet scales; the hindwing has one central fenestrum. The postmedian band of the forewing is very strong and bent a little outward, ante- and postmedian line of the hindwing are well separated in all specimens, a little wider in those from West Malaysia. The postmedian line is followed by a light violet portion of scales. On ventral side antemedian and median area are lighter than dorsal ground colour, suffused with white scales, the postmedian area again in the ground colour. Markings are similar to the dorsal side, but less indicated, the postmedian line is undulate and much lighter than on dorsal side, and of violet colour.

While in *C. elaezia* J. two colour morphs, either in orange and reddish brown, are known, we so far have only orange ♀♀ of *C. magnifenestrata* spec. nov. in our hands; if this is just a gap of collecting or if all ♀♀ of *C. magnifenestrata* spec. nov. are orange, cannot be clarified for the moment. *C. elaezia* J. ♀♀ are also much smaller, have less separated forewing fenestra, and a very acute apical tip of their forewings.

Cricula baliensis NAUMANN & LÖFFLER spec. nov.

Holotype ♂ (figs. 75, 77): Indonesia, Central Bali, Bedugul Distr., Tamblingan N.P., 8°14' S, 115°8' E, 1200 m, I.-II.2004, leg. S. JAKL, genitalia no. 2096/09 NAUMANN, barcode SNB 1171, coll. S. NAUMANN. A red holotype label will be fixed accordingly. The holotype will be deposited in ZMHU.

Paratypes: In total 33 ♂♂, 6 ♀♀, all from Indonesia, Bali Island, with data: 4 ♂♂, Tabanan District, Bedugul env., ca. 1200 m, V.1998, leg. local collector; genitalia nos. 345/99 & 523/01 NAUMANN, coll. S. NAUMANN; 1 ♂, Lake Tamblingan, II.2003, coll. S. NAUMANN; 24 ♂♂, 5 ♀♀ (including allotype), Central Bali, Bedugul Distr., Tamblingan N.P., 8°14' S, 115°8' E, 1200 m, I.-II.2004, leg. S. JAKL, male genitalia no. 2097/09 NAUMANN, 1 ♀ barcode SNB 1172, coll. S. NAUMANN; 4 ♂♂, 1 ♀, same locality, labelled as II.2004, local collector, received from S. NAUMANN, coll. BROSCH. A red allotype label and blue paratype labels will be fixed accordingly.

Etymology: The species is named after its origin, the Indonesian island of Bali.

Diagnosis: *Cricula baliensis* spec. nov. is nearest related to *C. elaezia* J. which occurs on the islands of Java and Borneo. It is always of reddish ochre to reddish brown colour in the males and intensive reddish brown or orange suffused with lots of reddish violet scales in the ♀♀. ♂♂ have two or three forewing fenestra, a very acute forewing apex with outer tip, and always well separated hindwing ante- and postmedian lines; ♀♀ have up to six forewing fenestra, and also the hindwing ante- and postmedian lines are more separated than in ♀♀ of *C. elaezia* J.

Description: ♂ (figs. 75-77), forewing length, measured from basis to apex, 34-6 mm (holotype 35 mm), the wings are almost rectangular at the lower angle, and have a falcate forewing apex with acute tip. Length of antennae 7.4-7.5 mm (holotype 7.5 mm), they are of ochre colour. The ground colour on dorsal side varies from homogenous reddish ochre to little reddish brown, some ochre specimens even have lots of red scales in their median areas. Head, thorax, abdomen, and wings on dorsal side in ground colour,

only the fore- and hindwing postmedian area is somewhat lighter, suffused with grey scales, marginal parts again in ground colour. Markings in dark grey colour. Antemedian line of zigzag form, fainted, the forewing postmedian line is almost straight, that of the hindwing undulate and followed by a portion of white scales. There are always two or three fenestra in the forewing. Hindwing with one central fenestrum, ante- and postmedian line are well separated from each other. The outer margin with pinkish white fringes in the fore- and hindwing, the forewing apex has a portion of white scales. Ventral side lighter in the antemedian and median areas, suffused with lots of white scales. The antemedian line is almost missing, the forewing postmedian line is straight and of pink colour, that of the hindwing undulate, the postmedian area again in ground colour.

Cricula baliensis **spec. nov.** can be separated from nearby occurring *C. elaezia* J. by its reddish colour (always olive ground colour in *C. elaezia* J.), the well separated hindwing ante- and postmedian lines (confluent or nearly confluent in *C. elaezia* J.), a little more acute forewing apical tip, and details in male genitalia.

genitalia (figs. 138-140): Uncus with two even shorter lateral processes than in *C. elaezia* J., and less indented between those. Gnathos a little more trapezoid, juxta with two short rounded lateral processes, sella long, with two acute tips at its end. Dorsal and ventral process of the valves rounded, the ventral one more sclerotized, sacculus basally well developed, saccus short and round. The vesica rounded, a little longer than in other related species, without any sclerites, and aside of the length of no diagnostic relevance inside the elaezia-group. Again, compared to those genitalia structures, nearby occurring *C. elaezia* J. (fig. 134: ♂ genitalia no. 2094/09, from West Java; fig. 135: ♂ genitalia no. 2098/09, from South Kalimantan) has a deeper indentation between the two processes of the uncus as main difference of the genitalic structures, and a less indented sella. Generally, differences in the whole *elaezia*-group are weak.

♀ (figs. 78-80): It is larger than the ♂♂, has a forewing length of 37-42 mm (allotype 38 mm), rounder wings, the forewing apex with an acute outer tip, and taller antennae of 6.5 mm (allotype) length. Ground colour chestnut brown or dark orange brown, suffused with lots of violet scales the postmedian areas of both fore- and hindwings and around the fenestra, with intensive dark purplish grey markings. The forewing has a row of three large fenestra and one to three additional smaller ones situated more basally. The hindwing has one central fenestrum. The forewing antemedian band is faint, the postmedian band very strong and bent a little outward, ante- and postmedian line of the hindwing are widely separated in all specimens, much wider in those of *C. elaezia* J. The postmedian line is followed by a light violet portion of scales. On ventral side antemedian and median area are much lighter than dorsal ground colour, suffused with white scales, the postmedian area again in the ground colour. Markings are similar to the dorsal side, but less indicated, the postmedian line is undulate and much lighter than on dorsal side, of violet colour.

The known colour morphs of *C. elaezia* J. ♀♀, either in orange and reddish brown, are much less suffused with white and violet scales and look more homogenous. Their forewing apical tip is less pronounced, the additional smaller forewing fenestra are missing or much reduced, and the hindwing ante- and postmedian lines are much nearer to each other than in *C. baliensis* **spec. nov.**

Discussion and notes on other taxa

So far the most complete work on the genus *Cricula* was the thesis of NÄSSIG (1995) who then counted 14 species in total, plus several subspecies. Since this publication some more taxa were described (NÄSSIG & TREADAWAY, 1997; NÄSSIG et al., 1999; BRECHLIN, 2001 & 2004; U. PAUKSTADT & L. H. PAUKSTADT, 2009). During the last 10 years there happened an increasing number of expeditions of European Entomologists to Asia, and access to material collected by local collectors in China, Vietnam, and Laos became much more easier. Thereby lots of material was accumulated and studied, and already then it became clear that there exist much more taxa than believed earlier. Especially the mountain areas of Vietnam, Myanmar and Central China which were less explored before, brought a big lot of new results. Nevertheless, especially in Vietnamese taxa there was always some confusion due to overall similarity in adults and genitalia structures which partly even caused mixed type series of species described during last years (see below). With access to the BOLD project of the University of Guelph, Canada, some problems could be solved, ideas and results only from genitalic studies were confirmed, and finally some classifications of ♀♀ to their according ♂♂ became easier. The grouping proposed by NÄSSIG (1898, 1995) for the genus largely was confirmed, with some few exceptions:

C. hayatiae P. & S. plus the here described *C. maxalorensis* **spec. nov.** are no members of the *trifenestrata*-group but are more allied with *C. luzonica* Jordan, 1909.

C. zubsiana N. and *C. fansipanensis* **spec. nov.** would need to be grouped in a separated group.

C. vietnama NÄSSIG, BRECHLIN, & NAUMANN, 1999, plus the here described *C. schintlmeisteri* **spec. nov.**, *C. pseudandrei* **spec. nov.** and *C. griseorubrescens* **spec. nov.** would need to get a separated “*vietnama*-group”

A further well-separated group is formed by some Chinese and Vietnamese taxa around *C. hainanensis* BRECHLIN, 2004, all taxa described after the publication of NÄSSIG’s revision. Members are: *C. hainanensis* BRECHLIN, *C. australosinica* BRECHLIN, 2004, *C. hoffmanni* **spec. nov.**, *C. sponai* **spec. nov.**, *C. hoabinhnguyeni* **spec. nov.**, and *C. variabilis* **spec. nov.**

Short notes on the following groups or taxa would be necessary as well:

The *elaezia*-group. With the here described three species the following taxa can be counted for the group:

C. elaezia JORDAN, 1909, known from the Indonesian Islands of Java and Southern Borneo.

C. sumatrensis Jordan, 1939, from Sumatra; NÄSSIG (1989, 1995) placed this species within the *andrei*-group, but recent barcoding results showed the near relationship with all taxa of the *elaezia*-group (fig. 141: ♂ genitalia no. 2100/09 NAUMANN).

C. quinquefenestrata ROEPKE, 1940, known from the Island of Sulawesi and nearby Tanahjampea (NAUMANN, 1995, 2000).

C. mindanaensis NÄSSIG & TREADAWAY, 1997, from the Philippine Island of Mindanao.

C. palawanica BRECHLIN, 2001, from the Philippine Island of Palawan.

C. pelengensis PAUKSTADT & PAUKSTADT, 2009 from Indonesia, Banggai Archipelago, Peleng Island. If the holotype really came from that island or from nearby Sulawesi (or even Java?) remains doubtful. During the time when it was collected, some more material appeared on the market which was labelled to originate from Peleng Island, but which was obviously mislabelled typical Sulawesi material. Some further material with same data in our hands currently is studied.

C. separata **spec. nov.**, known only from Sumatra.

C. magnifenestrata **spec. nov.**, known from Northern and central Borneo and mountain areas of Peninsular Malaysia. The populati-

on could be separated from the Bornean specimens by some characters on subspecific niveau which we do not intend to do. *C. baliensis* spec. nov. from Bali Island, a near easternmost relative of *C. elaezia* J. With separation of *C. elaezia* J. into different taxa it becomes clear that some of the recent authors published thereby some misidentifications. We cite here only the major works which contain figures, to apply the actually correct names to their figures: HOLLOWAY (1981): *C. elaezia* J. mentioned on p. 122 and figured on pl. 18 left hand is *C. magnifeneistrata* spec. nov.; LAMPE (1984): The specimen figured on pl. 8, fig. 1 is *C. magnifeneistrata* spec. nov. instead of *C. trifeneistrata* (H.); HOLLOWAY (1987): *C. elaezia* J. mentioned on p. 110 and figured on pl. 10, fig. 2 in fact is *C. magnifeneistrata* spec. nov. NÄSSIG et al. (1996a & b): ♂♂ specimens figured on pl. 7, pl. 8, fig. 43 and mentioned on p. 122 as *C. elaezia* J. are in fact *C. separata* spec. nov. The identity of the two ♀♀ on pl. 8, figs. 44 & 45, - *C. separata* spec. nov. or *C. sumatrensis* J. - should be cleared by barcoding experiments. D'ABRERA (1998): Determinations can be confirmed. PAUKSTADT & PAUKSTADT (2004): *C. elaezia* J. mentioned on p. 184 in fact is *C. magnifeneistrata* spec. nov. BECK & NÄSSIG (2008) mentioned populations of *C. elaezia* J. from Borneo already as *C. elaezia* ssp.; they in fact used material of *C. magnifeneistrata* spec. nov.

With the descriptions above now 9 species in total are known for China: *C. trifeneistrata* (H.), *C. jordani* BR., *C. zubsiana* N., *C. flavoglana* ZHU & WANG, 1993, *C. vietnama* N. et al., *C. hainanensis* B., *C. australosinica* B., *C. pseudandrei* spec. nov., and *C. variabilis* spec. nov. *C. flavoglana* Z. & W., described from Yunnan, Yungfeng, 20.v.1980, from genitalia clearly is a member of the *trifeneistrata*-group (fig. 142, ♂ genitalia no. 400/99). A photo of the ♂ holotype from the collection of the Institute for Zoology, Academia Sinica, in Beijing makes a determination easier than the weak figure in ZHU & WANG (1996, pl. IX, fig. 6); a very similar specimen from China, Yunnan/Guangxi borderline is figured here to show the identity of *C. flavoglana* Z. & W. (figs. 81, 82). DNA barcoding experiments brought the identity of the according ♀. Interestingly, that ♀ (figs. 83, 84, plus other conspecific ones in coll. S. NAUMANN, plus the allotype in coll. BRECHLIN, figured in his description as fig. 4) are paratypes of *C. australosinica* B. (♂ paratype see figs. 85, 86; ♂ genitalia fig. 145, genitalia no. 985/04) which thereby has a mixed type series. Obviously the ♀♀ were wrongly classified with this new taxon.

C. hainanensis B. is not restricted to Hainan Island; as told to the author of this taxon before his publication of 2004, it also occurs in mainland China, Jiangxi and Fujian provinces (plus probably further ones). Not all ♂♂ specimens have the large dark forewing patches as shown by BRECHLIN for the holotype. To give some information about the variability of that species, also a ♂ paratype from Hainan without those markings (fig. 88), a ♂ from Jiangxi/Fujian borderline (figs. 89, 90), and a ♀ paratype (figs. 91, 92, figured for the first time) are figured, all from coll. S. NAUMANN. ♂ genitalia structures of specimens from Hainan (fig. 143, genitalia no. 986/04) and Jiangxi (fig. 144, genitalia no. 987/04) show conspecificity.

Specimens of *C. vietnama* N. et al. (figs. 93-95; ♂ genitalia fig. 146, genitalia no. 956/96 NÄSSIG = 964/03) are shown here for comparison to those taxa described from Vietnam and Southern China. This taxon was meanwhile also recorded from the Chinese province of Guangxi and proved by DNA sequencing. The identity of the ♀ figured in the original description of *C. vietnama* N. et al. is somewhat uncertain. From morphology and size it could more possibly be a representative of *C. schintlmeisteri* spec. nov. DNA barcoding could bring here more results. Currently we have no access to this specimen stored in the collections of the Czech Academy of Sciences.

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Fig. 1-13: *Cricula aungsansuukyiæ* spec. nov.

Fig. 1, 7: Holotype ♂, dorsal- & ventral view, Myanmar, Sagaing State (N), E Ngalong Ga, SSE Kumki (India), Tarung Hka river fork, 1 km E Hkasi village, 1000 m, 27°7.875'N 96°53.105'E, 10.V.2008, coll. S. NAUMANN. **Fig. 2:** Paratype ♂, dorsal view, Myanmar (NE), Kachin State, Chudu Razi Hills, 30 miles E Kawnlangphu, 1500 m, 25.IV.2008, leg. local collector, coll. S. NAUMANN. **Fig. 3, 8:** Paratype ♂, dorsal- & ventral view, Myanmar (NE), Kachin State, Chinese borderline, Kanphant village, N 26°08'51.2''N 98°34'58.2''E, 1642 m, 29.V.2006 at village lights, leg. S. NAUMANN, S. LÖFFLER, & M. LANGER, coll. S. NAUMANN. **Fig. 4:** Paratype ♂, dorsal view, Myanmar (N), [Kachin State], Putao, 900 m, 27°21'N 97°24'E, 27.IV.1998, leg. S. MURZIN & V. SINIAEV, coll. S. NAUMANN. **Fig. 5:** Paratype ♂, dorsal view, India (NE), Arunachal Pradesh, Dist. Along, near Rapum, 2000m, N 28.53176° E 94.24941°, 9.-11.V.2009, leg. G. BRETSCHNEIDER, coll. S. LÖFFLER. **Fig. 6, 9:** Paratype ♂, dorsal- & ventral view India (NE), Arunachal Pradesh, Dist. Along, near Rapum, 2000m, N 28.53176° E 94.24941°, 9.-11.V.2009, leg. G. BRETSCHNEIDER, coll. S. LÖFFLER. **Fig. 10, 12:** Allotype ♀, dorsal- & ventral view, Myanmar (N), [Kachin State], Zi Yar Dam, 65 km NW Putao, 1250 m, 27°50'N 97°01'E, 18.-21.V.1998, leg. S. MURZIN & V. SINIAEV, barcode SNB 1131, coll. S. NAUMANN. **Fig. 11, 13:** Paratype ♀, dorsal- & ventral view, India (NE), Arunachal Pradesh, Dist. Monigong, near Pidi, 1650m, N 28.37601° E 94.21316°, 13.V.2009, leg. G. BRETSCHNEIDER, coll. S. LÖFFLER. **Fig. 14, 15:** *Cricula fulcata* spec. nov., holotype ♂, dorsal- & ventral view, Vietnam (S), Gebirgspass Phu Mi, Gemeinde Phu Son, Kreis Lam Ha, Lam Dong, 27.-29.IV.2003, leg. BINH, coll. S. LÖFFLER.



Fig. 16-19: *Cricula frederkingi* spec. nov., (16, 17) holotype ♂, dorsal- & ventral view, Vietnam (C), Provinz Thua Thien – Hue, Kreis A Luoi, Gemeinde A Rong, Dorf Khe Cha Lenh, 809 m, Naturschutzgebiet, Regenwald, N 16°05. 374' E 107°27.559', 12./13.VIII.2004, leg. S. LÖFFLER, P. SPONA & T. FREDERKING, coll. S. LÖFFLER. (18, 19) Allotype ♀, dorsal- & ventral view, Central Vietnam, Thua Thien – Hue Province, with same data as holotype, coll. S. LÖFFLER.

Fig. 20-23: *Cricula maxalorensis* spec. nov., (20, 22) holotype ♂, dorsal- & ventral view, Indonesia, Nusa Tenggara Timur Province, Alor Island, 5 km NW Kalabahi, 150 m, 1.-8.III.2006, leg. S. JAKL, coll. S. NAUMANN. (21, 23) Paratype ♂, dorsal- & ventral view, Indonesia, Nusa Tenggara Timur Province, Pantar Island, Tanah Labang env., 350 m, 9.-21.III.2006, leg. S. JAKL, coll. S. NAUMANN.

Fig. 24, 25: *Cricula schintlmeisteri* spec. nov., holotype ♀, dorsal- & ventral view, Vietnam (N), Lao Cai Province, Sa Pa Cat-Cat Frontier Base Camp, 22°19'36,4"N 103°49'46,1"E, 1250 m, 23.VIII.1998, leg. A. KUN, coll. S. NAUMANN.

Fig. 26-30: *Cricula pseudandrei* spec. nov., (26, 29) holotype ♂, dorsal view, PR China, Guangxi province, Zhongshan County, Lianshan, 1600 m, near Liangjiang, Guangdong borderline, III.2005, leg. Yi et al., coll. S. NAUMANN. (27, 30) Paratype ♂, dorsal- & ventral view, PR China, Fujian Province, Shangang, Longda, IV.1998, leg. Li, coll. S. NAUMANN. (28) Paratype ♂, dorsal view, PR China, Hunan Province (E), near Jiangxi borderline, Baimianshan, 1700 m, II.2004, leg. YING et al., coll. S. NAUMANN.

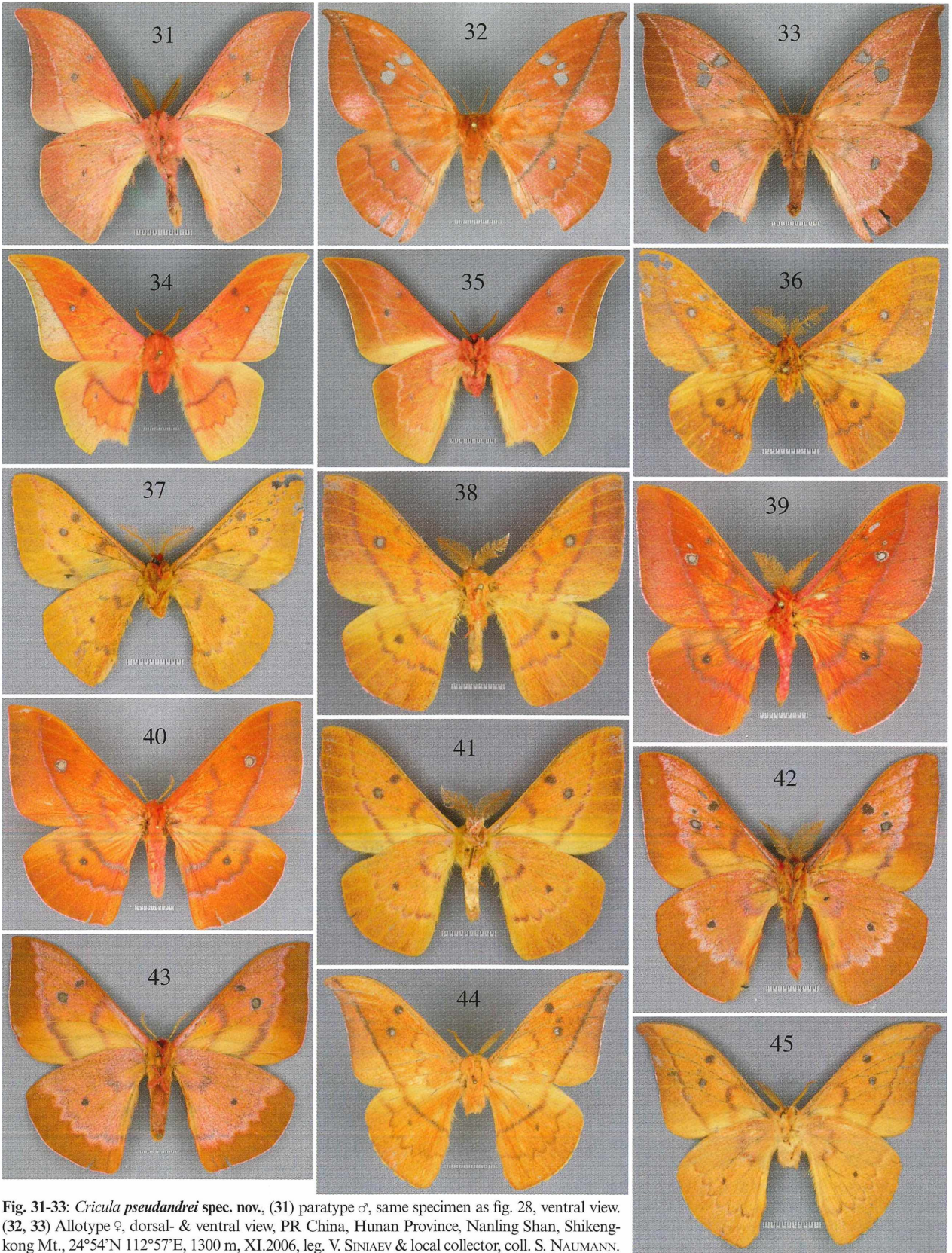


Fig. 31-33: *Cricula pseudandrei* spec. nov., (31) paratype ♂, same specimen as fig. 28, ventral view. (32, 33) Allotype ♀, dorsal- & ventral view, PR China, Hunan Province, Nanling Shan, Shikengkong Mt., 24°54'N 112°57'E, 1300 m, XI.2006, leg. V. SINIAEV & local collector, coll. S. NAUMANN. **Fig. 34, 35:** *Cricula griseorubrescens* spec. nov., holotype ♂, dorsal- & ventral view, Vietnam (C), Provinz Thua Thien – Hue, Kreis A Luoi, Gemeinde A Rong, Dorf Khe Cha Lenh, 809 m, Naturschutzgebiet, Regenwald, N 16°05.374' E 107°27.559', 12./13.VIII.2004, leg. S. LÖFFLER, P. SPONA & T. FREDERKING, coll. S. LÖFFLER. **Fig. 36, 37:** *Cricula fansipanensis* spec. nov., holotype ♂, dorsal- & ventral view, Vietnam (N), Huanglingshan, Fan Si Pan Mt., Shaba [Chapa?], 3000m, VIII.2003, leg. Tu, coll. S. LÖFFLER. **Fig. 38-43:** *Cricula zubsiana* NÄSSIG, 1985, (38, 41) ♂ dorsal view, PR China, Yunnan, Sanfengshan, 2897 m, VII.2000, coll. S. LÖFFLER. (39, 42) ♂ dorsal & ventral view, Myanmar, Kachin State, Chudu Razi Mt. Range, Kawlanghpui, VII.2006, coll. S. NAUMANN. (40, 43) ♀ dorsal & ventral view, Myanmar, Kachin State, Chudu Razi Mt. Range, Kawlanghpui, VII.2006, coll. S. NAUMANN. **Fig. 44, 45:** *Cricula hoffmanni* spec. nov., holotype ♂, dorsal & ventral view, Vietnam (S), Prov. Lam Dong, Bhu Son, Lam Ha, Regenwald, 1320m, N 11°55.079' E 108°10.711', 10.-11.VII.2002, leg. S. LÖFFLER & M. HOFFMANN, coll. S. LÖFFLER.



Fig. 46-49: *Cricula sponai* spec. nov., (46, 47) holotype ♂, dorsal view & ventral view, Vietnam (C), Provinz Thua Thien – Hue, Kreis A Luoi, Gemeinde A Rong, Dorf Khe Cha Lenh, 809 m, Naturschutzgebiet, Regenwald, N 16°05.374' E 107° 27.559', 12./13.VIII.2004, leg. S. LÖFFLER, P. SPONA & T. FREDERKING, coll. S. LÖFFLER. (48, 49) Allotype ♀, dorsal & ventral view, same data as holotype.

Fig. 50: *Cricula agria* JORDAN, 1909, ♂ dorsal view, India (S), Kerala, Peryar, Kumili, 16.X.1997, leg. K. WERNER, coll. S. NAUMANN.

Fig. 51-57: *Cricula hoabinhnguyeni* spec. nov., (51, 54) holotype ♂, dorsal view, Vietnam (N), Banh Trach, ca. 5 km from Ba Be to Cao Bang, 26.XI.2001, leg. HOA BINH NGUYEN, coll. S. LÖFFLER. (52) Paratype ♂, dorsal view, Vietnam (N), Eingang zum Ba Be Lake N.P., 25.XII.2001, leg. T. IHLE, coll. S. LÖFFLER. (53) paratype ♂, dorsal view, Vietnam (N), Provinz Cao Bang, Ba Be, Primärwald, 12. & 13.XI.2002, LF, leg. M. HOFFMANN, coll. S. LÖFFLER. (55, 57) Allotype ♀, dorsal & ventral view, Vietnam (N), Umg. Bau Pieng, Cao Chi, Ba Be Lake Nationalpark, 1450 m, 13.X.1999, leg. & coll. S. LÖFFLER. (56) Paratype ♀, dorsal view, same data as fig. 55.

Fig. 58-60: *Cricula variabilis* spec. nov., (58, 62) holotype ♂, dorsal view, PR China, Guangxi Province, Dayao Shan, Jinxiu, 24°07'N 110°14'E, 1700 m, 15.-20.XI.2006, leg. V. SINIAEV, coll. S. NAUMANN. (59, 60, 63) Fig. 59: Paratypes ♂♂, dorsal view, same data as holotype.



Fig. 61-65: *Cricula variabilis* spec. nov., (61) paratype ♂, dorsal view, same data as holotype. (62) Holotype ♂, same specimen as fig. 58, ventral view. (63) Paratype ♂, same specimen as fig. 59, ventral view. (64, 65) Allotype ♀, dorsal & ventral view, same data as holotype.

Fig. 66-69: *Cricula separata* spec. nov., (66, 67) holotype ♂, dorsal & ventral view, Indonesia, West Sumatra, Mt. Sanggul, 1250-1450 m, VI-VII.2007, leg. S. JAKL, coll. S. NAUMANN. (68, 69) Allotype ♀, dorsal & ventral view, Indonesia, West Sumatra, Mt. Talang, 1500-1700 m, VI.2006, leg. S. JAKL, coll. S. NAUMANN.

Fig. 70-74: *Cricula magnifenestrata* spec. nov., (70, 72) holotype ♂, dorsal view, Malaysia, Sabah, Trus Madi, 1600 m, IV.1997, leg. B. & C. MARTINI, coll. S. NAUMANN. (71) Paratype ♂, dorsal view, Borneo, Indonesia, Kalimantan Tengah (Central) Province, Mt. Payang, 400-800 m, III.2008, leg. local collector, coll. S. NAUMANN. (73, 74) Allotype ♀, dorsal & ventral view, Borneo, Indonesia, Kalimantan Tengah (Central) Province, Mt. Payang, 400-800 m, III.2008, leg. local collector, coll. S. NAUMANN.

Fig. 75: *Cricula baliensis* spec. nov., holotype ♂, dorsal view, Indonesia, Central Bali, Bedugul Distr., Tamblingan N.P., 8°14' S, 115°8' E, 1200 m, I-II.2004, leg. S. JAKL, coll. S. NAUMANN.



Fig. 76-80: *Cricula baliensis* spec. nov., (76) paratype ♂, dorsal view, same data as holotype. (77) Holotype ♂, same specimen as fig. 75, ventral view. (78, 80) Allotype ♀, dorsal & ventral view, same data as holotype. (79) Paratype ♀, dorsal view, same data as holotype.
Fig. 81-84: *Cricula flavoglenea* ZHU & WANG, 1993, (81, 82) ♂ dorsal & ventral view, PR China, Yunnan/Guangxi borderline, Laogongshan, Xiling, 1800 m, VI.2002, coll. S. NAUMANN. (83, 84) ♀ dorsal & ventral view, PR China, SE Yunnan, Maguan env., Suiyuanqing, 2500 m, ca. 23°00'N 104°20'E, VIII.2000, leg. TU, at the same time being paratype of *C. australosinica* BRECHLIN, 2004, coll. S. NAUMANN.
Fig. 85, 86: *Cricula australosinica* BRECHLIN, 2004, paratype ♂, dorsal & ventral view, PR China, Yunnan (E), Honghe, Wulao Feng, 2500 m, VII.2003, leg. LI et al., coll. S. NAUMANN.
Fig. 87-90: *Cricula hainanensis* BRECHLIN, 2004, (87, 88) paratypes ♂♂, dorsal view, PR China, Hainan, Wujishan Nature Reserve, near hostel of the office, 2.-9.IV.2001, leg. SHEN HORN YEN, coll. S. NAUMANN. (89, 90) ♂♂ dorsal view, PR China, Jiangxi/Fujian borderline, Wuyi Shan, 50 km SE Yingtan, 27°56'N 117°25'E, 1600 m, VI./VII.2002, leg. V. SINIAEV & local collector, coll. S. NAUMANN.

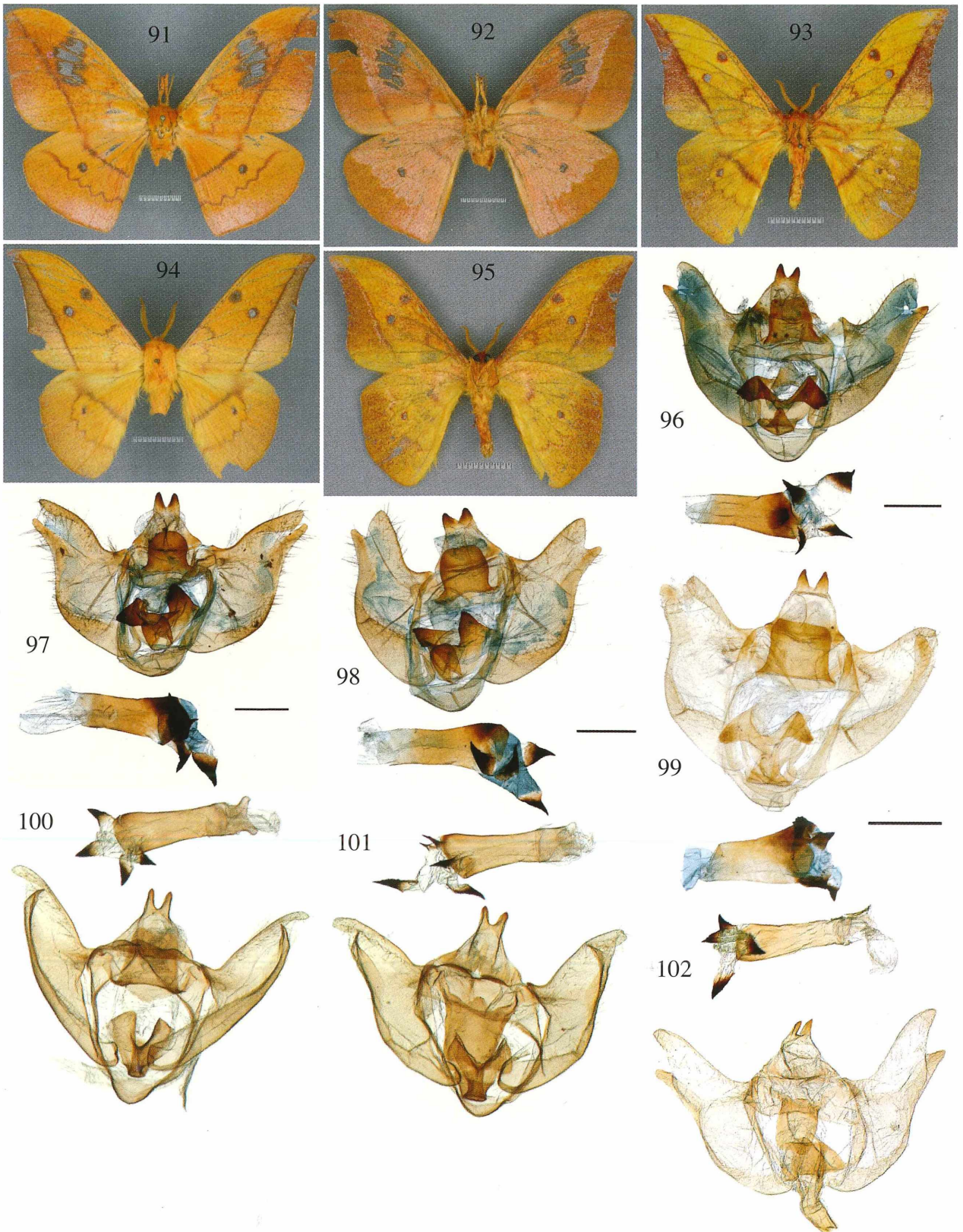


Fig. 91, 92: *Cricula hainanensis* BRECHLIN, 2004., paratype ♀, dorsal & ventral view, PR China, Hainan, Wuzhi Mt., 1600 m, VI.1998, leg. WANG, coll. S. NAUMANN.

Fig. 93-95: *Cricula vietnama* NÄSSIG, BRECHLIN & NAUMANN, 1999, (93, 95) paratype ♂, dorsal view, Vietnam (N), Mt. Fa Si Pan N-Seite, Chapa (=Sapa), 1600 m, 22°17'N 103°44'E, prim. Urwald, 20.-30.IV.1995, leg. SINIAEV & einheim. Sammler, coll. S. NAUMANN; figured in D'ABRERA (1998: 54) as *Cricula* ?sp. (94) Paratype ♂, dorsal view, Vietnam (N), Tam Dao, 60 km NW Hanoi, 21°34'N 105°20'E, 950 m, IV.1995, leg. V. SINIAEV, coll. S. NAUMANN.

Fig. 96-99: *Cricula aungsansuukyaiae* spec. nov., holotype ♂, Myanmar, Sagaing State, ♂ genitalia no. 2108/09. (97) Paratype ♂, Myanmar, Kachin State, Chinese borderline, male genitalia no. 2107/09. (98) Paratype ♂, Myanmar, Kachin State, Putao, ♂ genitalia no. 2109/09. (99) Paratype ♂, India (NE), Arunachal Pradesh, ♂ genitalia no. 2051/09.

Fig. 100, 101: *Cricula falcata* spec. nov., (100) holotype ♂, Vietnam (S), Lam Ha, Lam Dong, male genitalia no. 989/04. (101) Paratype ♂, Vietnam (S), Lam Dong, ca. 19 km Di Linh – Phan Thien, ♂ genitalia no. 815/02.

Fig. 102: *Cricula frederkingi* spec. nov., holotype ♂, Vietnam (C), Thua Thien – Hue, A Luoi, ♂ genitalia 1135/05.

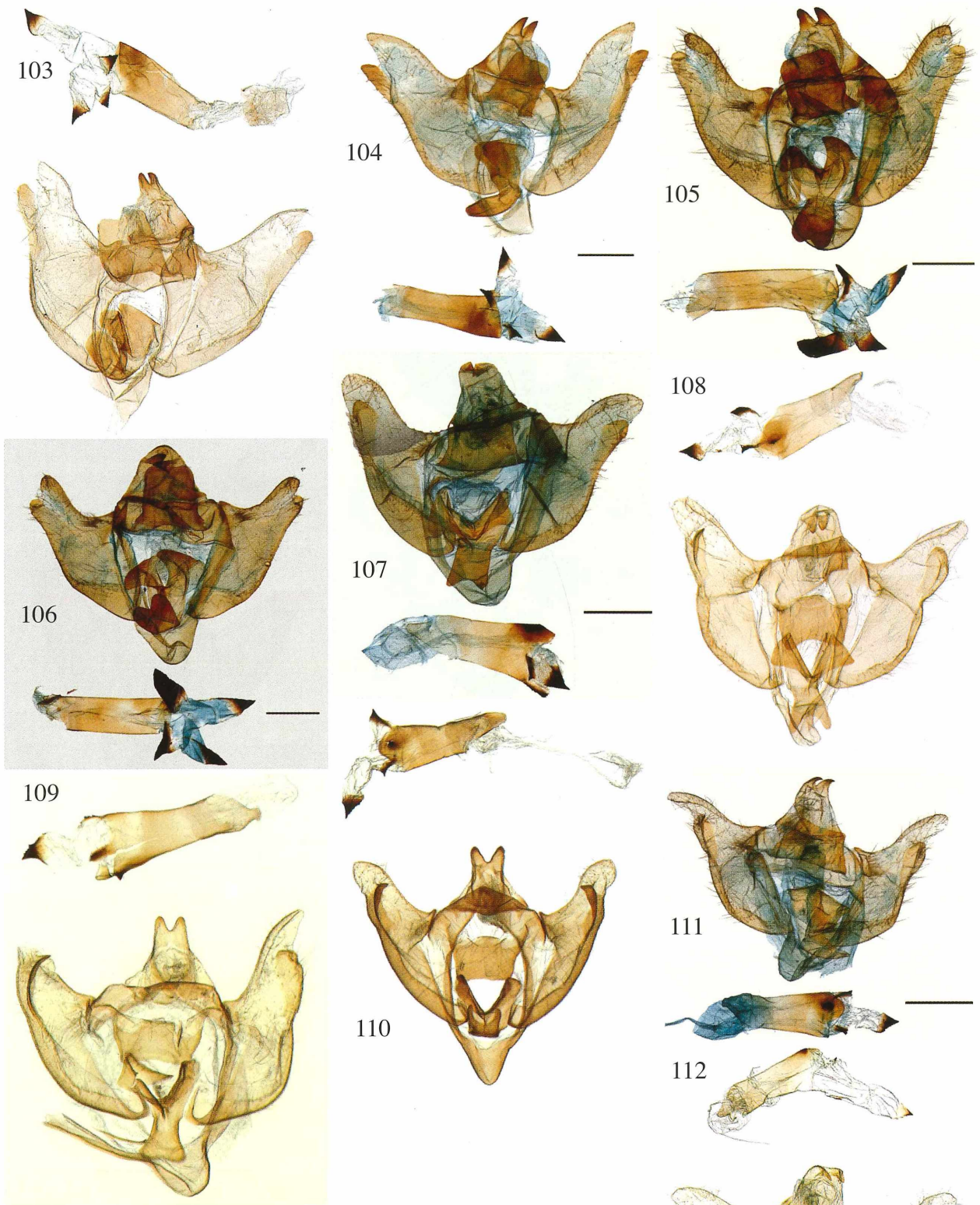


Fig. 103, 104: *Cricula frederkingi* spec. nov., paratype, s ♂♂ Central Vietnam, Thua Thien – Hue, ♂ genitalia no. 1119/05 & 2086/09.

Fig. 105, 106: *Cricula maxalorensis* spec. nov., (105) holotype ♂, Indonesia, Nusa Tenggara Timur Province, Alor Island, ♂ genitalia no. 2102/09. (106) paratype ♂, Indonesia, Nusa Tenggara Timur Province, Pantar Island, ♂ genitalia no. 2101/09.

Fig. 107–111: *Cricula pseudandrei* spec. nov., (107) holotype ♂, PR China, Guangxi province, Zhongshan County, Lianshan, ♂ genitalia no. 2103/09. (108) Paratype ♂, PR China, Guangdong province, Shikangkong, Yuyuan, ♂ genitalia no. 604/01. (109) Paratype ♂, PR China, Fujian province, Shangang, Longda, ♂ genitalia no. 1207/98 NÄSSIG = 965/03. (110) Paratype ♂, PR China, Guangxi province, E. Yunnan borderline, Laogongshan Mt., Xiling, ♂ genitalia no. 1000/04. (111) Paratype ♂, PR China, Hunan province, Nanling Shan, Shikengkong Mt., ♂ genitalia no. 2104/09.

Fig. 112: *Cricula griseorubescens* spec. nov., holotype ♂, Vietnam (C), Thua Thien – Hue, A Luoi, ♂ genitalia no. 1121/05.

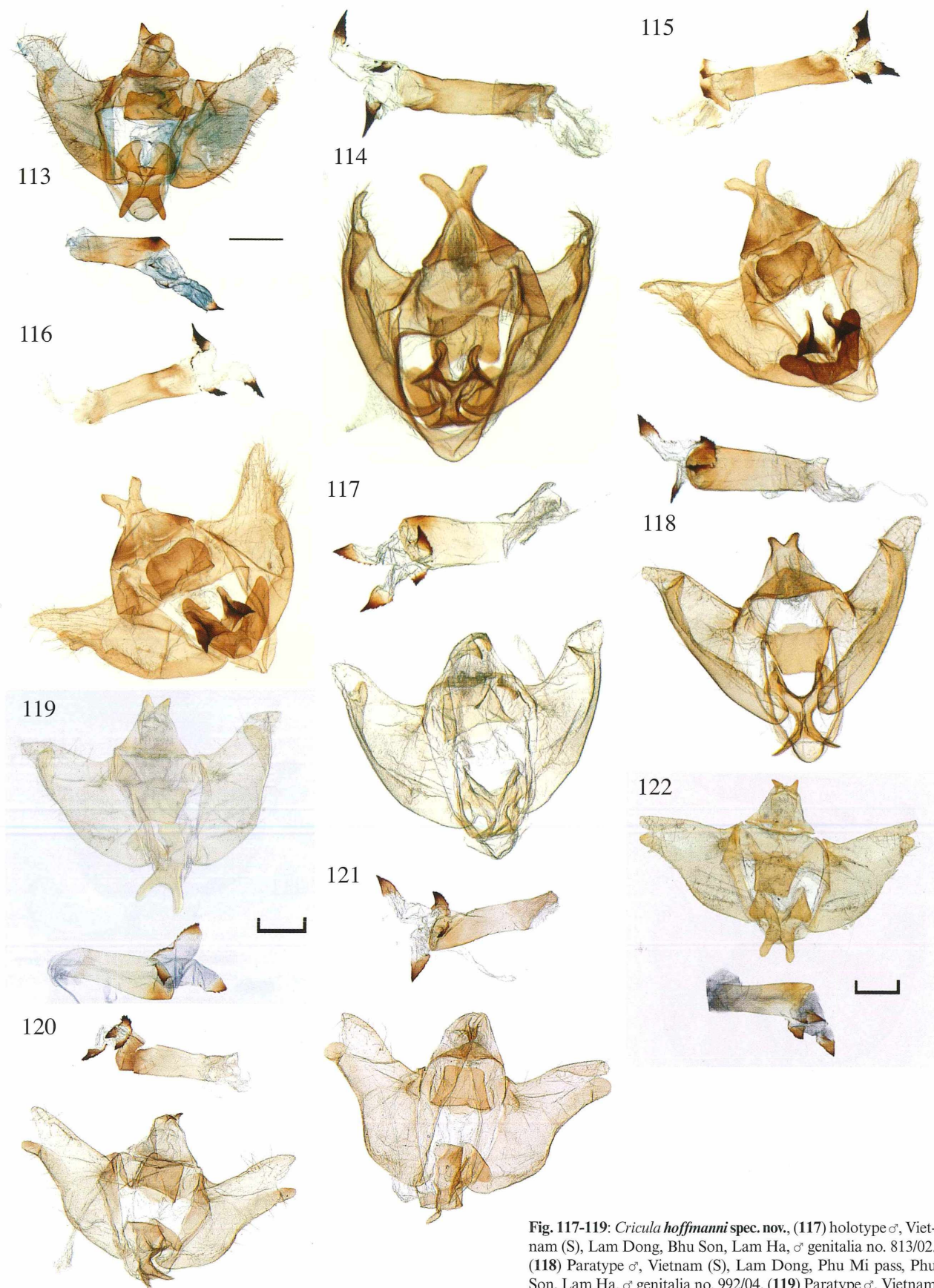


Fig. 113: *Cricula griseorubescens* spec. nov., paratype ♂, Vietnam (C), Thua Thien – Hue, A Luoi, ♂ genitalia no. 2106/09.

Fig. 114: *Cricula fansipanensis* spec. nov., holotype ♂, Vietnam (N), Huanglingshan, Fan Si Pan Mt., Shaba [Chapa ?], ♂ genitalia no. 994/04.

Fig. 115, 116: *Cricula Cricula zubsiana* NÄSSIG, 1985, PR China, Yunnan province (NW), Baimaxue Mt., Dexin env., ♂♂ genitalia no. 370/99, no. 371/99.

Fig. 117-119: *Cricula hoffmanni* spec. nov., (117) holotype ♂, Vietnam (S), Lam Dong, Bhu Son, Lam Ha, ♂ genitalia no. 813/02. (118) Paratype ♂, Vietnam (S), Lam Dong, Phu Mi pass, Phu Son, Lam Ha, ♂ genitalia no. 992/04. (119) Paratype ♂, Vietnam (S), Lam Dong, Bhu Son, Lam Ha, ♂ genitalia no. 1378/05.

Fig. 120-122: *Cricula sponai* spec. nov., (120) holotype ♂, Vietnam (C), Thua Thien – Hue, A Luoi, A Rong, ♂ genitalia no. 1134/05. (121) Paratype ♂, Vietnam (C), Thua Thien – Hue, A Luoi, A Rong, ♂ genitalia no. 1118/05. (122) Paratype ♂, Vietnam (C), Thua Thien – Hue, A Luoi, A Rong, ♂ genitalia no. 1379/05.

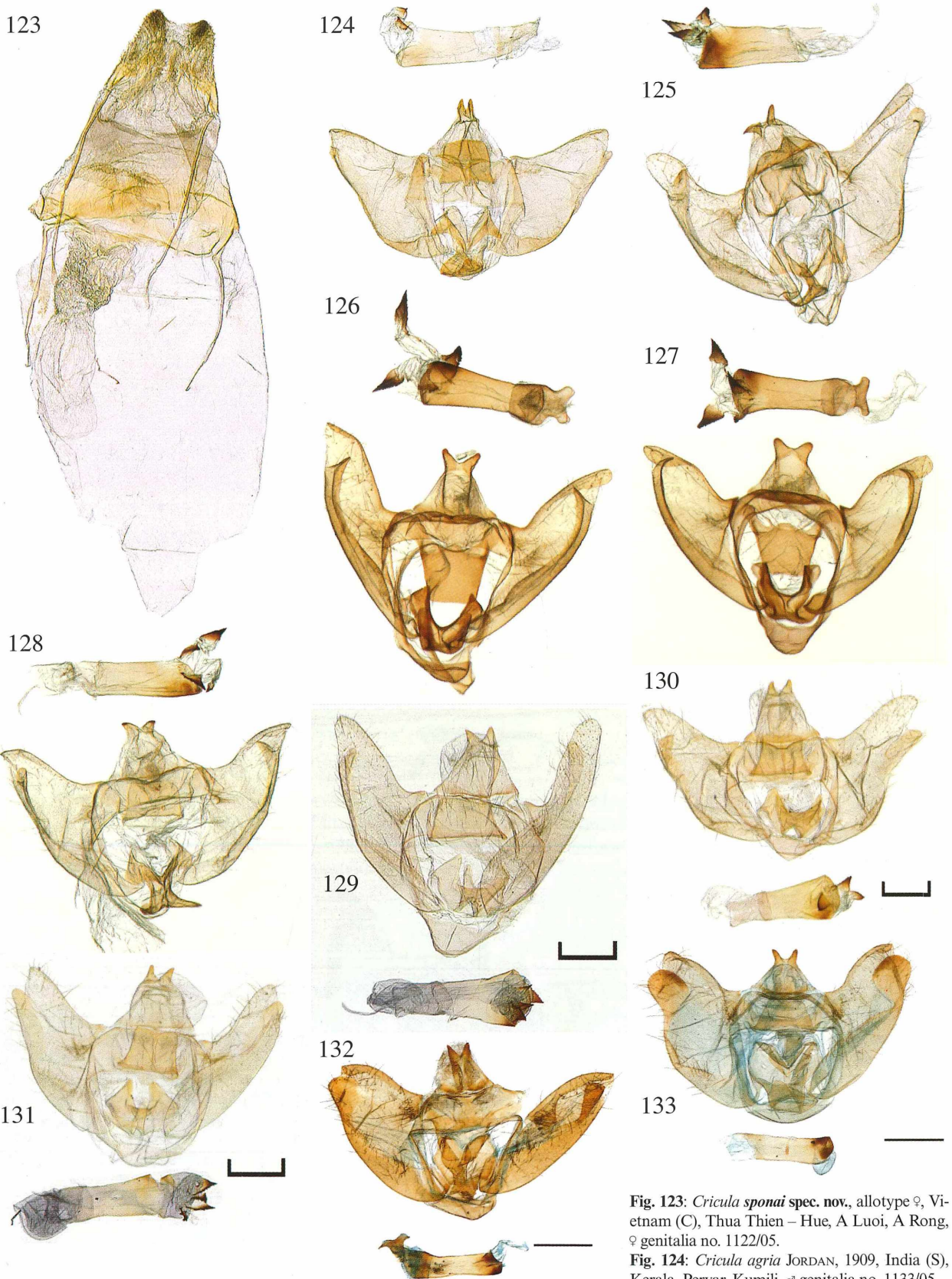


Fig. 123: *Cricula sponai* spec. nov., allotype ♀, Vietnam (C), Thua Thien – Hue, A Luoi, A Rong, ♀ genitalia no. 1122/05.

Fig. 124: *Cricula agria* JORDAN, 1909, India (S), Kerala, Peryar, Kumili, ♂ genitalia no. 1133/05.

Fig. 125-128: *Cricula hoabinhnguyeni* spec. nov.,

(125) holotype ♂, Vietnam (N), Binh Trach, ca. 5 km from Ba Be to Cao Bang, ♂ genitalia no. 647/02. (126): Paratype ♂, Vietnam (N), Umg. Bau Pieng, Cao Chi, Ba Be Lake N.P., ♂ genitalia no. 998/04. (127): Paratype ♂, Vietnam (N), Umg. Bau Pieng, Cao Chi, Ba Be Lake N.P., ♂ genitalia no. 996/04. (128): Paratype ♂, Vietnam (N), Eingang zum Ba Be Lake N.P., ♂ genitalia no. 646/02.

Fig. 129-131: *Cricula variabilis* spec. nov., (129) holotype ♂, PR China, Guangxi Province, Dayao Shan, Jinxiu, male genitalia no. 1583/07. (130) Paratype ♂, PR China, Guangxi Province, Dayao Shan, Jinxiu, ♂ genitalia no. 1582/07. (131) Paratype ♂, PR China, Guangxi Province, Dayao Shan, Jinxiu, ♂ genitalia no. 1584/07.

Fig. 132, 133: *Cricula separata* spec. nov., (132) paratype ♂, Indonesia, West Sumatra, Mt. Sanggul, ♂ genitalia no. 2093/09. (133) Paratype ♂, Indo-

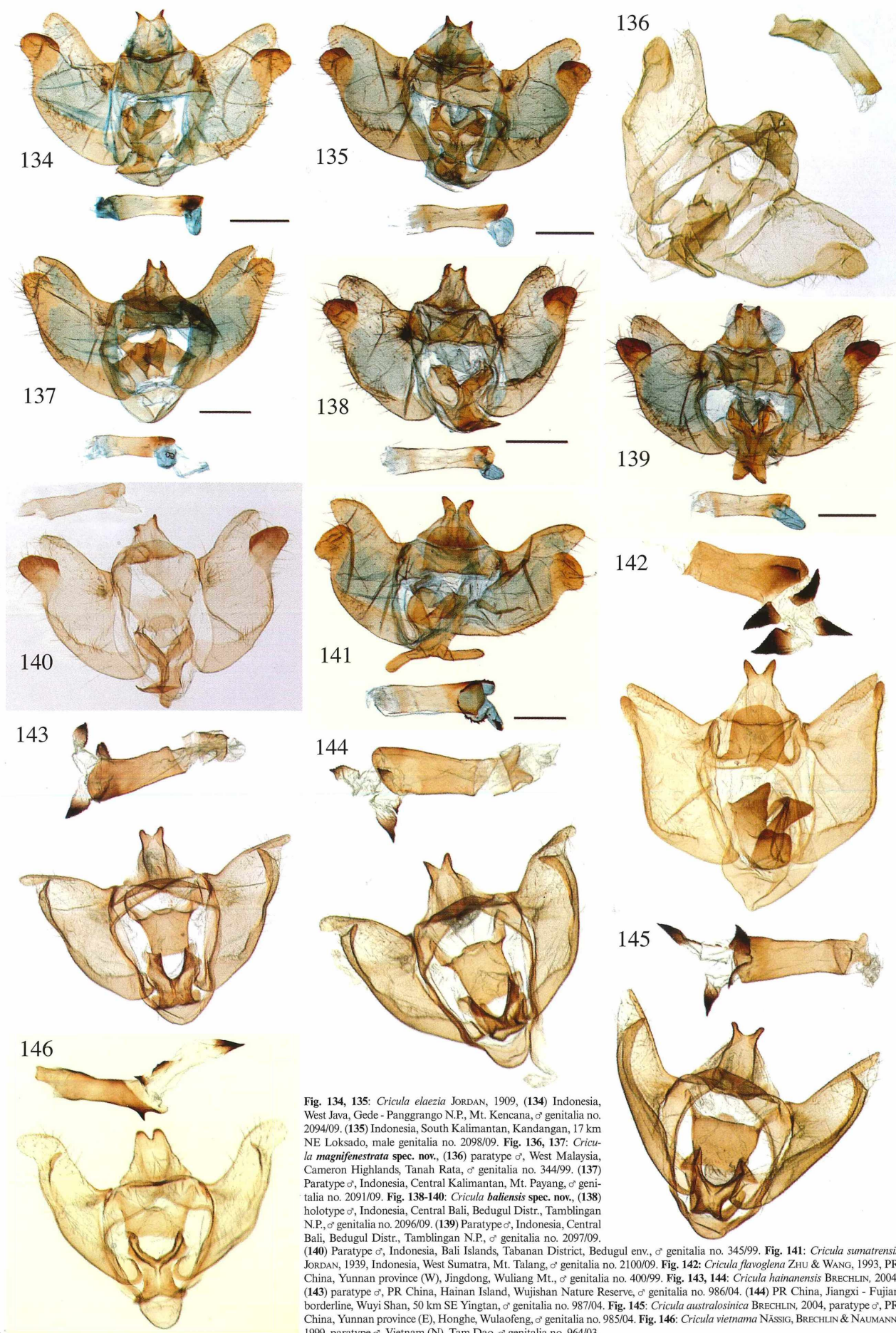


Fig. 134, 135: *Cricula elaezia* JORDAN, 1909, (134) Indonesia, West Java, Gede - Panggrango N.P., Mt. Kencana, ♂ genitalia no. 2094/09. (135) Indonesia, South Kalimantan, Kandangan, 17 km NE Loksado, male genitalia no. 2098/09. Fig. 136, 137: *Cricula magnifenestrata* spec. nov., (136) paratype ♂, West Malaysia, Cameron Highlands, Tanah Rata, ♂ genitalia no. 344/99. (137) Paratype ♂, Indonesia, Central Kalimantan, Mt. Payang, ♂ genitalia no. 2091/09. Fig. 138-140: *Cricula baliensis* spec. nov., (138) holotype ♂, Indonesia, Central Bali, Bedugul Distr., Tamblingan N.P., ♂ genitalia no. 2096/09. (139) Paratype ♂, Indonesia, Central Bali, Bedugul Distr., Tamblingan N.P., ♂ genitalia no. 2097/09. (140) Paratype ♂, Indonesia, Bali Islands, Tabanan District, Bedugul env., ♂ genitalia no. 345/99. Fig. 141: *Cricula sumatrensis* JORDAN, 1939, Indonesia, West Sumatra, Mt. Talang, ♂ genitalia no. 2100/09. Fig. 142: *Cricula flavoglana* ZHU & WANG, 1993, PR China, Yunnan province (W), Jingdong, Wuliang Mt., ♂ genitalia no. 400/99. Fig. 143, 144: *Cricula hainanensis* BRECHLIN, 2004, (143) paratype ♂, PR China, Hainan Island, Wujishan Nature Reserve, ♂ genitalia no. 986/04. (144) PR China, Jiangxi - Fujian borderline, Wuyi Shan, 50 km SE Yingtan, ♂ genitalia no. 987/04. Fig. 145: *Cricula australosinica* BRECHLIN, 2004, paratype ♂, PR China, Yunnan province (E), Honghe, Wulaofeng, ♂ genitalia no. 985/04. Fig. 146: *Cricula vietnama* NÄSSIG, BRECHLIN & NAUMANN, 1999, paratype ♂, Vietnam (N), Tam Dao, ♂ genitalia no. 964/03.

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