A Preliminary Annotated Checklist of the Indonesian Wild Silkmoths – Part X. The genus *Cricula* WALKER, 1855 – Part 3, the *elaezia*-group (Lepidoptera: Saturniidae: Saturniinae)

Ulrich PAUKSTADT & Laela Hayati PAUKSTADT

Key words: Lepidoptera, Saturniidae, Saturniini, wild silkmoth, *Cricula, elaezia-*group, annotated checklist, Indonesia, Oriental fauna.

A Preliminary Annotated Checklist of the Indonesian Wild Silkmoths – Part X. The genus *Cricula* WALKER, 1855 – Part 3, the *elaezia*-group (Lepidoptera: Saturniidae: Saturniinae)

Eine vorläufige kommentierte Scheckliste der indonesischen wilden Seidenspinner – Teil X. Die Gattung *Cricula* WALKER, 1855 – Teil 3, die *elaezia*-Gruppe (Lepidoptera: Saturniidae: Saturniinae)

Zusammenfassung: Die Saturniiden der Tribus Attacini BLANCHARD, 1840 und der Tribus Saturniini BOISDUVAL, [1837] 1834 der Unterfamilie Saturniinae BOISDUVAL, [1837] 1834 (Lepidoptera: Saturniidae) der indonesischen Fauna werden in diesen Beiträgen zur Kenntnis der wilden Seidenspinner des indonesischen Archipels in kommentierten Schecklisten dargestellt. Der vorliegende Beitrag beschäftigt sich mit den Vertretern der Gattung Cricula WALKER, 1855. Wie auch bereits in vorangegangenen Schecklisten, soll die vorliegende kommentierte Scheckliste über die Taxa der Gattung Cricula keine Gattungsrevision darstellen, sondern aufzeigen, was bisher bekannt ist, wo noch Forschungsbedarf besteht oder bestehen könnte und insbesondere den rezenten Status der vielen Namen in der Gattung Cricula WALKER, 1855 aufzeigen. Die Inhalte dieser Publikationsserie spiegeln den derzeitigen Kenntnisstand bestmöglichst wider. In Teil 3 dieses Beitrages werden die Taxa der elaezia-Gruppe bibliographisch bearbeitet. Wir sind dankbar für weitere Literaturhinweise und Diskussion zu den Taxa der Gattung Cricula WALKER, 1855. Weitere Studien zur Kenntnis der Gattung Cricula sind dringend notwendig, insbesondere Studien zur Biologie, Ökologie und den Präimaginalstadien der Taxa.

Introduction: The wild silkmoths of the tribe Attacini BLANCHARD, 1840 and of the tribe Saturniini BOISDUVAL, [1837] 1834 of the subfamily Saturniinae BOISDUVAL, [1837] 1834 (Lepidoptera: Saturniidae) of the Indonesian Archipelago are discussed within annotated checklists in this special contributions to knowledge the wild silkmoths. The present paper is dealing with the Indonesian taxa of the *elaezia*-group of the genus *Cricula* WALKER, 1855. This contribution is considered being no generic revision but intends to demonstrate what is known and what is still unknown. Feedbacks and hints on the systematic, on further publications, and discussions are highly welcome. Further studies on the taxa of genus *Cricula* of the Indonesian fauna and in particular studies on the early stages, the biology and the ecology are considered needed. During the past years the number of taxa in the genus *Cricula* increased rapidly mainly due to DNA-analysis, but contrary the knowledge on the biology and ecology unfortunately not improved considerably thus far.

Annotated checklist and type localities of taxa of the genus *Cricula* WALKER, 1855 which are distributed in the Indonesian Archipelago

(including the non-Indonesian regions of the islands of Borneo and Timor)

elaezia-group

- *elaezia* JORDAN, 1909 ([Indonesia,] Dradjad, G. [= Gunung, = Mountain] Kendang, Preanger, [Province West] Java) ‡*afenestra* WATSON, 1913 (infrasubspecific) ([Indonesia, West Java Prov.,]) Preanger, Java occ.)
- *buruensis* JORDAN, 1939 (*species inquirenda*) ([Indonesia, Moluccas] Central Buru, Kako Tagalago, 2,700 ft. [= 823 m]
- *sumatrensis* JORDAN, 1939 (Indonesia, West Sumatra [Province], Mt. Korintji [= Mt. Kerinci], 7300 ft. [= 2225 m])
- *quinquefenestrata* ROEPKE, 1940 ([Indonesia, South Sulawesi Prov.], Central Celebes, Paloppo [near Palopo], Todjamboe [=Tujambu], 800 m)
- *pelengensis* PAUKSTADT & PAUKSTADT, 2009 (Indonesia, Sulawesi Tenggah Province (= Central Sulawesi Province), Banggai Archipelago, Pulau Peleng (= Peleng Island)) [based on DNA-analysis (by BOLD) the actual origin is the island of Bali]

baliensis NAUMANN & LÖFFLER, 2010 (junior subjective synonym) (Indonesia, [Bali I., Bali Province] Central Bali, Bedugul Distr., Tamblingan N. P. [= National Park]), GPS data, 1200 m)

magnifenestrata magnifenestrata NAUMANN & LÖFFLER, 2010 ([Borneo Island] Malaysia, Sabah, Trus Madi, 1600 m)

‡elaezioborneensis BRECHLIN, 2010 (*nomen nudum*) [Borneo, Sabah, Ranau Mts., 1600 m]

elaezioborneensis BRECHLIN, 2010 (junior subjective synonym) [Borneo, Sabah, Ranau Mts., 1600 m]

separata NAUMANN & LÖFFLER, 2010 (Indonesia, West Sumatra [recte South Sumatra Province], Mt. Sanggul, 1250-1450 m)

‡elaeziosumatrana BRECHLIN, 2010 (*nomen nudum*) (Indonesia, Sumatra (N), 20 km NE Sipirok, Lake Marsabut, 1350 m)

elaeziosumatrana BRECHLIN, 2010 (junior subjective synonym) (Indonesia, Sumatra (N), 20 km NE Sipirok, Lake Marsabut, 1350 m)

Remarks: the name *separata* NAUMANN & LÖFFLER, 2010 was based on the populations from the South and West Sumatra Provinces only, while the name *elaeziosumatrana* BRECHLIN, 2010 was based on the populations from northern Sumatra (North Sumatra Province and Aceh Province). The populations of both regions show a clear grouping in the BOLD TaxonID Tree. Further studies on the relationship and status are considered needed.

elaezia JORDAN, 1909

- Original citation and spelling: "Cricula andrei elaezia subsp. nov."
- **Original description:** Jordan, K. (1909): On the species of *Cricula*, a genus of Saturniidae. Novitates Zoologicae . A Journal of Zoology in Connection with the Tring Museum (Tring), Vol. XVI: pp. 300-306.
- **Type locality:** ([Indonesia,] Dradjad, G. [= Gg. = Gunung = Mountain] Kendang, Preanger, [Province West] Java) **Remarks:** the authors were unable to locate the type locality "Dradjad" in western Java. The correct name for this village should be Darajat, a village near Mt. Kendang in the

West Java Province. On the way to this village the Darajat pass is to be crossed.

- **Etymology:** not mentioned in the original description. The Greek "elaezia" means "enthusiasm" or "Begeisterung" in German language.
- **Type material:** the description clearly based on a single \Im specimen which therefore is considered to be the holotype by monotypy. Nässig (1989: 182) confirmed that the \Im holotype of *C. elaezia* JORDAN, 1909 is preserved in BMNH [now The Natural History Museum (London, Great Britain)].
- **Taxonomical notes:** the taxon *elaezia* JORDAN, 1909 was first described as a subspecies of *C. andrei* JORDAN, 1909 which was described in the same paper from the Khasia Hills, Assam. Jordan (1939: 434) subsequently placed *sumatrensis* JORDAN, 1939 as subspecies to *C. andrei* JORDAN, 1909 and therefore raised the Malayan *elaezia* JORDAN, 1909 to species rank. Nässig (2010) and Nässig *in* Nässig, Kitching, Peigler & Treadaway (2010: 145-165) placed *C. pelengensis* PAUKSTADT & PAUKSTADT, 2009 (Bali) [as junior subjective synonym] to *C. elaezia* JORDAN, 1909 (Kalimantan, Java and Bali) and finally treated the populations from the island of Bali as subspecies: *C. elaezia pelengensis* PAUKSTADT & PAUKSTADT, 2009. As already noted by Paukstadt & Paukstadt (in this paper under "*pelengensis*" and 2010: 58, 59) the distribution pattern of *pelengensis* includes eastern Java based on DNA analysis (by BOLD). Therefore the name *pelengensis* should be rather applied to the genus *Cricula* WALKER, 1855 in species rank.
- Geographical and altitudinal range: *elaezia* JORDAN, 1909 is considered to be endemic to the islands of Java and southeastern Borneo, Indonesia, cf. Naumann & Löffler (2010: 10) and Nässig *in* Nässig, Kitching, Peigler & Treadaway (2010: 145-165). Records for the altitudinal distribution in West Java are from 1050 and 1100 m (Research Collection of Ulrich and Laela H. Paukstadt / Wilhelmshaven).

- **General notes:** Jordan (1939: 435) figured and compared the \mathcal{J} antennae of elaezia (Java) (line drawing, text-fig. 319) and trifenestrata [javana] (Java) (line drawing, text-fig. 318). Kalshoven (1981: 320) reported that the tachnid *Carcelia irridipennis* (vdW.) [correct as *Carcelia iridipennis* (VAN DER WULP, 1893) (Parexorista) of the genus Carcelia ROBINEAU-DESVOIDY, 1830] was reared from larvae. Nässig (1995: 73) figured the d holotype of andrei elaezia JORDAN, 1909 (fig. 36) in color dorsally. Nässig (1995: 85) figured \bigcirc adults of *elaezia* (fig. 10, 13, 14) from Java [fig. 14 show a specimen from West Java; figs. 10 and 13 show specimens from East Java which can represent *pelengensis* PAUKSTADT & PAUKSTADT, 2009]. D'Abrera (1998: 53) figured the \mathcal{J} holotype of C. andrei elaezia JORDAN, 1909 from western Java and a \mathcal{Q} from eastern Java in color [the \bigcirc can belong to *pelengensis*]. Brechlin (2010: 37) figured the S genitalia structures of elaezia JORDAN, 1909 (Java Inot further specified]) (: 44, fig. 16). Nässig (1995: 107) figured the Qgenitalia structures of *elaezia* from Java [not further specified] (fig. 4) in phot. h.-t.
- **Synonyms:** For misinterpretations see the appropriate text parts. Junior subjective synonyms, junior objective synonyms, errors, and incorrect subsequent spellings for *elaezia* JORDAN, 1909 are as follows:

‡elaozia JORDAN; Seitz (1928: 507, 519) [incorrect subsequent spelling of *elaezia* JORDAN, 1909]

Remarks: Nässig (1989) cited 1926 as year of publication. This is correct for the first part of "14. Familie: Saturniidae, Nachtpfauenaugen", but the part which includes the genus *Cricula* has been issued 16.viii.1928.

- *‡elaozia* JORDAN; Seitz (1928: 508, 519) [incorrect subsequent spelling of *elaezia* JORDAN, 1909] [French edition]
- *‡elezia* JORDAN, 1909; Bouvier (1936: 237) [incorrect subsequent spelling of *elaezia* JORDAN, 1909]
- *‡aelaezea* JORD; Furry (2012: 1, 4) [incorrect subsequent spellings of *elaezia* JORDAN, 1909]
- *‡aleaezea*; Herlina & Hadiyanti (2018: 93) [incorrect subsequent spelling of *elaezia* JORDAN, 1909]
- *‡afenestra* WATSON, 1913 (*Cricula andrei* ab. *‡afenestra*); STATUS-; infrasubspecific
- andrei ab. ‡afenestrata WATSON; Bouvier (1936: 237) [incorrect subsequent spelling of ‡afenestra WATSON, 1913]
- *‡afenestra* WATSON, 1912; Meister (2011: 153) [error in publication date of *‡afenestra* WATSON, 1913; error in combination in synonymy / citation in subordination of *sumatrensis* JORDAN, 1939; *sumatrensis* is an endemic Sumatran taxon and the locus typicus of *‡afenestra* WATSON, 1913 was cited in the original description to be Preanger, Java; the name *‡afenestra* is excluded from the provisions of the ICZN and therefore is considered to be no synonym as such and consequently is without locus typicus].

‡Ricini JONES [lapsus]; Snellen (1877: 20) placed *Ricini* [sic] JONES into the genus *Cricula* WALKER of the family Saturnina [sic] and remarked "(*Cynthia* CR. nec DRURY = *Insularis* VOLL.)" [misinterpretation]

Hybridizations and sericulture: Inter-generic and inter-specific pairings with *elaezia* JORDAN, 1909are unknown from literature. There is no information on sericulture available.

Further readings on *elaezia* (in chronological order):

Jordan (1909) noted (: 300) that he has received information from Andrè (France) that he had been successful in breeding a species of *Cricula* from North India which differed especially in the larva from the Javan *trifenestrata*. The taxon from the Khasia Hills in Assam was described by Jordan as new for science: *C. andrei* JORDAN, 1909. Jordan (1909: 303) recorded *andrei* from North India and Java. He noted that the specimens from North India and Java representing two geographical races. Those were *andrei andrei* from the Khasia Hills in Assam and a new species from Dradjad [unidentified; =?Darajat], G. [=Gunung =Mt.] Kendang, Preanger, Java which he named *andrei elaezia* JORDAN 1909.

Remarks: the Khasi Hills are part of the Garo-Khasi range in the Indian state of Meghalaya (before 1970 part of Assam). Khasi Hills is part of the Patkai Range and of the Meghalaya subtropical forests ecoregion. In older literature in particular, the alternative transcription Khasia Hills is seen.

Seitz (1928: 507-508) [16.viii.1928] recognized only three species of the genus *Cricula* WALKER, 1855. Those were *trifenestrata* HELFER [sic], *andrei*, and *drepanoides*. Concluded from text Seitz did not accept the generic name *Solus* WATSON for the taxon *drepanoides*. He listed several forms of *trifenestrata* in the sense of subspecies. Those were *burmana* SWINHOE [Myanmar], *luzonica* JORDAN (Philippines), *andamanica* JORDAN (Andamans), *bornea* WATSON (Sarawak), and *javana* WATSON (Java). Seitz listed *elaozia* [sic] JORDAN (Java) as form of *andrei* in the sense of subspecies. *C. andrei* ab. *afenestra* WATSON was mentioned for an aberration without fenestrae in the forewings.

Remarks: the name *‡afenestra* is considered to be infrasubspecific.

Seitz (1928: 507-508) [French edition 16.viii.1928] recognized only three species of the genus *Cricula* Walker, 1855. Those were *trifenestrata* HELFER [sic], *andrei*, and *drepanoides*. Concluded from text Seitz did not accept the generic name *Solus* WATSON for the taxon *drepanoides*. Seitz listed *elaozia* JORDAN [incorrect subsequent spelling of *elaezia* JORDAN, 1909] (Java) as form of *andrei* in the sense of subspecies. *C. andrei* ab. *afenestra* WATSON was mentioned for an aberration without fenestrae in the forewings.

Remarks: there are occasionally differences in the German and French editions in the translation of the text and various misspellings. The name *‡afenestra* is considered to be infrasubspecific.

Eecke van (1929a: 134- 1929b [137]) recorded *trifenestrata* HELFER [sic] for British India, Ceylon [Sri Lanka], Andaman, Sumatra, Java, Borneo, Celebes [Sulawesi], and the Philippines. Van Eecke described a second taxon which so far has been unknown from Sumatra but from Java (: 136).

Remarks: the range of *trifenestrata* (HELFER, 1837) provided by van Eecke based on the distribution of several species and subspecies of the *trifenestrata*-group of the genus *Cricula*

WALKER, 1855. The further short description of the Javanese taxon fits well to *elaezia* JORDAN, 1909 which is replaced on Sumatra by *separata* NAUMANN & LÖFFLER, 2010.

Eecke van (1930: 402-[405]) [book edition of "De Heterocera van Sumatra" first published in Zoologische Mededeelingen] recorded *trifenestrata* HELFER [sic] for British India, Ceylon [Sri Lanka], Andaman, Sumatra, Java, Borneo, Celebes [Sulawesi], and the Philippines. Van Eecke (: 405) described the larva of *Cricula andrei* but this taxon has been explicitly not recorded from Sumatra. The author described a second taxon which so far has been unknown from Sumatra but from Java (: 404).

Remarks: the range of *trifenestrata* (HELFER, 1837) provided by van Eecke based on the distribution of several species and subspecies of the *trifenestrata*-group of the genus *Cricula* WALKER, 1855. A further short description by van Eecke of a Javanese taxon fits well to *elaezia* JORDAN, 1909 which is replaced on Sumatra by *separata* NAUMANN & LÖFFLER, 2010.

Schüssler (1936: 152-158) assigned only two species to the genus *Cricula* WALKER, 1855. Those were *andrei* JORDAN and *trifenestrata* HELFER [sic]. He listed *andrei elaezia* JORDAN and *andrei* f. *afenestra* WATSON for Java.

Remarks: *andrei f. afenestra* WATSON was not clearly cited in infrasubspecific rank, because he also listed f. *agoia* JORDAN, 1909 from Travancore (Madras) [Chennai] in the same chapter.

- Bouvier (1936: 235-240) accepted only three species of the genus *Cricula* WALKER, 1855. Those were *trifenestrata* HELFER [sic] distributed from Sikkim to Celebes [Sulawesi], *andrei* JORDAN distributed from Sikkim and Java, and *drepanoides* MOORE from Sikkim. *C. andrei elezia* [sic] JORDAN, 1909 was recorded for Java. **Remarks:** the taxon *drepanoides* was later transferred to the genus *Solus* WATSON, 1913: *Solus drepanoides* (MOORE, 1865) (*Cricula*). *C. elazia* JORDAN, 1909 is considered to be no subspecies of *andrei* JORDAN, 1909, which is a Continental Asian species.
- Jordan (1939) raised *andrei elaezia* JORDAN, 1909 to full species rank (: 434). He noted that the range of the Malayan *elaezia* overlaps that of *andrei* [=*sumatrensis* JORDAN, 1939] in Sumatra. Jordan (1939: 435) figured and compared the ♂ antennae of *elaezia* (Java) (line drawing, text-fig. 319) and *trifenestrata* [=subsp. *javana*] (Java) (line drawing, text-fig. 318).
- Roepke (1940: 24) remarked that Watson (1913) described from Java a subspecies of *trifenestrata: javana* and that he described an aberration of *andrei elaezia* as ab. *afenestra*. Roepke (1940: 23) listed *Canarium*, *Chinchona*, *Theobroma*, *Mangifera*, *Altingia*, and *Cinnamomum* as foodplants for the larvae of *Cricula* (undefined) from the island of Java. Roepke noted that the ♂ genitalia organs of the species and subspecies of *Cricula* WALKER vary to a considerable extent. In local populations of the Javanese *Cricula* species these organs may be fairly constant, but different populations show distinct differences mainly in the so-called sella. He further noted that the Javanese *elaezia* JORDAN must be considered as a distinct species due to genitalia morphology. The aedeagus of *elaezia* from Java and Sumatra. He reported *elaezia* being a mountainous taxon and that the green larvae are injurious to Chinchona plantations. Roepke remarked that reports of *elaezia* in literature were always confounded with *trifenestrata javana* WATSON.

- Kalshoven, Sody & van Bemmel (1951: 560) recorded *elaezia* JORDAN from the mountainous region of Java and noted that the larvae are defoliating trees. The parasitoid *Paraxorista modicella* was recorded as parasit of the larvae.
- Crotch (1956: 84-85) recorded the genus *Cricula* from India and Ceylon [Sri Lanka] to the East Indian islands [Malay Archipelago]. The author recognized only three species. Those were *andrei* JORDAN, *trifenestrata* HELFER [sic] (India), and *drepanoides* MOORE (Sikkim).

Remarks: taxa of the continental Asian *andrei*-group are replaced by taxa of the *elaezia*group and the *hayatiae*-subgroup of the *luzonica*-group in the Indonesian Archipelago. Several subspecies of *trifenestrata* have been described from the Indonesian Archipelago. The taxon *drepanoides* was later transferred to the genus *Solus* WATSON, 1913: *Solus drepanoides* (MOORE, 1865) (*Cricula*).

Holloway (1976: 85) recorded *andrei* JORDAN, 1909 from Sri Lanka, N. India, Assam, Burma [Myanmar], Sumatra, and Java.

Remarks: *andrei* represents a Continental Asian taxon which is replaced by taxa of the *elaezia*-group in the Indonesian Archipelago. The Javanese and SE Bornean *elaezia* JORDAN, 1909 is replaced by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra. The record of *andrei* JORDAN, 1909 for the Mt. Kinabalu, Borneo needs to be referred to *trifenestrata* (HELFER) instead, cf. Holloway *in* Allen (1981: 122). The record of *trifenestrata* for the Mt. Kinabalu needs to be assigned to *magnifenestrata* magnifenestrata NAUMANN & LÖFFLER, 2010, cf. Holloway (1987: 110).

- Arora & Gupta (1979) reported *andrei* JORDAN for India, Bhutan, and Java (: 40). **Remarks:** *andrei* JORDAN, 1909 is a Continental Asian species which is absent in the Indonesian Archipelago. The *andrei*-group is replaced by the *elaezia*-group in the Indonesian Archipelago. The island of Java is occupied by *elaezia* JORDAN, 1909.
- Allen (1981: 103, 120) recorded *trifenestrata* HELFER, 1837 [sic], *elaezia* JORDAN, 1909, and *bornea* WATSON, 1913 for Brunei, Sabah and Sarawak, Borneo. The author recorded *elaezia* JORDAN, 1909 for Brunei based on 2 3° taken in lowland primary forest and montane forest (both figured pl. 18) [see "Remarks" below]. The illustrated specimen was taken in primary lowland forest in Sabah (figured pl. 18). Allen remarked that no records of the larvae and food plants of the Bornean populations of *Cricula* were recorded thus far.

Remarks: both specimens recorded as *elaezia* JORDAN, 1909 are true *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 due to the large ocelli in the forewings (pl. 18, top left the montane \Im and bottom left the lowland \Im . The illustrated \Im (pl. 18, top right) can be a true *trifenestrata* (HELFER, 1837). The \Im *bornea* WATSON, 1913 (pl. 18, bottom right) does not fit very well to *bornea* of the type series.

Holloway *in* Allen (1981: 123) recorded *elaezia* ROEPKE from Borneo, Java and Bali. Holloway included seven species into the genus *Cricula* WALKER, 1855, of which two species need to be assigned to the genus *Solus* WATSON, 1913. Those were *drepanoides* MOORE and *parvifenestrata* BRYK [see "Remarks" below].

Remarks: the name *parvifenestrata* BRYK is correct as *parvifenestratus* BRYK, 1944, cf. emendation by Nässig (1989: 340). *C. elaezia* JORDAN, 1909 is the valid name for the Javanese populations and the populations from southeastern Borneo and *pelengensis* PAUKSTADT & PAUKSTADT, 2009 is the valid name for the Balinese populations of this species-group.

Kalshoven (1981) remarked that *elaezia* JORDAN, 1909 [undefined origin] occurs in chinchona plantations [*Chinchona* L. (Rubiaceae)]. A short description of the

larvae and pupa (cocoon) fits to observations by Paukstadt & Paukstadt for *pelengensis* PAUKSTADT & PAUKSTADT, 2009 from the island of Bali. Kalshoven reported that the tachnid *Carcelia irridipennis* (vdW.) [correct as *Carcelia iridipennis* (VAN DER WULP, 1893) (*Parexorista*) of the genus *Carcelia* ROBINEAU-DESVOIDY, 1830] was reared from larvae.

- Lampe (1984: [1]-[32]) [20.10.1984] recorded the Saturniidae of the Cameron- and Genting-Highlands in West-Malaysia. The author remarked that Allen recorded three species of *Cricula* for Borneo which were discussed in detail by Holloway. **Remarks:** Allen and Holloway recorded three species for Borneo. Those were *elaezia* JORDAN, 1909, the record needs to be assigned to *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 today, *trifenestrata* (HELFER, 1837), and *bornea* WATSON, 1913 which is considered to be a somehow doubtful species. The illustrated specimens by Lampe (col.-pl. 8) are most likely ♂ *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 (fig. 1), ♀ and ♂ *cameronensis* PAUKSTADT & PAUKSTADT, 1998 (figs. 4 and 5).
- Gardiner (1982: 126-128) recorded the genus *Cricula* from India and Ceylon [Sri Lanka] to the East Indian islands [Malay / Indonesian Archipelago]. The author recognized only three species. Those were *andrei* JORDAN, *trifenestrata* HELFER [sic] (India), and *drepanoides* MOORE (Sikkim).

Remarks: taxa of the continental Asian *andrei*-group are replaced by taxa of the *elaezia*group and *hayatiae*-subgroup in the Indonesian Archipelago. Several subspecies of *trifenestrata* have been described from the Indonesian Archipelago. The taxon *drepanoides* was later transferred to the genus *Solus* WATSON, 1913

Lampe (1985: [1]-[32]) [1985] noted that "recently Allen (1980) described [sic] three new species from Borneo and Holloway (*in* Allen 1980) fully confirmed these. Perhaps we are dealing here with more than one taxon. A knowledge of the pre-imaginal stages would provide more positive information."

Remarks: Allen and Holloway recorded three species for Borneo. Those were *elaezia* JORDAN, 1909, the record needs to be assigned to *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010, *trifenestrata* (HELFER, 1837), and *bornea* WATSON, 1913 which is considered to be a somehow doubtful species. The illustrated specimens by Lampe (col.-pl. 8) are most likely \Im *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 (fig. 1), \Im and \Im *cameronensis* PAUKSTADT & PAUKSTADT, 1998 (figs. 4 and 5).

- Becking (1987: 182) reported on diets of Javanese birds based on unpublished manuscripts by H. J. V. Sody (1892-1959), an expert on Indonesian Wildlife. He reported that birds of the family Cuculidae, *Cuculus saturatus lepidus* M. MÜLLER, 1845 and *Cacomantis merulinus* (SCOPOLI, 1786) eat *Cricula trifenestrata* and *Cacomantis variolosus* VIGORS & HORSFIELD, 1826 eats *Cricula elaezia* adults and/or larvae.
- Holloway (1987: 108-110) listed three species of the genus *Cricula* WALKER, 1855 for Borneo. Those were *trifenestrata* HELFER [sic] with a geographical range from the Indian Subregion to the Philippines, Sulawesi and Java, *bornea* WATSON with a geographical range Borneo (endemic), and *elaezia* JORDAN with a geographical range Sundaland and Buru (ssp. *buruensis* JORDAN). Holloway still assigned *drepanoides* MOORE erroneously to the genus *Cricula* but remarked that W. A. Nässig suggested that *drepanoides* is best separated in the genus *Solus*. The \bigcirc specimen illustrated in color dorsally (pl. 8, fig. 6) most probably belongs to *magnifenestrata* NAUMANN & LÖFFLER, 2010.

Remarks: the taxon *drepanoides* was later transferred to the genus *Solus* WATSON, 1913: *Solus drepanoides* (MOORE, 1865) (*Cricula*). The populations of the *elaezia*-group (sensu Naumann & Löffler 2010) from Sumatra are assigned to *separata* NAUMANN & LÖFFLER, 2010, from Java to *elaezia* JORDAN, 1909, from Bali to *pelengensis* PAUKSTADT & PAUKSTADT, 2009, from Borneo to *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010, and from West Malaysia to *magnifenestrata elaeziopahangensis* BRECHLIN, 2010. The name *buruensis* JORDAN, 1939 is treated as *species inquirenda* rather than as synonym of *elaezia* JORDAN, 1909.

Nässig (1989: 182, 196) [01./15.vii.1989] recorded *elaezia* JORDAN, 1909 from Sundaland (West-Malaysia, Sumatra, Java, Borneo, and Bali), and Buru?. The record from Buru was critically doubted and the name *elaezia buruensis* JORDAN, 1939 was placed subsequently into synonymy of *elaezia* JORDAN, 1909.

Remarks: *elaezia* JORDAN, 1909 is considered to be restricted to the island of Java and probably SE Borneo. On other islands in the Indonesian Archipelago and the Peninsula Malaysia *elaezia* is replaced by distinct mostly endemic taxa. Those are *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 (West Malaysia), *separata* NAUMANN & LÖFFLER, 2010 (Sumatra), *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 (Borneo), and *pelengensis* PAUKSTADT & PAUKSTADT, 2009 (Bali).

Nässig (1991: 504) reported on the phylogeny and zoogeography of the tropical Asiatic genus *Cricula* WALKER, 1855. He separated the taxa into two groups. Those were the *trifenestrata*-group with 3 species and the *andrei*-group with 9 species. The *andrei*-group was devided into further 3 subgroups. Those were the *andrei*-group of the *andrei*-group, the *elaezia*-subgroup of the *andrei*-group and the [third subgroup unnamed, probably the later proposed *luzonica*-subgroup]. Three sympatric species of *Cricula* were recorded for Sumatra, two of the *andrei*-group and two of the *trifenestrata*-group, and for Borneo, one of the *andrei*-group and two of the *trifenestrata*-group. *C. trifenestrata* javana WATSON, 1913 and *elaezia* JORDAN, 1939 were recorded for West Malaysia and Sundaland.

Remarks: the *andrei*-group (Continental Asian group) is replaced by the *elaezia*-group (Archipelago Asian group) on Sumatra, Java, Bali, and Borneo. Recent studies carried out on *sumatrensis* JORDAN, 1939 revealed this species being more allied to taxa of the *elaezia*-group and not to the Continental Asian *andrei*-group. *C. elaezia* is considered to be endemic to Java and southeastern Borneo (Kalimantan). This species is replaced in Sundaland by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 (Malay Peninsula), *magnifenestrata* NAUMANN & LÖFFLER, 2010 (Borneo), *separata* NAUMANN & LÖFFLER, 2010 (Sumatra), and *pelengensis* PAUKSTADT & PAUKSTADT, 2009 (Bali).

Baxter (1992: 46) recorded *andrei* JORDAN from throughout India, Sri Lanka, Burma [Myanmar], and Java.

Remarks: the populations of the *elaezia*-group from Java are assigned to *elaezia* JORDAN, 1909. Taxa of the *andrei*-group are absent in the Indonesian Archipelago.

Nässig (1995: 1-113; A revision of the genus *Cricula* WALKER, 1855 and an attempt of a phylogenetic analysis of the tribus Saturniini) recorded *C. elaezia* JORDAN, 1909 from Sundaland: West Malaysia, Sumatra, Java, Bali, and Borneo (: 34). He figured the ♂ holotype of *andrei elaezia* JORDAN, 1909 (: 73, fig. 36) in color dorsally. Nässig (1995: 85) figured ♂ adults (figs. 7, 8, 9) of *separata* NAUMANN & LÖFFLER, 2010 from Sumatra under the name of *elaezia* JORDAN, 1909 in color dorsally. The illustrated ♀ adult (fig. 14) came from West Java and represents a true *elaezia*, other \bigcirc are either *separata* (figs. 11, 12) or can be *pelengensis* PAUKSTADT & PAUKSTADT, 2009 (figs. 10, 13). Nässig (1995: 107) figured the \bigcirc genitalia structures of *elaezia* from Java [unspecified] (fig. 4) in phot.

Remarks: *elaezia* JORDAN, 1909 is considered endemic to Java and probably SE Borneo, this species is replaced by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra, by *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on Bali, by *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 in many regions of Borneo, and by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 in Peninsular Malaysia.

Nässig, Lampe & Kager (1996a: 37-38) [30.vi.1996] recorded *elaezia* JORDAN, 1909 from Sundaland (Sumatra, Java, Bali, Borneo, West Malaysia). The authors noted that *elaezia* is a very variable species which forms are externally very similar to *trifenestrata* [unspecified] or rarely to *sumatrensis* JORDAN, 1939. The authors noted (: 37) that identification is only possible by examination of the genitalia. The authors remarked that *elaezia* sometimes becomes a pest in cultivations. Nässig, Lampe & Kager (1996a: 38) recorded *elaezia* (Sumatra) as a species with preference for the lower elevations just around 1000 m [this record refers to the endemic *separata* NAUMANN & LÖFFLER, 2010].

Remarks: Nässig, Lampe & Kager (1996a) noted the insular variability but were not aware that distinct taxa were before them (too small number of specimens?). The populations of this genus from Sumatra are assigned to *separata* NAUMANN & LÖFFLER, 2010, from Java and SE Borneo to *elaezia* JORDAN, 1909, from Bali to *pelengensis* PAUKSTADT & PAUKSTADT, 2009, from Borneo to *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010, and from West Malaysia to *magnifenestrata elaeziopahangensis* BRECHLIN, 2010. Identification of *trifenestrata* (HELFER, 1837), *elaezia* (Java), and *sumatrensis* JORDAN, 1939 is very easy possible by comparisons of the length of the rami in the d° antennae. The by far largest antennae are at *sumatrensis*, followed by *elaezia* and pest and we did not receive information on this. All records by local people on this matter most probably refer to the more common *trifenestrata* (HELFER, 1837).

Nässig & Treadaway (1997: 323-366) [26.ii.1997] placed three allopatric species into the *elaezia*-group. Those were *elaezia* JORDAN, 1909 (Sundaland: Westmalaysia, Sumatra, Borneo, Java, and Bali), *quinquefenestrata* ROEPKE, 1940 (Sulawesi), and *mindanaensis* NÄSSIG & TREADAWAY, 1997 (Mindanao).

Remarks: above record of *elaezia* JORDAN, 1909 based on several mostly endemic taxa in Southeast Asia. Those are *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 (Peninsular Malaysia), *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 (Borneo), *separata* NAUMANN & LÖFFLER, 2010 (Sumatra), *elaezia* JORDAN, 1909 (Java and SE Borneo), and *pelengensis* PAUKSTADT & PAUKSTADT, 2009 (Bali).

Paukstadt & Paukstadt (1998: 131) noted that *elaezia* JORDAN, 1909 is distributed on Java and in Peninsular Malaysia.
 Remarks: *elaezia* JORDAN, 1909 is considered to be endemic to the islands of Java, and

Remarks: *elaezia* JORDAN, 1909 is considered to be endemic to the islands of Java, and replaced in West Malaysia by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010.

Nässig & Treadaway (1998: 223-424) [vii.1998] reported on the Saturniidae of the Philippines. The authors remarked that the 1st instar larva of *hayatiae* PAUKSTADT & SUHARDJONO, 1998 is similar yellowish colored as in some populations of *trifenestrata* (HELFER, 1837) [undefined origin] (: 280). The authors noted that young larvae of *luzonica* (Luzon) resemble quite closely those of *trifenestrata kransi* (Sulawesi) (: 280). Nässig & Treadaway (: 283) remarked

mindanaensis NÄSSIG & TREADAWAY, 1997 being a monotypic paraspecies only known from Mt. Kitanglad in Mindanao which is similar the very variable *quinquefenestrata* ROEPKE, 1940 an endemic of Sulawesi (: 284). *C. mindanaensis* was also compared with *elaezia* JORDAN, 1909 from Sundaland (: 284-285). The relationships of *elaezia*, *quinquefenestrata* and *mindanaensis* were discussed (: 285).

Remarks: *elaezia* JORDAN, 1909 is considered to be an endemic of Java and southeastern Kalimantan. This species is replaced by allied taxa in the remaining regions of Sundaland. Those are *pelengensis* PAUKSTADT & PAUKSTADT, 2009 (Bali), *separata* NAUMANN & LÖFFLER, 2010 (Sumatra), *magnifenestrata* NAUMANN & LÖFFLER, 2010 (Borneo), and *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 (Malay Peninsula).

D'Abrera (1998: 52-55) [1998] recorded *elaezia* JORDAN, 1939 from the Malay Peninsula, Java, Sumatra, Borneo, and the ?western Moluccas. The \circ holotype from western Java and a \circ from eastern Java [can probably also refer to *pelengensis* PAUKSTADT & PAUKSTADT, 2009] were figured in color.

Remarks: *elaezia* JORDAN, 1939 is replaced by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 on the Malay Peninsula, by *magnifenestrata* NAUMANN & LÖFFLER, 2010 on Borneo, by *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on Bali, and by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra.

Akai (2000: 91-97) [30.vi.2000] reported on a successful example of wild silk development from *trifenestrata* in Indonesia [mainly based on observations carried out in Yogyakarta, Central Java]. Akai listed 12 species of the genus *Cricula* and the distribution of each species. *C. bornea* (Borneo), *sumatrensis* (Sumatra), *elaezia* (Burma [Myanmar]) [sic], and *quinauefenestrata* [sic] (South Asia, India, Thailand) [sic] were listed.

Remarks: *elaezia* JORDAN, 1909 is considered to be endemic on Java and probably in SE Borneo. There are no taxa of the *elaezia*-group present in Myanmar. The *elaezia*-group is replaced by the *andrei*-group in Continental Asia. *C. quinquefenestrata* ROEPKE, 1940 is an endemic species on the island of Sulawesi.

Brechlin (2001: 41) [v. 2001] recorded *elaezia* JORDAN, 1909 from Borneo. The taxa *elaezia* JORDAN, 1909, *palawanica* BRECHLIN, 2001, *quinquefenestrata* ROEPKE, 1940, and *mindanaensis* NÄSSIG & TREADAWAY, 1997 were placed into the *elaezia*-group (sensu Nässig 1995). *C. elaezia* has been also recorded from Sumatra and Java. ♂ adults of *elaezia* [= *separata*] from Sumatra and *quinquefenestrata* from Sulawesi were figured in color (: 42, col.-pl., fig. 3 and 5). **Remarks:** the record of *elaezia* from Borneo needs to be assigned to the later established name *magnifenestrata* magnifenestrata NAUMANN & LÖFFLER, 2010 and the record from Sumatra to the later established name *separata* NAUMANN & LÖFFLER, 2010.

Paukstadt & Paukstadt (2001a: 3-16) [2001] recorded the circadian flight times of *elaezia* JORDAN, 1909 from Java (fig. 39) and Bali (fig. 40).
Remarks: the populations of the *elaezia*-group from Bali are assigned to *pelengensis* PAUKSTADT & PAUKSTADT, 2009.

- Paukstadt & Paukstadt (2001b: 50-52) [2001] recorded *trifenestrata javana* WATSON, 1913 and *elaezia* JORDAN, 1909 for the Mt. Halimun National Park, West Java based on own observations.
- Paukstadt & Paukstadt (2002: 240-247) [17.viii.2002] recorded *trifenestrata javana* WATSON, 1913 and *elaezia* JORDAN, 1909 from Bali.

Remarks: the populations of the *trifenestrata*-group from Bali are assigned to *trifenestrata tenggarensis* PAUKSTADT, PAUKSTADT & SUHARDJONO, 1998 and those of the *elaezia*-group are assigned to *pelengensis* PAUKSTADT & PAUKSTADT, 2009.

Paukstadt & Paukstadt (2004a: 3-55) [12.i.2004] noted in "distribution patterns of the genera of the family Saturniidae BOISDUVAL, 1837 ("1834") that the genus *Cricula* WALKER, 1855 is absent on Taiwan, New Guinea and Australia (: 19, Table 3 and : 20, Table 4). In map 22 (: 37) and map 23 (: 38) the number of species and percentage of combined totals of species (excluding / including subspecies) of the genus *Cricula* shared between the major parts (mostly islands) of Southeast Asia was illustrated. The authors found that many islands of the archipelago are often colonized sympatrically by two taxa of different species groups. For *elaezia* JORDAN, 1909 a Sundanian distribution was recorded. The various possibilities of colonization of Southeast Asia by *Cricula* were discussed (: 49).

Remarks: the drawing based on each 3 species for Sumatra and Borneo, each 2 species for Java, Sulawesi, and the Lesser Sunda Islands, and each 1 species for Banggai, Seram / Buru, and Halmahera. *C. elaezia* JORDAN, 1909 is considered to be endemic to Java. Bali (and eastern Java?) are occupied by the closely related *pelengensis* PAUKSTADT & PAUKSTADT, 2009 and replaced by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra, by *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 on Borneo, and by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 on the Malay Peninsula.

Paukstadt & Paukstadt (2004c: 111-188) [03.ix.2004] provided general information on the genus *Cricula* WALKER, 1855. The adults and larvae were briefly described. *C. elaezia* JORDAN, 1909 was recorded for the Malay Peninsula, Borneo, Sumatra, Jawa, and Bali. *C. elaezia* has been reported from 1,000 to 1,500 m (Sumatra), 1,400 to 1,800 m (Peninsular Malaysia), much above 1,000 m (Java and Bali), and from 1,500 to 2,600 m (Borneo).

Remarks: *elaezia* JORDAN, 1909 is considered to be endemic to Java and probably SE Borneo, and replaced by *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on Bali, by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra, by *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 in most regions of Borneo, and by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 on the Malay Peninsula.

- Paukstadt & Paukstadt (2005a: 51-124) [17.v.2005] listed in "distribution patterns of the genera of the family Saturniidae BOISDUVAL, 1837 ("1834") Part II the taxa elaezia JORDAN, 1909, cameronensis PAUKSTADT & PAUKSTADT, 1998, and trifenestrata (HELFER 1837) for the Malay Peninsula. ♂ and ♀ specimens were figured in color (: 87, figs. 1-12). The wing venation of Malay Cricula was illustrated (: 93, figs. 26-29) and the ♂ genitalia structures of elaezia (: 96, fig. 9).
 Remarks: the populations of the elaezia-group from the Malay Peninsula are assigned to magnifenestrata elaeziopahangensis BRECHLIN, 2010.
- Paukstadt (2007: 251-254) noted that the ♂ adult of *sumatrensis* JORDAN, 1939 figured by Paukstadt (2006a) to be *elaezia* JORDAN, 1909 following a hint by Nässig (Frankfurt am Main).

Remarks: sumatrensis JORDAN, 1939 and elaezia JORDAN, 1909 (= separata NAUMANN & LÖFFLER, 2010 from Aceh were dissected and barcoded (by BOLD). It was found that the illustrated specimen is quite sure a reddish color morph of sumatrensis JORDAN, 1939. *C. elaezia* JORDAN, 1909 is replaced on Sumatra by separata NAUMANN & LÖFFLER, 2010.

Paukstadt & Paukstadt 2007e: 260-277) provided a travel report on their 2nd entomological expedition to the Nanggroe Aceh Darussalam Province, northern Sumatra. *C. elaezia* JORDAN, 1909, *sumatrensis* JORDAN, 1939, and *trifenestrata javana* WATSON, 1913 were recorded and some information on the collecting sites and altitudinal distribution were given.

Remarks: *elaezia* JORDAN, 1909 is replaced by *separata* NAUMANN & LÖFFLER, 2010 and *trifenestrata javana* WATSON, 1913 is replaced by *trifenestrata barisanensis* PAUKSTADT & PAUKSTADT, 2010 on Sumatra Island.

Paukstadt, Paukstadt, Suhardjono, Sutrisno & Aswari (2009: 151-204) [21.viii.2009] recorded in "An Annotated Catalogue of the Saturniidae in Coll. Museum Zoologicum Bogoriense (Cibinong) – Saturniini Part II" all specimens of *Cricula* WALKER, 1855 preserved in MZB. The following lists were provided: list of reared specimens (: 158), of food plants recorded (: 157), of altitudinal records (: 159), of collecting years recorded (: 160-161), of collecting months recorded (: 161-162), of collecting sites recorded (: 162-163) all based on data of pin-labels, and a systematic list of taxa (: 164). The following taxa of the *elaezia*-group were recorded: *elaezia* JORDAN, 1909 (Java, Sumatra), *sumatrensis* JORDAN, 1939 (Sumatra), *quinquefenestrata* ROEPKE, 1940 (South Sulawesi), and *hayatiae* PAUKSTADT & SUHARDJONO, 1992 (Flores). The pin-labels of all preserved specimens were figured in color with scales and the text was annotated.

Remarks: the populations of the *elaezia*-group are presently assigned to *elaezia* JORDAN, 1909 (Java), to *pelengensis* PAUKSTADT & PAUKSTADT, 2009 (Bali), and to *separata* NAUMANN & LÖFFLER, 2010 (Sumatra); no changes were in *sumatrensis* JORDAN, 1939 (Sumatra), *quinquefenestrata* ROEPKE, 1940 (South Sulawesi), and *hayatiae* PAUKSTADT & SUHARDJONO, 1992 (Flores). *C. hayatiae* PAUKSTADT & SUHARDJONO, 1992 is now considered being a member of the *hayatiae*-subgroup of the *luzonica*-group.

Paukstadt & Paukstadt (2009f: 311-364) [15.ix.2009] reported on "final observations on the wild silkmoths of Nanggroe Aceh Darussalam, Sumatra, Indonesia". Three species were listed for Aceh: *trifenestrata javana* WATSON, 1913, *elaezia* JORDAN, 1909, and *sumatrensis* JORDAN, 1939. Collecting sites were described and illustrated. Biotop labels attached to specimens were figured (: 322, Table 1), the numbers of observations each taxon were listed (: 323; 163 specimens were collected). The distribution of taxa was recorded (: 324, Table 2), the altitudinal distribution assorted to regions (: 325, Table 3), and the altitudinal distribution (: 327, Table 4 and: 329, Table 5). Details on *elaezia* JORDAN, 1909 were shown (: 345) on the annual frequency (Diagram 30), altitudinal distribution (Map 10).

Remarks: *C. trifenestrata javana* WATSON, 1913 is restricted to Java and replaced by *trifenestrata barisanensis* PAUKSTADT & PAUKSTADT, 2010 on Sumatra. *C. elaezia* JORDAN 1909 is restricted to Java and southeastern Borneo and replaced on Sumatra by *separata* NAUMANN & LÖFFLER, 2010.

Paukstadt & Paukstadt (2009g: 416-424) [14.xii.2009] noted that taxa of the *elaezia*group (sensu Nässig 1995) are eventually distributed on the islands of Buru [Moluccas = ssp. *buruensis* JORDAN, 1939] and Bali. The new taxon *pelengensis* was compared with *quinquefenestrata* ROEPKE, 1940 (Sulawesi), *hayatiae* PAUKSTADT & SUHARDJONO, 1992 (Flores), *elaezia* JORDAN, 1909 (West Malaysia, East Malaysia, Sumatra, Java). The ♂ singleton of *pelengensis* was received from a dealer on Bali together with a large series of *trifenestrata* banggaiensis NAUMANN & PAUKSTADT, 1997.

Remarks: the authors were not aware that the new taxon *pelengensis* PAUKSTADT & PAUKSTADT, 2009 from Pulau Peleng has been mislabeled and actually has been from the island of Bali. The populations of the *elaezia*-group from Bali is assigned to *pelengensis* PAUKSTADT & PAUKSTADT, 2009, from Java and SE Borneo to *elaezia* JORDAN, 1909, from the remaining Borneo to *magnifenestrata* NAUMANN & LÖFFLER, 2010, from Sumatra to *separata* NAUMANN & LÖFFLER, 2010, and from Peninsular Malaysia to *magnifenestrata elaeziopahangensis* BRECHLIN, 2010.

The Institut Pertanian Bogor (2009) reported in IPB Repository on the classification of *Cricula*. From Sumatra 3 species were recorded, those were *trifenestrata* (Oriental region), *elaezia* (Sunda region), and *sumatrensis* (endemic); from West Malaysia *trifenestrata* and *elaezia*, from Borneo *bornea* (endemic), *trifenestrata*, and *elaezia*; and from Java and Bali *trifenestrata* and *elaezia*.

Remarks: *elaezia* is endemic to Java and replaced by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra, by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 on the Malay Peninsula, by *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 on Borneo, and by *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on the island of Bali. The record of *elaezia* from Bali is assigned to *pelengensis* PAUKSTADT & PAUKSTADT & PAUKSTADT, 2009.

Brechlin (2010a: 34-41) [09.i.2010 / considered unpublished for the purposes of zoological nomenclature] described and illustrated new taxa of the genus *Cricula* WALKER, 1855. Those were *‡elaeziosumatrana* (Sumatra), *‡elaeziopahangensis* (West Malaysia), and *‡elaezioborneensis* (Borneo) of the *elaezia*-group and *‡kalimantanensis* (Kalimantan) with uncertain group status. The taxa were figured in color (: 40) and their ♂ genitalia structures (: 41). *C. elaezia* JORDAN, 1909 was recorded for Bali.

Remarks: the paper by Brechlin (2010a) was considered being unpublished for the purposes of zoological nomenclature and the names therefore being invalid, cf. Nässig, Kitching, Peigler & Treadaway, 2010.

Paukstadt & Paukstadt (2010a: 3-14) [23.i.2010] described for the first time being the unknown \bigcirc of *sumatrensis* JORDAN, 1939 (Nanggroe Aceh Darussalam Province), which was compared with the \bigcirc of *trifenestrata javana* WATSON, 1913 (Aceh) and the \bigcirc of *elaezia* JORDAN, 1909 (Aceh). The \bigcirc specimens of all three taxa were figured in color dorsally and ventrally. The \bigcirc genitalia structures of *sumatrensis* (Aceh), *trifenestrata javana* (Aceh) and *elaezia* ([West] Malaysia) were figured in color. Comparisons and identification based on DNA barcoding (by BOLD). *C. elaezia* JORDAN, 1909 was recorded from the Malay Peninsula, Borneo, Sumatra, Java, and Bali.

Remarks: the populations of the *elaezia*-group (sensu Nässig 1995) from Peninsular Malaysia are presently assigned to *magnifenestrata elaeziopahangensis* BRECHLIN, 2010, from SE Borneo to *elaezia* JORDAN, 1909, from the remaining island of Borneo to *magnifenestrata* NAUMANN & LÖFFLER, 2010, from Sumatra to *separata* NAUMANN & LÖFFLER, 2010, from Sumatra to *separata* NAUMANN & LÖFFLER, 2010, from Java to *elaezia* JORDAN, 1909, while the populations from Bali are assigned to *pelengensis* PAUKSTADT & PAUKSTADT, 2010. The paper by Paukstadt & Paukstadt was issued only 5 days later than the paper by Naumann & Löffler.

Brechlin (2010b: 36-44) [09.i.2010, recte 26.i.2010 / considered being published for purposes of zoological nomenclature, cf. Nässig, Kitching, Peigler & Treadaway (2010)] described and illustrated new taxa of the genus *Cricula* WALKER, 1855. Those were from Sundaland *elaeziosumatrana* (Sumatra), *elaeziopahangensis* (West Malaysia), and *elaezioborneensis* (Borneo) of the *elaezia*-group and *kalimantanensis* (Kalimantan) with uncertain group status. Brechlin compared the new species with *elaezia* JORDAN, 1909 (Java and Bali), and *trifenestrata* s.l. 3° specimens of *elaezia* (Bali) and the 3° genitalia structures (Java) were figured in color (: 43, figs. 4 and 5, : 44: fig 16).

Remarks: in the meantime *elaeziosumatrana* was considered to be a junior subjective synonym of *separata* NAUMANN & LÖFFLER, 2010, *elaeziopahangensis* was downgraded as subspecies of *magnifenestrata* NAUMANN & LÖFFLER, 2010, and *elaezioborneensis* was considered to be a junior subjective synonym of *magnifenestrata* NAUMANN & LÖFFLER, 2010, cf. Nässig, Kitching, Peigler & Treadaway (2010). The populations of the *elaezia*-group from Bali are assigned to *pelengensis* PAUKSTADT & PAUKSTADT, 2009.

Paukstadt & Paukstadt (2010b: 55-64) [30.iii.2010] discussed on the identity of Cricula pelengensis PAUKSTADT & PAUKSTADT, 2009 and further taxa of the genus Cricula WALKER, 1855. Contributions by Paukstadt & Paukstadt (2009), Naumann & Löffler (2010), and Brechlin (2010) [Brechlin (2010a which is considered today being unpublished) and Brechlin (2010b)] were evaluated. C. baliensis NAUMANN & LÖFFLER, 2010 has been downgraded as junior subjective synonym of *pelengensis* PAUKSTADT & PAUKSTADT, 2009. The taxonomic status of several taxa of the genus Cricula was changed based on the contributions by Brechlin (2010a), followed by Naumann & Löffler (2010), and Brechlin (2010b). The taxonomic changes were based on a presumed valid (code-conform) description by Brechlin (2010a). C. separata NAUMANN & LÖFFLER, 2010 was treated as a new junior subjective synonym of *elaeziosumatrana* BRECHLIN, 2010 and magnifenestrata NAUMANN & LÖFFLER, 2010 was treated as a new junior subjective synonym of *elaeziobornea* BRECHLIN, 2010 (:56, 57, 59, and 62) [lapsus, correct as elaezioborneensis BRECHLIN, 2010], and finally elaeziopahangensis was removed from synonymy and placed to elaeziobornea [sic, correct as *elaezioborneensis*] [lapsus, correct as *magnifenestrata*] as subspecies.

Remarks: above taxonomic changes on *separata* and *magnifenestrata* were confirmed being not valid because they were based on a paper which was later considered being unpublished for the purposes of zoological nomenclature, cf. Nässig, Kitching, Peigler & Treadaway (2010). The correct name for *‡elaeziobornea* BRECHLIN, 2010 is *elaezioborneensis* BRECHLIN, 2010.

Paukstadt & Paukstadt (2010c: 80-88) [30.iii.2010] recorded the Saturniidae of Sumatra with special reference to the Nanggroe Aceh Darussalam Province. C. elaeziosumatrana BRECHLIN, 2010, trifenestrata javana WATSON, 1913, and sumatrensis JORDAN, 1939 were listed in the check-list. C. separata NAUMANN & LÖFFLER, 2010 was listed as junior subjective synonym of elaeziosumatrana BRECHLIN, 2010. The authors noted that elaeziosumatrana replaces the Javanese elaezia JORDAN, 1909 on the island of Sumatra.

Remarks: *trifenestrata javana* is considered being replaced by *trifenestrata barisanensis* PAUKSTADT & PAUKSTADT, 2010 on Sumatra, *elaeziosumatrana* BRECHLIN, 2010 is considered to be a *nomen nudum* and *elaeziosumatrana* BRECHLIN, 2010 is considered to be a junior subjective synonym of *separata* NAUMANN & LÖFFLER, 2010.

Paukstadt & Paukstadt (2010e: 159-174) [13.v.2010] provided a preliminary checklist of the Saturniidae of Indonesia (New Guinea excluded). *C. elaezia* JORDAN, 1909 from western Java and southern Borneo was listed (: 167). The taxa vinosa WATSON, 1912 was cited as junior subjective synonym of most probably elaezia JORDAN, 1909 and afenestra WATSON, 1913 was cited as junior subjective synonym of elaezia JORDAN, 1909. *C. elaezia buruensis* JORDAN, 1939 was treated as junior subjective synonym of *elaezia* JORDAN, 1909.

Remarks: the names *‡vinosa* WATSON, 1912 and *‡afenestra* WATSON, 1913 are infrasubspecific names excluded from the provisions of the ICZN and therefore considered to be no synonyms as such.

- Paukstadt & Paukstadt (2013e: 66-74) [01.iii.2013] reported on an entomological expedition to the Dieng Plateau, Central Java. The authors noted that no members of the genus *Cricula* WALKER, 1855 came to light.
- Naumann & Löffler (2013) [07.iii.2013] figured a barcode similarity tree including a specimen of *elaezia* from Indonesia, Java Barat [West Java] (p. 181). Further details on the sequenced specimen were provided in Table 1 (p. 182).

buruensis JORDAN, 1939 (species inquirenda)

Original citation and spelling: "C. elaezia buruensis subsp. nov."

- **Original description:** Jordan, K. (1939): On some old-world Lepidoptera Heterocera. – Novitates Zoologicae . A Journal of Zoology in Connection with the Tring Museum (Tring), Vol. XLI: pp. 433-436; 8 text-figs. (line drawings).
- **Type locality:** ([Indonesia, Moluccas] Central Buru, Kako Tagalago, 2,700 ft. [= 823 m]
- **Etymology:** the name *buruensis* indicates the collecting site of this singleton, the island of Buru, Moluccas.
- **Type material:** The description clearly based on a single 3 specimen which has been collected by the Pratt Brothers in May 1922. The specimen is considered to be a 3 holotype by monotypy. Nässig (1989: 182) confirmed that the 3 holotype of *elaezia buruensis* JORDAN, 1939 is preserved in BMNH [now The Natural History Museum (London, Great Britain)].
- **Taxonomical notes:** (*species inquirenda*). Nässig (1989: 182) placed *elaezia buruensis* JORDAN, 1939 into synonymy of *elaezia* JORDAN, 1909 and remarked that the ♂ holotype can be a mislabeled or introduced specimen. Nässig, Lampe & Kager (1996a: 38) remarked that *buruensis* JORDAN, 1939 is a true *elaezia* JORDAN, 1909 [unspecified origin; the remark above might be assigned to one or more closely related taxa of the *elaezia*-group sensu (Nässig 1995)].

- **Geographical and altitudinal range:** Cricula buruensis JORDAN, 1939 was described from the island of Buru, Moluccas, North Moluccas Province, Indonesia after a 3 singleton. No further specimens were collected so far why one might suspect that the singleton could have been introduced or mislabeled. The only altitudinal distribution is available from the 3 holotype: ca. 823 m.
- General notes: Jordan (1939: 435, figs. 317a-c) illustrated (line drawings) the costal lobes of the valva of the ♂ genitalia structures.
- **Synonyms:** For misinterpretations see the appropriate text parts. Junior subjective synonyms, junior objective synonyms, errors, and incorrect subsequent spellings for *buruensis* JORDAN, 1939 were not found in literature so far.

Hybridizations and sericulture: n/a.

Further readings on *buruensis* (in chronological order):

- Jordan (1939: 435) noted that the single \Im buruensis agrees with dark examples from Java but differing in the apex of the valve. He illustrated (: 435, line drawings, figs. 317a-c) the costal lobes of the valva of the \Im genitalia structures.
- Holloway *in* Allen (1981: 123) recorded *elaezia* JORDAN for Borneo. He noted that *elaezia* JORDAN was described from Java, occurs also on Bali and has a distinct subspecies from Buru, *buruensis* JORDAN, attributed to it.

Remarks: the record of *elaezia* JORDAN, 1909 for Borneo is assigned to *magnifenestrata* magnifenestrata NAUMANN & LÖFFLER, 2010 rather than to *elaezia*, which is mainly distributed in Java but may also range in southeastern Borneo (Kalimantan). The populations of the *elaezia*-group from Java belong to the subspecies *elaezia* JORDAN, 1909 and those from Bali to *pelengensis* PAUKSTADT & PAUKSTADT, 2009. The name *buruensis* JORDAN, 1939 is tentatively treated as *species inquirenda*.

Holloway (1987: 108-110) listed three species of the genus *Cricula* WALKER, 1855 for Borneo. Those were *trifenestrata* HELFER [sic], *bornea* WATSON (endemic), and *elaezia* JORDAN with a geographical range Sundaland and Buru (ssp. *buruensis* JORDAN). The \mathcal{Q} specimen illustrated in color dorsally (pl. 8, fig. 6) most probably belongs to *magnifenestrata* NAUMANN & LÖFFLER, 2010.

Remarks: *elaezia* JORDAN, 1909 is replaced by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra, *elaezia* occupies Java and SE borneo, is replaced by *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on Bali, by *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 in some regions of Borneo, and by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 in West Malaysia. The name *buruensis* JORDAN, 1939 is treated as *species inquirenda* rather than as synonym of *elaezia* JORDAN, 1909.

Nässig (1989: 182, 196) [01./15.vii.1989] recorded *elaezia* JORDAN, 1909 from Sundaland (West-Malaysia, Sumatra, Java, Borneo, and Bali), and Buru?. The record from Buru was critically doubted and the name *elaezia buruensis* JORDAN, 1939 was placed subsequently into synonymy of *elaezia* JORDAN, 1909. The author remarked that the ♂ holotype from "Buru" can be a mislabeled or introduced specimen. He confirmed that the ♂ holotype of *elaezia buruensis* JORDAN, 1939 is preserved in BMNH [The Natural History Museum (London. Great Britain)].

D'Abrera (1998: 52-55) [1998] recorded *elaezia* JORDAN, 1939 from the Malay Peninsula, Java, Sumatra, Borneo, and ?western Moluccas. The author mentioned that the population from Buru [western Moluccas] has been described as *buruensis* JORDAN.

Remarks: the Javanese and SE Bornean *elaezia* JORDAN, 1939 is replaced by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 on the Malay Peninsula, by *magnifenestrata* NAUMANN & LÖFFLER, 2010 on Borneo, by *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on Bali, and by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra. *C. elaezia buruensis* JORDAN, 1909 is considered being a *species inquirenda* rather.

- Paukstadt & Paukstadt (2009: 416-424) remarked that taxa of the *elaezia*-group (sensu Nässig 1995) are eventually distributed on the islands of Buru [Moluccas] and Bali [Lesser Sunda Islands]. *C. elaezia buruensis* JORDAN, 1939 was treated in the "Systematics" of the article as "presently treated as junior subjective synonym of *elaezia* JORDAN, 1909". The authors remarked that Nässig (1995) placed *buruensis* without detailed studies, DNA analysis at older specimens from collections were not possible in 1995, as junior subjective synonym to *elaezia* JORDAN, 1909.
- Paukstadt & Paukstadt (2010e: 159-174) [13.v.2010] provided a preliminary checklist of the Saturniidae of Indonesia (New Guinea excluded). *C. elaezia* JORDAN, 1909 from western Java and southern Borneo was listed (: 167). *C. elaezia buruensis* JORDAN, 1939 was treated as junior subjective synonym of *elaezia* JORDAN, 1909 following Nässig (1989).

‡afenestra WATSON, 1913 [infrasubspecific]

Original citation and spelling: "C. Andrei ab. afenestra, nov. ab."

Original description: Watson, J. H. (1913): A new genus, a new species of *Antherea* [sic], and some geographical races of the genus *Cricula* (Saturnidae [sic]) from the Indo-Malay region. – Notes from the Leyden Museum (Leyden), XXXV: pp. 181-185; pl. 8 (5 figs. phot. h.-t.).

Type locality: ([Indonesia, West Java Prov.,]) Preanger, Java occ.)

- **Etymology:** the name *‡afenestra* indicates the aberration of the forewing ocelli, there are no fenestrae present.
- **Type material:** infrasubspecific names are excluded from the provisions of the ICZN and therefore infrasubspecific names do not have a type locality and no type specimens. The description unmistakable based on two \bigcirc specimens, the type \bigcirc [sic] was mentioned being preserved in the Leyden Museum in coll. Piepers, No. 6800 and the co-type [sic] in coll. Watson. Concluded from text the specimens were collected in 1888.

- **Taxonomical notes:** the name *‡afenestra* WATSON, 1913 is deemed to be infrasubspecific, cf ICZN (2000) Art. 45.6. Nässig (1989: 194) proposed to use the name *afenestra* as "nomen collectivum" for "Formen" (= forms) of specimens which are without fenestrae.
- Geographical and altitudinal range: however, this aberration can occur in virtually all taxa of the genus *Cricula* WALKER, 1855.
- General notes: Watson (1913: pl. 8, fig. 3) illustrated in phot. h.-t. "*Cricula Andrei* [sic] ab. *afenestra* (WATS.). Nov. ab. Male" according to the "Explanation of plate 8" (p. 185), which indeed is a ♀ rather than a ♂ of *elaezia* JORDAN, 1909.
- **Synonyms:** infrasubspecific names are excluded from the provisions of the ICZN and therefore cannot be synonyms as such. For misinterpretations see the appropriate text parts. Junior subjective synonyms, junior objective synonyms, errors, and incorrect subsequent spellings for *‡afenestra* WATSON, 1913 are as follows:
 - *Cricula andrei* ab. *afenestrata* WATSON; Bouvier (1936: 237) [incorrect subsequent spelling of *‡afenestra* WATSON, 1913].
 - *‡afenestra* WATSON, 1912; Meister (2011: 153) [error in publication date of *‡afenestra* WATSON, 1913; error in combination in synonymy / citation in subordination of *sumatrensis* JORDAN, 1939; *sumatrensis* is an endemic Sumatran taxon and the locus typicus of *‡afenestra* WATSON, 1913 was cited in the original description to be Preanger, Java; the name *‡afenestra* is excluded from the provisions of the ICZN and therefore considered to be no synonym as such and consequently is without locus typicus.

Hybridizations and sericulture: n/a.

Further readings on *‡afenestra* (in chronological order):

Watson (1913: 183) described *C. andrei* ab. *afenestra* as a new aberration of *andrei* from Preanger, Java occ. due to the ground coloration of the \mathcal{Q} and the fact that no clear fenestrae are present in the forewings.

Remarks: from the same locality *andrei elaezia* JORDAN, 1909 was described. The name *‡afenestra* WATSON, 1913 is deemed to be infrasubspecific, cf. ICZN (2000), Art. 45.6.

- Seitz (1928: 507-508) [16.viii.1928] listed *elaozia* [sic] JORDAN (Java) as form of *andrei* in the sense of subspecies. *C. andrei* ab. *afenestra* WATSON was mentioned for an aberration without fenestrae in the forewings.
- Seitz (1928: 507-508) [French edition 16.viii.1928] listed *elaozia* [sic] JORDAN (Java) as form of *andrei* in the sense of subspecies. *C. andrei* ab. *afenestra* WATSON was mentioned for an aberration without fenestrae in the forewings.
- Schüssler (1936: 152-158) assigned only two species to the genus *Cricula* WALKER, 1855. Those were *andrei* JORDAN and *trifenestrata* HELFER [sic]. He listed *andrei elaezia* JORDAN and *andrei* f. *afenestra* WATSON for Java.
- Roepke (1940: 24) remarked that Watson (1913) described an aberration of *andrei elaezia* without fenestrae as ab. *afenestra*.

Nässig (1989: 194) [01./15.vii.1989] proposed to use the name "ab." *afenestra* WATSON, 1913 as "nomen collectivum" for forms which are without fenestrae and the name "ab." *vinosa* WINOSA, 1912 [lapsus, error in authorship of ‡*vinosa* WATSON, 1912] has been proposed as "nomen collectivum" for reddish colored forms.

Remarks: the use of the term "form" was somewhat unfortunate, because above described taxon was clearly described as "ab." (=aberration) and not as "f." (forma), which than can have another taxonomic status.

Nässig (1995: 1-113; A revision of the genus *Cricula* WALKER, 1855 and an attempt of a phylogenetic analysis of the tribus Saturniini) remarked (: 16) that the habitual variability has led to the assignment of some infrasubspecific form names, for example forma *afenestra* WATSON, 1913 for forms without fenestrae.

Remarks: the name $\ddagger afenestra$ WATSON, 1913 has been applied to an aberration without fenestrae and explicitly cited as ab. [=aberratio] *afenestra* by Watson (1913). Therefore the name $\ddagger afenestra$ is deemed to be infrasubspecific. By citing the name as a forma *afenestra* by Watson (1913), the name can have taken a subspecific rank, cf. ICZN (2000) Art. 45.6 if the content of the work not unambiguously reveals that the name was proposed for an infrasubspecific entity.

Meister (2011: 153) listed ‡*afenestra* WATSON, 1913 [error in publication date of *‡afenestra* WATSON, 1912] in synonymy of *sumatrensis* JORDAN, 1939.

Remarks: the name $\ddagger afenestra$ WATSON, 1913 was described after specimens from West Java, Indonesia while *sumatrensis* JORDAN, 1939 was described after specimens from the island of Sumatra. The name $\ddagger afenestra$ therefore has to be cited in synonymy to the Javanese populations of *C. elaezia* JORDAN, 1909 rather. Infrasubspecific names are no synonyms as such.

pelengensis PAUKSTADT & PAUKSTADT, 2009

Original citation and spelling: "Cricula pelengensis sp. nov."

- **Original description:** Paukstadt, U. & Paukstadt, L. H. (2009): *Cricula pelengensis* sp. nov., eine neue Saturniide vom Banggai Archipel, Indonesien (Lepidoptera: Saturniidae). Beiträge zur Kenntnis der wilden Seidenspinner (Wilhelmshaven), 7 (8): pp. 416-424; 1 col. text-fig., 1 b/w text-fig.
- **Type locality:** Indonesia, Sulawesi Tenggah Province (= Central Sulawesi Province), Banggai Archipelago, Pulau Peleng (= Peleng Island) [based on DNA-analysis (by BOLD) the actual origin is from the island of Bali]. The first correction of the type locality took place by Paukstadt & Paukstadt (2010: 58-59) and subsequently by Nässig *in* Nässig, Kitching, Peigler & Treadaway (2010: 156).
- **Etymology:** this taxon actually was named after the collecting place, the island of Peleng in the Banggai Archipelago: *pelengensis*. Unfortunately the specimen was obviously mislabeled and the correct habitat must be

the island of Bali, Lesser Sunda Islands as DNA-barcoding (by BOLD) confirmed.

- **Type material:** the ♂ holotype by original designation and the genitalia apparatus are preserved in Coll. Museum Zoologicum Bogoriense / MZB (Cibinong / Bogor, Province West Java, Indonesia. No paratype specimens are available.
- Taxonomical notes: this taxon was described actually in fully species rank based on morphology and zoogeography. Unfortunately the ♂ singleton has been mislabelled "Pulau Peleng" and later found to be from Bali Island after *baliensis* NAUMANN & LÖFFLER, 2010 was described and DNA barcode data were available. Nässig *in* Nässig, Kitching, Peigler & Treadaway (2010) downgraded *pelengensis* PAUKSTADT & PAUKSTADT, 2009 to subspecific level: *Cricula elaezia pelengensis* PAUKSTADT & PAUKSTADT, 2009, and synoymised *pelengensis* with *baliensis*, given priority to *pelengensis* as the older name of both synonyms. L. H. Paukstadt & U. Paukstadt (2014b: 37) upgraded *pelengensis* to species level due to the uncertain range of *elaezia* JORDAN, 1909 on Java.
- Geographical and altitudinal range: Jordan (1939: 435) recorded 6 ♂ of *pelengensis* PAUKSTADT & PAUKSTADT, 2009 under the name of *elaezia elaezia* JORDAN, 1909 from Bali, Batoeriti [=Baturiti, Bedugul env.] 3,500 ft. (ca. 1,067 m) and Gilgit [correct as Gitgit, also Git Git, better known as Gitgit Waterfalls near Gitgit Village, Sukasada District, about 10 km off the city of Singaraja], 5,000 ft. (ca. 1,524 m). ♂ adults of *pelengensis* are preserved in the Research collection of Ulrich and Laela H. Paukstadt (Germany, Wilhelmshaven) from the Bedugul env., ca. 1350 m. Specimens from the arid region in eastern Java might be assigned to this taxon, too. More studies by use of DNA-barcoding (by BOLD) are necessary to confirm the range.
- General notes: Paukstadt & Paukstadt (1993a: 20) reported green colored almost mature larvae of probably *elaezia* JORDAN, 1909 feeding on Avocado (*Persea americana*, Lauraceae). This record needs to be assigned to *pelengensis* PAUKSTADT & PAUKSTADT, 2009. Nässig (1995: 85) figured *pelengensis* from Bali under the name of *elaezia* JORDAN, 1909 in color dorsally: ♂ adults (fig. 15) and ♀ adult (fig. 16). Nässig (1995: 101) figured the ♂ genitalia structures of *elaezia* from Bali (fig. 5) [*=pelengensis*] in phot. Nässig (1995: 107) figured the ♀ genitalia structures of *elaezia* from Bali [*=pelengensis*] (fig. 5) in phot. Brechlin (2010: 37) figured ♂ and ♀ of *elaezia* JORDAN, 1909 (Bali) [*=pelengensis*] in color dorsally (: 43, fig. 4 and 5). Paukstadt & Paukstadt (2009) illustrated the ♂ holotype in color dorsally and ventrally (: 422, fig. 1) and the ♂ genitalia structures in phot. h.-t. (: 423, fig.2). The authors remarked that so far nothing is known on the biology

and ecology of *pelengensis* and also the early stages and the \bigcirc adult remain unknown. Meister (2011: 152) recorded *Eucalyptus gunni*, *Liquidambar styraciflua* and *Quercus ilex* as [substitute] foodplants [without reference].

Synonyms: For misinterpretations see the appropriate text parts. Junior subjective synonyms, junior objective synonyms, errors, and incorrect subsequent spellings for *C. bornea* WATSON, 1913 are as follows: *baliensis* NAUMANN & LÖFFLER, 2010 [junior subjective synonym]

elaezia pelengensis PAUKSTADT & PAUKSTADT, 1998; Meister (2011: 152) [error in publication date of *pelengensis* PAUKSTADT & PAUKSTADT, 2009]

Hybridizations and sericulture: Inter-generic and inter-specific pairings with *pelengensis* PAUKSTADT & PAUKSTADT, 2009 are unknown from literature. There is no information on sericulture available.

Further readings on *pelengensis* (in chronological order):

Jordan (1939: 433) raised the Malayan *elaezia* JORDAN, 1909 to full species rank. He used the nominotypical subspecific name *elaezia* JORDAN, 1909 for the populations from Sumatra, Java, and Bali. From the island of Buru the subspecies *elaezia buruensis* JORDAN, 1939 was described (: 435). Jordan (435) recorded *elaezia elaezia* JORDAN, 1909 from Bali and provided a brief description. He noted that the coloration of specimens from Bali is distinct to those from Java and Sumatra.

Remarks: the populations of the *elaezia*-group (sensu Nässig 1995) from Bali were later described as *pelengensis* PAUKSTADT & PAUKSTADT, 2009, those from the island of Sumatra were found being distinct on species level from those from Java and described as *separata* NAUMANN & LÖFFLER, 2010.

Holloway in Allen (1981: 123) recorded *elaezia* ROEPKE from Borneo, Java and Bali. Holloway included seven species into the genus *Cricula* WALKER, 1855, of which two species need to be assigned to the genus *Solus* WATSON, 1913. Those were *C. drepanoides* MOORE and *C. parvifenestrata* BRYK [see "Remarks" below].
Remarks: the name *parvifenestrata* BRYK is correct as *parvifenestratus* BRYK, 1944; emendation by Nässig (1989: 340). *C.elaezia* JORDAN, 1909 is the valid name for the Javanese and SE Bornean populations and *pelengensis* PAUKSTADT & PAUKSTADT, 2009 is the valid name for the Balinese populations.

Holloway (1987: 108-110) listed three species of the genus *Cricula* WALKER, 1855 for Borneo. Those were *C. trifenestrata* HELFER [sic] which range from the Indian Subregion to the Philippines, Sulawesi and Java, *bornea* WATSON which range on Borneo (endemic), and *elaezia* JORDAN which range in Sundaland and Buru (ssp. *buruensis* JORDAN). Holloway still assigned *drepanoides* MOORE erroneously to the genus *Cricula* but remarked that W.A.Nässig suggested that *drepanoides* is best separated in the genus *Solus*. The ♀ specimen illustrated in color dorsally (pl. 8, fig. 6) most probably belongs to *magnifenestrata* NAUMANN & LÖFFLER, 2010.

Remarks: the taxon *drepanoides* was later transferred to the genus *Solus* WATSON, 1913: *Solus drepanoides* (MOORE, 1865) (*Cricula*). The populations of the *elaezia*-group from Sumatra are assigned to *separata* NAUMANN & LÖFFLER, 2010, from Java and SE Borneo to *elaezia* JORDAN, 1909, from Bali to *pelengensis* PAUKSTADT & PAUKSTADT, 2009, from Borneo to *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010, and from West Malaysia to *magnifenestrata elaeziopahangensis* BRECHLIN, 2010. The name *buruensis* JORDAN, 1939 is treated as *species inquirenda* rather than as synonym of *elaezia* JORDAN, 1909.

Nässig (1989: 182, 196) [01./15.vii.1989] recorded *elaezia* JORDAN, 1909 from Sundaland (West-Malaysia, Sumatra, Java, Borneo, and Bali), and Buru?. The record from Buru was critically doubted and the name *elaezia buruensis* JORDAN, 1939 was placed subsequently into synonymy of *elaezia* JORDAN, 1909.

Remarks: *elaezia* JORDAN, 1909 is considered to be restricted to the islands of Java and southeastern Borneo. On other islands in the Indonesian Archipelago and the Peninsula Malaysia *elaezia* is replaced by distinct mostly endemic taxa. Those are *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 (West Malaysia), *separata* NAUMANN & LÖFFLER, 2010 (Sumatra), *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 (Borneo), and *pelengensis* PAUKSTADT & PAUKSTADT, 2009 (Bali).

Nässig (1991: 504) reported on the phylogeny and zoogeography of the tropical Asiatic genus *Cricula* WALKER, 1855. He separated the taxa into two groups. Those were the *trifenestrata*-group and the *andrei*-group. The *andrei*-group was devided into further 3 subgroups. Those were the *andrei*-subgroup of the *andrei*-group of the *andrei*-group and the [third subgroup remained unnamed, supposedly the *luzonica*-subgroup]. Three sympatric species of *Cricula* were recorded for Sumatra, two of the *andrei*-group and one of the *trifenestrata*-group, and for Borneo, one of the *andrei*-group and two of the *trifenestrata*-group. *C. trifenestrata* javana WATSON, 1913 and *elaezia* JORDAN, 1939 were recorded for West Malaysia and Sundaland.

Remarks: the *andrei*-group (Continental Asian group) is replaced by the *elaezia*-group (Archipelago Asian group) on Sumatra and Borneo. *C. elaezia* is considered to be endemic to Java and southeastern Borneo (Kalimantan). This species is replaced in Sundaland by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 (Malay Peninsula), *magnifenestrata* NAUMANN & LÖFFLER, 2010 (Borneo), *separata* NAUMANN & LÖFFLER, 2010 (Sumatra), and *pelengensis* PAUKSTADT & PAUKSTADT, 2009 (Bali). Taxa of the *andrei*-group are not present in the Philippines and the Indonesian Archipelago.

Paukstadt & Suhardjono (1992: 253-258) [15.vii.1992] recorded *elaezia* JORDAN, 1909 from Kalimantan, Sumatra, Java and Bali.

Remarks: *elaezia* JORDAN, 1909 is considered endemic to Java and SE Borneo (Kalimantan). Bali (and E Java?) are occupied by the closely related *pelengensis* PAUKSTADT & PAUKSTADT, 2009, and *separata* NAUMANN & LÖFFLER, 2010 ranges on Sumatra.

Paukstadt & Paukstadt (1993a: 19-20) [15.i.1993] reported green colored almost mature larvae of probably *elaezia* JORDAN, 1909 feeding on Avocado (*Persea americana*, Lauraceae) based on own observations on Bali.

Remarks: this record needs to be assigned to *pelengensis* PAUKSTADT & PAUKSTADT, 2009.

Nässig (1995: 1-113; A revision of the genus *Cricula* WALKER, 1855 and an attempt of a phylogenetic analysis of the tribus Saturniini) recorded *elaezia* JORDAN, 1909 from Sundaland: West Malaysia, Sumatra, Java, Bali, and Borneo (: 34). Nässig (1995: 101) figured the \Im genitalia structures of *elaezia* from Bali (fig. 5) [*=pelengensis*] in phot. Nässig (1995: 107) figured the \Im genitalia structures of *elaezia* from Bali [*=pelengensis*] (fig. 5) in phot.

Remarks: *elaezia* JORDAN, 1909 is restricted to Java and SE Borneo and replaced by *separata* NAUMANN & LÖFFLER, 2010 (Sumatra), by *pelengensis* PAUKSTADT &

PAUKSTADT, 2009 (Bali), by magnifenestrata magnifenestrata NAUMANN & LÖFFLER, 2010 (Borneo), and ba magnifenestrata elaeziopahangensis BRECHLIN, 2010 (West Malaysia).

Paukstadt & Paukstadt (1995: 155-164) [1995] noted that the preimaginal instars of *trifenestrata javana* WATSON, 1913 (Bali) and *elaezia* JORDAN, 1909 (Bali) are incomplete known (: 155).

Remarks: this note based actually on *trifenestrata tenggarensis* PAUKSTADT, PAUKSTADT & SUHARDJONO, 1998 which is widespread from Bali to Flores and Sumba and *pelengensis* PAUKSTADT & PAUKSTADT, 2009 which is considered to be endemic to Bali and probably eastern Java.

Nässig, Lampe & Kager (1996a: 36) [30.vi.1996] noted that there is no member of the *andrei*-group known from the Malay Peninsula and South Thailand and that the external similarity between *sumatrensis* (Sumatra) and *elaezia* (Bali) may possibly be explained as convergence. Nässig, Lampe & Kager (: 37-38) recorded *elaezia* JORDAN, 1909 from Sundaland (Sumatra, Java, Bali, Borneo, West Malaysia). The authors noted that *elaezia* is a very variable species which forms are externally very similar to *trifenestrata* [unspecified] or rarely to *sumatrensis*. Nässig, Lampe & Kager (1996a: 35) recorded 2 species of *Cricula* WALKER, 1855 from Java and Bali. Those were *elaezia* JORDAN, 1909 and *trifenestrata* (HELFER, 1837).

Remarks: Nässig, Lampe & Kager (1996a) noted the insular variability but were not aware that distinct taxa were before them (too small number of specimens?). The populations of the *elaezia*-group from Sumatra are assigned to *separata* NAUMANN & LÖFFLER, 2010, from Java and SE Borneo to *elaezia* JORDAN, 1909, from Bali to *pelengensis* PAUKSTADT & PAUKSTADT, 2009, from some regions of Borneo to *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010, and those from West Malaysia to *magnifenestrata elaeziopahangensis* BRECHLIN, 2010.

Nässig & Treadaway (1997: 323-366) [26.ii.1997] placed three allopatric species into the *elaezia*-group. Those were *elaezia* JORDAN, 1909 from Sundaland (Westmalaysia, Sumatra, Borneo, Java, and Bali), *quinquefenestrata* ROEPKE, 1940 from Sulawesi, and the new species *mindanaensis* NÄSSIG & TREADAWAY, 1997 from Mindanao.

Remarks: above record of *elaezia* JORDAN, 1909 based on several mostly endemic taxa in Southeast Asia. Those are *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 (Peninsular Malaysia), *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 (Borneo), *separata* NAUMANN & LÖFFLER, 2010 (Sumatra), *elaezia* JORDAN, 1909 (Java, SE Borneo), and *pelengensis* PAUKSTADT & PAUKSTADT, 2009 (Bali).

Nässig & Treadaway (1998: 223-424) [vii.1998] reported on the Saturniidae of the Philippines. The authors noted that the 1st instar larva of *hayatiae* PAUKSTADT & SUHARDJONO, 1998 is similar yellowish colored as in some populations of *C. trifenestrata* (HELFER, 1837) [undefined origin] (: 280). The authors noted that young larvae of *luzonica* (Luzon) resemble quite closely those of *trifenestrata kransi* (Sulawesi) (: 280). Nässig & Treadaway (: 283) remarked *mindanaensis* NÄSSIG & TREADAWAY, 1997 being a monotypic paraspecies only known from Mt. Kitanglad in Mindanao which is similar the very variable *quinquefenestrata* ROEPKE, 1940 an endemic of Sulawesi (: 284). *C. mindanaensis* was also compared with *elaezia* JORDAN, 1909 from Sundaland (: 284-285). The relationship of *elaezia, quinquefenestrata* and *mindanaensis* was discussed (: 285).

Remarks: *elaezia* JORDAN, 1909 is considered to be an endemic of Java and southeastern Kalimantan. This species is replaced by allied taxa in the remaining regions of Sundaland. Those are *pelengensis* PAUKSTADT & PAUKSTADT, 2009 (Bali), *separata* NAUMANN & LÖFFLER, 2010 (Sumatra), *magnifenestrata* NAUMANN & LÖFFLER, 2010 (Borneo), and *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 (Malay Peninsula).

- D'Abrera (1998: 52-55) [1998] recorded *elaezia* JORDAN, 1939 from the Malay Peninsula, Java, Sumatra, Borneo, and ?western Moluccas. *C. hayatiae* PAUKSTADT & SUHARDJONO, 1992 was reported from Flores. **Remarks:** *elaezia* JORDAN, 1939 is replaced by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 on the Malay Peninsula, by *magnifenestrata* NAUMANN & LÖFFLER, 2010 on Borneo, by *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on Bali, and by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra.
- Paukstadt & Paukstadt (2001a: 3-16) [2001] recorded the circadian flight times of elaezia JORDAN, 1909 from Java (fig. 39) and Bali (fig. 40) [=pelengensis PAUKSTADT & PAUKSTADT, 2009] and of trifenestrata tenggarensis PAUKSTADT, PAUKSTADT & SUHARDJONO, 1998 from Sumbawa (fig. 41) and Sumba (fig. 42).
- Paukstadt & Paukstadt (2004a: 3-55) [12.i.2004] noted in "distribution patterns of the genera of the family Saturniidae BOISDUVAL, 1837 ("1834") that the genus Cricula WALKER, 1855 is absent on Taiwan, New Guinea and Australia (: 19, Table 3 and : 20, Table 4). In map 22 (: 37) and map 23 (: 38) the number of species and percentage of combined totals of species (excluding / including subspecies) of the genus *Cricula* shared between the major parts (mostly islands) of Southeast Asia is illustrated. The authors found that many islands of the archipelago are often colonized sympatrically by two taxa of different species groups. In Cricula it was found that one of the taxa is always a subspecies of the widespread trifenestrata, which occurs in Sundaland as javana WATSON, 1913. For elaezia JORDAN, 1909 a Sundanian distribution was recorded. The various possibilities of colonization of Southeast Asia by Cricula were discussed (: 49). C. hayatiae PAUKSTADT & SUHARDJONO, 1992 and quinquefenestrata ROEPKE, 1940 were placed into the elaezia-group and sumatrensis JORDAN, 1939 into the andreigroup. The authors noted that there has been no dispersal of *Cricula* from the Philippines to Taiwan (: 51).

Remarks: the drawing based on each 3 species for Sumatra and Borneo, each 2 species for Java, Sulawesi, and the Lesser Sunda Islands, and each 1 species for Banggai, Seram / Buru, and Halmahera. *C. elaezia* JORDAN, 1909 is considered to be endemic to Java and southeastern Borneo and replaced on Bali (and eastern Java?) by *pelengensis* PAUKSTADT & PAUKSTADT, 2009, by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra, by *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 on Borneo and by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 on the Malay Peninsula.

Paukstadt & Paukstadt (2004c: 111-188) [03.ix.2004] provided general information on the genus *Cricula* WALKER, 1855. The adults and larvae were briefly described. *C. elaezia* JORDAN, 1909 was recorded for the Malay Peninsula, Borneo, Sumatra, Jawa, and Bali. *C. elaezia* has been reported from 1,000 to 1,500 m (Sumatra), 1,400 to 1,800 m (Peninsular Malaysia), much above 1,000 m (Java and Bali), and from 1,500 to 2,600 m (Borneo).

Remarks: *C. elaezia* JORDAN, 1909 is considered to be endemic to Java and probably southeastern Borneo. This species is replaced by *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on Bali, by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra, by *magnifenestrata*

magnifenestrata NAUMANN & LÖFFLER, 2010 on Borneo, and by magnifenestrata elaeziopahangensis BRECHLIN, 2010 on the Malay Peninsula.

Paukstadt & Paukstadt (2009g: 416-424) [14.xii.2009] remarked that taxa of the *elaezia*-group (sensu Nässig 1995) are eventually distributed on the islands of Buru [Moluccas = ssp. *buruensis* JORDAN, 1939] and Bali [Lesser Sunda Islands]. The new taxon *pelengensis* was compared with *quinquefenestrata* ROEPKE, 1940 (Sulawesi), *hayatiae* PAUKSTADT & SUHARDJONO, 1992 (Flores), *elaezia* JORDAN, 1909 (West Malaysia, East Malaysia, Sumatra, Java). The *∂* singleton of *pelengensis* was received from a dealer on Bali together with a large series of *trifenestrata banggaiensis* NAUMANN & PAUKSTADT, 1997.

Remarks: the authors were not aware that *pelengensis* PAUKSTADT & PAUKSTADT, 2009 from Pulau Peleng has been mislabeled and actually has been from the island of Bali. The populations of the *elaezia*-group from Bali are assigned to *pelengensis* PAUKSTADT & PAUKSTADT, 2009, from Java and SE Borneo to *elaezia* JORDAN, 1909, from the remaining Borneo to *magnifenestrata* NAUMANN & LÖFFLER, 2010, from Sumatra to *separata* NAUMANN & LÖFFLER, 2010, from West Malaysia to *magnifenestrata elaeziopahangensis* BRECHLIN, 2010.

The Institut Pertanian Bogor (2009) reported in IPB Repository on the classification of *Cricula*. From Sumatra 3 species were recorded: *trifenestrata* (Oriental region), *elaezia* (Sunda region), and *sumatrensis* (endemic); from West Malaysia *trifenestrata* and *elaezia* were recorded, from Borneo *bornea* (endemic), *trifenestrata*, and *elaezia* were recorded; from Java and Bali *trifenestrata* and *elaezia* were recorded; from Java and Bali *trifenestrata* and *elaezia* were recorded; from Java and Bali *trifenestrata* and *elaezia* were recorded; from Java and Bali *trifenestrata* and *sumatra*, the ssp. *kransi* and ssp. *banggaiensis* were recorded from Sulawesi, the ssp. *serama* was recorded from the Moluccas, and finally the ssp. *tenggarrensis* [sic] from Sumba.

Remarks: *C. elaezia* is an endemic to Java (and likely to SE Borneo) and replaced by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra, by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 on the Malay Peninsula, by *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 in some regions of Borneo, and by *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on the island of Bali. The record of *trifenestrata* from Bali should be assigned to the subspecies *tenggarensis* PAUKSTADT, PAUKSTADT & SUHARDJONO, 1998 and the record of *elaezia* from Bali to *pelengensis* PAUKSTADT & PAUKSTADT, 2009.

- Naumann & Löffler (2010: 11) remarked that if the holotype of *pelengensis* PAUKSTADT & PAUKSTADT, 2009 really came from Peleng Island or from nearby Sulawesi (or even Java?) remains doubtful.
- Paukstadt & Paukstadt (2010a: 3-14) [23.i.2010] described for the first time being the unknown \bigcirc of *sumatrensis* JORDAN, 1939 (Nanggroe Aceh Darussalam Province), which was compared with the \bigcirc of *trifenestrata javana* WATSON, 1913 (Aceh) and the \bigcirc of *elaezia* JORDAN, 1909 (Aceh). The \bigcirc specimens of all three taxa were figured in color dorsally and ventrally. The \bigcirc genitalia structures of *sumatrensis* (Aceh), *trifenestrata javana* (Aceh) and *elaezia* ([West] Malaysia) were figured in color. Comparisons and identification based on DNA barcoding (by BOLD). *C. elaezia* JORDAN, 1909 was recorded from the Malay Peninsula, Borneo, Sumatra, Java, and Bali.

Remarks: the populations of the *elaezia*-group from Peninsular Malaysia are presently assigned to *magnifenestrata elaeziopahangensis* BRECHLIN, 2010, from SE Borneo to *elaezia* JORDAN, 1909, from the remaining island of Borneo to *magnifenestrata* NAUMANN

& LÖFFLER, 2010, from Sumatra to *separata* NAUMANN & LÖFFLER, 2010, from Java to *elaezia* JORDAN, 1909, and from Bali (and eastern Java?) to *pelengensis* PAUKSTADT & PAUKSTADT, 2010. The paper by Paukstadt & Paukstadt was issued only 5 days later than the paper by Naumann & Löffler.

Brechlin (2010a: 34-41) [09.i.2010 / considered unpublished for the purposes of zoological nomenclature] described and illustrated new taxa of the genus *Cricula* WALKER, 1855. Those were *‡elaeziosumatrana* (Sumatra), *‡elaeziopahangensis* (West Malaysia), and *‡elaezioborneensis* (Borneo) of the *elaezia*-group and *‡kalimantanensis* (Kalimantan) with uncertain group status. The taxa were figured in color (: 40) and their 3 genitalia structures (: 41). *C. elaezia* JORDAN, 1909 was recorded for Bali.

Remarks: the paper by Brechlin (2010a) was considered being unpublished for the purposes of zoological nomenclature and the names therefore being invalid, cf. Nässig, Kitching, Peigler & Treadaway, 2010.

Brechlin (2010b: 36-44) [09.i.2010, recte 26.i.2010 / considered being published for purposes of zoological nomenclature, cf. Nässig, Kitching, Peigler & Treadaway (2010)] described and illustrated new taxa of the genus *Cricula* WALKER, 1855. Those were from Sundaland *elaeziosumatrana* (Sumatra), *elaeziopahangensis* (West Malaysia), and *elaezioborneensis* (Borneo) of the *elaezia*-group and *kalimantanensis* (Kalimantan) with uncertain group status. Brechlin compared *elaezioborneensis* BRECHLIN, 2010 with *elaezia* JORDAN, 1909 (Bali), and *trifenestrata* s.l.

Remarks: in the meantime *elaeziosumatrana* was considered to be a junior subjective synonym of *separata* NAUMANN & LÖFFLER, 2010, *elaeziopahangensis* was downgraded as subspecies of *magnifenestrata* NAUMANN & LÖFFLER, 2010, and *elaezioborneensis* was considered to be a junior subjective synonym of *magnifenestrata* NAUMANN & LÖFFLER, 2010, cf. Nässig, Kitching, Peigler & Treadaway (2010). The populations of the *elaezia*-group from Bali are assigned to *pelengensis* PAUKSTADT & PAUKSTADT, 2009.

Paukstadt & Paukstadt (2010b: 55-64) [30.iii.2010] discussed on the identity of *Cricula pelengensis* PAUKSTADT & PAUKSTADT, 2009 and further taxa of the genus *Cricula* WALKER, 1855. *C. baliensis* NAUMANN & LÖFFLER, 2010 has been downgraded as junior subjective synonym of *pelengensis* PAUKSTADT & PAUKSTADT, 2009. The taxonomic status of several taxa of the genus *Cricula* was changed based on the contributions by Brechlin (2010a), followed by Naumann & Löffler (2010), and Brechlin (2010b). The taxonomic changes were based on a presumed valid (code-conform) description by Brechlin (2010a). *C. separata* NAUMANN & LÖFFLER, 2010 was treated as a new junior subjective synonym of *elaeziosumatrana* BRECHLIN, 2010 and *magnifenestrata* NAUMANN & LÖFFLER, 2010 was treated as a new junior subjective synonym of *C. elaeziobornea* BRECHLIN, 2010 [sic, correct as *elaezioborneensis* BRECHLIN, 2010], and finally *elaeziopahangensis* was removed from synonymy and placed to *elaeziobornea* [sic, correct as *elaezioborneensis*] [lapsus, correct as *magnifenestrata*] as subspecies.

Remarks: above taxonomic changes on *separata* and *magnifenestrata* were confirmed being not valid because they were based on a paper which was later considered being unpublished for the purposes of zoological nomenclature, cf. Nässig, Kitching, Peigler & Treadaway (2010). The correct name for *elaeziobornea* BRECHLIN, 2010 is *elaezioborneensis* BRECHLIN, 2010 [*=magnifenestrata* NAUMANN & LÖFFLER, 2010].

- Paukstadt & Paukstadt (2010e: 159-174) [13.v.2010] provided a preliminary checklist of the Saturniidae of Indonesia (New Guinea excluded). *C. pelengensis* PAUKSTADT & PAUKSTADT, 2009 from Bali (and probably eastern Java / under investigation) was listed (: 167). *C. baliensis* NAUMANN & LÖFFLER, 2010 was listed as junior subjective synonym of *pelengensis* PAUKSTADT & PAUKSTADT, 2009.
- Nässig *in* Nässig, Kitching, Peigler & Treadaway (2010: 159) placed *elaezia pelengensis* into the Sundaland subgroup of the *elaezia*-group. Two barcode similarity trees were figured (: 151) which include almost all taxa of the *elaezia*-group (*palawanica* was missing because results of barcoding were not publicly available). *C. elaezia pelengensis* (Bali) is separated in the barcode similarity tree from *elaezia* (Java and Kalimantan) just less than 1% [see "Remarks ¹" below]. A map was provided (: 153) showing the distribution pattern of all taxa of the *elaezia*-group. A revised check-list of the *elaezia*-group was provided by the author (: 162). Nässig (: 156) corrected the type locality in accordance with the Recommendation 76A.2 of the Code from "Sulawesi Tenggah [sic!, correct as Sulawesi Tenggah Province], Banggai Archipelago, Pulau Peleng" to "Bali" [see "Remarks ²" below].

Remarks:

¹ April 30, 2018 a barcode similarity tree was obtained with much more specimens included by Brechlin (Germany, Pasewalk) and sent to the authors. This tree confirms the very close relationship of specimens of the *elaezia*-group from Bali and East Java, while the populations from western Java are obviously well distantly separated. Because two subspecies of one species cannot occupy the same area and due to the fact of the mtDNA grouping of the populations, we do not agree with the separation of the populations of Bali and Java on subspecific level only, but on species level instead. This matter is weakly supported by mtDNA analysis.

² Nässig did overlook that the type locality has been already corrected by Paukstadt & Paukstadt (2010: 58-59). Paukstadt & Paukstadt noted: "The recent description of *pelengensis* PAUKSTADT & PAUKSTADT (2009) obviously was based on a mislabeled specimen purchased by the senior author from a local dealer on the island of Bali. The male singleton was received together with a large series of *C. trifenestrata banggaiensis* NAUMANN & PAUKSTADT, 1997 from Pulau Peleng, Banggai Archipelago. Presently we assume that *pelengensis* is distributed on the island of Bali and in the more arid regions of the East and Central Java Provinces. This idea is weakly supported by DNA Barcoding.".

- Paukstadt, L. H. & Paukstadt, U. (2013: 75-93) [01.iii.2013] reported on an entomological travel carried out by the senior author Laela Hayati to the island of Selayar, South Sulawesi Province. The record of *pelengensis* PAUKSTADT & PAUKSTADT, 2009 from Peleng Island was confirmed being based on a mislabeled specimen which was originally from Bali. The authors confirmed that *Cricula* WALKER, 1855 was not observed on the island of Selayar.
- Naumann & Löffler (2013) [07.iii.2013] figured a barcode similarity tree including the holotype specimen of *baliensis* from Indonesia, Bali (p. 181). Further details on the sequenced specimen were provided in Table 1 (p. 182).
 Remarks: the name *baliensis* NAUMANN & LÖFFLER, 2010 is considered to be a junior subjective synonym of *pelengensis* PAUKSTADT & PAUKSTADT, 2009.
- Paukstadt, L. H. & Paukstadt, U. (: 30-48) [28.ii.2014] described and illustrated the preimaginal instars of *trifenestrata tenggarensis* PAUKSTADT, PAUKSTADT &

SUHARDJONO, 1998 from Bali. *C. trifenestrata tenggarensis* was reported being sympatric with *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on Bali. *C. pelengensis* was upgraded to species rank due to the unclear situation of the range of *elaezia* JORDAN, 1909 on Java Island.

baliensis NAUMANN & LÖFFLER, 2010 (synonym)

- **Original citation and spelling:** "Cricula baliensis NAUMANN & LÖFFLER spec. nov."
- **Original description:** Naumann, S. & Löffler, S. (2010): Notes on the Asian genus *Cricula* WALKER, 1855, with description of new species (Lepidoptera, Saturniidae). Neue Entomologische Nachrichten . Beiträge zur Ökologie, Faunistik und Systematic von Lepidopteren, Supplement 2: pp. 1-24; 11 col.-pls. (146 figs.).
- **Type locality:** Indonesia, [Bali I., Bali Province] Central Bali, Bedugul Distr., Tamblingan N. P. [= National Park]), GPS 8°14" S 115°08" E, 1,200 m.
- **Etymology:** the taxon *baliensis* was named after its origin, the island of Bali, Bali Province, Lesser Sunda Islands.
- **Type material:** the description based on the ♂ holotype by original designation, and 33 ♂ and 6 ♀ paratypes (including a designated ♀ allotype). The holotype will be deposited in the ZMHU / Zoologisches Museum der Humboldt-Universität zu Berlin [= Museum für Naturkunde Leibniz-Institut für Evolutions- und Biodiversitäts-forschung]. Paratypes are in Coll. S. Naumann (Berlin, Germany) and Coll. Brosch (Hille, Germany).
- **Taxonomical notes:** *Cricula baliensis* NAUMANN & LÖFFLER, 2010 is considered to be a junior subjective synonym of *Cricula pelengensis* PAUKSTADT & PAUKSTADT, 2009. This taxon is a member of the *elaezia*-group.
- **Geographical and altitudinal range:** as fo C. pelengensis Paukstadt & Paukstadt, 2009. Altitudinal records are in the original description of *balinesis* from 1,200 m.
- **General notes:** Naumann & Löffler (2010) figured the $\stackrel{\circ}{\supset}$ holotype in color dorsally (: 18, fig. 75) and ventrally (: 19, fig. 77), a $\stackrel{\circ}{\supset}$ paratype dorsally (: 19, fig. 76), the $\stackrel{\circ}{\ominus}$ allotype dorsally and ventrally (: 19, figs. 78, 80), and a $\stackrel{\circ}{\ominus}$ paratype dorsally (: 19, fig. 79).
- Synonyms: For misinterpretations see the appropriate text parts. Junior subjective synonyms, junior objective synonyms, errors, and incorrect subsequent spellings for *baliensis* NAUMANN & LÖFFLER, 2010 are as follows:

Cricula pelengensis PAUKSTADT & PAUKSTADT, 2009 [senior subjective synonym]

Hybridizations and sericulture: n/a.

Further readings on *baliensis* (in chronological order):

Naumann & Löffler (2010) described four new taxa of the genus *Cricula* WALKER, 1855 from Indonesia and East Malaysia. Those were *maxalorensis* (Alor Archipelago), *separata* (Sumatra), *baliensis* (Bali), and *magnifenestrata* (Borneo: East Malaysia and Central Kalimantan Province). The taxa *separata*, *baliensis*, and *magnifenestrata* were placed into the *elaezia*-group (sensu Naumann & Löffler 2010).

Remarks: the taxon *baliensis* was later found to be a junior subjective synonym of *pelengensis* PAUKSTADT & PAUKSTADT, 2001 based on comparisons of the DNA structures.

- Paukstadt & Paukstadt (2010e: 159-174) [13.v.2010] provided a preliminary checklist of the Saturniidae of Indonesia (New Guinea excluded). *C. pelengensis* PAUKSTADT & PAUKSTADT, 2009 from Bali (and probably eastern Java / under investigation) was listed (: 167). *C. baliensis* NAUMANN & LÖFFLER, 2010 was listed as junior subjective synonym of *pelengensis* PAUKSTADT & PAUKSTADT, 2009.
- Nässig *in* Nässig, Kitching, Peigler & Treadaway (2010: 157) placed *baliensis* into an annotated catalogue of the existing taxa of the *elaezia*-group under the running number "7.a.".
- Naumann & Löffler (2013) [07.iii.2013] figured a barcode similarity tree including the holotype of *baliensis* from Indonesia, Bali (p. 181). Further details on the sequenced specimen were provided in Table 1 (p. 182).

Remarks: The populations of the *elaezia*-group of the island of Bali need to be assigned to *pelengensis* PAUKSTADT & PAUKSTADT, 2009 which has been originally described in species rank. The name was omitted by Naumann & Löffler (2013: 181).

magnifenestrata magnifenestrata NAUMANN & LÖFFLER, 2010

- **Original citation and spelling:** "Cricula magnifenestrata NAUMANN & LÖFFLER sp. nov."
- **Original description:** Naumann, S. & Löffler, S. (2010): Notes on the Asian genus *Cricula* WALKER, 1855, with description of new species (Lepidoptera, Saturniidae). Neue Entomologische Nachrichten . Beiträge zur Ökologie, Faunistik und systematic von Lepidopteren, Supplement 2: pp. 1-24; 11 col.-pls. (146 figs.).
- Type locality: [Borneo I.], [East] Malaysia, Sabah, Trus Madi, 1600 m.
- **Etymology:** *C. magnifenestrata* was named after its generally large forewing ocelli.
- **Type material:** the description based on the $\stackrel{?}{\circ}$ holotype by original designation and 19 $\stackrel{?}{\circ}$ and 4 $\stackrel{\circ}{\circ}$ paratypes, including the $\stackrel{\circ}{\circ}$ allotype. The

holotype was reported to be assigned to ZMHU / Zoologisches Museum der Humboldt-Universität zu Berlin [= Museum für Naturkunde – Leibniz-Institut für Evolutions- und Biodiversitätsforschung]. Paratypes were reported to be in coll. S. Naumann (Berlin, Germany), coll. S. Löffler (Lichtenstein, Germany), and coll. Brosch (Hille, Germany).

- **Taxonomical notes:** Naumann & Löffler (2010: 11) placed *magnifenestrata* to the *elaezia*-group (sensu Naumann & Löffler 2010) which has been updated of the *elaezia*-group (sensu Nässig 1995) due to new results in DNA barcoding (by BOLD). The authors remarked that the populations from Peninsular Malaysia could be separated from the Bornean populations on subspecific level due to some characters but the authors do not intend.
- Geographical and altitudinal range: in the original description *magnifenestrata* was recorded for the island of Borneo, East Malaysia, Sabah and the Central Kalimantan Province of Indonesia. There are also records from the Cameron Highlands in West Malaysia. Records from lowlands Perak in West Malaysia were remarked being probably mislabelled because *magnifenestrata* obviously is a mountainous species rather. Altitudinal records for East Malaysia are from 1509-1600 m, from the Central Kalimantan Province from 400-800 m, and from West Malaysia from 1300-2000 m. Specimens from the South Kalimantan Province are assigned to *elaezia* JORDAN, 1909, cf. Naumann & Löffler (2010: 10).
- **General notes:** Allen (1981: pl. 18) figured two \mathcal{J} adults from lowland and montane Brunei (top left, bottom left) under the name of elaezia JORDAN, 1909. Holloway (1987: 110) provided an altitudinal distribution from 1500-2600 m for Borneo, Sarawak. The figured \bigcirc of trifenestrata might be assigned to magnifenestrata magnifenestrata (pl. 8, fig. 6). Naumann & Löffler (2010) illustrated the 3° holotype of magnifenestrata (Sabah) in the original description in color dorsally (: 18, fig. 70) and ventrally [error in the explanation of plate] (: 18, fig. 72); a β paratype from the Central Kalimantan Province was figured in color dorsally (: 18, fig. 71). The $\stackrel{\bigcirc}{=}$ allotype from the Central Kalimantan Province was illustrated in color dorsally and ventrally (: 18, figs. 73, 74). The male genitalia structures of paratype specimens were figured in color from the Cameron Highlands, West Malaysia (: 24, fig. 136) [the populations from Peninsular Malaysia need to be assigned to magnifenestrata elaeziopahangensis BRECHLIN, 2010] and from the Central Kalimantan Province (: 24, fig. 137).
- Synonyms: For misinterpretations see the appropriate text parts. Junior subjective synonyms, junior objective synonyms, errors, and incorrect

subsequent spellings for *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 are as follows:

- *‡elaezioborneensis* BRECHLIN, 2010 (*Cricula*) [*nomen nudum*] [considered unpublished for the purposes of zoological nomenclature, cf. Nässig, Kitching, Peigler & Treadaway (2010)]
- elaezioborneensis BRECHLIN, 2010 (Cricula) [junior subjective synonym of magnifenestrata NAUMANN & LÖFFLER, 2010]
- Hybridizations and sericulture: Inter-generic and inter-specific pairings with *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 are unknown from literature. There is no information on sericulture available.
- **Further readings on** *magnifenestrata magnifenestrata* (in chronological order):
- Allen (1981: 103, 120) recorded *Cricula trifenestrata* HELFER, 1837 [sic], *elaezia* JORDAN, 1909, and *bornea* WATSON, 1913 for Brunei, Sabah and Sarawak, Borneo. Allen noted that separate lowland and montane races may occur in Borneo. The author recorded *elaezia* JORDAN, 1909 for Brunei based on 2 $\stackrel{?}{\circ}$ taken in lowland primary forest and montane forest (both figured pl. 18) [see "Remarks" below]. Allen remarked that no records of the larvae and food plants of the Bornean populations of *Cricula* were recorded thus far.

Remarks: both specimens which were recorded as *elaezia* JORDAN, 1909 are true *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 due to the large ocelli in the forewings (pl. 18, top left the montane 3° and bottom left the lowland 3° . The illustrated 3° (pl. 18, top right) can be a true *trifenestrata* (HELFER, 1837). The 3° *bornea* WATSON, 1913 (pl. 18, bottom right) does not fit very well to *bornea* of the type series.

- Holloway *in* Allen (1981: 122) cited *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 from Borneo under the name of *elaezia* JORDAN.
- Lampe (1984: [1]-[32]) [20.10.1984] recorded the Saturniidae of the Cameron- and Genting-Highlands in West-Malaysia. The author remarked that Allen recorded three species for Borneo which were discussed in detail by Holloway.

Remarks: Allen and Holloway recorded three species for Borneo. Those were *elaezia* JORDAN, 1909, the record refers to *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010, *trifenestrata* (HELFER, 1837), and *bornea* WATSON, 1913 which is considered to be a somehow doubtful species. The illustrated specimens by Lampe (col.-pl. 8) are most likely $\stackrel{\circ}{\supset}$ *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 (fig. 1), $\stackrel{\circ}{\subsetneq}$ and $\stackrel{\circ}{\supset}$ *cameronensis* PAUKSTADT & PAUKSTADT, 1998 (figs. 4 and 5).

Lampe (1985: [1]-[32]) [1985] noted that "recently Allen (1980) described [sic] three new species from Borneo and Holloway (*in* Allen 1980) fully confirmed these. Perhaps we are dealing here with more than one taxon. A knowledge of the pre-imaginal stages would provide more positive information."

Remarks: Allen and Holloway recorded three species for Borneo. Those were *elaezia* JORDAN, 1909, the record refers to *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010, *trifenestrata* (HELFER, 1837), and *bornea* WATSON, 1913 which is considered to be a somehow doubtful species. The illustrated specimens by Lampe (col.-pl. 8) are most likely \Im *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 (fig. 1), \Im and \Im *cameronensis* PAUKSTADT & PAUKSTADT, 1998 (figs. 4 and 5).

Holloway (1987: 108-110) listed three species of the genus *Cricula* WALKER, 1855 for Borneo including *Cricula elaezia* JORDAN with a geographical range Sundaland and Buru (ssp. *buruensis* JORDAN). Holloway still assigned *drepanoides* MOORE to the genus *Cricula* but remarked that W. A. Nässig suggested that *drepanoides* is best separated in the genus *Solus*. The \bigcirc specimen illustrated in color dorsally (pl. 8, fig. 6) most probably belongs to *magnifenestrata* NAUMANN & LÖFFLER, 2010.

Remarks: the taxon *drepanoides* was later transferred to the genus *Solus* WATSON, 1913: *Solus drepanoides* (MOORE, 1865) (*Cricula*). At the time being the populations of the *elaezia*-group (sensu Naumann & Löffler 2010) from Sumatra are assigned to *separata* NAUMANN & LÖFFLER, 2010, from Java to *elaezia* JORDAN, 1909, from Bali to *pelengensis* PAUKSTADT & PAUKSTADT, 2009, from Borneo mostly to *magnifenestrata magnifenestrata elaeziopahangensis* BRECHLIN, 2010. At the time being the name *buruensis* JORDAN, 1939 is treated as *species inquirenda* rather than as synonym of *elaezia* JORDAN, 1909.

Nässig (1989: 182, 196) [01./15.vii.1989] recorded *elaezia* JORDAN, 1909 from Sundaland (West-Malaysia, Sumatra, Java, Borneo, and Bali), and Buru?. The record from Buru was critically doubted and the name *elaezia buruensis* JORDAN, 1939 was placed subsequently into synonymy of *elaezia* JORDAN, 1909.
Remarks: *C. elaezia* JORDAN, 1909 is considered to be restricted to the island of Java (and SE Borneo). On other islands in the Indonesian Archipelago and Peninsula Malaysia *elaezia* is replaced by distinct mostly endemic taxa. Those are *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 (West Malaysia), *separata* NAUMANN & LÖFFLER, 2010 (Sumatra), *elaezia* JORDAN, 1909 (Java and SE Borneo), *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 (Borneo), and *pelengensis* PAUKSTADT & PAUKSTADT, 2009 (Bali).

Nässig (1991: 504) reported on the phylogeny and zoogeography of the tropical Asiatic genus *Cricula* WALKER, 1855. He separated the taxa into two groups. Those were the *trifenestrata*-group with 3 species and the *andrei*-group with 9 species. The *andrei*-group was devided into further 3 subgroups. Those were the *andrei*-group of the *andrei*-group, the *elaezia*-subgroup of the *andrei*-group and the [third subgroup unnamed, probably the later proposed *luzonica*-subgroup]. Three sympytric species of *Cricula* were recorded for Sumatra, two of the *andrei*-group and two of the *trifenestrata*-group. *C. trifenestrata javana* WATSON, 1913 and *elaezia* JORDAN, 1939 were recorded for West Malaysia and Sundaland. *C. trifenestrata kransi* JURRIAANSE & LINDEMANS, 1920 and *quinquefenestrata* ROEPKE, 1940 were recorded for Sulawesi.

Remarks: the *andrei*-group (Continental Asian group) is replaced by the *elaezia*-group (Archipelago Asian group) on Sumatra and Borneo. Recent studies carried out on *C. sumatrensis* JORDAN, 1939 revealed this species being more allied to taxa of the *elaezia*-group and not to the Continental Asian *andrei*-group. *C. elaezia* is considered to be endemic to Java and southeastern Borneo (Kalimantan). This species is replaced in Sundaland by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 (Malay Peninsula), *magnifenestrata* NAUMANN & LÖFFLER, 2010 (Borneo), *separata* NAUMANN & LÖFFLER, 2010 (Sumatra), and *pelengensis* PAUKSTADT & PAUKSTADT, 2009 (Bali). Taxa of the *andrei*-group are not present in the Philippines.

Paukstadt & Suhardjono (1992: 253-258) [15.vii.1992] recorded *elaezia* JORDAN, 1909 from Kalimantan, Sumatra, Java, and Bali.

Remarks: *C. elaezia* JORDAN, 1909 is considered to be endemic on Java and in SE Borneo and replaced by *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on the island of Bali (and eastern Java?). Further endemic taxa in this group are *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 (West Malaysia), *separata* NAUMANN & LÖFFLER, 2010 (Sumatra), and *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 (Borneo).

Nässig (1995: 1-113; A revision of the genus *Cricula* WALKER, 1855 and an attempt of a phylogenetic analysis of the tribus Saturniini) recorded *elaezia* JORDAN, 1909 from Sundaland: West Malaysia, Sumatra, Java, Bali, and Borneo (: 34).
Remarks: *elaezia* JORDAN, 1909 ranges on Java and in SE Borneo and is replaced by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra, by *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on Bali (and E Java?), by *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 in some regions of Borneo, and by *magnifenestrata elaeziopahangensis*

BRECHLIN, 2010 in Peninsular Malaysia.

Naumann (1995: 80) compared *quinquefenestrata* ROEPKE, 1940 from Sulawesi with *elaezia* JORDAN, 1909 from Borneo and West Malaysia.

Remarks: populations of this group from Borneo are generally assigned to *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010, from SE Borneo to *elaezia* JORDAN, 1909, from West Malaysia to *magnifenestrata elaeziopahangensis* BRECHLIN, 2010.

Nässig, Lampe & Kager (1996a: 37-38) [30.vi.1996] recorded *elaezia* JORDAN, 1909 from Sundaland (Sumatra, Java, Bali, Borneo, West Malaysia). The authors noted that *elaezia* is a very variable species which forms are externally very similar to *trifenestrata* [unspecified] or rarely to *sumatrensis*.

Remarks: Nässig, Lampe & Kager (1996a) noted the insular variability but were not aware that distinct taxa were before them for studies (too small number of specimens?). At the time being the populations of this group from Sumatra are assigned to *separata* NAUMANN & LÖFFLER, 2010, from Java and SE Borneo to *elaezia* JORDAN, 1909, from Bali to *pelengensis* PAUKSTADT & PAUKSTADT, 2009, from Borneo to *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010, and those from West Malaysia to *magnifenestrata elaeziopahangensis* BRECHLIN, 2010.

Nässig & Treadaway (1997: 323-366) [26.ii.1997] placed three allopatric species into the *elaezia*-group. Those were *elaezia* JORDAN, 1909 (Sundaland: Westmalaysia, Sumatra, Borneo, Java, and Bali), *quinquefenestrata* ROEPKE, 1940 (Sulawesi), and *mindanaensis* NÄSSIG & TREADAWAY, 1997 (Mindanao).
Remarks: above record of *elaezia* JORDAN, 1909 based on several mostly endemic taxa in Southeast Asia. Those are magnifenestrata elaeziopahangensis BRECHLIN, 2010 (Peninsular Malaysia), magnifenestrata magnifenestrata NAUMANN & LÖFFLER, 2010 (Borneo), separata NAUMANN & LÖFFLER, 2010 (Sumatra), *elaezia* JORDAN, 1909 (Java and SE

Borneo), and pelengensis PAUKSTADT & PAUKSTADT, 2009 (Bali).

Nässig & Treadaway (1998: 223-424) [vii.1998] reported on the Saturniidae of the Philippines. The authors noted that the 1st instar larva of *hayatiae* PAUKSTADT & SUHARDJONO, 1998 is similar yellowish colored as in some populations of *trifenestrata* (HELFER, 1837) [undefined origin] (: 280). The authors noted that young larvae of *luzonica* (Luzon) resemble quite closely those of *trifenestrata kransi* (Sulawesi) (: 280). Nässig & Treadaway (: 283) remarked *mindanaensis* NÄSSIG & TREADAWAY, 1997 being a monotypic paraspecies only known from Mt. Kitanglad in Mindanao which is similar the very variable *quinquefenestrata* ROEPKE, 1940 an endemic of Sulawesi (: 284). *C. mindanaensis* was also compared with *elaezia* JORDAN, 1909 from Sundaland (: 284-285). The

relationships of *elaezia*, *quinquefenestrata* and *mindanaensis* were discussed (: 285).

Remarks: *C. elaezia* JORDAN, 1909 is considered to be an endemic of Java and southeastern Kalimantan. This species is replaced by allied taxa in the remaining regions of Sundaland. Those are *pelengensis* PAUKSTADT & PAUKSTADT, 2009 (Bali), *separata* NAUMANN & LÖFFLER, 2010 (Sumatra), *magnifenestrata* NAUMANN & LÖFFLER, 2010 (Borneo), and *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 (Malay Peninsula).

D'Abrera (1998: 52-55) [1998] recorded *C. elaezia* JORDAN, 1939 from the Malay Peninsula, Java, Sumatra, Borneo, and ?western Moluccas. The \Im holotype from western Java and a \Im from eastern Java were figured in color. The author noted that the population from Buru [western Moluccas] has been described as *buruensis* JORDAN. *C. quinquefenestrata* ROEPKE, 1940 was recorded for Sulawesi. *C. sumatrensis* JORDAN, 1939 was recorded for Sumatra and the \Im holotype figured. *C. hayatiae* PAUKSTADT & SUHARDJONO, 1992 was reported from Flores. \Im and \Im adults were illustrated in color.

Remarks: *C. elaezia* JORDAN, 1939 is replaced by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 on the Malay Peninsula, by *magnifenestrata* NAUMANN & LÖFFLER, 2010 on Borneo, by *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on Bali (and E Java?), and by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra.

Brechlin (2001: 41) recorded *elaezia* JORDAN, 1909 from Borneo. The taxa *elaezia* JORDAN, 1909, *palawanica* BRECHLIN, 2001, *quinquefenestrata* ROEPKE, 1940, and *mindanaensis* NÄSSIG & TREADAWAY, 1997 were placed into the *elaezia*-group (sensu Nässig 1995). *C. elaezia* has been also recorded from Sumatra and Java. adults of *elaezia* [= *separata*] from Sumatra and *quinquefenestrata* from Sulawesi were figured in color (: 42, col.-pl., fig. 3 and 5).

Remarks: the record of *elaezia* from Borneo needs to be assigned partim to the later established name *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 and the record from Sumatra to the later established name *separata* NAUMANN & LÖFFLER, 2010.

Paukstadt & Paukstadt (2004a: 3-55) [12.i.2004] noted in "distribution patterns of the genera of the family Saturniidae BOISDUVAL, 1837 ("1834") that the genus Cricula WALKER, 1855 is absent on Taiwan, New Guinea and Australia (: 19, Table 3 and : 20, Table 4). In map 22 (: 37) and map 23 (: 38) the number of species and percentage of combined totals of species (excluding / including subspecies) of the genus *Cricula* shared between the major parts (mostly islands) of Southeast Asia is illustrated. The authors found that many islands of the archipelago are often colonized sympatrically by two taxa of different species groups. In Cricula it was found that one of the taxa is always a subspecies of the widespread trifenestrata, which occurs in Sundaland as javana WATSON, 1913. For elaezia JORDAN, 1909 a Sundanian distribution was recorded. The various possibilities of colonization of Southeast Asia by Cricula are discussed (: 49). C. havatiae PAUKSTADT & SUHARDJONO, 1992 and auinauefenestrata ROEPKE, 1940 were placed into the *elaezia*-group and *sumatrensis* JORDAN, 1939 into the *andrei*group. The authors noted that there has been no dispersal of *Cricula* from the Philippines to Taiwan (: 51).

Remarks: the drawing based on each 3 species for Sumatra and Borneo, each 2 species for Java, Sulawesi, and the Lesser Sunda Islands, and each 1 species for Banggai, Seram / Buru, and Halmahera. *C. elaezia* JORDAN, 1909 is considered to be endemic to Java (and SE Borneo?) and replaced by *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on Bali (and eastern

Java?), by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra, by *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 on Borneo, and by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 on the Malay Peninsula.

Paukstadt & Paukstadt (2004c: 111-188) [03.ix.2004] provided general information on the genus *Cricula* WALKER, 1855. The adults and larvae were briefly described. *C. elaezia* JORDAN, 1909 was recorded for the Malay Peninsula, Borneo, Sumatra, Jawa, and Bali. *C. elaezia* has been reported from 1,000 to 1,500 m (Sumatra), 1,400 to 1,800 m (Peninsular Malaysia), much above 1,000 m (Java and Bali), and from 1,500 to 2,600 m (Borneo).

Remarks: *C. elaezia* JORDAN, 1909 is considered to be endemic to Java and replaced by *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on Bali (and eastern Java?), by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra, by *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 on Borneo, and by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 on the Malay Peninsula.

Beck & Nässig (2008: 161) listed *elaezia* JORDAN, 1909 ssp. from Borneo based on Holloway (1976). The authors remarked that the status of the Bornean populations (in relation to those from Sundaland [other than Borneo]) requires further studies. Determination is possible by external features of specimens but more reliable with dissections of the d genitalia, see Nässig (1995), Nässig et al. (1996), and Brechlin (2001).

Remarks: the populations of the *elaezia*-group from Borneo, except those from SE Borneo, were later described as *magnifenestrata* NAUMANN & LÖFFLER, 2010. Due to the high morphological variability (external and genitalic morphology) in the taxa of *Cricula* a safe determination is not possible by external features of specimens and not more reliable with genitalia preparations but by DNA analysis instead.

Paukstadt & Paukstadt (2009g: 416-424) [14.xii.2009] remarked that taxa of the *elaezia*-group (sensu Nässig 1995) are eventually distributed on the islands of Buru [Moluccas = ssp. *buruensis* JORDAN, 1939] and Bali [Lesser Sunda Islands]. The new taxon *pelengensis* was compared with *quinquefenestrata* ROEPKE, 1940 (Sulawesi), *hayatiae* PAUKSTADT & SUHARDJONO, 1992 (Flores), *elaezia* JORDAN, 1909 (West Malaysia, East Malaysia, Sumatra, Java). The ♂ singleton of *pelengensis* was received from a dealer on Bali together with a large series of *trifenestrata banggaiensis* NAUMANN & PAUKSTADT, 1997.

Remarks: the authors were not aware that the new taxon *pelengensis* PAUKSTADT & PAUKSTADT, 2009 from Pulau Peleng has been mislabeled and actually has been from the island of Bali. *C. elaezia* JORDAN, 1909 (Java, SE Borneo) is replaced on Bali by *pelengensis* PAUKSTADT & PAUKSTADT, 2009, in some regions of Borneo by *magnifenestrata* NAUMANN & LÖFFLER, 2010, on Sumatra by *separata* NAUMANN & LÖFFLER, 2010, and in West Malaysia by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010.

The Institut Pertanian Bogor (2009) reported in IPB Repository on the classification of *Cricula*. From Sumatra 3 species were recorded: *trifenestrata* (Oriental region), *elaezia* (Sunda region), and *sumatrensis* (endemic); from West Malaysia *trifenestrata* and *elaezia* were recorded, from Borneo *bornea* (endemic), *trifenestrata*, and *elaezia* were recorded; from Java and Bali *trifenestrata* and *elaezia* were recorded.

Remarks: *elaezia* is an endemic to Java (and SE Borneo?) and replaced by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra, by *magnifenestrata elaeziopahangensis*

BRECHLIN, 2010 on the Malay Peninsula, by *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 in some regions of Borneo, and by *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on the island of Bali.

Brechlin (2010a: 34-41) [09.i.2010 / considered unpublished for the purposes of zoological nomenclature] described and illustrated new taxa of the genus *Cricula* WALKER, 1855. Those were *‡elaeziosumatrana* (Sumatra), *‡elaeziopahangensis* (West Malaysia), and *‡elaezioborneensis* (Borneo) of the *elaezia*-group and *‡kalimantanensis* (Kalimantan) with uncertain group status. The taxa were figured in color (: 40) and their *3* genitalia structures (: 41).

Remarks: the paper by Brechlin (2010a) was considered being unpublished for the purposes of zoological nomenclature and the names therefore being invalid, cf. Nässig, Kitching, Peigler & Treadaway, 2010.

Naumann & Löffler (2010) described four new taxa of the genus *Cricula* WALKER, 1855 from Indonesia and East Malaysia. Those were *maxalorensis* (Alor Archipelago), *separata* (Sumatra), *baliensis* (Bali), and *C. magnifenestrata* (Borneo: East Malaysia and Central Kalimantan Province). The taxa *separata*, *baliensis*, and *magnifenestrata* were placed into the *elaezia*-group (sensu Naumann & Löffler 2010).

Remarks: the taxon *baliensis* was later found to be a junior subjective synonym of *pelengensis* PAUKSTADT & PAUKSTADT, 2009.

Paukstadt & Paukstadt (2010a: 3-14) [23.i.2010] described for the first time being the unknown \bigcirc of *sumatrensis* JORDAN, 1939 (Nanggroe Aceh Darussalam Province), which was compared with the \bigcirc of *trifenestrata javana* WATSON, 1913 (Aceh) and the \bigcirc of *elaezia* JORDAN, 1909 (Aceh). The \bigcirc specimens of all three taxa were figured in color dorsally and ventrally. The \bigcirc genitalia structures of *sumatrensis* (Aceh), *trifenestrata javana* (Aceh) and *elaezia* ([West] Malaysia) were figured in color. The \bigcirc specimens were separated by DNA analysis (by BOLD).

Remarks: the populations of the *elaezia*-group (sensu Nässig 1995) from Peninsular Malaysia are presently assigned to *magnifenestrata elaeziopahangensis* BRECHLIN, 2010. The populations of the *elaezia*-group from Sumatra Island are presently assigned to *separata* NAUMANN & LÖFFLER, 2010. The populations of the *trifenestrata*-group from Sumatra Island are assigned to *trifenestrata barisanensis* PAUKSTADT & PAUKSTADT, 2010. The paper by Paukstadt & Paukstadt was issued only 5 days later than the paper by Naumann & Löffler.

Brechlin (2010b: 36-44) [09.i.2010, recte 26.i.2010 / considered being published for purposes of zoological nomenclature, cf. Nässig, Kitching, Peigler & Treadaway (2010)] described and illustrated new taxa of the genus *Cricula* WALKER, 1855. Those were from Sundaland *elaeziosumatrana* (Sumatra), *elaeziopahangensis* (West Malaysia), and *elaezioborneensis* (Borneo) of the *elaezia*-group and *kalimantanensis* (Kalimantan) with uncertain group status. The author compared *elaeziosumatrana* BRECHLIN, 2010 with *elaezia* JORDAN, 1909 from Java and Bali, the \Im genitalia structures were compared with those of *elaezia* (Java) and the \Im fenestrae were compared with those of *trifenestrata javana* WATSON, 1913 [unspecified]. The author compared *elaezioborneensis* BRECHLIN, 2010 with *elaezia* JORDAN, 1909 [unspecified, probably from Java and Bali], the \Im genitalia structures were compared with those of *elaezia* (Java). The \Im holotype of *elaezioborneensis* BRECHLIN, 2010 (Sabah) was figured in color dorsally (: 43, fig. 2), as well as the 3° genitalia structures of *elaezioborneensis* (: 44, fig. 14).

Remarks: in the meantime *elaeziosumatrana* was considered to be a junior subjective synonym of *separata* NAUMANN & LÖFFLER, 2010, *elaeziopahangensis* was downgraded as subspecies of *magnifenestrata* NAUMANN & LÖFFLER, 2010, and *elaezioborneensis* was considered to be a junior subjective synonym of *magnifenestrata* NAUMANN & LÖFFLER, 2010, cf. Nässig, Kitching, Peigler & Treadaway (2010). At the time present the populations of the *elaezia*-group from Bali are assigned to *pelengensis* PAUKSTADT & PAUKSTADT, 2009.

Paukstadt & Paukstadt (2010b: 55-64) [30.iii.2010] discussed on the identity of *Cricula pelengensis* PAUKSTADT & PAUKSTADT, 2009 and further taxa of the genus *Cricula* WALKER, 1855. *C. baliensis* NAUMANN & LÖFFLER, 2010 has been downgraded as junior subjective synonym of *pelengensis* PAUKSTADT & PAUKSTADT, 2009. The taxonomic status of several taxa of the genus *Cricula* was changed based on the contributions by Brechlin (2010a), followed by Naumann & Löffler (2010), and Brechlin (2010b). The taxonomic changes were based on a presumed valid (code-conform) description by Brechlin (2010a). *C. separata* NAUMANN & LÖFFLER, 2010 was treated as a new junior subjective synonym of *elaeziosumatrana* BRECHLIN, 2010 and *magnifenestrata* NAUMANN & LÖFFLER, 2010 was treated as a new junior subjective synonym of *elaeziobornea* BRECHLIN, 2010 [sic, correct as *elaezioborneensis* BRECHLIN, 2010], and finally *elaeziopahangensis* was removed from synonymy and placed to *elaeziobornea* [sic, correct as *elaezioborneensis*] [lapsus, correct as *magnifenestrata*] as subspecies.

Remarks: above taxonomic changes on *separata* and *magnifenestrata* were confirmed being not valid because they were based on a paper which was later considered being unpublished for the purposes of zoological nomenclature, cf. Nässig, Kitching, Peigler & Treadaway (2010). The correct name for *elaeziobornea* BRECHLIN, 2010 is *elaezioborneensis* BRECHLIN, 2010.

Paukstadt & Paukstadt (2010e: 159-174) [13.v.2010] provided a preliminary checklist of the Saturniidae of Indonesia (New Guinea excluded). C. elaezioborneensis BRECHLIN, 2010 from Sumatra was listed (: 168). C. magnifenestrata NAUMANN & LÖFFLER, 2010 was listed as junior subjective synonym of elaezioborneensis BRECHLIN, 2010.

Remarks: *elaezioborneensis* BRECHLIN, 2010 is considered to be a junior subjective synonym of *magnifenestrata* NAUMANN & LÖFFLER, 2010. The first description of *elaezioborneensis* BRECHLIN, 2010 was considered being not valid and the second description of this taxon was published later than *magnifenestrata* NAUMANN & LÖFFLER, 2010.

Nässig *in* Nässig, Kitching, Peigler & Treadaway (2010: 159) placed *C. magnifenestrata* into the Sundaland subgroup of the *elaezia*-group. Two barcode similarity trees were figured (: 151) which include almost all taxa of the *elaezia*-group (*palawanica* was missing because results of barcoding were not publicly available). A map was provided (: 153) showing the distribution pattern of all taxa of the *elaezia*-group. A revised check-list of the *elaezia*-group was provided by the author (: 162). The author confirmed each subspecific status for the Peninsular and Bornean populations of *magnifenestrata*. He noted that the distribution of DNA variability may suggest that the Malay Peninsula was colonized rather recently by

a small founder population from Borneo. The author (responsible author: W. A. Nässig for the systematic part of this contribution) placed *elaeziopahangensis* BRECHLIN, 2010 as subspecies to *magnifenestrata* and marked the status explicitly as stat. n. [status novum / new]. He further mentioned that U. & L. H. Paukstadt (2010: 62) already had used this combination indicated as new status, but regarding the opinions expressed in their publication on other pages Nässig was pretty sure that this was just a lapsus and therefore he interpreted his statement on the status of *elaeziopahangensis* as being intentionally new. With other words the change made by U. & L. H. Paukstadt was cited as being unintentionally [see "Remarks ¹" below]. Nässig (: 157) remarked that the correct (conspecific) combination of \mathcal{S} and \mathcal{Q} in collections requires more barcoding or at least dissection [see "Remarks ²" below].

Remarks: Paukstadt & Paukstadt (2010: 55-64) explicitly cited the new status *elaeziopahangensis* BRECHLIN, 2010 as subspecies at least three times in their publication. 1st in the "Systematics" of the article (: 57): "Saturniini-; elaeziopahangensis BRECHLIN, 2010; REMOVAL-FROM-SYNONYMY; magnifenestrata NAUMANN & LÖFFLER, 2010; DOWNGRADED-TO; elaeziobornea elaezioborneensis] [lapsus, correct as elaeziopahangensis BRECHLIN, 2010 stat. nov.", 2nd in the English "Abstract" of the article (: 59): "Due to zoogeographic reasons and as a result of our studies we downgrade elaeziopahangensis BRECHLIN, 2010 to elaeziobornea [lapsus, correct as elaezioborneensis] elaeziopahangensis BRECHLIN, 2010, stat. nov. Further studies need to clarify whether elaeziopahangensis can be upgraded to species rank", and finally 3rd in the text-part on the elaezia-group (sensu Nässig (1995) (: 62): "Aus zoogeographischen Gründen und als Resultat unserer eigenen Studien werden wir hiermit den Namen elaeziopahangensis BRECHLIN, 2010 vorläufig als Unterartnamen zu magnifenestrata NAUMANN & LÖFFLER, 2010 stellen: magnifenestrata elaeziopahangensis BRECHLIN, 2010 stat. nov. Weitere Untersuchungen müssten klären, ob eventuell eine Stellung von elaeziopahangensis im Artrang möglich wäre" [in German language but more or less a translation of the text in the abstract]. The downgrading of *elaeziopahangensis* BRECHLIN, 2010 has been obviously intentionally and not unintentionally as erroneously remarked by Nässig (: 158). Unfortunately *elaeziopahangensis* was cited twice as subspecies of *elaeziobornea* BRECHLIN, 2010 [lapsus, correct as *elaezioborneensis*] which is now considered to be a junior subjective synonym of magnifenestrata NAUMANN & LÖFFLER, 2010 and once as subspecies of magnifenestrata NAUMANN & LÖFFLER, 2010. Important is finally, that the name of the populations of the *elaezia*-group from the Malay Peninsula was downgraded as subspecies. Therefore, in our opinion, the change of status of *elaeziopahangensis* BRECHLIN, 2010 has been first carried out by Paukstadt & Paukstadt (2010: 55-64) and not by Nässig in Nässig, Kitching, Peigler & Treadaway (2010: 159).

² We do not believe that barcoding or dissection is necessary to combine \mathcal{J} and \mathcal{Q} adults because they can be combined after the origin of the specimens: Borneo (except SE Borneo)= magnifenestrata magnifenestrata NAUMANN & LÖFFLER, 2010 and Peninsular Malaysia = magnifenestrata elaeziopahangensis BRECHLIN, 2010 as long as locality data are present and reliable.

elaezioborneensis BRECHLIN, 2010 (synonym)

Original citation and spelling: "Cricula elaezioborneensis n. sp."

- Original description: Brechlin, R. (2010a): Neue Taxa der Gattung *Cricula* WALKER, 1855 (Lepidoptera: Saturniidae). Entomo-Satsphingia, 3 (1): pp. 34-41, 2 col.-pls. (with 20 figs.).
 Remarks: above paper is considered being unpublished for the purposes of zoological nomenclature, cf. Nässig, Kitching, Peigler & Treadaway (2010: 145-165).
 Brechlin, R. (2010b): Neue Taxa der Gattung *Cricula* WALKER, 1855 (Lepidoptera: Saturniidae). Entomo-Satsphingia, 3 (1): pp. 36-44, 2 col.-pls. (with 20 figs.).
- Type locality: Borneo, Sabah, Ranau Mts., 1600 m.
- **Etymology:** the name *elaezioborneensis* indicates the close relationship with *elaezia* JORDAN, 1909 combined with the type locality the island of Borneo.
- Type material: the description based on the ♂ holotype by original designation and 20 ♂ and 4 ♀ paratypes (including the ♀ allotype). Holotype ex coll. Brechlin / CRBP (Pasewalk, Germany) in coll. Museum Witt (Munich, Germany), which is further assigned to the Zoologische Staastsammlung München (Munich, Germany). Paratypes are preserved in coll. Brechlin (Pasewalk, Germany), in coll. Natural History Museum London / BMNH (London, Great Britain), in coll. Laela H. Paukstadt (Wilhelmshaven, Germany) now as Research Collection of Ulrich and Laela H. Paukstadt (Wilhelmshaven, Germany), in coll. Nässig / CWAN *in* Senckenberg Museum Frankfurt Lepidoptera (Frankfurt am Main).
- **Taxonomical notes:** the name *‡elaezioborneensis* BRECHLIN, 2010 was proposed in a paper considered being unpublished for the purposes of zoological nomenclature, cf. Nässig, Kitching, Peigler & Treadaway (2010: 145-165). The published name *elaezioborneensis* BRECHLIN, 2010 is considered to be a junor subjective synonym of *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010.
- **Geographical and altitudinal range:** thus far this taxon is mainly known from East Malaysia (Sabah, North Borneo, Sarawak, and Brunei), scattered records are from the Kalimantan Tenggah Province of Indonesia. Altitudinal records are from 60-1790 m for East Malaysia, but mostly far above 1000 m, and from 400-800 m for Kalimantan.
- **General notes:** the \mathcal{J} holotype of *elaezioborneensis* BRECHLIN, 2010 was figured in color dorsally (: 43, fig. 2) and the \mathcal{J} genitalia structures with separate aedeagus of a paratype (: 44, fig. 14).
- Synonyms: For misinterpretations see the appropriate text parts. Junior subjective synonyms, junior objective synonyms, errors, and incorrect

subsequent spellings for *elaezioborneensis* BRECHLIN, 2010 are as follows:

Cricula magnifenestrata magnifenestrata NAUMANN & LÖFFLER, 2010 [senior subjective synonym]

‡elaeziobornea BRECHLIN, 2010; Paukstadt & Paukstadt (2010: 56, 57, 59, 62)

[lapsus, incorrect subsequent spelling of *elaezioborneensis* BRECHLIN, 2010] **Hybridizations and sericulture:** n/a.

Further readings on *elaezioborneensis* (in chronological order):

Brechlin (2010a: 34-41) [09.i.2010 / considered unpublished for the purposes of zoological nomenclature] described and illustrated new taxa of the genus *Cricula* WALKER, 1855. Those were *‡elaeziosumatrana* (Sumatra), *‡elaeziopahangensis* (West Malaysia), and *‡elaezioborneensis* (Borneo) of the *elaezia*-group and *‡kalimantanensis* (Kalimantan) with uncertain group status. The taxa were figured in color (: 40) and their ♂ genitalia structures (: 41).

Remarks: the paper by Brechlin (2010a) was considered being unpublished for the purposes of zoological nomenclature and the names therefore being invalid, cf. Nässig, Kitching, Peigler & Treadaway, 2010.

Brechlin (2010b: 36-44) [09.i.2010, recte 26.i.2010 / considered being published for purposes of zoological nomenclature, cf. Nässig, Kitching, Peigler & Treadaway (2010)] described and illustrated new taxa of the genus *Cricula* WALKER, 1855. Those were from Sundaland *elaeziosumatrana* (Sumatra), *elaeziopahangensis* (West Malaysia), and *elaezioborneensis* (Borneo) of the *elaezia*-group and *kalimantanensis* (Kalimantan) with uncertain group status. The author compared *elaezioborneensis* BRECHLIN, 2010 with *elaezia* JORDAN, 1909 [unspecified, probably from Java and/ or Bali], the ♂ genitalia structures were compared with those of *elaezia* (Java). The ♂ holotype of *elaezioborneensis* BRECHLIN, 2010 (Sabah) was figured in color dorsally (: 43, fig. 2), as well as the ♂ genitalia structures of *elaezioborneensis* (: 44, fig. 14).

Remarks: in the meantime *elaeziosumatrana* was considered to be a junior subjective synonym of *separata* NAUMANN & LÖFFLER, 2010, *elaeziopahangensis* was downgraded as subspecies of *magnifenestrata* NAUMANN & LÖFFLER, 2010, and *elaezioborneensis* was considered to be a junior subjective synonym of *magnifenestrata* NAUMANN & LÖFFLER, 2010, cf. Nässig, Kitching, Peigler & Treadaway (2010). The populations of the *elaezia*-group from Bali are assigned to *pelengensis* PAUKSTADT & PAUKSTADT, 2009.

Paukstadt & Paukstadt (2010e: 159-174) [13.v.2010] provided a preliminary checklist of the Saturniidae of Indonesia (New Guinea excluded). C. elaezioborneensis BRECHLIN, 2010 from Borneo (East Malaysia, Brunei, and central part of Borneo) was listed (: 168). C. magnifenestrata NAUMANN & LÖFFLER, 2010 was listed as junior subjective synonym of elaezioborneensis BRECHLIN, 2010.

Remarks: *elaezioborneensis* BRECHLIN, 2010 is considered to be a junior subjective synonym of *magnifenestrata* NAUMANN & LÖFFLER, 2010. The first description of *elaezioborneensis* BRECHLIN, 2010 was considered being not valid and the following description was published a few days later than *magnifenestrata* NAUMANN & LÖFFLER, 2010. For the "calculated" publication date of *elaeziaborneensis* BRECHLIN, 2010, cf. cf. Nässig, Kitching, Peigler & Treadaway (2010).

quinquefenestrata ROEPKE, 1940

Original citation and spelling: "Cr. quinquefenestrata n. sp."

- **Original description:** Roepke, W. (1940): Aanteekeniingen over het geslacht *Cricula* WALK. (Lep., Saturniidae). Entomologische Mededeelingen Ned.-Indië (Leiden), 6 (2): pp. 23-32, 1 pl. with 4 phot. h.-t., 4 text-figs. (line drawings).
- **Type locality:** Midden-Celebes [=Central-Celebes; Indonesia, South Sulawesi Province], Paloppo [ca. 35 km off Palopo, street Palopo Rantepao], Todjamboe [Tujambu], 800 m.
- **Etymology:** the name is a combination of the number of "windows" in the forewings of the \Im and \Im adults: the Latin quinque = fife and the Latin fenestrae = windows.
- **Type material:** the descrition based on the \bigcirc holotype by original designation and 10 paratypes [undefined sex]. A \circlearrowleft allotype was designated in the original description. Nässig (1989: 197) reported the \bigcirc holotype of *quinquefenestrata* ROEPKE, 1940 got lost. Naumann (1995: 79) reported erroneously a type series of 11 \bigcirc and 2 \circlearrowright specimens [= 13 specimens] in RMNH [former Nationaal Natuurhistorisch Museum, now Naturalis (Leiden, The Netherlands)] und BMNH [former Britisch Museum Natural History; now The Natural History Museum (London, Great Britain)].
- **Taxonomical notes:** this species is unmistakable a member of the *elaezia*group (sensu Nässig 1995) and geographically well isolated from other species of the *elaezia*-group. Nässig *in* Nässig, Kitching, Peigler & Treadaway (2010: 159) placed *quinquefenestrata* into the Wallacea subgroup of the *elaezia*-group.
- Geographical and altitudinal range: *quinquefenestrata* ROEPKE, 1940 is considered to be an endemic to the island of Sulawesi. The original description confirms an altitudinal distribution at 800 m. Specimens preserved in the Research Collection of Ulrich and Laela H. Paukstadt (Wilhelmshaven) are from 800 (type locality!)-1,800 m. Naumann (1995: 79) reported this species from 800-1,800 m. Naumann (2000) recorded *quinquefenestrata* ROEPKE, 1940 from Tanahjampea Island far off the southern coast of Sulawesi [the record is doubtful because based on probably mislabelled dealer specimens]. Contrary, Nässig *in* Nässig, Kitching, Peigler & Treadaway (2010: 159) confirmed the record of *quinquefenestrata* from Tanahjampea being reliable.
- **General notes:** the \bigcirc holotype and a \bigcirc allotype of *quinquefenestrata* ROEPKE, 1940 was illustrated in phot. h.-t. Paukstadt & Paukstadt (1991) figured the \bigcirc in phot. h.-t. (: 23, fig. 12). Naumann (1995) figured a \bigcirc adult in color ventrally (: 139, pl. XV, fig. 1), the \bigcirc holotype (fig. 2) and

a further $\stackrel{\bigcirc}{\downarrow}$ adult (fig. 3). Nässig (1995: 87) figured $\stackrel{\bigcirc}{\supset}$ adults in color dorsally (figs. 4, 7, 8, 9, and 10); the \mathcal{Q} holotype was figured in color dorsally (fig. 5) and a \bigcirc paratype (fig. 6). Nässig (1995: 101) figured the \mathcal{E} genitalia structures of *quinquefenestrata* from Sulawesi (figs. 7, 8) phot. Nässig (1995: 107) figured the \mathcal{Q} genitalia structures of quinquefenestrata from Sulawesi (fig. 8) in phot. Naumann (1995: 81) remarked that the cocoon is known, which is preserved in RMNH [Naturalis (Leiden, The Netherlands)]; the cocoon was illustrated in color (: 119, pl. V, fig. 1). Four δ adults were figured in color dorsally (: 137, pl. XIV, figs. 12-15; including a paratype (fig. 13)). The \mathcal{J} genitalia structures were figured in phot. h.-t. (: 143, pl. XVII, fig. 7). Paukstadt (2009) illustrated a d adult of *quinquefenestrata* ROEPKE, 1940 in color dorsally (cover illustration). Nässig in Nässig, Kitching, Peigler & Treadaway (2010: 155) figured the likely $\stackrel{\circ}{\downarrow}$ holotype (as figured in the original description, but not labeled as such) of quinquefenestrata in color dorsally (fig. 4a), ventrally (fig. 4b), and the appropriate pin-labels (fig. 4c). A d paratype of quinquefenestrata (labeled as "allotype" but not fits to the figure in the original description) was figured in color dorsally (fig. 5a), ventrally (fig. 5b), the appropriate pin-labels (fig. 5c).

- Synonyms: For misinterpretations see the appropriate text parts. Junior subjective synonyms, junior objective synonyms, errors, and incorrect subsequent spellings for *quinquefenestrata* ROEPKE, 1940 are as follows:
 - *‡quinquefenstrata* ROEPKE, 1940; Naumann (1995: 81) [lapsus, incorrect subsequent spelling of *quinquefenestrata* ROEPKE, 1940]
 - *‡quinauefenstrata*; Akai (2000: [91]) [lapsus, incorrect subsequent spelling of *quinquefenestrata* ROEPKE, 1940]
 - ‡quinquefenstrata ROEPKE, 1940; Nässig in Nässig, Kitching, Peigler & Treadaway (2010: 156, 162) [lapsus, incorrect subsequent spelling of quinquefenestrata ROEPKE, 1940]
- **Hybridizations and sericulture:** Inter-generic and inter-specific pairings with *quinquefenestrata* ROEPKE, 1940 are unknown from literature. There is no information on sericulture available.

Further readings on *quinquefenestrata* (in chronological order):

Jordan (1939: 434) remarked that the subspecies of *trifenestrata* from Celebes [=Sulawesi] will be described by Prof. W. Roepke and therefore omitted in his contribution.

Remarks: this has been probably the first still unnamed record of a species of the *elaezia*group from Sulawesi. The taxon from Sulawesi mentioned by Jordan (1939: 434) was later described as *quinquefenestrata* ROEPKE, 1940 and, of course, is considered to be no subspecies of *trifenestrata* (HELFER, 1837).

Roepke (1940: 24) noticed that the \Im genitalia organs of the species and subspecies of *Cricula* WALKER vary to a considerable extent. The aedeagus of *elaezia* from

West Java was figured (: 25, fig. 2c, line drawings) and details of the genitalia (: 28, figs. 4I-4J, line drawings) and compared to *quinquefenestrata* ROEPKE, 1940 (: 28, fig. 4K, line drawings). The \bigcirc holotype and the \Im allotype of *quinquefenestrata* were figured in phot. h.-t. (pl. 4, fig. 5).

- Holloway in Allen (1981: 123) recorded quinquefenestrata ROEPKE from Sulawesi.
 Holloway included seven species into the genus Cricula WALKER, 1855, of which two species needs to be assigned to the genus Solus WATSON, 1913. Those were C. drepanoides MOORE and C. parvifenestrata BRYK [see "Remarks" below].
 Remarks: the name parvifenestrata BRYK is correct as parvifenestratus BRYK, 1944; emendation by Nässig (1989: 340).
- Nässig (1989) [01./15.vii.1989] reported the \bigcirc holotype of *quinquefenestrata* ROEPKE, 1940 got lost.

Paukstadt & Paukstadt (1989: 193-214) [ix.1989] remarked that only a very few specimens of the genus *Cricula* WALKER, 1855 came to light in Puncak Palopo, South Sulawesi Province (: 213).

Remark: this remark needs to be assigned to two species which are syntop in this area: *trifenestrata kransi* JURRIAANSE & LINDEMANS, 1920 and *quinquefenestrata* ROEPKE, 1940.

- Paukstadt & Paukstadt (1991: 17-27) [iii.1991] illustrated the \bigcirc of *quinquefenestrata* (ROEPKE, 1940) [sic] from Sulawesi (fig. 12) in phot. h.-t..
- Nässig (1991: 504) reported on the phylogeny and zoogeography of the tropical Asiatic genus *Cricula* WALKER, 1855. He separated the taxa into two groups. Those were the *trifenestrata*-group with 3 species and the *andrei*-group with 9 species. The *andrei*-group was devided into further 3 subgroups. Those were the *andrei*-group of the *andrei*-group, the *elaezia*-subgroup of the *andrei*-group and the [third subgroup still unnamed, probably *luzonica*-subgroup]. *C. trifenestrata kransi* JURRIAANSE & LINDEMANS, 1920 and *quinquefenestrata* ROEPKE, 1940 were recorded for Sulawesi.

Remarks: The continental *andrei*-group (Continental Asian group) is replaced by the insular *elaezia*-group (Archipelago Asian group) on Sumatra and Borneo.

- Nässig (1995: 1-113; A revision of the genus *Cricula* WALKER, 1855 and an attempt of a phylogenetic analysis of the tribus Saturniini) reported *quinquefenestrata* ROEPKE, 1940 from Sulawesi (: 35). \Im adults were figured in color dorsally (: 87, figs. 4, 7, 8, 9, and 10); the \Im holotype was figured in color dorsally (: 87, fig. 5) an a \Im paratype (: 87, fig. 6). Nässig (1995: 101) figured the \Im genitalia structures of *quinquefenestrata* from Sulawesi (figs. 7, 8) phot. Nässig (1995: 107) figured the \Im genitalia structures of *quinquefenestrata* from Sulawesi (fig. 8) in phot.
- Naumann (1995: 79-81) provided some information on *quinquefenestrata* ROEPKE, 1940 from Sulawesi. The cocoon was illustrated in color (: 119, pl. V, fig. 1). $\overset{\circ}{\supset}$ adults were figured in color dorsally (: 137, pl. XIV, figs. 12-15) [fig. 13 is one of the paratypes]. A $\overset{\circ}{\supset}$ adult was figured in color ventrally (: 139, pl. XV, fig. 1), the \bigcirc holotype (fig. 2) and a further \bigcirc adult (fig. 3).
- Nässig, Lampe & Kager (1996a: 38) [30.vi.1996] remarked that the vesica of the aedeagus of *elaezia* JORDAN, 1909 [unspecified origin] has no cornuti at all and very prominent harpes, these characters largely coincide with *quinquefenestrata* ROEPKE, 1940 (Sulawesi) and a further (undescribed) taxon from Mindanao.

Nässig & Treadaway (1997: 323-366) [26.ii.1997] placed three allopatric species into the *elaezia*-group. Those were *elaezia* JORDAN, 1909 from Sundaland (Westmalaysia, Sumatra, Borneo, Java, and Bali), *quinquefenestrata* ROEPKE, 1940 (Sulawesi), and *mindanaensis* NÄSSIG & TREADAWAY, 1997 (Mindanao).
Remarks: above record of *elaezia* JORDAN, 1909 based on several mostly endemic taxa in Southeast Asia. Those are magnifenestrata elaeziopahangensis BRECHLIN, 2010 (Peninsular Malaysia), *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 (Borneo), *separata* NAUMANN & LÖFFLER, 2010 (Sumatra), *elaezia* JORDAN, 1909 (Java), and *pelengensis* PAUKSTADT & PAUKSTADT, 2009 (Bali).

Nässig & Treadaway (1998: 223-424) [vii.1998] reported on the Saturniidae of the Philippines. Nässig & Treadaway (: 283) remarked *mindanaensis* NÄSSIG & TREADAWAY, 1997 being a monotypic paraspecies only known from Mt. Kitanglad in Mindanao which is similar the variable *quinquefenestrata* ROEPKE, 1940 an endemic of Sulawesi (: 284). *C. mindanaensis* was also compared with *elaezia* JORDAN, 1909 from Sundaland (: 284-285). The relationships of *elaezia*, *quinquefenestrata* and *mindanaensis* were discussed (: 285).

Remarks: *elaezia* JORDAN, 1909 is considered to be an endemic of Java and southeastern Kalimantan. This species is replaced by allied taxa in the remaining regions of Sundaland. Those are *pelengensis* PAUKSTADT & PAUKSTADT, 2009 (Bali), *separata* NAUMANN & LÖFFLER, 2010 (Sumatra), *magnifenestrata* NAUMANN & LÖFFLER, 2010 (Borneo), and *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 (Malay Peninsula).

D'Abrera (1998: 52-55) [1998] recorded *elaezia* JORDAN, 1939 from the Malay Peninsula, Java, Sumatra, Borneo, and ?western Moluccas. The author noted that the population from Buru [western Moluccas] has been described as *buruensis* JORDAN. *C. quinquefenestrata* ROEPKE, 1940 was recorded for Sulawesi. A $\stackrel{\circ}{\supset}$ adult and a $\stackrel{\circ}{\ominus}$ paratype were figured in color. *C. bornea* WATSON, 1913 was recorded from Borneo.

Remarks: *elaezia* JORDAN, 1939 is replaced by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 on the Malay Peninsula, by *magnifenestrata* NAUMANN & LÖFFLER, 2010 on Borneo, by *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on Bali, and by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra. *C. quinquefenestrata* ROEPKE, 1940 is considered restricted to Sulawesi.

Akai (2000: 91-97) [30.vi.2000] reported on a successful example of wild silk development from *Cricula trifenestrata* in Indonesia [mainly based on observations carried out in Yogyakarta, Central Java]. Akai listed 12 species of the genus *Cricula* and the distribution. *C. bornea* (Borneo), *sumatrensis* (Sumatra), *elaezia* (Burma [Myanmar]) [sic], *quinauefenestrata* [sic] (South Asia, India, Thailand) [sic] were listed.

Remarks: *elaezia* JORDAN, 1909 is considered to be endemic on Java and probably SE Borneo. There are no taxa of the *elaezia*-group present in Myanmar north of the Isthmus of Kra. *C. quinquefenestrata* ROEPKE, 1940 is an endemic species on the island of Sulawesi.

Naumann (2000: 57) recorded *Cricula quinquefenestrata* ROEPKE, 1940 for the small island of Tanahjampea far off the southern coast of South Sulawesi. **Remarks:** the record needs to be treated with caution. The record probably based on mislabeled dealer material. All together six species of the family Saturniidae were recorded for this tiny island but a few of them are typical montane species of Sulawesi which most likely would not being able to survive on a lowland island without mountains. Brechlin (2001: 41) recorded *elaezia* JORDAN, 1909 from Borneo. The taxa *elaezia* JORDAN, 1909, *palawanica* BRECHLIN, 2001, *quinquefenestrata* ROEPKE, 1940, and *mindanaensis* NÄSSIG & TREADAWAY, 1997 were placed into the *elaezia*-group (sensu Nässig 1995). *C. elaezia* has been also recorded from Sumatra and Java. ♂ adults of *elaezia* [= *separata*] from Sumatra and *quinquefenestrata* from Sulawesi were figured in color (: 42, col.-pl., fig. 3 and 5).

Remarks: the record of *elaezia* from Borneo needs to be assigned (partim) to the later established name *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 and the record from Sumatra to the later established name *separata* NAUMANN & LÖFFLER, 2010.

Paukstadt & Paukstadt (2004a: 3-55) [12.i.2004] noted in "distribution patterns of the genera of the family Saturniidae BOISDUVAL, 1837 ("1834") that the genus *Cricula* WALKER, 1855 is absent on Taiwan, New Guinea and Australia (: 19, Table 3 and : 20, Table 4). In map 22 (: 37) and map 23 (: 38) the number of species and percentage of combined totals of species (excluding / including subspecies) of the genus *Cricula* shared between the major parts (mostly islands) of Southeast Asia is illustrated. The authors found that many islands of the archipelago are often colonized sympatrically by two taxa of different species groups. For *C. elaezia* JORDAN, 1909 a Sundanian distribution was recorded. The various possibilities of colonization of Southeast Asia by *Cricula* were discussed (: 49). *C. hayatiae* PAUKSTADT & SUHARDJONO, 1992 and *quinquefenestrata* ROEPKE, 1940 were placed into the *elaezia*-group and *sumatrensis* JORDAN, 1939 into the *andrei*-group. The authors noted that there has been no dispersal of *Cricula* from the Philippines to Taiwan (: 51).

Remarks: the drawing based on each 3 species for Sumatra and Borneo, each 2 species for Java, Sulawesi, and the Lesser Sunda Islands, and each 1 species for Banggai, Seram / Buru, and Halmahera. *C. elaezia* JORDAN, 1909 is considered to be endemic to Java and likely SE Borneo and replaced by the closely related *pelengensis* PAUKSTADT & PAUKSTADT, 2009 on Bali, by *separata* NAUMANN & LÖFFLER, 2010 on Sumatra, by *magnifenestrata magnifenestrata* NAUMANN & LÖFFLER, 2010 in some regions of Borneo, and by *magnifenestrata elaeziopahangensis* BRECHLIN, 2010 on the Malay Peninsula.

Paukstadt & Paukstadt (2004c: 111-188) [03.ix.2004] provided general information on the genus *Cricula* WALKER, 1855. The adults and larvae were briefly described. *Cricula quinquefenestrata* ROEPKE, 1940 was recorded from Sulawesi and placed into the *elaezia*-group (sensu Nässig 1995) (: 184).

Paukstadt & Paukstadt (2005b: 127-145) [15.xii.2005] remarked that so far no member of the genus *Cricula* WALKER, 1855 was found on the island of Alor, Eastern Lesser Sunda Islands, Indonesia (: 141).

Remarks: the first record and description of a new species from Alor was carried out by Naumann & Löffler (2010): *Cricula maxalorensis* NAUMANN & LÖFFLER, 2010.

Paukstadt & Paukstadt (2007: 46, 64) [28.v.2007] in "A Preliminary Annotated Checklist of the Indonesian Wild Silkmoths – Part III: The *cordifolia*-subgroup of the *mylitta/frithi*-group (Lepidoptera: Saturniidae: Saturniinae)" noted that "A record by Naumann (2000) Galathea – Ber. Kr. Nürnbg. Entomol. (Nürnberg), 16 (2): pp. 55–58, from the Indonesian island of Tanahjampea (Flores Sea) need confirmation with material from other sources. The record did include the Sulawesian taxon *exspectata*, which is mostly distributed in higher mountain regions of Sulawesi but the island of Tanahjampea lacks mountains. Therefore all records for Tanahjampea are considered to be not reliable."

Remarks: the records by Naumann (2000) included quinquefenestrata ROEPKE, 1940.

- Paukstadt (2009) [21.viii.2009] illustrated a ♂ adult of *quinquefenestrata* ROEPKE, 1940 in color dorsally (cover illustration).
- Paukstadt, Paukstadt, Suhardiono, Sutrisno & Aswari (2009: 151-204) [21,viii.2009] recorded in "An Annotated Catalogue of the Saturniidae in Coll. Museum Zoologicum Bogoriense (Cibinong) - Saturniini Part II" all specimens of Cricula WALKER, 1855 preserved in MZB. The following lists were provided: list of reared specimens (: 158), of food plants recorded (: 157), of altitudinal records (: 159), of collecting years recorded (: 160-161), of collecting months recorded (: 161-162), of collecting sites recorded (: 162-163) all based on data of pin-labels, and a systematic list of taxa (: 164). The following taxa were recorded: trifenestrata (HELFER, 1837) of uncertain subspecific identity (Halmahera), trifenestrata javana WATSON, 1913 (North and West Sumatra, Lampung -Sumatra, Jawa, Bali, Krakatau I.), trifenestrata kransi JURRIAANSE & LINDEMANS, 1920 (South Sulawesi), trifenestrata serama NÄSSIG, 1989 (Seram I.), trifenestrata banggaiensis NAUMANN & PAUKSTADT, 1997 (Banggai Arch.), trifenestrata tenggarensis PAUKSTADT, PAUKSTADT & SUHARDJONO, 1998 (Flores, Lombok), elaezia JORDAN, 1909 (Java, Sumatra), sumatrensis JORDAN, 1939 (Sumatra), quinquefenestrata ROEPKE, 1940 (South Sulawesi), and hayatiae PAUKSTADT & SUHARDJONO, 1992 (Flores). The pin-labels of all preserved specimens were figured in color with scales and the text was annotated.

Remarks: the populations assigned to *trifenestrata halmaheraensis* PAUKSTADT & PAUKSTADT, 2010 (Halmahera), to *trifenestrata barisanensis* PAUKSTADT & PAUKSTADT, 2010 (Sumatra), to *trifenestrata javana* WATSON, 1913 (Jawa, Krakatau I.), to *trifenestrata tenggarensis* PAUKSTADT, PAUKSTADT & SUHARDJONO, 1998 (Bali, Lombok, Flores), to *trifenestrata kransi* JURRIAANSE & LINDEMANS, 1920 (Sulawesi), to *trifenestrata serama* NÄSSIG, 1989 (Seram), to *trifenestrata banggaiensis* NAUMANN & PAUKSTADT, 1997 (Banggai-Arch., to *elaezia* JORDAN, 1909 (Java and SE Borneo) [and *pelengensis* PAUKSTADT & PAUKSTADT, 2009 (Bali)], to *C. separata* NAUMANN & LÖFFLER, 2010 (Sumatra); no changes were in *sumatrensis* JORDAN, 1939 (Sumatra), *quinquefenestrata* ROEPKE, 1940 (South Sulawesi), and *hayatiae* PAUKSTADT & SUHARDJONO, 1992 (Flores).

Paukstadt & Paukstadt (2009g: 416-424) [14.xii.2009] remarked that taxa of the *elaezia*-group (sensu Nässig 1995) are eventually distributed on the islands of Buru [Moluccas = ssp. *buruensis* JORDAN, 1939] and Bali [Lesser Sunda Islands]. The new taxon *pelengensis* was compared with *quinquefenestrata* ROEPKE, 1940 (Sulawesi), *hayatiae* PAUKSTADT & SUHARDJONO, 1992 (Flores), and *elaezia* JORDAN, 1909 (West Malaysia, East Malaysia, Sumatra, Java). The ♂ singleton of *pelengensis* was received from a dealer on Bali together with a large series of *trifenestrata banggaiensis* NAUMANN & PAUKSTADT, 1997.

Remarks: the authors were not aware that the new taxon *pelengensis* PAUKSTADT & PAUKSTADT, 2009 from Pulau Peleng has been mislabeled and actually has been from the island of Bali. Today the populations of the *elaezia*-group from Bali are assigned to *pelengensis* PAUKSTADT & PAUKSTADT, 2009 and those from Java and SE Borneo to *elaezia* JORDAN, 1909, from the remaining Borneo to *magnifenestrata* NAUMANN & LÖFFLER, 2010, from Sumatra to *separata* NAUMANN & LÖFFLER, 2010, and from West Malaysia to *magnifenestrata elaeziopahangensis* BRECHLIN, 2010.

- Paukstadt & Paukstadt (2010e: 159-174) [13.v.2010] provided a preliminary checklist of the Saturniidae of Indonesia (New Guinea excluded). *C. quinquefenestrata* ROEPKE, 1940 from Sulawesi was listed (: 167).
- Nässig *in* Nässig, Kitching, Peigler & Treadaway (2010: 159) placed *quinquefenestrata* into the Wallacea subgroup of the *elaezia*-group. The author noted that the Sulawesian populations of *quinquefenestrata* exhibit a large variability in the barcode and appear to live on Sulawesi already for a long time. Two barcode similarity trees were figured (: 151) which include almost all taxa of the *elaezia*-group (*palawanica* was missing because results of barcoding were not available). A map was provided (: 153) showing the distribution pattern of the taxa of the *elaezia*-group. The likely ♀ holotype of *quinquefenestrata* was illustrated in color dorsally (: 155, fig. 4a), ventrally (: 155, fig. 4b), and the appropriate pinlabels (: 155, fig. 4c). A revised check-list of the *elaezia*-group was provided by the author (: 162). A ♂ paratype of *quinquefenestrata* was illustrated in color dorsally (: 155, fig. 5a), ventrally (: 155, fig. 5b), and the appropriate pinlabels (: 155, fig. 5c). A revised check-list of the *elaezia*-group was provided by the author (: 162).

Remarks: the authors confirmed *quinquefenestrata* ROEPKE, 1940 for the island of Tanahjampea without further entomological studies on that island (not mentioned in the paper).

Naumann & Peigler (2012: 48) cited that Naumann (2000) recorded six representatives of Sulawesia Saturniidae for Tanahjampea.

Remarks: the paper by Naumann (2000) includes C. quinquefenestrata ROEPKE, 1940.

- Paukstadt, L. H. & Paukstadt, U. (2013a: 75-93) [01.iii.2013] reported on an entomological travel carried out by the senior author Laela Hayati to the island of Selayar, South Sulawesi Province. A record of *quinquefenestrata* ROEPKE, 1940 from Tanahjampea (Pulau Jampea) in between South Sulawesi and the island of Flores by Naumann (1995) was considered being based on mislabeled specimens because *quinquefenestrata* is a mountain species and the highest elevation on Tanahjampea is 521 m only (: 86). Naumann (1995, 2000) and Naumann & Peigler (2012) recorded six species of the family Saturniidae from the tiny island of Tanahjampea, while Paukstadt & Paukstadt did collect only three species on the much bigger island of Selayar during a periode of two years (during about 24 consecutive month of light trapping!). The authors confirmed that the genus *Cricula* WALKER, 1855 was not observed on the island of Selayar.
- Paukstadt & Paukstadt (2013i: 271-288) [06.xi.2013] noted that the record of six taxa of the family Saturniidae for Tanahjampea by Naumann (2000) and Naumann & Peigler (2012) needs to be treated with caution because the reported specimens might be mislabeled and might be originally from Sulawesi instead (: 273, 284). The genus *Cricula* WALKER, 1855 was reported probably missing on the island of Selayar, South Sulawesi Province, though Naumann (2000) recorded *quinquefenestrata* ROEPKE, 1940 for the tiny island of Tanahjampea.

(to be continued)

Verfasser:

Ulrich PAUKSTADT & Laela Hayati PAUKSTADT Knud-Rasmussen-Strasse 5, 26389 Wilhelmshaven, Germany e-mail: ulrich.paukstadt@gmx.de http://www.wildsilkmoth-indonesia.com

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Beiträge zur Kenntnis der wilden Seidenspinner

Jahr/Year: 2019

Band/Volume: 17

Autor(en)/Author(s): Paukstadt Ulrich, Paukstadt Laela Hayati

Artikel/Article: <u>A Preliminary Annotated Checklist of the Indonesian Wild Silkmoths</u> – Part X. The genus Cricula WALKER, 1855 – Part 3, the elaezia-group (Lepidoptera: Saturniidae: Saturniinae) 215-264