「森林総合研究所研究報告」(Bulletin of FFPRI), Vol. 1, No. 3 (No. 384), 189-223, November, 2002

研究資料（Research Material）

Longicorn Beetles from Gunung Halimun National Park, West Java, Indonesia from 1997 - 2002 (Coleoptera, Disteniidae and Cerambycidae)

MAKIHARA Hiroshi[1)*], WORO A. NOERDJITO[2)] and SUGIARTO[3)]

Abstract

Gunung Halimun National Park is one of the biggest natural forests in West Java. The park is well known for its rich flora, with a total area of about 40,000 ha. The national park consists of three types of forests, namely lowland forest, sub-montane forest, and montane forest. The research site is located in the eastern part of the park, and the research area, which coveres only about 2 ha, is at about 1,000 m asl. We report 128 species of longicorn beetles occurring at the research site of Gunung Halimun National Park from 1997-2002, including illustrations of all species, host records, distributions, some biological information and faunal features of the longicorns. Of the 99 species identified here, 43 are endemic to Java and 10 are new records for Java.

Key words: Longicorn, Gunung Halimun National Park, West Java, inventory, Malaise trap

Introduction

In Asia the cerambycid beetles consist of three families, Disteniidae, Vesperidae and Cerambycidae. Among them, the family Cerambycidae constitutes one of the largest groups of wood-boring insects. Of approximately 35,000 species that have been described, most are scavengers in forests, but many are injurious against living trees and shrubs. In the particular cerambycid-beetles are typical forest insects.

In 2001, we inventoried the longicorn (96species) in the Cikaniki Research Site of Gunug Halimun National Park (Makihara and Woro, 2001). Here, we provide a revised list of longicorn beetles, adding 36 species new to the site.

This report is the result of a survey concerning longicorn beetles at the research site in Gunung Halimun National Park. This survey was carried out under the Biodiversity Conservation Project of JICA and with the cooperation of the Research and Development Center for Biology, Indonesian Institute of Sciences (RDCB-LIPI).

GHNP, Cikaniki Research Site and sampling procedure

Among the remaining forests in West Java, Gunung Halimun National Park (GHNP) is one of the biggest natural forests in the region. GHNP is located at about the longitude 106° 30´ E and the 6° 40´ S, with a total area of it about 40,000 ha. The national park consists of three types of forests, namely lowland forest (＜1,000m in altitude), sub-montane forest (1,000-1,500), and montane forest (＞1,500m). The park is well known for its rich flora. There are many kinds broad-leaved trees, lianas and medicinal plants and also species of orchids. More than 200 birds, including the endangered Javan hawk eagle, as well as leopard and several species of primate, including the Javan gibbon, the grizzled leaf monkey, and the ebony langur ocur there.

The Cikaniki Research Site, which covers about 2 ha is located in the eastern part of GHNP, at about 1,000 m asl. Rainfall varies between 4,000-6,000 mm a year. The rainy season occurs from October to April and the dry from May to September.

Longicorn beetles were mainly collected by Malaise traps, hanging traps, light traps and bait traps in the Cikaniki Research Site from 1997-2002. Five Malaise traps were set on ground paths, and two traps were set on the canopy bridge at height of 15m and two were on at 25m in 2000-2002. Two hanging traps of a black color were set on the canopy bridge at a height of 15mm and two were on at 25m in 2000-2002. One light trap was set on the ground, and anotther one was set in the canopy bridge at a height of 25m from 1997-2002. Five bait traps, using a newly cut branch of *Artocarpus* sp., were hung from tree trunks at 1.5m avove the ground in 2001-2002.

原稿受付：平成14年５月22日　Received May. 22, 2002　　原稿受理：平成14年７月25日　Accepted Jul. 25, 2002

1)* Department of Global Forest Research, Forestry and Forest Products Research Institute, P.O.Box16, Tsukuba Norin Kenkyu Danchi-nai, Ibaraki 305-8687, Japan; e-mail: makihara@ffpri.affrc.go.jp

2) Bidang Zoologi Puslit Biologi - LIPI

3) Ehime University

A list of Longicorn beetles from Gunung Halimun National Park, West Java, Indonesia from1997-2002

Abreviations

The following abreviations are used to indicate traps and methods of collection of longicorns in this investigation.

MT: Malaise trap.

HT: Hanging trap with chemical attractants (70% ethanol and methyleugenol).

LT: Light trap.

Artocarpus: Namely a kind of bait trap. A cut branch of *Artocarpus* sp., with many leaves, was hung from a tree trunk in the forest.

Family Disteniidae Lacordaire, 1869

Tribe Disteniini Thomson, 1860

1. *Typodryas chalybeata* (Pascoe) (Pl.1, Fig. 1)

***Noemia chalybeata* Pasc., 1866, Proc. Zool. Soc. Lond., 1866: 509 (Singapore).**

***Psalanta chalybeata*: Pasc., 1869, Trans. Entomol. Soc. Lond., (3)III:659, Pl.XXII, Fig.1.**

***Typodryas chalybeata*: Auriv., 1912, Coleopt. Cat., 39:9.**

Specimen examined: 1♂, MT, 7.iv.2000, E. Cholik and Sarino leg.

Distribution: Malay Peninsula, Borneo (Pascoe, 1869), Java (Makihara and Woro, 2001).

Family Cerambycidae Latreille, 1804

Subfamily Prioninae Latreille, 1804
Tribe Macrotomini Thomson, 1860

2. *Rhaphipodus* (*Rhaphipodus*) *suturalis* Serville (Pl.1, Fig. 2)

***Rhaphipodus suturalis* Serville, 1832, Ann. Soc. Entomol. Fr., 1: 169 (Java).**

***Rhaphipodus Blumei* Lansb., 1884, Not. Leyd. Mus., VI:150.**

***Rhaphipodus* (*Rhaphipodus*) *suturalis*: Lmr., 1903, Mem. Soc. Entomol. Belg., 11:76.**

Specimen examined: 1♂, LT, 10.vi.2000, E. Cholik and Sarino leg.

Distribution: Java, Sumatra, Borneo (Lameere, 1903).

Tribe Megopidini Gressitt, 1940

3. *Megopis cinnamonea* Lansberge (Pl.1, Fig. 3)

***Megopis cinnamonea* Lansb., 1884, Not. Leyd. Mus., 6: 159 (Java).**

Specimen examined: 1♂, LT, 26.i.2000, Woro A.N. and E. Cholik leg.

Distribution: Java.

4. *Megopis costata* Lansberge (Pl.1, Fig. 4)

***Megopis costata* Lansb., 1884, Not. Leyd. Mus., 6: 158 (Sumatra).**

Specimens examined: 1♂, LT, 13.iii.1999, T. Ueno and M. Rofic Sofyan leg.; 1♂, LT., 22.iv.1999, N.J. Tatalinic and E. Cholik leg.; 1♀, from Kayu Lapuk, 6.v.2000, M. Rofik Sofyan leg.

Host record: *Quercus* (Kalshoven, 1955).

Distribution: Java, Sumatra, Sulawesi (Lameere, 1909).

5. *Sarmydus antennatus* Pascoe (Pl.1, Fig. 5)

***Sarmydus antennatus* Pasc., 1867, Ann. Mag. Nat. Hist., (3)3: 410 (Sarawak).**

Specimens examined: 1♂, LT, iv.1999, N.J. Tatalinic and E. Cholik leg.; 1♂, 22.iv.1999,N.J. Tatalinic and E. Cholik leg.; 1♂, LT, 26-29.iv.1999, H. Horiuchi and M. Rofic Sofyan leg.; 1♂, LT, 27.iv-2.v.1999, M. Rofic Sofyan leg.; 1♂, LT, 5.iv.2000, N.J. Tatalinic and E. Cholik leg.; 2♂♂, LT, 4.v.2000, M. Rofik Sofyan and Sarino leg.; 1♀, LT, 6.v.2000, M. Rofik Sofyan and Sarino leg.

Host records: *Cryptomeria japonica* (Beeson and Bhatia, 1939), *Engelharditia spicata* (Mathur and Balwant Singh, 1959).

Distribution: Java, Borneo, Sumatra, Malay Peninsula, Assam, Myanmar, Andaman Is., Nicobar Is. (Lameere, 1913), Laos (Gressitt et al., 1970), Taiwan (Gressitt, 1951).

Subfamily Lepturinae Latreille, 1804
Tribe Xylosteini Reitter, 1912

6. *Trypogeus javanicus* Aurivillius (Pl.1, Fig. 6)

***Trypogeus javanicus* Auriv., 1924 Ark. f. Zool., 17A(12): 2 (Java).**

Specimens examined:1♂, 14-21.iii.2000, E. Cholik, M. Rofik Sofyan and Sarino leg.; 2♂♂, 21- 28.iii.2000, E. Cholik, M. Rofik Sofyan and Sarino leg.; 2♂♂, 28.iii-4.iv.2000, E. Cholik and Sarino leg.; 3♂♂, 11-18.iv.2000, E. Cholik and Sarino leg.; 2♂♂, 18-25.iv.2000, E. Cholik and Sarino leg.; 2♂♂, 25.iv-2.v.2000, E. Cholik and Sarino leg.; 1♂, 2-9.v.2000, E. Cholik, M. Rofik Sofyan and Sarino leg.; 2♂♂, 16-23.v.2000, M. Rofik Sofyan and Sarino leg.; 1♂, 23-30.v.2000, M. Rofik Sofyan and Sarino leg. All specimens were collected by MT.

Distribution: Java.

7. *Pseudoparanaspia* sp., affinis *P. lepturooides* Pascoe (Pl.1, Fig. 7)

Specimen examined: 1♀, HT, 9-16.v.2001, Woro A.N. and S. Kahono leg.

Subfamily Cerambycinae Latreille, 1804
Tribe Cerambycini Mulsant, 1839

8. *Trachylophus approximator* Gahan (Pl.1, Fig. 8)

***Trachylophus approximator* Gah., 1888, Ann. Mag. Nat. Hist.,**

(6)2: 60 (Java).

Specimen examined: 1♀, LT, 1.ix.2000, Woro A.N., E. Cholik and Sarino leg.

Host record: *Schima noronhae* (Kalshoven, 1933).

Distribution: Java.

Biology: According to Kalshoven (1933), infestation can readily be detected by the accumulation of frass ejected through holes in the bark at the base of the host tree. Large galleries have been found running horizontally under the bark of the buttresses, one of them as long as 29 cm. Infestation has also been seen in the axils of larger crotches near the base of the tree. At first the galleries are found in the bark, but later they penerate deep into the heartwood. No emergence holes have been observed but it is not possible that adults use the galleries as a means of egress. The pupal cells have a calcareous operculum.

9. *Dialeges undulatus villosicornis* Schwarzer (Pl.1, Fig. 9)

***Dialeges undulatus villosicornis* Schwarz., 1931, Senckenbergiana, 13:60 (Java).**

Specimen examined: 1♂, LT, 22.iv.1999, N.J. Tatalinic and E. Cholik leg.

Host record: *Actinophora fragrans* (Kalshoven, 1955).

Distribution: Java, [another subspecies: Sri-Lanka, Myanmar, Thailand, Hainan Is (Gressitt et al., 1970)].

Biology: According to Kalshoven (1955), larvae of this species are frequently found in trunks of branches of *Actinophora* killed by the buprestid *Agrilus kalshoveni* Obenberger in Java. The period of development from egg to adult in purposely infested logs, which were kept moist, was between 12 and 15 months. The pupal cell is lined with a calcareous deposit.

Tribe Methini Thomson, 1860

10. *Xystrocera festiva* Thomson (Pl.1, Fig. 10)

***Xystrocera festiva* Thoms., 1861, Classif. Ceramb., 251 (Java).**

Specimens examined: 1♂, LT, 26.v-2.vi.1999, M. Rofik Sofyan leg.; 1♀, LT, 24.i.2000, Woro A.N. and E. Cholik leg.

Host records: *Acacia confusa, A. modesta, A. mollissima, Albizia lucida, A. odoratissima, A. procera* (Abe, 1983), *Albizia falcataria, A. lebbeck, A. stipulata, A. sumatrana, Coffea, Pithecellobium, Theobroma* (Beeson, 1941), *Albizia chinensis* (Kalshoven, 1951), *Acacia auriculiformis, A. arabica, A. catecu, A. mangium, A. vera, Calliandra calothyrsus, Enterolobium cycloocarpum, Parkia speciosa, Pithecelobium dulce, P. jiringa, Samanea saman* (Matsumoto, 1994),

Distribution: Java, Sumatra, Borneo, Myanmar, Thailand, Assam, Vietnam, Laos, Nias Is. (Duffy, 1968), Malay Peninsula (Makihara, 1999) .

Biology and control: According to Franssen (1937), under laboratory conditions eggs were deposited in clusters of up to 400 on host plant stems, the incubation period averaging 18 days. Recently infested trees may be recognized by the secretion of gum and sap, causing black stains to appear. Larvae feed subcortically, and if the branches are completly encircled by the larval galleries they die. Pupation occurs deep in the wood, and where there are several pupal cells close together, trunks and branches are weakened. Pupal stage, Under laboratory conditions the pupal stage averaged 18 days, the total life-cycle being about 190 days duration. The female beetle lives about four days. In regard to mating behavior Fauziah and Hidaka (1989) hypothesised that the male releases a sex pheromone while on the tree bark 5-7m above the ground. This then travels down to attract females on the ground and consequently mating and oviposition occur on the tree.

Matsumoto and Irianto (1995) suggested that pruning of *Albizia* trees, which attracts oviposition by this beetles, be avoided in the first four years after planting, and attacked trees be removed through thinning or salvage cutting every three months to control the population. Abe (1983) recomended the planting of buffer areas of resistant trees (e.g. *Eucalyptus deglupta*) between the *Albizia* plantation and secondry forest (which serves as a reservoir for the borer), and one or two rows of tap trees, e.g. *Albizia* itself, be planted between the secondary forest and buffer to attract the borer, infested trees subsequently being removed.

Tribe Callidiopini Lacordaire, 1869

11. *Stenodryas* sp.1 (Pl.1, Figs. 11 and 11')

Specimen examined: 1♂, LT, 8.viii.2000, M. Rofik Sofyan and Sarino leg.

12. *Stenodryas* sp.2, affinis *S. unicolor* Hüdepohl (Pl.2, Fig. 12)

Specimens examined: 1♀, LT, 18.iv.2000, E. Cholik and Sarino leg.; 1♀, LT, 21-28.xi.2000, Woro A.N., E. Cholik and Sarino leg

13. *Ceresium zeylanicum* White (Pl.2, Fig. 13)

***Ceresium zeylanicum* White, 1855, Cat. Col. Brit. Mus., 8: 246 (Ceylon).**

Specimens examined: 2♂♂, LT, 4-21.iii.2000, M. Rofik Sofyan and Sarino leg.; 1♂2♀♀, LT, 9-16,v.2000, E. Cholik, M. Rofik Sofyan and Sarino leg.

Host records: *Careya arborea, Heritiera minor, Shorea robusta* (Beeson and Bhatia, 1939), *Lagerstroemia parviflora* (Beeson, 1941), *Artidesma tetrandrum, Bauhinia malabarica* (Kalshoven, 1955).

Distribution: Sri-Lanka, India, Myanmar, Thailand, Laos, Java, Borneo, Sumatra, Philippines (Gressitt et al., 1970).

Tribe Rosaliini Fairmaire, 1864

14. *Rosalia* (*Eurybatus*) *decempunctata* (Westwood) (Pl.2, Fig. 14)

***Purpuricenus 10-punctata* Westw., 1848, Cab. Orient Entomol., 59, pl.29, Fig.2 (Assam).**

***Rosalia decempunctata*: Gah., 1906, Fauna Brit. India, Col. 1:179.**

Specimen examined: 1♂, MT, 23-30.v.2001, MT, Woro A.N. and S. Kahono leg.

Distribution: Java, Borneo, Laos, Sikkim, Assam, Hainan Is. (Gressitt et al., 1970).

Tribe Clytini Mulsant, 1839

15. *Xylotrechus buqueti* (Castelnau et Gory) (Pl.2, Fig. 15)

***Clytus buqueti* C. et G., 1835, Mon. Clyt., p.86, t.16, f.99 (Java).**

***Xylotrechus buqueti*: Chevr., 1863, Mem. Soc. Sci. Liege, 18:323(71).**

Specimen examined: 1♂, MT, 13-20.ii.2002, MT, Woro A.N. and S. Kahono leg.

Host records: *Acrocarpus fraxinifolius, Cedrela toona, Celtus australis, Cryptocarya wightiana,Gmelina arborea, Kydia calycina, Lagerstroemia parviflora, Mallotus philippinensis, Milletia pendula, Myristca longifolia, Pterocarpus dalbergioides, Shorea robusta, Tectona grandis* (Beeson and Bhatia, 1939), *Cassia fistula* (Bhasin et al., 1958), *Duabanga sonneratioides* (Mathur and Singh. 1959) .

Distribution: Java, Sumatra, Andaman Is., Thailand, Laos, India, Assam (Gressitt et al., 1970), Malay Peninsula (1ex. was comfirmed by authors, collection of FRIM).

Biology: According to Duffy (1968), eggs are deposited in the bark in groups of two to five. The irregular galleries are usually subcortical but sometimes lie entirely in the sapwood and bark. The pupal cell is excavated about half an inch deep in the sapwood but is very variable in shape and orientation. The life cycle may be six months or more in duration.

16. *Xylotrechus imperfectus* Chevrolat (Pl.2, Fig.16)

***Xylotrechus imperfectus* Chevrl., 1863, Mem. Soc. Sc. Liege, 18:313(61) (Sarawak).**

Specimen examined: 1♂, MT, 30.i-6.ii.2001,Woro A.N., Cholik and Sarino leg.

Distribution: Borneo, Laos, S. Vietnam (Gressitt et al., 1970), Java (New to Java).

17. *Xylotrechus decoratus* Pascoe (Pl.2, Fig. 17)

***Xylotrechus decoratus* Pasc., 1869, Trans. Entomol. Soc. Lond., (3)III:611 (Sarawak, Singapor).**

Specimen examined: 1♀, MT, 9-16.v.2001, Woro A.N. and S. Kahono leg.

Distribution: Borneo, Malay Peninsula, Java (New to Java).

18. *Xylotrechus pulchra* Aurivillius (Pl.2, Fig. 18)

***Xylotrechus pulchra* Auriv., 1911, Ark. f. Zool., 7(19):3 (Java).**

Specimens examined: 1♂, MT, 5-12.ix.2000, Woro A.N., E. Cholik and Sarino leg.; 1♀, MT, 17-24.x.2000, M. Rofik Sofyan and Sarino leg.

Distribution: Java.

19. *Xylotrechus biimpressus* Aurivillius (Pl.2, Fig.19)

***Xylotrechus biimpressus* Auriv., 1923, Ark. f. Zool., 15(25):8 (Java).**

Specimen examined: 1♀, 18.iii.1999, M. Rofik Sofyan leg.

Distribution: Java.

20. *Xylotrechus fluctuosus* (Pascoe) (Pl.2, Fig. 20)

***Perissus fluctuosus* Pasc., 1869, Trans. Entomol. Soc. Lond., (3)III:617 (Sarawak).**

Specimen examined: 1♀, MT, 27.vi-4.vii.2001, Woro A.N. and S. Kahono leg.

Distribution: Borneo, Java (New to Java).

21. *Psilomerus procerus* Holzschuh (Pl.2, Fig. 21)

***Psilomerus procerus* Holzschuh, 1992, FBVA-Berichte, 69:40 (Thailand).**

Specimen examined: 1♂, MT, 24-31.x.2000, M. Rofik Sofyan and Sarino leg.

Distribution: Thailand, Java (Makihara and Woro, 2001).

22. *Demonax exilis* Pascoe (Pl.2, Fig. 22)

***Demonax exilis* Pasc., 1869, Trans. Entomol.. Soc. London, (3)3:636 (Java).**

Specimen examined: 1♀, MT, 11-18.iv.2000, E. Cholik and Sarino leg.

Distribution: Java.

23. *Demonax javanicus* Fisher (Pl.2, Fig. 23)

***Demonax javanicus* Fish., 1936, Fauna Javanica, p.180 (Java).**

Specimens examined:1♂2♀♀, MT, 14-21.iii.2000, M. Rofik Sofyan and Sarino leg.; 1♂, MT, 21-28.iii.2000, M. Rofik Sofyan and Sarino leg.; 1♂1♀, MT, 11-18.iv.2000, E. Cholik and Sarino leg.; 1♂1♀, MT, 25.iv-2.v.2000, E. Cholik and Sarino leg.; 1♀, MT, 23-30.v.2000, M. Rofik Sofyan and Sarino leg.;1♀, MT, 19-26.ix.2000, E. Cholik and Sarino leg.; 1♂, MT, 26.ix-3.x.2000, M. Rofik Sofyan and Sarino leg.; 1♂,

MT, 28.xi-5.xii.2000, M. Rofik Sofyan and Sarino leg.; 1♂1♀, MT, 5-12.xii.2000, M. Rofik Sofyan and Sarino leg.

Distribution: Java.

24. *Demonax elongatulus* (Castelnau et Gory) (Pl.3, Fig. 24)

***Clytus elongatulus* C. et G. 1835, Mon. Clyt., p.97, t.16, f.116 (Java).**

Specimen examined: 1♀, MT, 7-14.xi.2000, E. Cholik and Sarino leg.

Distribution: Java.

25. *Demonax drescheri* Fisher (Pl.3, Fig. 25)

***Demonax drescheri* Fish., 1936, Fauna Javanica, p.179 (Java).**

Specimens examined: 1♀, 29.iv.1999, M. Rofik Sofyan leg.; 1♀, MT, 9-16.v.2000, E. Cholik, M. Rofik Sofyan and Sarino leg.; 1♂, MT, 4-11.vii.2000, M. Rofik Sofyan and Sarino leg.;1♀, MT, 22-29.viii.2000, M. Rofik Sofyan and Sarino leg.; 1♀, MT, 24-31.x.2000, M. Rofik Sofyan and Sarino leg.

Distribution: Java.

26. *Demonax polyzonus* Pascoe (Pl.3, Fig. 26)

***Demonax? polyzonus* Pasc., 1869, Trans. Entomol. Soc.Lond., (3)III:637 (Sarawak).**

***Demonax polyzonus*: Auriv., 1912, Coloopt. cat., 39:411.**

***Demonax? carinatus* Auriv., 1922, Ark. f. Zool., 14(18):15, Fig.83.**

Specimen examined: 1♀, MT, 13-20.iii.2001, Woro A.N. and S. Kahono leg.

Distribution: Borneo, Java (New to Java).

27. *Demonax lineolatus* Redtenbacher (Pl.3, Fig. 27)

***Demonax lineolatus* Redt, 1868, Reise Novara, Col., p.196 (Java).**

Specimens examined: 1♀, MT, 2-9.v.2000, E. Cholik, M. Rofik Sofyan and Sarino leg.; 1♀, MT, 9-16.v.2000, E. Cholik, M. Rofik Sofyan and Sarino leg.

Distribution: Java.

28. *Demonax* sp.1 (Pl.3, Fig. 28)

Specimens examined: 1♀, MT, 2-9.v.2000, E. Cholik, M. Rofik Sofyan and Sarino leg.; 1♀, MT, 25.vii-1.viii.2000, M. Rofik Sofyan and Sarino leg.

29. *Demonax* sp.2 (Pl.3, Fig. 29)

Specimens examined: 1♀, MT, 14-21.iii.2000, E. Cholik, M. Rofik Sofyan and Sarino leg.; 1♀, MT, 25.vii-1.viii.2000, M. Rofik Sofyan and Sarino leg.

30. *Demonax* sp.3 (Pl.3, Fig. 30)

Specimen examined: 1♂, 14.iv.2001, collected on a flower of Camellia thaea, H. Makihara, Woro A.N. and E. Cholik leg.

31. *Demonax* sp.4, affinis *D. drescheri* (Pl.3, Fig.31)

Specimen examined: 1♀, MT, 27.vi-4.vii.2001, Woro A.N. and S. Kahono leg.

32. *Demonax* sp.5 (Pl.3, Fig. 32)

Specimen examined: 1♀, MT, 11-18.vii.2001, Woro A.N. and S. Kahono leg.

33. *Demonax* sp.6, affinis *D. drescheri* (Pl.3, Fig.33)

Specimen examined: 1♀, MT, 13-20.vi.2001, Woro A.N. and S. Kahono leg.

Subfamily Lamiinae Latreille, 1825
Tribe Mesosini Thomson, 1860

34. *Anancylus* (*Anancylus*) *calceatus* Thomson (Pl.4, Figs. 34 and 34')

***Anancylus calceatus* Thoms., 1864, Syst. Cer., p.61 (Sarawak).**

***Anancylus* (*Anancylus*) *calceatus*: Breun., 1939, Nov. Entomol., 3. Suppl., 9:471 (Java).**

Specimens examined: 1♀, 13-20.vi.2000, E. Cholik, and Sarino leg.; 1♂, 10-17.x.2000, M. Rofik Sofyan and Sarino leg.

Distribution: Java, Sumatra, Borneo (Breuning,E., 1939).

35. *Cacia* (*Cacia*) *curta* Breuning (Fig. 25) (Pl.4, Figs. 35 and 35')

***Cacia* (*Cacia*) *curta* Breun., 1935, Fol. Zool. Hydrob., 8:261 (Java).**

Specimens examined: 1♂1♀, 26.iv.2001, H. Makihara, Woro A.N. and E.Cholik leg.

Distribution: Java.

36. *Cacia* (*Ipocregyes*) *bituberosa* Breuning (Pl.4, Figs. 36 and 36')

***Cacia* (*Ipocregyes*) *bituberosa* Breun., 1935, Fol. Zool. Hydrob., 8:260 (Java).**

Specimens examined: 1♀, 16-23.v.2000, E. Cholik, Rofik Sofyan and Sarino leg.; 2♂♂, 14.iv.2001, collected from a dead branch of Quercus sp., H. Makihara, Woro A.N. and E. Cholik leg.

Distribution: Java.

37. *Cacia* (*Ipocregyes*) *subfasciata* Schwarzer (Pl.4, Figs. 37 and 37')

***Cacia subfasciata* Schwarz., 1930, Treubia, 12(2):124 (Sipora Is.).**

***Cacia* (*Ipocregyes*) *subfasciata*: Breun., 1939, Nov. Entomol., 3. Suppl., 9:454.**

Specimens examined: 1♀, MT, 16-23.v.2000, E. Cholik, M.R.Sofyan and Sarino leg.; 1♀, 16-23.v.2000,

MT, Woro A.N. and S. Kahono leg.; 2♀♀, 24-31.i.2002, MT, Woro A.N. and S. Kahono; 1♂, 31.i-6.ii.2002, MT, Woro A.N. and S. Kahono leg.

Distribution: Java., Sumatra (Breuning, E.,1939), Sipora Is.

38. *Cacia* (*Ipocregyes*) *setulosa* Pascoe (Pl.4, Fig.38)

***Cacia* (*Ipocregyes*) *setulosa* Pasc., 1857, Trrans. Entomol. Soc. London, (2)4:101 (Java).**

Specimen examined: 1♂, 14.iv.2001, H. Makihara, Woro A.N.and E. Cholik leg.

Distribution: Java.

Tribe Apomecynini Lacordaire, 1869

39. *Apomecyna tigrina* Thomson (Pl.4, Fig. 39)

***Apomecyna tigrina* Thoms., 1857, Arch. Entomol., 1:343 (Java, Borneo).**

Specimens examined: 1♀, LT, 10.iii.2000, Rofik Sofyan and Sarino leg.; 1♂, MT, 6-13.iv.2000, E. Cholik and Sarino leg.

Distribution: Java, Borneo, Sumatra, Buru Is., Laos (Gressitt et al., 1970).

40. *Sybra* (*Sybra*) *bisignata* Schwarzer (Pl.4, Fig.40)

***Sybra bisignata* Schwarz., 1931, Senckenbergiana, 13:208, Fig.17 (Java).**

***Sybra* (*Sybra*) *bisignata*: Breun., 1960, Cat. Lam. Monde, 3:152.**

Specimen examined: 1♂, 27.ix.2000, Rofik Sofyan and Sarino leg.

Distribution: Java.

41. *Sybra* (*Sybra*) *javana* Breuning (Pl.4, Fig. 41)

***Sybra javana* Breun., 1939, Festschr. E. Strand, 5:267 (Java).**

***Sybra* (*Sybra*) *javana*: Breun., 1960, Cat. Lam. Monde, 3:151.**

Specimen examined: 1♂, 14.iv.2001, H. Makihara, Woro A.N. and E. Cholik leg.

Distribution: Java.

42. *Sybra* (*Sybra*) *fuscotriangularis* Breuning (Pl.5, Fig. 42)

***Sybra fuscotriangularis* Breun., 1939, Festschr. E. Strand, 5:268 (Java).**

***Sybra* (*Sybra*) *fuscotriangularis*: Breun., 1960, Cat. Lam. Monde, 3:152.**

Specimen examined: 1♀, MT, 16-23.v.2000, E. Cholik, Rofik Sofyan and Sarino leg.

Distribution: Java.

43. *Sybra* (*Sybra*) *binotata* Gahan (Pl.5, Fig. 43)

***Sybra binotata* Gah., 1907, Ann. Mus. civ. Genova, (3)III:88 (Engano Is.).**

***Sybra* (*Sybra*) *binotata*: Breun., 1960, Cat. Lam. Monde, 3:152.**

Specimen examined: 1♀, MT, 22-29.viii.2000, Rofik Sofyan and Sarino leg.

Distribution: Java, Sumatra, Borneo, Philippines (Breuning, S., 1960).

44. *Sybra* (*Sybra*) *obliquefasciata* Breuning (Pl.5, Fig. 44)

***Sybra obliquefasciata* Breun., 1938, Nov. Entomol. , 8:61 (Java).**

***Sybra* (*Sybra*) *obiquefasciata*: Breun., 1960, Cat. Lam. Monde, 3:152.**

Specimens examined: 1♂1♀, 14-27.iv.2001, H. Makihara, Woro A. N. and E. Cholik leg.

Distribution: Java.

45. *Sybra* (*Sybra*) *fervida* Pascoe (Pl.5, Fig. 45)

***Sybra fervida* Pasc., 1865, Trans. Entomol. Soc. Lond., (3)III:202 (Borneo).**

***Sybra* (*Sybra*) *fervida*: Breun., 1960, Cat. Lam. Monde, 3:151.**

Specimen examined: 1♀, MT, 6-13.vi.2001, Woro A.N. and S. Kahono leg.

Distribution: Borneo, Java (New to Java).

46. *Sybra* (*Sybra*) sp., affinis *S. pseudalternans* Breuning (Pl.5, Fig. 46)

Specimen examined: 1♀, HT, 11-18.vii.2001, Woro A.N. and S. Kahono leg.

47. *Sybra* (*Pseudatelais*) ? sp. (Pl.5, Fig. 47)

Specimen examined: 1♂, LT, 21.viii.2001, Woro A.N., E. Cholik and Sarino leg.

48. *Epilysta mucida* Pascoe (Pl.5, Fig. 48)

***Epilysta mucida* Pasc., 1865, Trans. Entomol. Soc.Lond., (3)III:149 (Borneo).**

Specimen examined: 1♀, Artocarpus, 24.vii.2001, Woro A.N. and S. Kahono leg.

Distribution: Borneo, Java (New to Java).

49. *Zorilispe spinipennis* Breuning (Pl.5, Fig. 49)

***Zorilispe spinipennis* Breun. 1939, Festschr. E. Strand., 5:237 (Java).**

Specimens examined: 1♀, 6-13.vi.2001, MT, Woro A.N. and S. Kahono leg.; 1♀, Artocarpus, 24.vii.2001, Woro A.N. and S. Kahono leg.

Distribution: Java.

50. *Ropica transversmaculata* Breuning (Pl.5, Fig.50)

***Ropica transversmaculata* Breun., 1942, Fol. Zool. Hydrob., 11:136 (Java).**

Specimen examined: 1♂, LT, 18.iii.1999, Rofik Sofyan and Sarino leg.

Distribution: Java.

51. *Ropica strandi* Breuning (Pl.5, Fig. 51)

***Ropica strandi* Breun., 1942, Fol. Zool. Hydrob., 11:136 (Java).**

Specimens examined: 1♀, LT, 6.v.2000, Rofik Sofyan and Sarino leg.; 1♂1♀, LT, 9-16. v.2000, E. Cholik, Rofik ofyan and Sarino leg.; 1♀, MT, 25.vii-1.viii.2000, Rofik Sofyan and Sarino leg.; 1♂1♀, MT, 6.ix-3.x.2000, Rofik Sofyan and Sarino leg.

Distribution: Java.

52. *Ropica laterifusca* Breuning et de Jong (Pl.5, Fig.52)

***Ropica laterifusca* Breun. et de Jong, 1941, Zool. Mededeel., 23:100 (Java).**

Specimens examined: 1♂, MT, 13-20.vi.2000, E. Cholik and Sarino leg.; 1♀, MT, 11-18.viii.2000, Rofik Sofyan and Sarino leg.

Distribution: Java.

53. *Ropica densepunctata* Breuning et de Jong (Pl.5, Fig. 53)

***Ropica laterifusca* Breun. et de Jong, 1941, Zool. Mededeel., 23:101 (Java).**

Specimen examined: 1♀, Artocarpus, 24.vii.2001, Woro A.N. and S. Kahono leg.

Distribution: Java.

54. *Atrichocera* sp., affinis *A. moultoni* Aurivillius (Pl.6, Figs. 54 and 54')

Specimen examined: 1♂, 8.iii.2000, E. Cholik and Sarino leg.

55. *Mimosybra mediomaculata* Breuning (Pl.6, Fig.55)

***Mimosybra mediomaculata* Breun., 1939, Festschr. E.Strand, 5:279 (Malacca).**

Specimens examined: 1♂, MT, 18-25.iv.2000, E. Cholik, Rofik Sofyan and Sarino leg.; 2♂♂, MT, 9-16.v.2000, E. Cholik,Rofik Sofyan and Sarino leg.; 1♂, MT, 16-23.v.2000, E. Cholik and Sarino leg.;1♂, MT, 6-13.vi.2000, E. Cholik and Sarino leg.; 1♂, MT, 20-27.vi.2000, E. Cholik and Sarino leg.;1♂, MT, 18-25.vii.2000, Rofik Sofyan and Sarino leg.; 2♂♂, MT, 18-25.viii.2000, Rofik Sofyan and Sarino leg.; 1♂, MT, 10-17.x.2000, Rofik Sofyan and Sarino leg.; 1♂, MT, 5-12.xii.2000, Rofik Sofyan and Sarino leg.; 1♂, MT, 19-26.xii.2000, Rofik Sofyan and Sarino leg.

Distribution: Borneo, Malay Peninsula (Breuning, 1960), Java (Makihara and Woro, 2001).

Tribe Hippopsini Thomson

56. *Cleptometopus montanus* (Pascoe) (Pl.6, Fig.56)

***Apophrema montana* Pasc., 1866, Trans. Entomol. Soc. Lond., (3)III:325 (Java).**

***Cleptometopus montanus*: Breun., 1961, Cat. Lam. Monde, 4:200.**

Specimens examined: 1♂, MT, 26-28.i.2000, Woro A.N. and E. Cholik leg.; 1♀, MT, 23-30.v.2000, E. Cholik and Sarino leg.; 1♀, MT, 6-13.vi.2000, E. Cholik and Sarino leg.; 1♀, MT, 26.x.2000, Woro A.N., E. Cholik and Sarino leg.; 1♂, MT, 21-28.xi.2000, Woro A.N., E. Cholik and Sarino leg.; 2♂♂, MT, 26.xii.2000- 2.i.2001, S. Kahono, Cholik and Sarino leg.; 1♂, MT, 16-23.i.2001, S. Kahono, Cholik and Sarino leg.

Distribution: Java.

57. *Cleptometopus javanicus* Breuning (Pl.6, Figs. 57 and 57')

***Cleptometopus javanicus* Breun., 1943, Fol. Zool. Hydrob., 12:62 (Java).**

Specimens examined: 1♂, MT, 22-29.viii.2000, Rofik Sofyan leg.; 1♂, MT, 19-26.xii.2000, Rofik Sofyan and Sarino leg.

Distribution: Java.

58. *Pothyne* sp. (Pl.6, Figs. 58 and 58')

Specimen examined: 1♀, 14.iv.2001, H. Makihara, Woro A.N. and E. Cholik leg.

59. *Pseudohyllisia* sp. (Pl.6, Fig. 59)

Specimens examined: 1♂, MT, 18-25.iv.2000, E. Cholik and Sarino leg.

Tribe Pteropliini Thomson, 1860

60. *Mispila venosa* Pascoe (Pl.6, Fig. 60)

***Mispila venosa* Pasc., 1864, Trans. Entomol. Soc. London, (3)3:90 (Sarawak).**

Specimen examined: 1♀, MT, 1.ix.2000, Woro A.N., E. Cholik and Sarino leg.

Distribution: Java, Borneo, Sulawesi, Tonkin, Andamans (Breuning, S., 1961).

61. *Mispila* sp., affinis *obliquevittata* Breuning (Pl.6, Fig. 61)

Specimen examined: 1♂, MT, 2-9.v.2001, Woro A.N. and S. Kahono leg.

62. *Mispilodes borneensis* Breuning (Pl.6, Fig. 62)

***Mispilodes borneensis* Breun., 1939, Festschr. E.Strand, 4:382 (Borneo).**

Specimen examined: 1♀, MT, 6-13.vi.2001, Woro A.N. and S. Kahono leg.

Distribution: Borneo, Java (New to Java).

63. *Etaxalus iliacus* Pascoe (Pl.7, Figs. 63 and 63')

***Etaxalus iliacus* Pasc., 1865, Trans. Entomol. Soc.Lond., (3)III:141, 153 (Sarawak).**

Specimen examined: 1♀, HT, 22.vi.2001, Woro

A.N. and S. Kahono leg.

Distribution: Borneo, Java (New to Java).

64. *Pterolophia melanura* (Pascoe) (Pl.7, Fig. 64)

***Praonetha melanura* Pasc., 1857, Trans. Entomol. Soc. Lond., (2)IV:106 (Singpore).**

***Praonetha montana* Pasc., 1865, Trans. Entomol. Soc. Lond., (3)III:167 (Mt. Ophir).**

***Praonetha quadraticollis* Pasc., 1865, Trans. Entomol. Soc. Lond., (3)III:168 (Sarawak).**

***Praonetha torpida* Pasc., 1865, Trans. Entomol. Soc. Lond., (3)III:169 (Dorey).**

Specimens examined: 3♀♀, LT, 25-28.i.2000, Woro A.N. and E. Cholik leg. ; 1♀, MT, 4-11.iv.2000, E. Cholik and Sarino leg. ; 1♀, MT, 11-18.iv.2000, E. Cholik and Sarino leg. ; 3♀♀, 25.iv-2.v.2000, Cholik and Sarino leg. ; 2♀♀, MT, 9-16.v.2000, E. Cholik, Rofik Sofyan and Sarino leg. ; 1♀, MT, 16-23.v.2000, E. Cholik, Rofik Sofyan and Sarino leg. ; 1♂, MT, 6-13.vi.2000, Rofik Sofyan and Sarino leg.;1♂3♀♀, MT, 11-18.vii.2000, E. Cholik and Sarino leg. ;1♀, MT, 5.viii.2000, Rofik Sofyan and Sarino leg. ;1♀, MT, 8-15.viii.2000, Rofik Sofyan and Sarino leg. ;1♀, MT, 15-22.viii.2000, Rofik Sofyan and Sarino leg. ;1♂, MT, 28.xi-5.xii.2000, Rofik Sofyan and Sarino leg.; 1♀, MT, 26.xii.2000-2.i.2001, S. Kahono, E. Cholik and Sarino leg. ; 2♀♀, MT, 9-16.i.2001, S.Kahono, E. Cholik and Sarino leg.

Host records: *Derris robusta* (roots) (Duffy, 1953), *Castilla, Coffea, Hevea, Theobroma* (Dammerman, 1919), *Actinophora, Artocarpus integra, Butea monosperma, Cassia auriculata, Derris eliptica, Dlbergia latofolia, Erythrina lithosperma, Ficus rempelas, Piper, Tectona* (Mathur and Balwant Singh, 1959), *Canarium, Ceiba, Citrus, Deguelia, Gravillea robusta, Magnifera indica* (Kalshoven, 1955), *Acacia mangium, Artocarpus anisophyllus, Diptorocarpus tempehes, Endospermum diadenum, Macaranga gigantea, Vernonia arborea* (Makihara, 1999), *Pinus caribaea* (Duffy, 1968).

Distribution: Borneo, Java, Sumatra, Malay Peninsula, N. Vietnam (Breuning, S., 1961).

Biology: This species is very common in all sorts of forests (Makihara and Woro, 2001).

65. *Pterolophia obliquefasciculata* Breuning et de Jong (Pl.7, Fig. 65)

***Pterolophia obliquefascculiata* Breun. et de Jong, 1941, Zool. Mededeel., 23:76, Fig.13b, c (Java).**

Specimens examined: 1♀, MT, 11-18.iv.2000, E. Cholik and Sarino leg. ;1♂1♀, MT, 9-16.v.2000, E.Cholik, Rofik Sofyan and Sarino leg. ; 1♂, MT, 4-11.vii.2000, Rofik Sofyan and Sarino leg.

Distribution: Java.

66. *Pterolophia mediocarinata* Breuning (Pl.7, Fig.66)

***Pterolophia mediocarinata* Breun., 1939, Mem. Soc. Entomol. Ital., 18:63 (Sumatra).**

***Pterolophia excavatipennis* Breun., 1939, Mem. Soc. Entomol. Ital., 18:65 (Sumatra).**

***Pterolophia excavatipennis* var. *rubida* Breun. et de Jong, 1941, Zool. Mededeel., 23:77 (Java).**

***Pterolophia excavatipennis* var. *medioalba* Breun. et de Jong, 1941, Zool. Mededeel., 23:78 (Java).**

***Pterolophia excavatipennis* var. *immaculata* Breun. et de Jong, 1941, Zool. Mededeel., 23:78 (Java).**

Specimens examined: 1♀, LT, 10.iii.2000, Rofik Sofyan and Sarino leg. ;1♂, LT, 7.iv.2000, E. Cholik and Sarino leg. ; 1♂, MT, 11-18.iv.2000, E. Cholik and Sarino leg. ; 1♀, LT, 25.iv-2.v.2000, E. Cholik and Sarino leg. ; 1♂, MT, 2-9.v.2000, E. Cholik, Rofik Sofyan and Sarino leg. ; 2♂♂, MT, 9- 16.v.2000, E. Cholik, Rofik Sofyan and Sarino leg. ; 1♀, MT, 6-13.vi.2000, E. Cholik and Sarino leg. ; 1♂, 8.viii. 2000 , Rofik Sofyan and Sarino leg. ; 1♀, MT, 24-31.x.2000, Rofik Sofyan and Sarino leg. ; 1♀, MT, 31.x-7.xi.2000, Woro A.N., E. Cholik, and Sarino leg. ; 1♂, MT, 9-16.i.2001, S. Kahono, E. Cholik and Sarino leg.

Distribution: Java, Sumatra.

67. *Pterolophia olivacea* Breuning et de Jong (Pl.7, Fig. 67)

***Pterolophia olivacea* Breun. et de Jong, 1941, Zool. Mededeel., 23:89 (Java).**

Specimen examined: 1♂, MT, 20-27.vi.2001, E. Cholik and Sarino leg.

Distribution: Java.

68. *Pterolophia* sp., affinis *P. nigroconjuncta* Breuning et de Jong (Pl.7, Fig. 68)

Specimen examined: 1♀, MT, 26.ix-3.x.2000, Rofik Sofyan and Sarino leg.

69. *Pterolophia simulans* Breuning et de Jong (Pl.7, Fig. 69)

***Pterolophia simulans* Breun. et de Jong, 1941, Zool. Mededeel., 23:80, Fig. 13f (Java).**

Specimens examined: 1♀, MT, 21-28.iii.2000, E. Cholik, Rofik Sofyan and Sarino leg.; 1♀, MT, 9-16.v.2000, E. Cholik, Rofik Sofyan and Sarino leg.

Distribution: Java.

70. *Pterolophia lunigera* Aurivillius (Pl.7, Figs. 70 and 70')

***Pterolophia lunigera* Auriv., 1913, Ark. f. Zool., 8(22):25 (Borneo).**

Specimen examined: 1♀, HT, 6-13.vi.2001, Woro A.N. and S. Kahono leg.

Distribution: Borneo, Java (New to Java).

71. *Egesina* (*Egesina*) *fusca* (Fisher) (Pl.7, Fig.71)

***Neoegesina fusca* Fish., 1925, Philipp. Jl. Sci., 28:219 (Borneo).**

***Egesina* (*Egesina*) *fusca*: Breun., 1963, Entomol. Arb. Mus. Frey, 14:516.**

Specimens examined: 1♀, MT, 11-18.iv.2000, E. Cholik and Sarino leg. ; 2♂♂, MT, 18-25.iv.2000, E. Cholik and Sarino leg. ; 1♂, MT, 25.iv-2.v.2000, E. Cholik and Sarino leg.; 2♂♂, MT, 2-9.v.2000, E. Cholik, Rofik Sofyan and Sarino leg. ; 3♂♂, MT, 9-16.v.2000, E. Cholik and Sarino leg.

Distribution: Java., Sumatra, Borneo (Breuning, S., 1961).

72. *Egesina* (*Callienispa*) *javana* Fisher (Pl.7, Fig.72)

***Egesina javana* Fish., 1934, Stylops, 3:35 (Java).**

Specimen examined: 1♂, MT, 6-13.vi.2001, Woro A.N. and S. Kahono leg.

Distribution: Java.

Tribe Gyaritini Breuning, 1956

73. *Gyaritus javanicus* Breuning et de Jong (Pl.8, Figs. 73 and 73')

***Gyaritus javanicus* Breun. et de Jong, 1941, Zool. Mededeel., 23:98 (Java).**

Specimens examined:1♂, MT, 31.x-7.xi.2000, Woro A.N., E. Cholik and Sarino leg.; 1♂1♀, MT, 21-28.xi.2000, Woro A.N., E. Cholik and Sarino leg.

Distribution: Java.

74. *Gyaritus fuscosignatus* Breuning et de Jong (Pl.8, Fig. 74)

***Gyaritus fuscosignatus* Breun. et de Jong, 1941, Zool. Mededeel., 23:98 (Java).**

Specimens examined:1♂, MT, 21-28.iii.2000, E. Cholik and Sarino leg.; 1♂, MT, 18-25.iv.2000, E. Cholik and Sarino leg.; 1♂, MT, 9-16.v.2000, E. Cholik and Sarino leg.;1♂, MT, 20-27.vi.2000, E. Cholik and Sarino leg.;1♂, MT, 22-29.viii.2000,Rofik Sofyan and Sarino leg.

Distribution: Java.

Tribe Agniini Thomson, 1864

75. *Amechana javanica* Breuning (Pl.8, Fig. 75)

***Amechana javanica* Breun., 1943, Trois. Suppl. Nov. Entomol., 97:206 (Java).**

Specimens examined:1♂, 23.x.2000, Woro A.N., E. Cholik and Sarino leg.; 3♂♂, MT, 5-12.xii.2000,Rofik Sofyan and Sarino leg.;;1♂, MT, 12-19.xii.2000,Rofik Sofyan and Sarino leg.; 2♂♂, MT, 26.xii.2000-2.i.2001, S. Kahono, E. Cholik and Sarino leg.;1♂, MT, 9-16.i.2001, S. Kahono, E. Cholik and Sarino leg.;1♂, MT, 16-23.i.2001, S. Kahono, E. Cholik and Sarino leg.

Distribution: Java.

76. *Epepeotes luscus* (Fabricius) (Pl.8, Fig. 76)

***Lamia lusca* F., 1787, Mant. Ins., 1:139 (Siam).**

***Epepeotes luscus*: Pasc., 1866, Trans. Entomol. Soc. Lond., (3)III:301.**

***Epepeotes fumosus* Pasc., 1866, Trans. Entomol. Soc. Lond., (3)III:301 (Flores).**

Specimens examined: 1♂, 5.iv.2000, E. Cholik and Sarino leg.;1♀, MT, 11-18.vii.2000,Rofik Sofyan and Sarino leg.; 1♂, MT, 25.vii-1..viii.2000, Rofik Sofyan and Sarino leg.; 1♀, MT, 1-5.ix.2000, E. Cholik and Sarino leg.

Host records: *Artocarpus anisophyllus* (Makihara, 1999), *Artocarpus integra,Castilla elastica, Ficus elastica, Ficus hispida, Mangifera, Theobroma cacao* (Beeson and Bhatia, 1939), *Morus laevigata* (Mathur and Singh, 1959), *Taxotropis ilicifolia* (Corbett and Gater, 1926), *Canarium commune* (Duffy, 1968).

Distribution: Borneo, Sumatra, Java, Myanmar, Thailand, Laos, Malay Peninsula, N. Vietnam, Timor Is., Banda, Bourou, Mentawei Is., China, Sumbawa Is., Flores Is., etc (Breuning, S., 1961).

Biology: According to Duffy (1968), there are three generations a year, the shortest life cycle being completed in two and a half to three months in Java. The female beetles have been known to live for over four months and to lay up to 1,400 eggs, often 400 a month.

77. *Epepeotes spinosus* (Thomson) (Pl.8, Fig. 77)

***Leprodera spinosa* Thoms., 1857, Arch. Entomol., 1:179.**

***Monochamus lateralis* Guér., 1831, Dict. Class. d'Hist. Nat., XVII, pl.68, Fig.6 (Malacca).**

***Epepeotes meridianus* Pasc., 1866, Trans. Entomol. Soc. Lond., (3)III:302 (Java, Sumatra, Singapore, Sarawak, Tondano).**

***Epepeotes luscus*: Gah., 1888, Ann. Mag. Nat. Hist., (6)II:490.**

***Epepeotes lateralis*: Heyne-Tasch, 1903, Ex. Kaf., p.241, pl.35, Fig.1.**

Specimens examined: 1♂, MT, 4-11.vii.2000, Rofik Sofyan and Sarino leg.; 1♀, MT, 31.viii.2000, E. Cholik and Sarino leg.; 1♂, MT, 12-19.ix.2000, Woro A.N., E. Cholik and Sarino leg.; 1♂, MT, 3-10.x.2000, Rofik Sofyan and Sarino leg.

Host records: *Artocarpus anisophyllus* (Makihara, 1999), *Artocarpus integra*, *Albizia*, *Ficus*, *Mangifera*, *Theobroma* (Dammerman, E., 1919).

Distribution: Java, Sumatra, Borneo, Malay Peninsula, Sulawesi (Breuning, 1943).

Biology: According to Duffy (1968), the eggs hatch in about six to seven days and first-instar larvae average

2.7mm in length. The presence of larvae is indicated by brownish black frass depending from the trees. The duration of the larval period is about two month, depending on the time of year.

78. *Epicedia trimaculata* (Chevrolat) (Pl.8, Fig. 78)

***Leprodera trimaculata* Chevrl., 1856, Rev. Zool., (2)8:87 (Java).**

***Leprodera plagiata* Thoms., 1857, Arch. Entomol., I:178 (Sarawak).**

***Epicedia trimaculata*: Auriv., 1922, Coleopt. Cat., 73:74.**

Specimens examined: 1♀, 26.iv.1999, T. Ueno and Rofik Sofyan leg.; 1♀, MT, 5-12.xii.2000, Rofik Sofyan and Sarino leg.

Distribution: Java, Borneo.

79. *Myagrus javanicus* Breuning (Pl.8, Fig. 79)

***Myagrus javanicus* Breun., 1957, Zool. Medeel., 35:113 (Java).**

Specimens examined:1♀, MT, 8-15.viii.2000, Rofik Sofyan and Sarino leg.;1♂, LT, 26.xi.2000, Rofik Sofyan and Sarino leg.

Distribution: Java.

80. *Celosterna stolzi* Ritsema (Pl.8, Fig. 80)

***Celosterna stolzi* Rits., 1911, Not. Leyd. Mus., 34:4 (Sumatra).**

***Loxotropoides brunnea* Fish., 1935, Jl. Fed. Malay St. Mus., 17(4):601 (Mt. Kinabaru).**

Specimen examined:1♂, LT, 10.iii.2000, Rofik Sofyan and Sarino leg.

Distribution: Sumatra, Borneo, Java (New to Java).

81. *Pseudomyagrus waterhousei* (Gahan) (Pl.8, Figs. 81 and 81')

***Cyriocrates waterhousei* Gah., 1888, Ann. Mag. Nat. Hist., (6)1:276 (Nias Is.).**

***Nemophas eupholoides* Nonfr., 1894, Entomol. Nachr., XX:47 (Sumatra).**

Specimens examined: 1♀, MT, 4-11.iv.2000, E. Cholik, Rofik Sofyan and Sarino leg.; 1♂, MT, 25.iv-.2.v..2000, E. Cholik and Sarino leg.

Distribution: Java, Sumatra, Borneo, Nias Is. (Breuning, E., 1943), Malay Peninsula (Sakaguti, 1981).

82. *Anhammus daleni* Guérin (Pl.9 Figs. 82 and 82')

***Monochamus daleni* Guér., 1844, Icon. Regne Anim. Ins., 3:242 (Java).**

***Anhammus daleni*: Pasc., 1866, Trans. Entomol. Soc. Lond., (3)III:290.**

Specimens examined:1♂, LT, 21-28.iii.2000, E. Cholik, Rofik Sofyan and Sarino leg.; 1♀, LT, 30.v-6.vi.2000, E. Cholik and Sarino leg.; 2♂♂, LT, 9-10.vi.2000, E. Cholik and Sarino leg.; 1♀, LT, 4-11.vii.2000, E. Cholik and Sarino leg.; 2♂♂, LT, 11-18.vii..2000, Rofik Sofyan and Sarino leg.; 1♂, LT, 18.-25.vii.2000, E. Cholik, Rofik Sofyan and Sarino leg.; 1♂, LT, 29.viii-5.ix.2000, E. Cholik, Rofik Sofyan and Sarino leg.; 1♂, LT, 5-12,ix.2000, Woro A.N., E. Cholik, and Sarino leg.; 1♂, LT, 7-14,xi.2000, Woro A.N., E. Cholik, and Sarino leg.

Distribution: Java, Sumatra, Borneo (Breuning, S., 1961).

83. *Pharsalia* (*Pharsalia*) *mortalis* (Thomson) (Pl.9, Figs. 83 and 83')

***Zygocera mortalis* Thoms., 1857, Arch. Entomol., 1:190 (Java).**

***Pharsalia albomaculata* v. d. Poll, 1887, Not. Leyd. Mus., IX:117 (Java).**

***Pharsalia* (*Pharsalia*) *mortalis*: Breun., 1944., Nov. Entomol. 3. Suppl.:330.**

Specimens examined:1♂, MT, 28.iii-4.iv.2000, E. Cholik and Sarino leg.; 1♂, MT, 23-30.v..2000, E. Cholik, Rofik Sofyan and Sarino leg.; 1♂, 20-27.vi.2000, E. Cholik and Sarino leg.; 1♀, MT, 29.viii-5.ix.2000, E. Cholik, and Sarino leg.; 1♀, MT, 21-28,xi.2000, Woro A.N., E. Cholik, and Sarino leg.; 1♂, MT, 28.xi-5.xii. 2000, Rofik Sofyan and Sarino leg.

Distribution: Java.

84. *Pharsalia* (*Eopharsalia*) *granulipennis* Breuning et de Jong (Pl.9, Fig. 84)

***Pharsalia granulipennis* Breun. et de Jong, 1941, Zool. Mededeel., 23:54, Fig.4e (Java).**

***Pharsalia* (*Eopharsalia*) *granulipennis*: Breun., 1944., Nov. Entomol. 3. Suppl.:336.**

Specimen examined:1♂, MT, 11-18.iv.2000, E. Cholik and Sarino leg.

Distribution: Java.

85. *Acalolepta* sp. 1, affinis *A. dispar* (Pascoe) (Pl.9, Fig. 85)

Specimens examined:1♂, MT, 4-11.iv.2000, E. Cholik and Sarino leg.; 1♀, MT, 11-18.vii.2000, Rofik Sofyan and Sarino leg.; 1♂, MT, 22-29.viii.2000, Rofik Sofyan and Sarino leg.

86. *Acalolepta montana* (Aurivillius) (Pl.9, Fig. 86)

***Hoplohammus montanus* Auriv., 1916, Ark. Zool., 10(19):13 (Java).**

***Monochamus montanus*: Kalsh., 1936, Entomol. Meded. ned. Ind. V:8.**

***Dihammus montanus*: Breun., 1944, Nov. Entomol. 3. Suppl.:477.**

***Acalolepta montana*: Breun., 1961, Cat. Lam. Monde, 5:375.**

Specimens examined:1♂, MT, 26.v-2.vi.1999, Rofik Sofyan and Sarino leg.; 1♀, MT, 9-16.v.2000, E. Cholik , Rofik Sofyan and Sarino leg.; 1♂2♀♀, MT, 20-27.vi.2000, E. Cholik and Sarino leg.; 1♂, MT,

27.vi-4.vii.2000, Rofik Sofyan and Sarino leg.; 1♂, MT, 1-8.viii.2000, Rofik Sofyan and Sarino leg.; 1♀, MT, 15-22.viii.2000, Rofik Sofyan and Sarino leg.;1♂, MT, 26.xii-2.i.2001, S. Kahono, E. Cholik and Sarino leg..; 1♀, MT, 2-9.i.2001, S. Kahono, E. Cholik and Sarino leg.;1♀, MT, 16-23.i.2001, S. Kahono, E. Cholik and Sarino leg.

Distribution: Java, Sumatra, Sulawesi (Breuning, E., 1944).

87. *Acalolepta* sp. 2, affinis *A. montana* (Pl.9, Fig.87)

Specimen examined:1♂, MT, 10-17.x.2000, Rofik Sofyan and Sarino leg.

88. *Acalolepta javanica* (Breuning) (Pl.9, Fig.88)

***Dihammus javanicus* Breun., 1935, Fol. Zool. Hydrob., 7:250 (Java).**

***Acalolepta javanica*: Breun., 1961, Cat. Lam. Monde, 5:372.**

Specimen examined:1♀, MT, 9-16.v.2000, E. Cholik , Rofik Sofyan and Sarino leg.

Distribution: Java.

89. *Acalolepta rusticatorix* (Fabricius) (Pl.9, Fig.89)

***Lamia rusticator* F. 1801, Syst. El., 2:294 (Sumatra).**

***Lamia fistulator* Germ., 1824, Ins. Spec. nov., p.478.**

***Monochamus bianor* Newm., 1842, Entomol., I:277.**

***Monochamus fistulator*: Pasc., Trans. Entomol. Soc. Lond., (3)III:293 (Java, Timor, Malacca, Borneo, Bouru, Makian).**

***Monochamus musivus* Pasc., 1866, Proc. Zool. Soc., 1866:251 (Malacca, Borneo, Tondano).**

***Dihamus rusticator*: Auriv., 1926, Treubia, 7(2):130.**

***Acalolepta rusticatorix*: Breun., 1961, Cat. Lam. Monde, 5:372.**

Specimen examined:1♀, MT, 26-29.iv.1999, H. Horiuchi and Rofik Sofyan leg.

Host records: *Afzelia bijuga, Artocarpus integra, Excaecaria agallocha, Ficus elastica, Hevea brasiliensis, Ricinus communis, Theobroma cacao* (Beeson and Bhatia, 1939), *Datura, Manihot utilissima* (Dammerman, 1919), *Aegle marmelos, Aleurites, Barringtonia spicata, Buchanania arborescens, Chydenanthus excelsus, Citrus, Erythrina,Ficus rasemosa,Jatropha curcas, Moringa ooleifera, Pithecolobium saman, Semecarpus heterophylla, Solamum melanogena, Tectona, Trema orientalis,* (Kalshoven, 1939), *Parashorea malaanonan,* (Mathur and Singh, 1960), .

Distribution: Borneo, Sumatra, Java, Malay Peninsula, Sulawesi, Philippines, Indo-China, India, Taiwan etc (Gressitt et al., 1970).

Biology: According to Kalshoven (1939), this species is a well-known pest of living cocoa. In east Java, teak samplings in two-year-old plantations were found to have gall-like swellings where larvae of this species had formed a circular gallery beneath the bark before tunnelling through the wood cylinder into the pith. The adults are nocturnal and feed on bark.

90. *Acalolepta laevifrons* (Aurivillius) (Pl.9, Figs. 90 and 90')

***Dihammus laevifrons* Auriv., 1923, Ark. f. Zool., 15(25):19 (Sumatra).**

***Acalolepta laevifrons*: Breun., 1961, Cat. Lam. Monde, 5:375.**

Specimens examined: 1♀, MT, 8-12.xi.1998, E. Cholik and Sarino leg.; 1♂1♀, MT, 11-18.iv.2000, E. Cholik and Sarino leg.; 1♂, MT, 25.iv-2.v.2000, E. Cholik and Sarino leg.; 1♀, MT, 2-9.v.2000, E. Cholik, Rofik Sofyan and Sarino leg.;1♀, MT, 13-20.vi.2000, E. Cholik and Sarino leg.; 1♂, MT, 4-11.vii.2000, Rofik Sofyan and Sarino leg.;; 1♂1♀, 18-25.vii.2000, Rofik Sofyan and Sarino leg.; 1♀, MT, 8-15.viii.2000, Rofik Sofyan and Sarino leg.; 2♂♂, MT, 1.ix.2000, Woro A.N., E. Cholik and Sarino leg.; 1♂, MT,3-10.x.2000, Rofik Sofyan and Sarino leg.; 2♂♂, MT, 31.x-7.xi.2000, Woro A.N., E. Cholik and Sarino leg.; 1♂, MT, 28.xi-5.xii.2000, Rofik Sofyan and Sarino leg.; 1♂ 1♀, MT, 5-12.xii.2000, Rofik Sofyan and Sarino leg.; 2 ♀♀, MT, 19-26.xii.2000, E. Cholik and Sarino leg.; 1 ♀, MT, 26.xii.2000-2.i.2001, S. Kahono, E. Cholik and Sarino leg.; 1♀, MT, 9-16.i.2001, S. Kahono, E. Cholik and Sarino leg.

Distribution:Sumatra, Borneo (Breuning, E.,1944), Java (Makihara and Woro, 2001).

91. *Sternohammus strandi* Breuning (Pl.10, Fig. 91)

***Sternohammus strandi* Breun., 1935, Fol. Zool. Hydrob., 8:59 Java).**

Specimen examined: 1♀, MT, 28.xi-5.xii.2000, Rofik Sofyan and Sarino leg.

Distribution: Java.

92. *Xoes egeria* Pascoe (Pl.10, Fig. 92)

***Xoes egeria* Pasc., 1866, Trans. Entomol. Soc.Lond., (3)III:246, pl.11, Fig.3 (Sarawak).**

Specimen examined: 1♀, MT, 6-13.vi.2001, Woro A.N. and S. Kahono leg.

Distribution: Borneo, Java (New to Java).

Tribe Batocerini Lacordaire, 1869

93. *Apriona flavescens* Kaup (Pl.10, Fig. 93)

***Apriona flavescens* Kaup, 1858, Einige Ceramb., 7 (Sumatra).**

Specimen examined: 1♂, LT, 21.xii.2000, Woro A.N., E. Cholik and Sarino leg.

Host records: *Castilla* (Dammerman, 1919), *Artocarpus integra, Artocarpus polyphemia* (Gater, 1925).

Distribution: Borneo, Java, Sumatra, Flores Is., Thailand, Malay Peninsula (Gilmour, 1958).

94. *Batocera parryi* Hope (Pl.10, Fig. 94)

***Batocera parryi* Hope, 1845, Trans. Entomol. Soc. London, 4:77 (India).**

Specimens examined: 1♀, LT, 25.v-2.vi.1999, Rofik Sofyan leg.;1♀, 10.iii.2000, E. Cholik and Rofik Sofyan leg.

Distribution: Java, Sumatra, India, Myanmar, Laos, Tonkin (Breuning, S., 1962).

95. *Batocera gigas* Drapiez (Pl.10, Figs. 95 and 95')

***Batocera gigas* Drap., 1819, Ann. Gen. Sc. phys., 3:273, pl.XLII, Fig.1 (Java).**

Specimen examined:1♂, 24.xi.2000, Rofik Sofyan and Sarino leg.

Host record: *Ficus* (Dammerman, 1913).

Distribution: Java.

Tribe Gnomini Thomson, 1864

96. *Gnoma sticticollis* Thomson (Pl.10, Figs. 96 and 96')

***Gnoma sticticollis* Thoms., 1857, Arch Entomol. 1:188 (Java).**

Specimens examined: 1♂, MT, 9-16.v.2000, E. Cholik, Rofik Sofyan and Sarino leg.;1♀, MT, 25.vii-1.viii.2000, Rofik Sofyan and Sarino leg.;1♀, MT, 3-10.x.2000, Rofik Sofyan and Sarino leg.;1♀, MT, 5-12.xii.2000, Rofik Sofyan and Sarino leg.;1♂, MT,12-19.xii.2000, Rofik Sofyan and Sarino leg.

Distribution: Java.

97. *Psectrocera plumigera* (Westwood) (Pl.10, Fig. 97)

***Gnoma? plumigera* Westw., 1848, Cab. Orient. Entomol., 11, pl.5,Fig.5 (Java).**

***Psectocera plumosa*: Pascoe, 1866, Trans. Entomol. Soc. Lond., (3)III:311.**

***Psectocera plumigera*: Dillon and Dillon, 1951, Philipp. Jl. Sci., 79(1):22.**

Specimen examined: 1♀, MT, 6-13.vi.2001, Woro A.N. and S. Kahono leg.

Distribution: Java, Borneo, Sumatra, PNG (Dillon and Dillon, 1951).

Tribe Rhodopinini Gressitt, 1951

98. *Epicasta ocelata* Thomson (Pl.10, Fig. 98)

***Epicasta ocelata* Thoms., 1864, Syst. Cer., p.90 (Java).**

Specimen examined: 1♂, MT, 9-16.i.2001, S. Kahono, E. Cholik and Sarino leg.

Distribution: Borneo (Makihara et al., 2002), Java.

99. *Rhodopina javana* Aurivillius (Pl.10, Figs 99 and 99')

***Rhodopina javana* Auriv., 1907, Ark. f. Zool., 3(18):30 (Java).**

Specimens examined: 1♀, 27.v-2.vi.1999, T. Ueno and Rofik Sofyan leg.; 1♂, 28.ix.2000, Woro A.N., E. Cholik and Sarino leg.

Distribution: Java.

100. *Parasophronica albomaculata* Breuning (Pl.11, Figs. 100 and 100')

***Parasophronica albomaculata* Breun., Bull. Inst. roy. Sc. Nat. Belg., 32(25):9 (Sumatra).**

Specimens examined: 1♂1♀, LT, 8.v.2000, Rofik Sofyan and Sarino leg.

Distribution:Sumatra, N. Vietnam (Breuning,S., 1963), Java (New to Java).

101. *Anaesthetobrium* sp.1 (Pl.11, Fig. 101)

Specimen examined: 1♂, LT, 15.iii.1999, Woro A.N. and Rofik Sofyan leg.

102. *Anaesthetobrium* sp.2 (Pl.11, Fig. 102)

Specimen examined: 1♀, LT, 9.iv.2000, E. Cholik and Sarino leg.

Tribe Nyctimeniini Thomson, 1864

103. *Nyctimenius varicornis* (Fabricius) (Pl.11, Fig. 103)

***Saperda varicornis* F., 1801, Syst. El., II:325 (Sumatra).**

***Nyctimene agrioides* Thoms., 1857, Arch. Entomol., I:314 (Java).**

***Nyctimene varicornis*: Auriv., 1922, Ark. f. Zool., 14(18):20.**

***Nyctimenius varicornis*: Breun., 1963, Cat. Lam. Monde, 7:463.**

Specimen examined:1♀, MT, 29.viii-5.ix.2000, E. Cholik and Sarino leg.

Distribution: Java, Sumatra, Borneo, Malay Peninsula (Breuning, 1963).

Tribe Acanthocinini Lacordaire, 1872

104. *Exocentrus drescheri* Fisher (Pl.11, Fig. 104)

***Exocentrus drescheri* Fish., 1934, Stylops, 3:36,41 Java).**

Specimens examined: 2♂♂2♀♀, 14.iv.2000, H. Makihara, Woro A.N., E. Cholik leg.

Distribution: Java

105. *Sciades* (*Miaenia*) *minutus* (Fisher) (Pl.11, Fig. 105)

***Miaenia minuta* Fish., Tidschr. Entomol., 79:196 (Java).**

***Sciades* (*Miaenia*) *minutus*: Breun., 1977, Mitt. Zool. Mus. Berlin, 53(2):246.**

Specimen examined: 1♂, 7.vii.2000, Rofik Sofyan and Sarino leg.

Distribution: Java.

106. *Ostedes* sp., affinis *O. pauperatus* Pascoe (Pl.11, Fig. 106)

Specimen examined: 1♀, LT, 6.v.2000, Rofik Sofyan and Sarino leg.

Tribe Saperdini Mulsant, 1839

107. *Menesia javanica* Breuning (Pl.11, Figs. 107 and 107')

***Menesia javanica* Breun., 1954, Entomol. Arb. Mus. Frey, 5:416 (Java).**

Specimens examined: 2♀♀, MT, 11-18.iv.2000, E. Cholik and Sarino leg. 1♀, MT, 16-23.v.2000, Rofik Sofyan and Sarino leg.

Distribution: Java.

108. *Menesia* sp., affinis *M. vittata* (Aurivilius) (Pl.11, Figs. 108 and 108')

Specimens examined: 1♀, MT, 28.iii-4.iv.2000, E. Cholik and Sarino leg. ; 1♂, MT, 24-31.x.2000, Rofik Sofyan and Sarino leg.

109. *Serixia* sp.1 (Pl.12, Figs. 109 and 109')

Specimen examined: 1♀, MT, 2-9.v.2001, Woro A.N. and S. Kahono leg.

110. *Serixia* sp.2 (Pl.12, Figs. 110 and 110')

Specimen examined: 1♀, 13.iii.1999, Woro A.N. and Rofik Sofyan leg.

111. *Glenea* (*Acutoglenea*) *acuta* (Fabricius) (Pl.12, Figs. 111, 111', 111'' and 111''')

***Saperda acuta* F., 1801, Syst. El., II:327 (Sumatra).**

***Saperda lineosa* Guér., 1837, Belanger, Voyage Ind. Or., p.489, pl.II, Fig.8 (Java).**

***Saperda ochracea* Guér., 1837, Belanger, Voyage Ind. Or., p.495, pl.II, Fig.9 (Java).**

***Saperda miles* Newm., 1838, Entomol. Mag., 5:395.**

***Satibara ana* Thoms., 1857, Arch. Entomol., I:145.**

***Satibara sanguinaria* Thoms., 1857, Arch. Entoml., I:146.**

***Volumnia acuta*: Thoms., 1860, Ess. Class. Cer., p.59.**

***Glenea acuta*: Pasc., 1867, Trans. Entomol. Soc. Lond., (3)III:386.**

***Glenea miles*: Pasc., 1867, Trans. Entomol. Soc. Lond., (3)III:412.**

***Glenea ochracea*: Gah., 1897, Ann. Mag. Nat. Hist., (6)XIX:492.**

***Glenea* (*Acutoglenea*) *acuta*: Breun. 1958, Entomol. Arb. Mus. Frey, 9:838.**

Specimens examined: 1♀, MT, 18-25.vii.2000, Rofik Sofyan and Sarino leg. ; 1♂, MT, 25.vii-1.viii.2000, Rofik Sofyan and Sarino leg. ; 1♂, MT, 10-17.x.2000, Rofik Sofyan and Sarino leg.

Distribution: Java, Sumatra, Borneo (Breuning, S., 1958b).

112. *Glenea* (*Macroglenea*) *nympha* Thomson (Pl.12, Fig. 112)

***Glenea nympha* Thoms., 1865, Syst. Cer., p.560 (Malaysia).**

***Glenea* (*Macroglenea*) *nympha*: Breun., 1956, Entomol. Arb. Mus. Frey, 7:118.**

Specimen examined:1♀, 26.iv.2001, H. Makihara leg.

Distribution: Java, Sumatra, Borneo, Malay Peninsula, Nias Is. (Breuning, S., 1956).

113. *Glenea* (*Glenea*) *dimidiata arcuatefasciata* Pic (Pl.12, Fig. 113)

***Glenea dimidiata arcuatefasciata* Pic, 1943, Echange, 59(493):12 (Java).**

***Glenea* (*Glenea*) *dimidiata arcuatefasciata*: Breun., 1958, Entomol. Arb. Mus. Frey, 9:336.**

Specimens examined:1♀, MT, 26-30.x.2000, Woro A.N., E. Cholik and Sarino leg. ;1♀, MT, 2-9.v.2000, E. Cholik and Sarino leg.;1♀, MT, 16-23.v.2000, Rofik Sofyan and Sarino leg.

Host record: *Eugenia subglauca* (Kalshoven, 1955).

Distribution: Java, [another subspecies: Sumatra, Borneo, Malay Peninsula, Sumbawa Is.(Breuning, S., 1958b)].

114. *Glenea* (*Glenea*) sp.1 (Pl.12, Figs. 114 and 114')

Specimens examined:1♀, 27.v-2.vi.1999, T. Ueno and Rofik Sofyan leg. ;1♀, MT, 28.xi-5.xii.2000, Rofik Sofyan and Sarino leg.

115. *Glenea* (*Glenea*) *signatifrons* Gahan (Pl.13, Figs. 115 and 115')

***Glenea signatifrons* Gah,. 1897, Ann. Mag. Nat. Hist., (6)XIX:489 (Java, Sumatra).**

***Glenea bistrimaculata* Pic,. 1943, Opusc. Mart., XI:6 (Malacca, Java).**

***Glenea* (*Glenea*) *signatifrons*: Breun,. 1956, Entomol. Arb. Mus. Frey, 7:835.**

Specimens examined: 1♀, MT, 11-18.iv.2000, E. Cholik and Sarino leg.; 2♀♀, MT, 28.xi-5.xii.2000, Rofik Sofyan and Sarino leg.; 1♀, MT, 6-12.vi.2000,S. Kahono leg. ;1♀, MT, 6-13.vi.2000, E. Cholik and Sarino leg. ;1♂, MT, 17-24.xi.2000, Rofik Sofyan and Sarino leg.;1♀, MT, 31.x-7.xi.2000, Woro A.N., E. Cholik and Sarino leg. ;1♀, MT, 7-14.xi.2000, Woro A.N., E. Cholik and Sarino leg. ;1♀, 14.iv.2001, H. Makihara,Woro A.N., and E. Cholik leg.

Distribution: Java, Sumatra, Malay Peninsula.

116. *Glenea* (*Glenea*) sp.2 (Pl.13, Figs. 116 and 116')

Specimens examined:1♂, MT, 11-18.iv.2000, E. Cholik and Sarino leg. ;1♂, MT, 22-29.viii.2000, Woro A.N., E. Cholik and Sarino leg.; 1♂, MT, 21-28.xi.2000, Woro A.N., E. Cholik and Sarino leg.; 1♂, 14.iv.2001, H. Makihara,Woro A.N., and E. Cholik leg.

117. *Glenea* (*Glenea*) sp.3, affinis *G. blandina* Pascoe

(Pl.13, Figs. 117 and 117')

Specimen examined:1♂, MT, 26-28.i.2000, Woro A.N., E. Cholik and Sarino leg.

118. *Glenea* (*Glenea*) sp.4 (Pl.13, Figs. 118 and 118')

Specimens examined:1♂, MT, 28.iii-4.iv.2000,E. Cholik and Sarino leg.;1♀, MT, 11-18.iv.2000, E. Cholik and Sarino leg. ;1♂, MT, 25.iv-2.v.2000, Rofik Sofyan and Sarino leg.;1♂, MT, 2-7.v.2000, Rofik Sofyan and Sarino leg.; 1♀, MT, 3-10.x.2000, Rofik Sofyan and Sarino leg. ;1♂1♀, MT, 28.xi-5.xii.2000, Rofik Sofyan and Sarino leg. ;1♂, MT, 5-12.xii.2000, Rofik Sofyan and Sarino leg.

119. *Glenea* (*Glenea*) *mathematica* Thomson (Pl.13, Figs. 119 and 119')

***Stibara mathematica* Thoms., 1857, Arch. Entomol., 1:144 (Malacca).**

***Glenea mathematica*: Pasc., 1867, Trans. Entomol. Soc. Lond., (3)III:398.**

***Glenea Weyersi* Auriv., 1907, Ark. f. Zool., 3(18):36 (Sumatra)**

***Glenea anona* Pasc., 1867, Trans. Entomol. Soc. Lond., (3)III:393 (Singapore).**

***Glenea alysson* Pasc., 1866, Proc. Zool. Soc. Lond., p.261, pl.28, Fig.8 (Singapore).**

***Glenea* (*Glenea*) *mathematica*: Breun., 1956, Entomol. Arb. Mus. Frey, 7:845.**

Specimen examined:1♂, MT, 6-12.xi.1998, E. Cholik and A. Sarino leg.

Distribution: Java, Sumatra., Borneo, Malay Peninsula, Batoe Is. (Breuning, S., 1956).

120. *Glenea* (*Glenea*) *dejeani* Gahan (Pl.13, Figs. 120 and 120')

***Glenea dejeani* Gah., 1889, Trans. Entom. Soc. Lond., 218 (Java).**

***Glenea* (*Glenea*) *dejeani*: Breun., 1956, Entomol. Arb. Mus. Frey, 7:889.**

Specimen examined:1♀, MT, 26.xii.2000-2.i.2001, S. Kahono, E. Cholik and A. Sarino leg.

Distribution: Java, Sumatra., Malay Peninsula (Breuning, S., 1956).

121. *Glenea* (*Glenea*) *manto* Pascoe (Pl.14, Figs. 121 and 121')

***Glenea manto* Pasc., 1866, Proc. Zool. Soc. Lond., 262 (Malacca).**

***Glenea* (*Glenea*) *manto*: Breun., 1958, Entomol. Arb. Mus. Frey, 9:284.**

Specimen examined: 1♂, HT, 23-30.v.2001, Woro A.N. and S. Kahono leg.

Distribution: Java, Sumatra., Borneo, Malay Peninsula (Breuning, S., 1958).

122. *Loboberea pygidialis* (Gahan) (Pl.14, Figs. 122 and 122')

***Oberea pygidialis* Gah., 1907, Ann. Mus. civ. Genova, (3)III:100 (Sumatra).**

***Loboberea pygidialis*: Breun., 1954, Entomol. Arb. Mus. Frey, 5:532.**

Specimen examined:1♂,MT, 9-14.iii.2000, Rofik Sofyan and Sarino leg.

Distribution: Java, Sumatra, Malay Peninsula (Breuning, S., 1954).

123. *Oberea javanicola* Breuning (Pl.14, Figs. 123 and 123')

***Oberea javanicola* Breun., 1950, Bull. Inst. roy. Sc. Nat. Belg., 24(12):28 (Java).**

Specimens examined: 1♂, iv.1999, Tatalinic and E. Cholik leg.; 1♂, 27.iv.2001, Woro A.N. leg.

Distribution: Java.

124. *Oberea* sp. (Pl.14, Figs. 124 and 124')

Specimen examined: 1♀, MT, 21-28.iii.2000,E. Cholik, Rofik Sofyan and Sarino leg.

125. *Oberea neptis* Pascoe (Pl.14, Figs. 125 and 125')

***Oberea neptis* Pasc., 1867, Trans. Entom. Soc. Lond., (3)III:425 (Sarawak).**

***Oberea drescheri* Fish., 1937, Treubia, 16:201 (Java).**

Specimen examined: 1♀, MT, 16-23.v.2001, Woro A.N. and S. Kahono leg.

Distribution: Java, Sumatra, Borneo, Simalur (Breuning, S., 1960-1962).

126. *Oberea denominata* Plaviltshikov (Pl.14, Figs. 126 and 126')

***Oberea denominata* Plav., 1926, Enc. Entomol. ser.B, II, Col.1:64.**

***Oberea limbata* Pasc., 1867, Trans. Entomol. Soc. Lond., (3)III:433 (Singapore).**

Specimen examined: 1♂, MT, 6-13.vi.2001, HT, Woro A.N. and S. Kahono leg.

Distribution: Java, Sumatra, Borneo, Malay Peninsula (Breuning, S., 1960-1962).

127. *Nupserha fricator* (Dalman) (Pl.15, Figs. 127 and 127')

***Saperda fricator* Dalm., 1817, Schoh., Syn. Ins., 13, Append., 183 (Java).**

***Nupserha fricator*: Pasc., 1867, Trans. Entomol. Sooc. Lond., (3)III:414 (Malacca, Sulawesi).**

Specimen examined: 1♂, MT, 13-20.vi.2001, MT, Woro A.N. and S. Kahono leg.

Host record: *Ipomea batatas* (Duffy, 1968).

Distribution: Java, Sumatra, Borneo, Sulawesi,

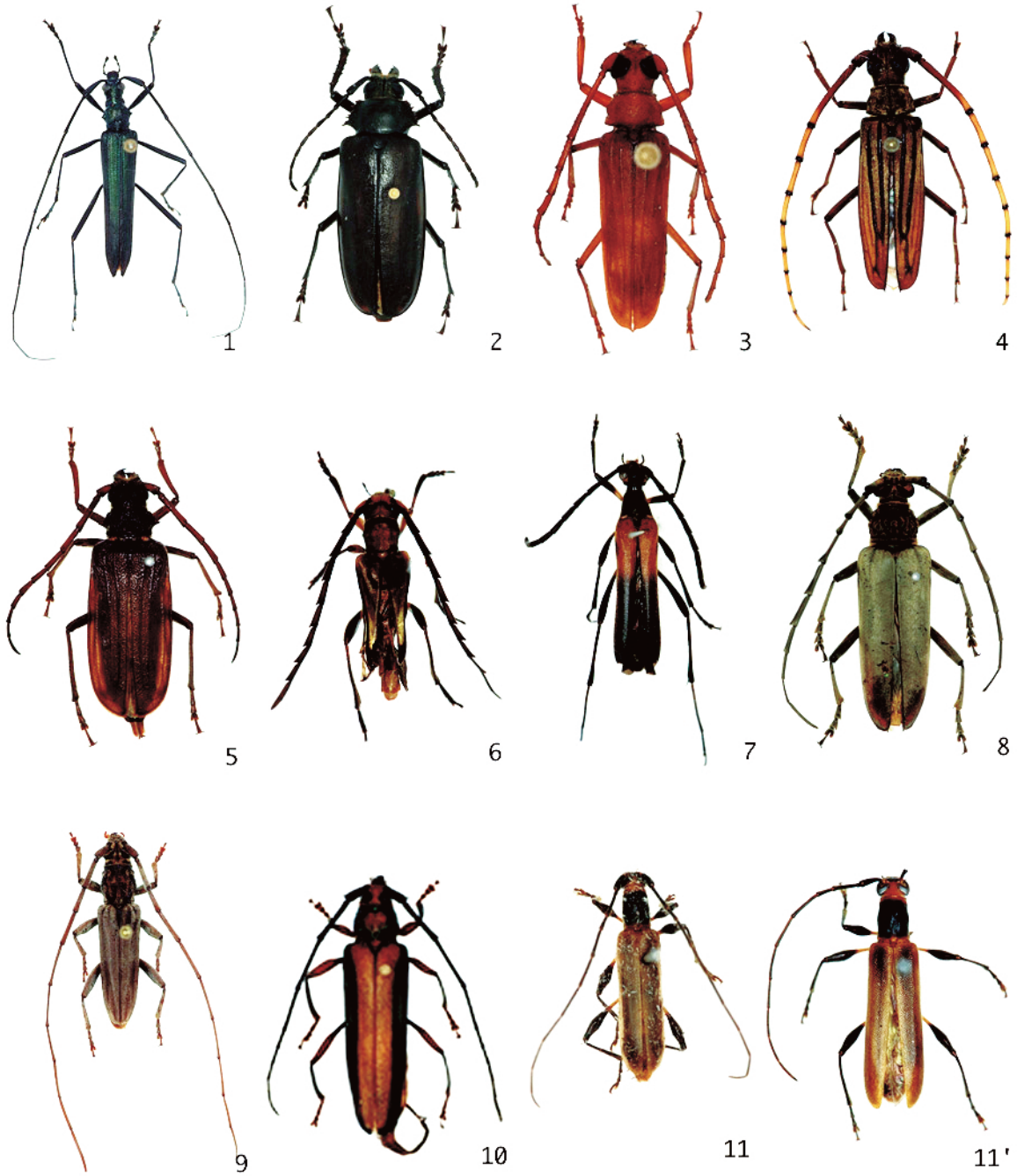
Malay Peninsula, Laos, Myanmar, Thailand, China, Philippines (Gressitt at al., 1970).

128. *Astathes cincta* Gahan (Pl.15, Fig. 128)

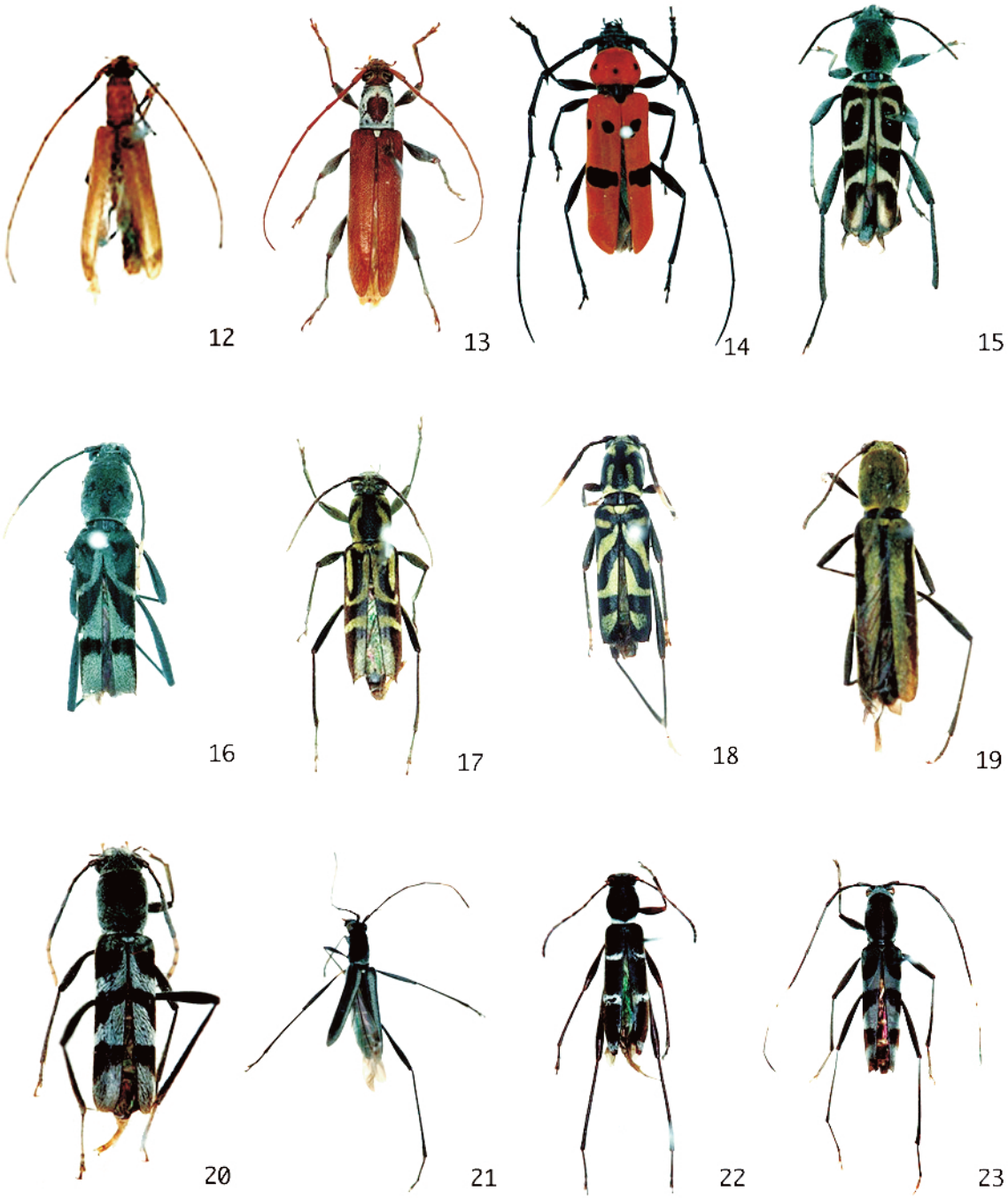
***Astathes cincta* Gah., 1901, Trans. Entomol. Soc. Lond., 58. pl.4, Fig.6 (Java).**

Specimen examined: 1♂, MT, 1-8.v.2001, Woro A.N. and S. Kahono leg.

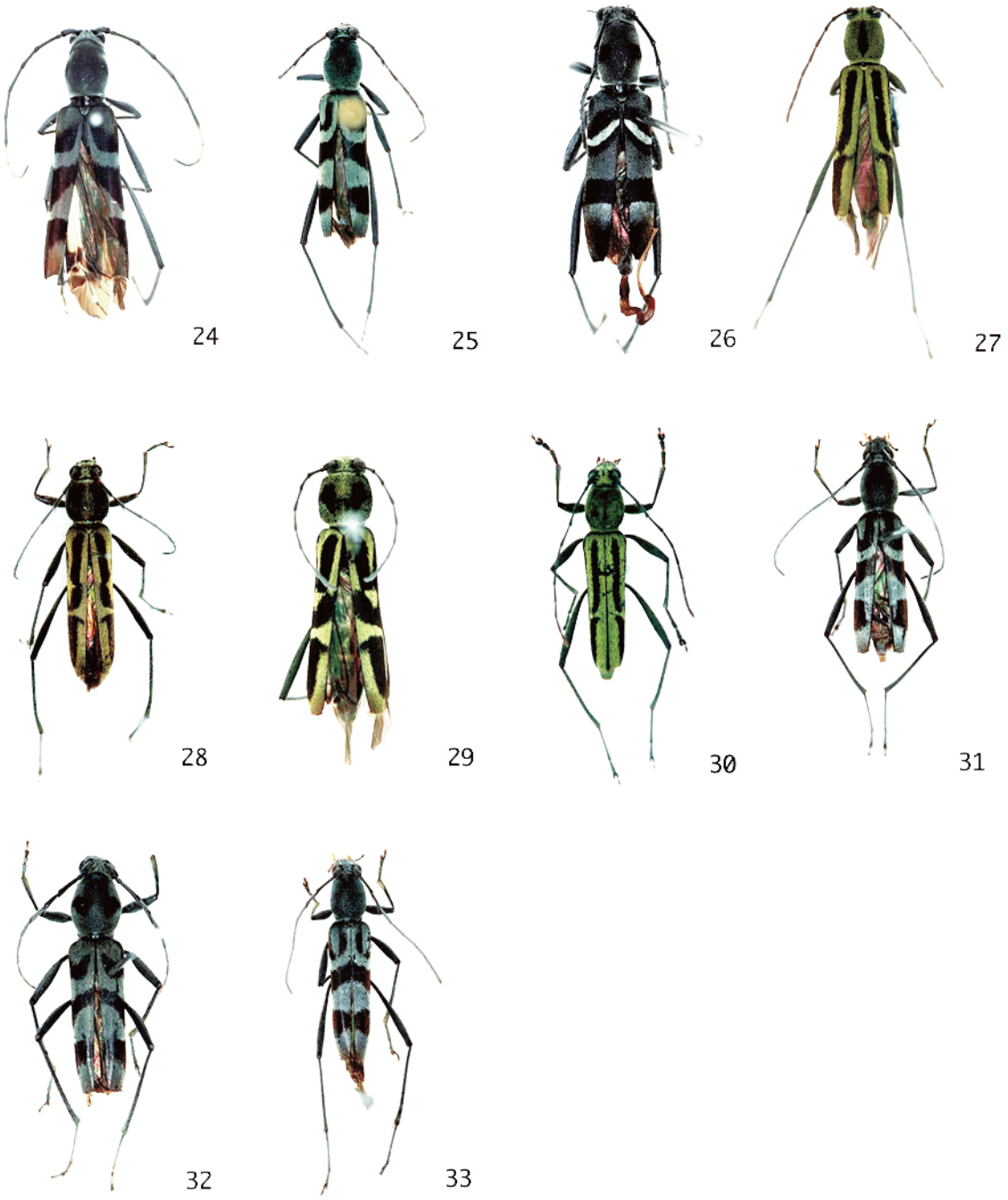
Distribution: Java.



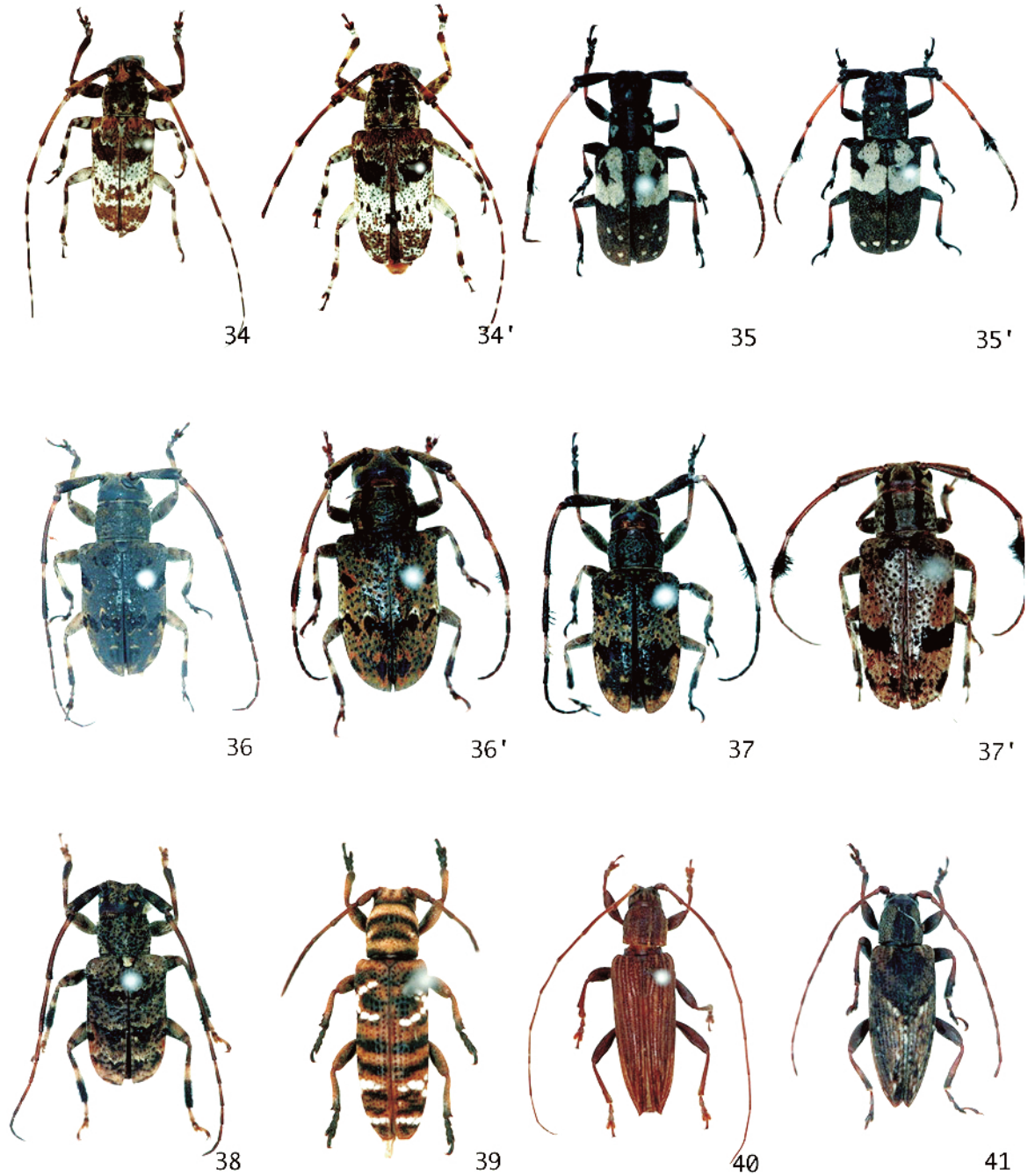
Pl.1: 1. *Typodryas chalybeata* (Pascoe), ♂, 20mm. 2. *Rhaphipodus* (*Rhaphipodus*) *suturalis* Serville, ♀, 39mm. 3. *Megopis cinnamonea* Lansberge, ♂, 20mm. 4. *Megopis costata* Lansberge, ♂, 27mm. 5. *Sarmydus antennatus* Pascoe, ♀, 25mm. 6. *Trypogeus javanicus* Aurivillius, ♂, 8.8mm. 7. *Pseudoparanaspia* sp., affinis *P. lepturoides* Pascoe, ♀, 8.0mm. 8. *Trachylophus approximator* Gahan, ♀, 40mm. 9. *Dialeges undulatus villosicornis* Schwarzer, ♂, 20mm. 10. *Xystrocera festiva* Thomson, ♀, 40mm. 11. *Stenodryas* sp.1, ♂, 11.0mm. 11'. Ditto, ♀, 11.2mm.



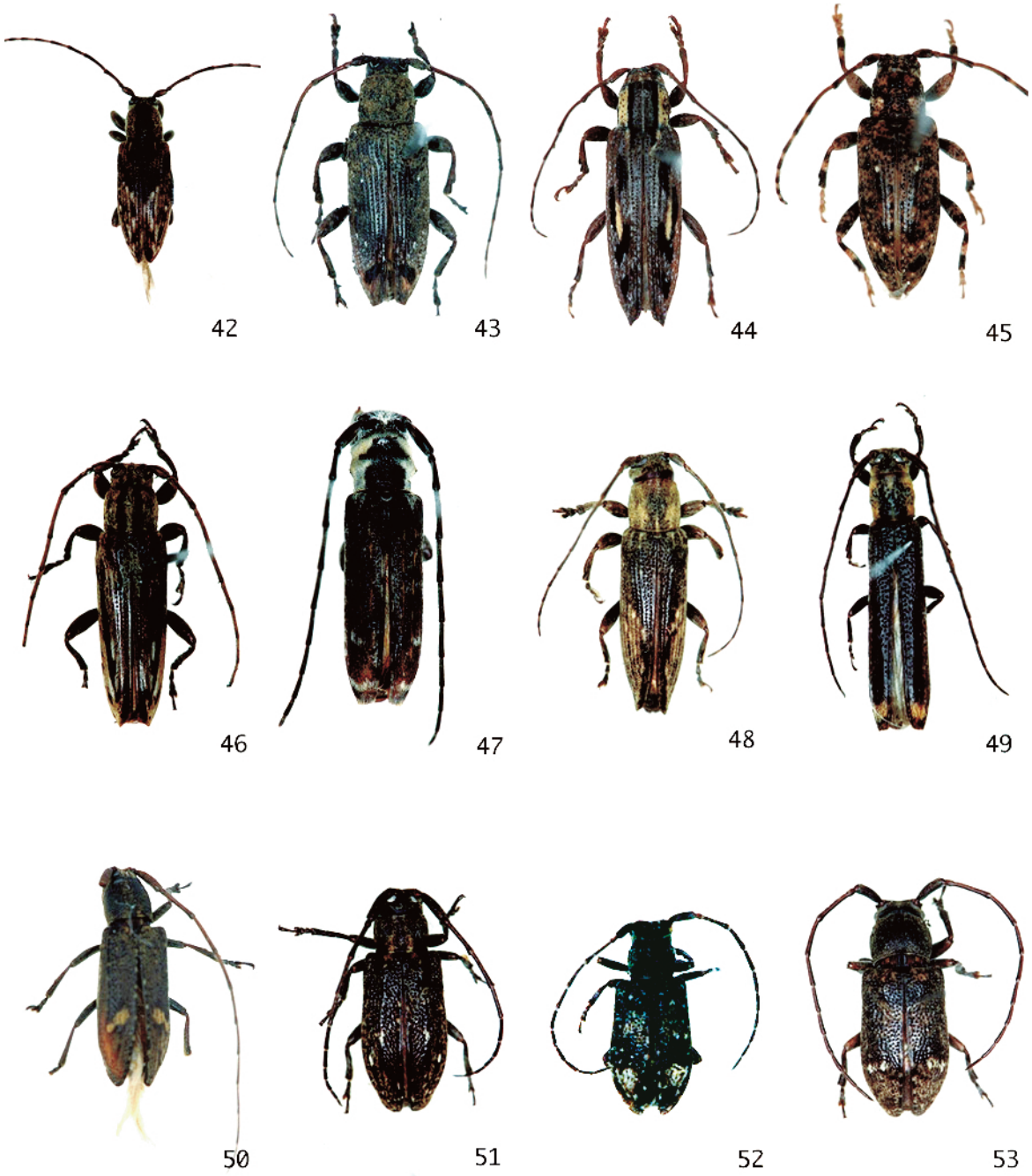
Pl.2: 12. *Stenodryas* sp.2 affinis *S. unicolor* Hüdepohl, ♂, 10.1mm. 13. *Ceresium zeylanicum* White, ♀, 11.2mm. 14. *Rosalia* (*Eurybatus*) *decempunctata* (Westwood), ♂, 19mm. 15. *Xylotrechus buqueti* (C. et G.), ♂, 12mm. 16. *Xylotrechus imperfectus* Chevrolat, ♂, 13mm. 17. *Xylotrechus decoratus* Pascoe, ♀, 8.7mm. 18. *Xylotrechus pulchra* Aurivillius, ♂, 9.5mm. 19. *Xylotrechus biimpressus* Aurivillius, ♂, 10.5mm. 20. *Xylotrechus fluctuosus* (Pascoe), ♀, 8.6mm. 21. *Psilomerus procerus* Holzschuh, ♂, 7.4mm. 22. *Demonax exilis* Pascoe, ♀, 5.2mm. 23. *Demonax javanicus* Fisher, ♂, 14.5mm.



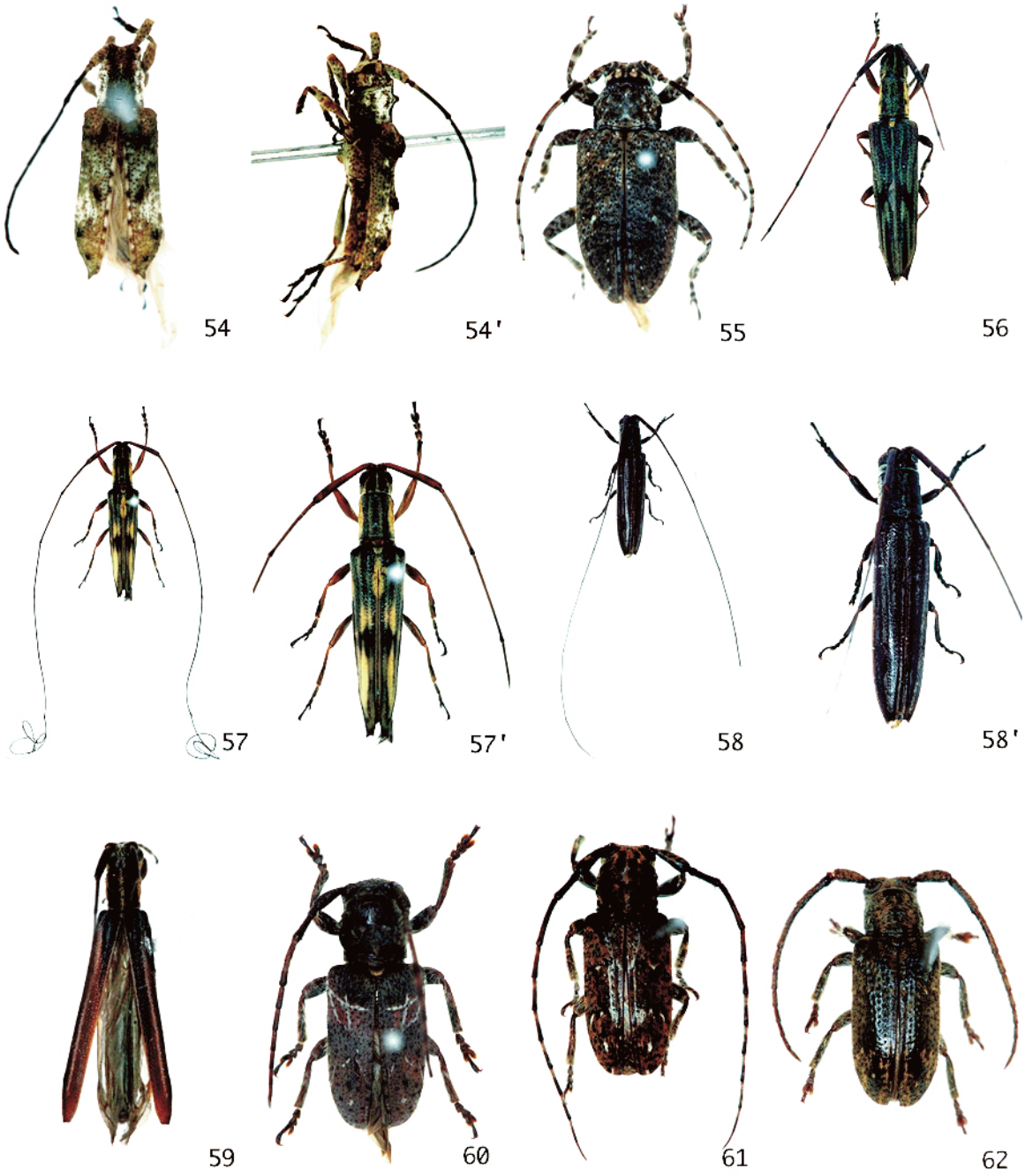
Pl.3: 24. *Demonax elongatulus* (Castelnau et Gory), ♀, 18mm. 25. *Demonax drescheri* Fisher, ♀, 9.8mm. 26. *Demonax polyzonus* Pascoe, ♀, 14mm. 27. *Demonax lineolatus* Redtenbacher, ♀, 7.2mm. 28. *Demonax* sp.1, ♂, 9mm. 29. *Demonax* sp.2, ♀, 9.2mm. 30. *Demonax* sp.3, ♂, 9.3mm. 31. *Demonax* sp.4, affinis *D. drescheri*, ♀, 10mm. 32. *Demonax* sp.5, ♀, 12mm. 33. *Demonax* sp.6, affinis *D. drescheri*, ♀, 9mm.



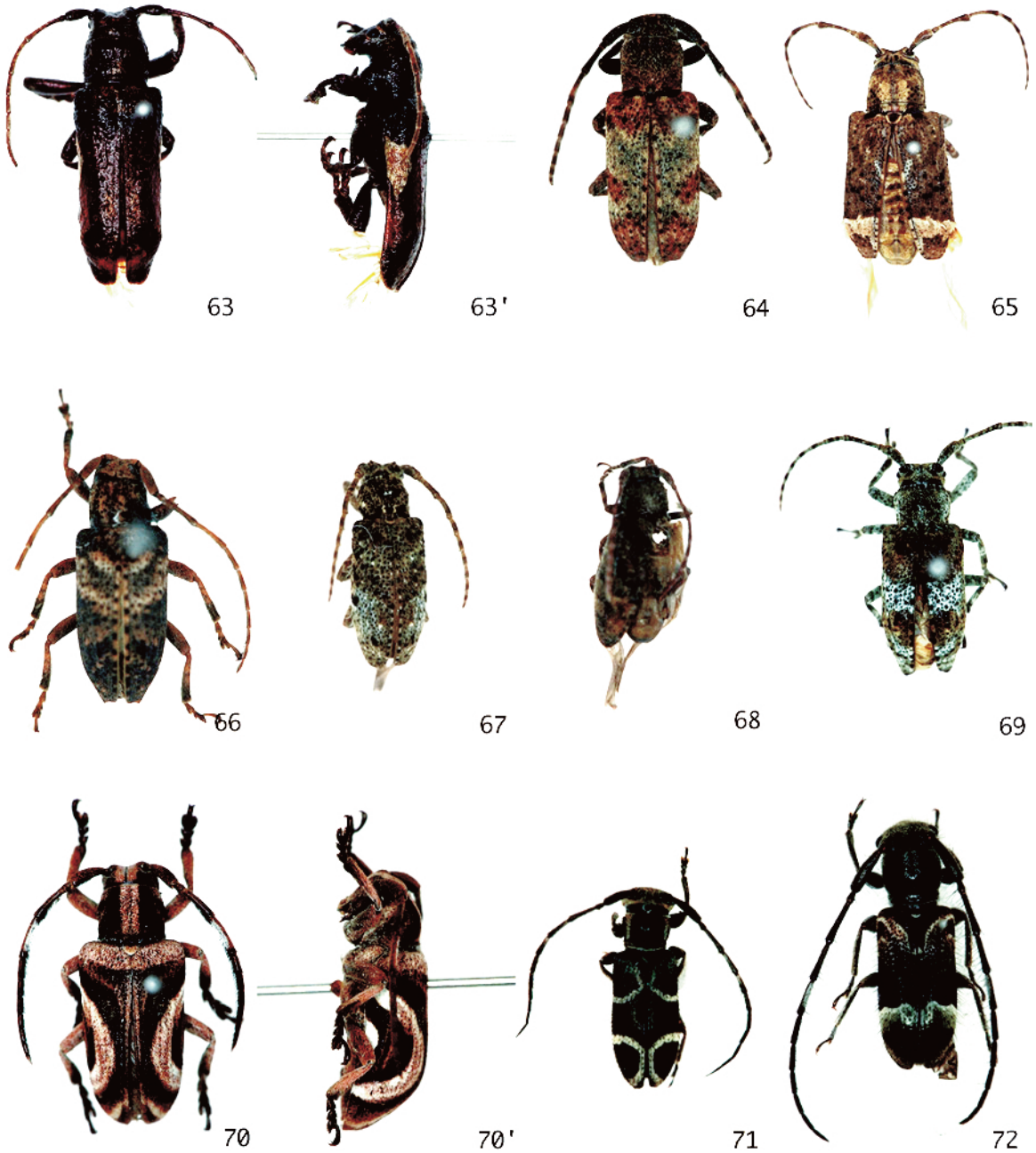
Pl.4: 34. *Anancylus* (*Anancylus*) *calceatus* Thomson, ♂, 11.6mm. 34'. Ditto, ♀, 16.5mm. 35. *Cacia* (*Cacia*) *curta* Breuning, ♂, 9.5mm. 35'. Ditto, ♀, 10.3mm. 36. *Cacia* (*Ipocregyes*) *bituberosa* Breuning, ♂, 11.5mm. 36'. Ditto, ♀, 12.0mm. 37. *Cacia* (*Ipocregyes*) *subfasciata* Schwarzer, ♂, 9.0mm. 37'. Ditto, ♀, 9.5mm. 38. *Cacia* (*Ipocregyes*) *setulosa* Pascoe, ♂, 10.8mm. 39. *Apomecyna tigrina* Thomson, ♂, 9.0mm. 40. *Sybra* (*Sybra*) *bisignata* Schwarzer ♂, 13.5mm. 41. *Sybra javana* Breuning, ♂, 6.5mm.



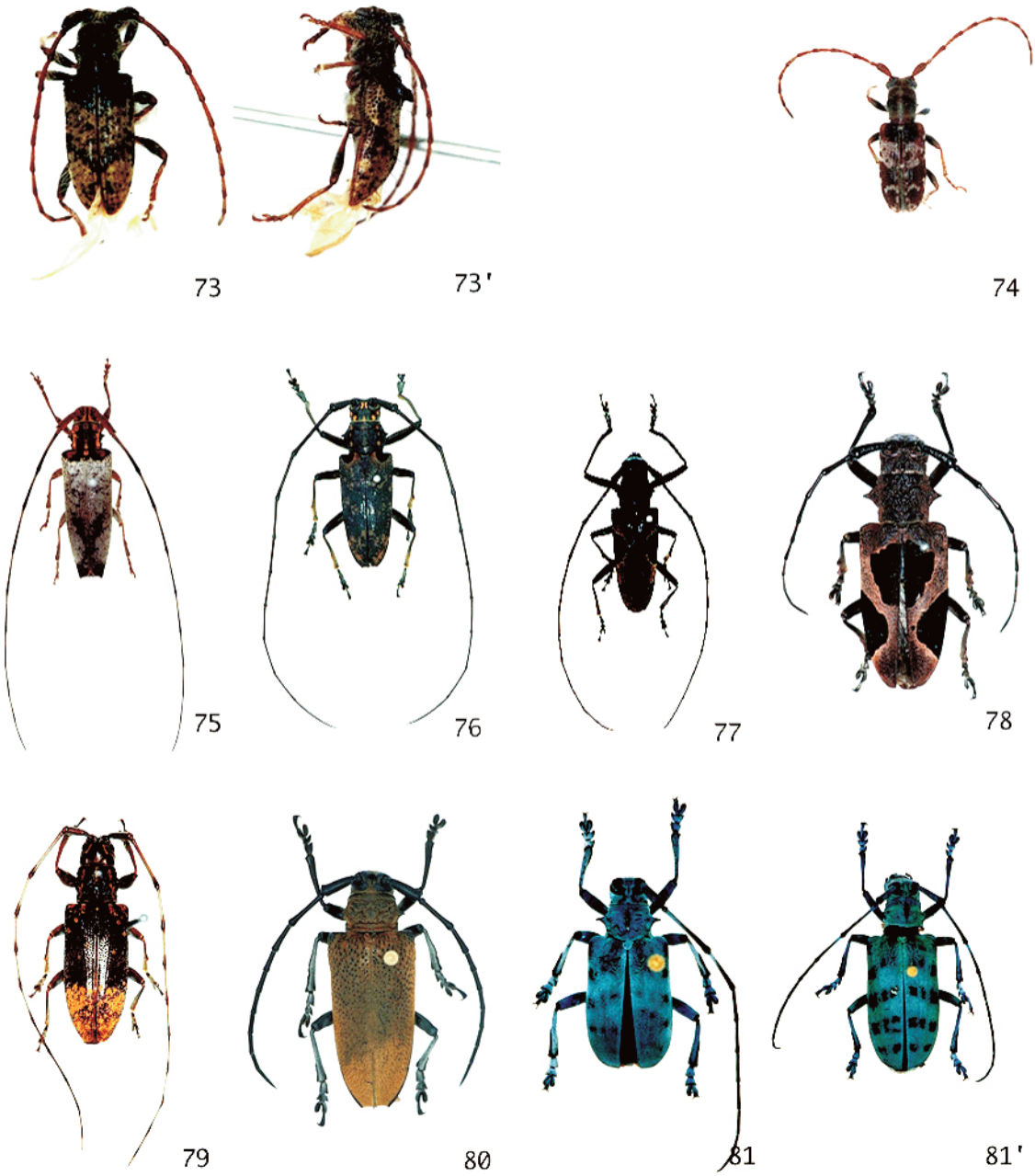
Pl.5: 42. *Sybra* (*Sybra*) *fuscotriangularis* Breuning, ♂, 4.0mm. 43. *Sybra* (*Sybra*) *binotata* Gahan, ♀, 9.7mm. 44. *Sybra* (*Sybra*) *obliquefasciata* Breuning, ♀, 9.4mm. 45. *Sybra* (*Sybra*) *fervida* Pascoe, ♀, 7.5mm. 46. *Sybra* (*Sybra*) sp., affinis *S. pseudalternans* Breuning, ♀, 9.5mm. 47. *Sybra* (*Pseudatelais*) ? sp., ♂, 11.5mm. 48. *Epilysta mucida* Pascoe, ♀, 7.5mm. 49. *Zorilispe spinipennis* Breuning, ♀, 7.0mm. 50. *Ropica transversmaculata* Breuning, ♂, 8.0mm. 51. *Ropica strandi* Breuning, ♀, 6.0mm. 52. *Ropica laterifusca* Breuning et de Jong, ♀, 3.5mm. 53. *Ropica densepunctata* Breuning et de Jong, ♂, 5.5mm.



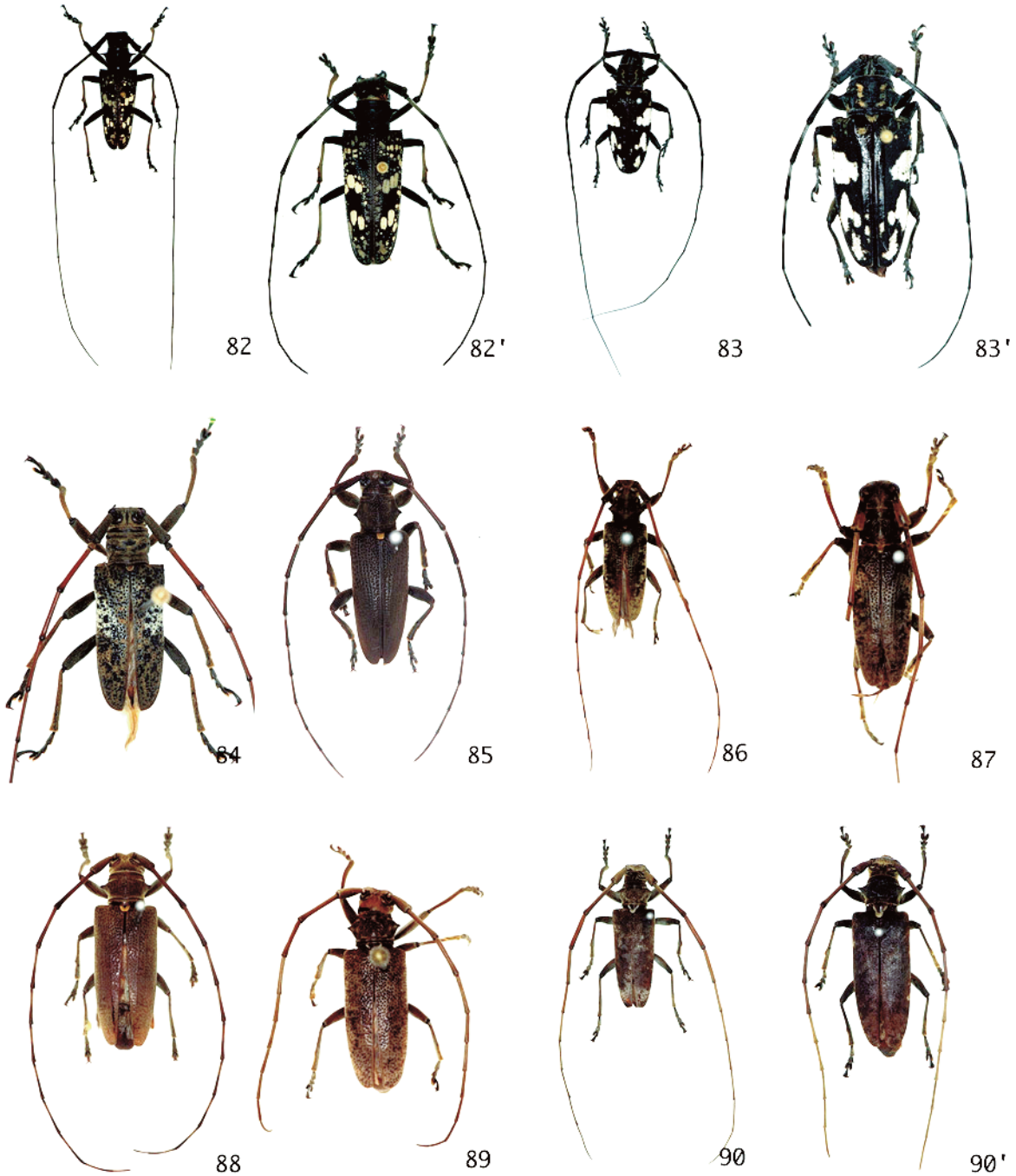
Pl.6: 54. *Atrichocera* sp. affinis *A. moultoni* Aurivillius, ♂, 7mm. 54': Ditto, lateral view. 55. *Mimosybra mediomaculata* Breuning, ♂, 11.6mm. 56. *Cleptometopus montanus* (Pascoe), ♀, 10.3mm. 57. *Cleptometopus javanicus* Breuning, ♂, 13.4mm. 57'. Ditto. 58. *Pothyne* sp., ♂, 10.9mm. 58'. Ditto. 59. *Pseudohyllisia* sp., ♂, 9mm. 60. *Mispila venosa* Pascoe, ♀, 12.4mm. 61.*Mispila* sp. affinis *obliquevittata* Breuning, ♂, 9.5mm. 62. *Mispilodes borneensis* Breuning, ♀, 7.2mm.



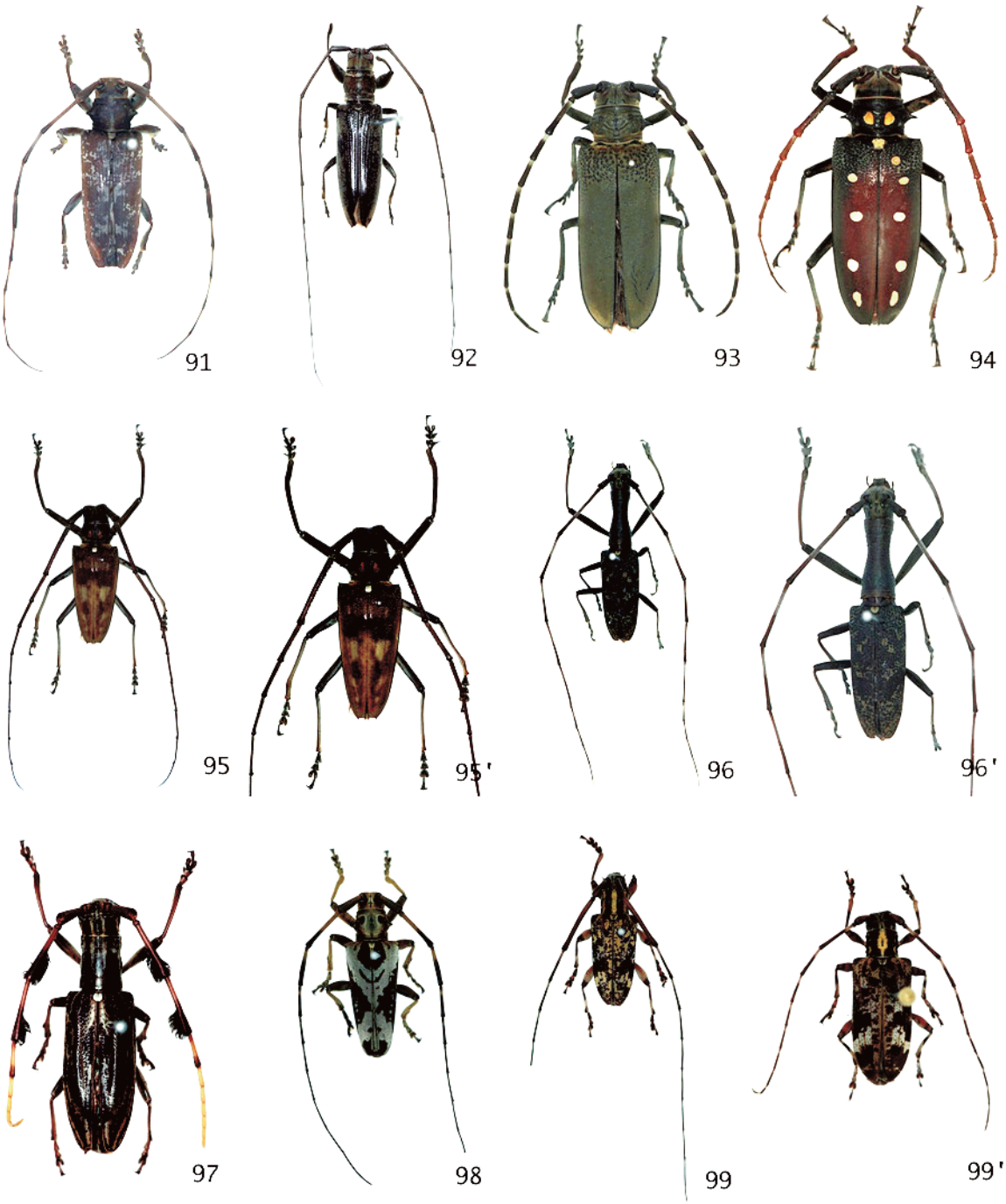
Pl.7: 63. *Etaxalus iliacus* Pascoe, ♀, 15.5mm. 63'. Ditto, lateral view. 64. *Pterolophia melanura* (Pascoe), ♀, 10.6mm. 65. *Pterolophia obliquefasciculata* Breuning et de Jong, ♀, 14.5mm. 66. *Pterolophia mediocarinata* Breuning, ♀, 8.9mm. 67. *Pterolophia olivacea* Breuning et de Jong, ♂, 6.8mm. 68. *Pterolophia* sp., affinis *P. nigroconjuncta* Breuning et de Jong, ♀, 4.2mm. 69. *Pterolophia simulans* Breuning et de Jong, ♀, 8.9mm. 70. *Pterolophia lunigera* Aurivillius, ♀, 12.8mm. 70'. Ditto, lateral view. 71. *Egesina* (*Egesina*) *fusca* (Fisher), ♀, 5.1mm. 72. *Egesina* (*Callienispa*) *javana* Fisher, ♂, 6.0mm.



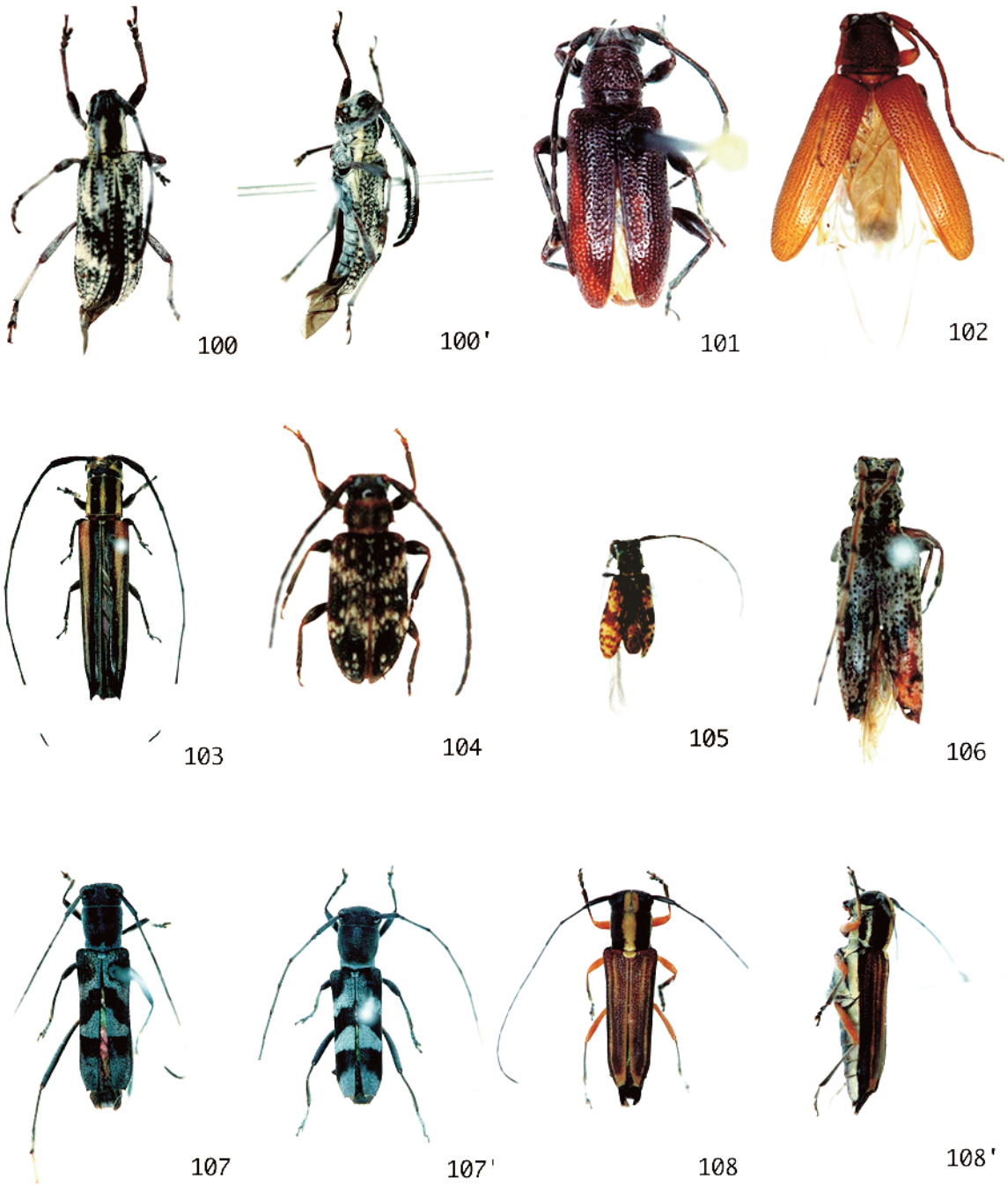
Pl.8: 73. *Gyaritus javanicus* Breuning et de Jong, ♂, 7.4mm. 73'. Ditto, lateral view. 74. *Gyaritus fuscosignatus* Breuning et de Jong, ♂, 3.6mm. 75. *Amechana javanica* Breuning, ♂, 16.6mm. 76. *Epepeotes luscus* (Fabricius), ♂, 23mm. 77. *Epepeotes spinosus* (Thomson), ♂, 23mm. 78. *Epicedia trimaculata* (Chevrolat), ♀, 27mm. 79. *Myagrus javanicus* Breuning, ♀, 14mm. 80. *Celosterna stolzi* Ritsema, ♂, 28.5mm. 81. *Pseudomyagrus waterhousei* (Gahan), ♂, 16.5mm. 81'. Ditto, ♀, 26.4mm.



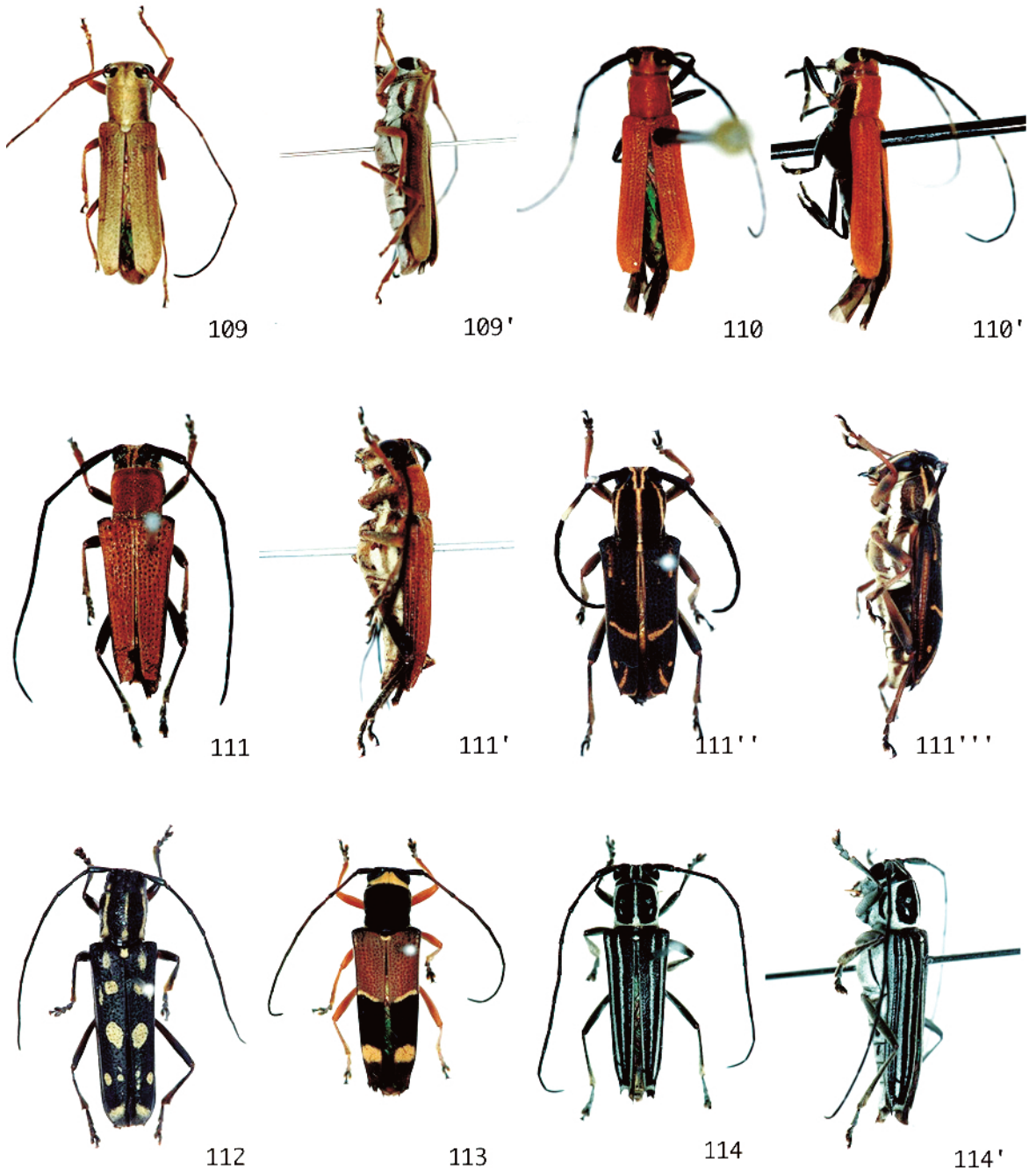
Pl.9: 82. *Anhammus daleni* Guérin, ♂, 36mm. 82'. Ditto, ♀, 29mm. 83. *Pharsalia* (*Pharsalia*) *mortalis* (Thomson), ♂, 18mm. 83'. Ditto, ♀, 19.5mm. 84. *Pharsalia* (*Eopharsalia*) *granulipennis* Breuning et de Jong, ♂, 15.5mm. 85. *Acalolepta* sp. 1, affinis *A. dispar* (Pascoe), ♂, 14mm. 86. *Acalolepta montana* (Aurivillius), ♂, 10.5mm. 87. *Acalolepta* sp. 2, affinis *A. montana*, ♂, 15mm. 88. *Acalolepta javanica* (Breuning), ♀, 15.3mm. 89. *Acalolepta rusticatorix* (Fabricius), ♀, 15.5mm. 90. *Acalolepta laevifrons* (Aurivillius), ♂, 18mm. 90'. Ditto, ♀, 21.5mm.



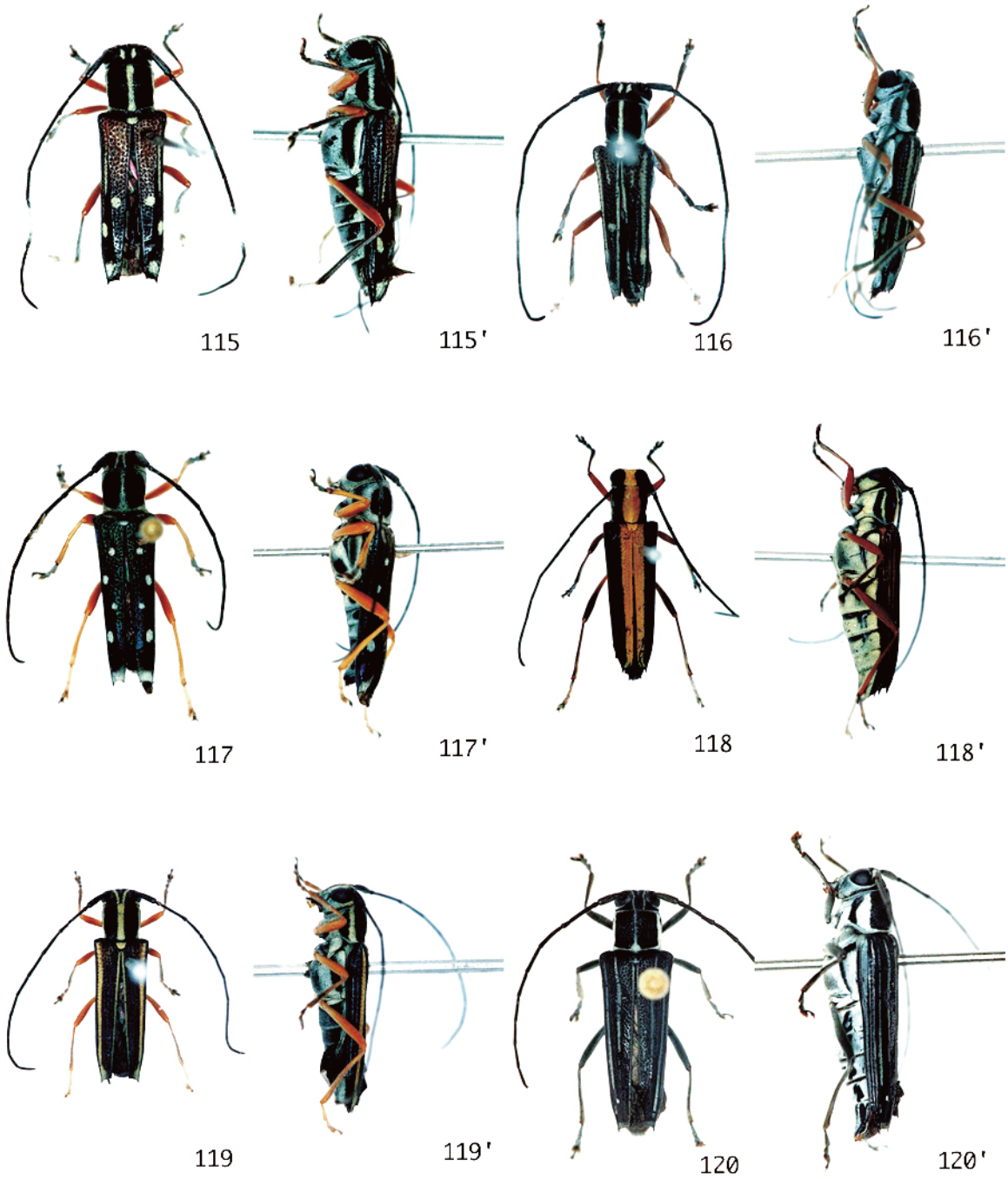
Pl.10: 91. *Sternohammus strandi* Breuning, ♂, 15.6mm. 92. *Xoes egeria* Pascoe, ♀, 11.3mm. 93. *Apriona flavescens* Kaup, ♂, 41mm. 94. *Batocera parryi* Hope, ♀, 47mm. 95. *Batocera gigas* Drapiez, ♂, 57mm. 95'. Ditto. 96. *Gnoma sticticollis* Thomson, ♂, 21mm. 96'. Ditto. 97. *Psectrocera plumigera* (Westwood), ♀, 18mm. 98. *Epicasta ocelata* Thomson, ♂, 17.4mm. 99. *Rhodopina javana* Aurivillius, ♂, 17mm. 99'. Ditto., ♀, 18mm.



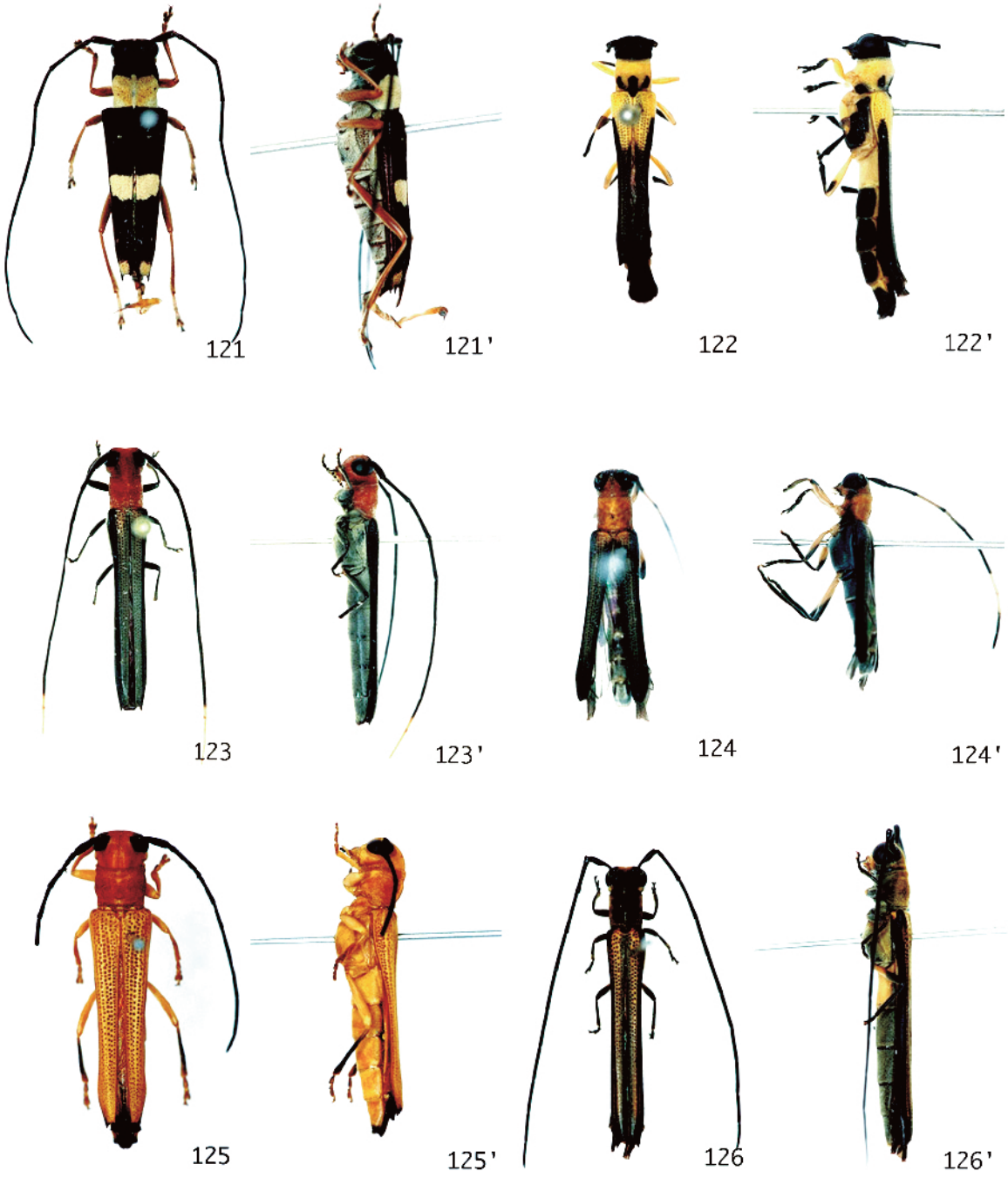
Pl.11: 100. *Parasophronica albomaculata* Breuning, ♂, 8.7mm. 100'. Ditto, lateral view. 101. *Anaesthetobrium* sp.1, ♂, 6.5mm. 102. *Anaesthetobrium* sp.2, ♀, 5.5mm. 103. *Nyctimenius varicornis* (Fabricius), ♀, 15.3mm. 104. *Exocentrus drescheri* Fisher, ♀, 4.8mm. 105. *Sciades* (*Miaenia*) *minutus* (Fisher), ♀, 3.5mm. 106. *Ostedes* sp. affinis *O. pauperatus* Pascoe, ♀, 9.0mm. 107. *Menesia javanica* Breuning, ♂, 8.9mm. 107'. Ditto, ♀, 10.2mm. 108. *Menesia* sp., affinis *M. vittata* (Aurivilius), ♀, 6.8mm. 108'. Ditto, lateral view.



Pl.12: 109. *Serixia* sp.1, ♀, 7.4mm. 109'. Ditto, lateral view. 110. *Serixia* sp.2, ♀, 8.5mm. 110'. Ditto, lateral view. 111. *Glenea* (*Acutoglenea*) *acuta* (Fabricius),♂, 14.5mm. 111'. Ditto, lateral view. 111". Ditto, ♀, 13mm. 111'". Ditto, lateral view. 112. *Glenea* (*Macroglenea*) *nympha* Thomson, ♀, 17.3mm. 113. *Glenea* (*Glenea*) *dimidiata arcuatefasciata* Pic, ♀, 14.5mm. 114. *Glenea* (*Glenea*) sp.1, ♂, 13mm. 114'. Ditto, lateral view.



Pl.13: 115. *Glenea* (*Glenea*) *signatifrons* Gahan, ♂, 10.2mm. 115'. Ditto, lateral view. 116. *Glenea* (*Glenea*) sp.2, ♂, 8.0mm. 116'. Ditto, lateral view. 117. *Glenea* (*Glenea*) sp.3 affinis *G. blandina* Pascoe, ♂, 12.3mm. 117'. Ditto, lateral view. 118. *Glenea* (*Glenea*) sp.4, ♀, 13mm. 118'. Ditto, lateral view. 119. *Glenea* (*Glenea*) *mathematica* Thomson, ♀, 9.5mm. 119'. Ditto, lateral view. 120. *Glenea* (*Glenea*) *dejeani* Gahan, ♀, 16.1mm. 120'. Ditto, lateral view.



Pl.14: 121. *Glenea* (*Glenea*) *manto* Pascoe, ♂, 10.2mm. 121'. Ditto, lateral view. 122. *Loboberea pygidialis* (Gahan), ♂, 14.4mm. 122'. Ditto, lateral view. 123. *Oberea javanicola* Breuning, ♂, 16mm. 123'. Ditto, lateral view. 124. *Oberea* sp., ♀, 8.3mm. 124'. Ditto, lateral view. 125. *Oberea neptis* Pascoe, ♀, mm. 125'. Ditto, lateral view. 126. *Oberea denominata* Plav., ♂, 15.4mm. 126'. Ditto, lateral view

Pl.15: 127. *Nupserha fricator* (Dalman), ♂, 10mm. 127'. Ditto, lateral view. 128. *Astathes cincta* Gahan, ♀, 9.5mm.

Features of cerambycid-fauna in the Gunung Harimun National Park

There are 128 species recorded in the National Park, of which 99 species (77%) were identified at the research site of Gunung Halimun National Park (GHNP). Of these 99 species identified here, 43 (43%) are endemic to Java.

Of the known distributions of the 56 non-endemic Java species that live in the GHNP, 36 (36%) occur in Sumatra, 41 (41%) in Borneo, 22 (22%) in the Malay Peninsula, 16 (16%) in Indo-China including Thailand and Myanmar, 6 (6%) in Sulawesi, 4 (4%) in Philippines and 1 (1%) occur in PNG (Fig.129). It is obvious that many species occur on the western side of Wallace's Line. So, many members are also shared with the fauna of the Malay region.

Acknowledgement

Without the cooperation and understanding of many people and institutions in Indonesia and Japan, it would not have been possible to make this report. We wish to express our sincere thanks to Dr. Arie Budiman, Director of Puslit Biologi-LIPI, Dr. Siti Nuramaliati Prijono, Head of Bidang Zoologi, Puslit Biologi-LIPI, and Dr. T. Toma of CIFOR for their encouragement and giving an opportunity to carry out this project. Our thanks are due to Dr. Sih Kahono for his cooperation in the collection and field work. We also thank to Messrs. Endang Cholik, M. Rofik Sofyan, Sarino, Darmawan and Rina Rahmatiah for their assistance in the field work activities and management of the specimens. Finally we wish to thank our research colleagues for this project in Cibinong, the JICA office in Jakarta and Tokyo, and the FFPRI in Tsukuba for their support and help.

References

Abe, K. 1983. Plantation forest pests in Sabah. FRC Publication No.8, Sabah Forest Dept., Sandakan, 119pp.

Aurivillius, Chr. 1907. Neue oder wenig Bekkante Coleoptera Longicornia 9, Ark. f. Zool., 3(18), 1-39, pl.1.

Aurivillius, Chr. 1912. Coleopterorum Catalogus, pars 39, Cerambycidae: Cerambycinae, pp.1-574. W. Junk, Berlin.

Aurivillius, Chr. 1920. Neue oder wenig Bekkante Coleoptera Longicornia 18, Ark. f. Zool., 14(18), 1-32.

Aurivillius, Chr. 1922. Neue oder wenig Bekkante Coleoptera Longicornia 19, Ark. f. Zool., 15(25), 1-43.

Aurivillius, Chr. 1922. Coleopterorum Catalogus, pars 73, Cerambycidae: Cerambycinae, pp.1-322. W. Junk, Berlin.

Aurivillius, Chr. 1923. Coleopterorum Catalogus, pars 74, Cerambycidae: Cerambycinae, pp.1-704. W. Junk, Berlin.

Aurivillius, Chr. 1923. Neue oder wenig Bekkante Coleoptera Longicornia 19, Ark. f. Zool., 15(25), 1-43.

Aurivillius, Chr. 1924. Neue oder wenig Bekkante Coleoptera Longicornia 20, Ark. Zool., 17A(12), 1-21.

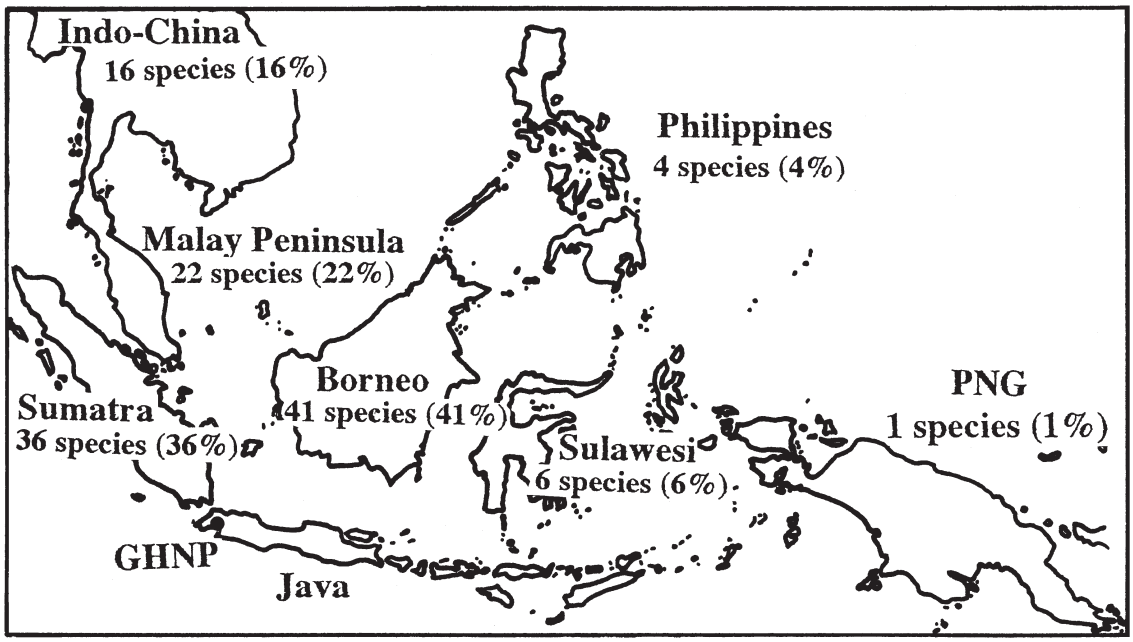


Fig.129. Common species and ratios between GHNP and another regions

Beeson, C.F.C. 1941. The ecology and control of the forest insects of India and the neighbouring countries. 767pp., Dehra Dun.

Beeson, C.F.C. and Bhatia, B.M. 1939. On the biology of the Cerambycidae (Coleopt.). Indian Forest Rec. 5(1), 1-235, Figs. 1-17, pls.1-8.

Bhasin, G.D., Roonwall, M.L. and Balwant Singh. 1958. A list of insect pests of forest plants in India and the adjacent countries (Arranged alphabetically according to the plant genera and species for the use of forest officers). part 2. Forest Bull. , Dehra Dun, 171(2) (N.S.) Entomol., 126pp.

Breuning, E. 1938. Etudes sur les Lamiaires (Coleoptera: Cerambycidae), Nov. Entomol. 3. Suppl., 8,313-392.

Breuning, E. 1939. Etudes sur les Lamiaires (Coleoptera: Cerambycidae), Nov. Entomol., 3. Suppl., 9,393-520.

Breuning, E. 1940. Etudes sur les Lamiaires (Coleoptera: Cerambycidae), Nov. Entomol., 3. Suppl., 10, 521-568.

Breuning, E. 1942. Etudes sur les Lamiaires (Coleoptera: Cerambycidae), Nov. Entomol., 3. Suppl., 11/12,1-136, 142-148.

Breuning, E. 1943. Etudes sur les Lamiaires (Coleoptera: Cerambycidae), Nov. Entomol., 3. Suppl., 13, 137-280.

Breuning, E. 1944. Etudes sur les Lamiaires (Coleoptera: Cerambycidae), Nov. Entomol., 3. Suppl., 14, 281-512.

Breuning, E. 1945/1946. Etudes sur les Lamiaires (Coleoptera: Cerambycidae), Nov. Entomol., 3. Suppl., 15/16,513-615.

Breuning, S. 1935. Novae species Cerambycidarum 4, Folia Zool. Hydrob., 8(2), 251-276.

Breuning, S. 1940. Novae species Cerambycidarum 9, Folia Zool. Hydrob., 10(1), 115-214.

Breuning, S. 1941. Novae species Cerambycidarum 10, Folia Zool. Hydrob., 10(2), 407-437.

Breuning, S. 1942. Novae species Cerambycidarum 11, Folia Zool. Hydrob., 11(2) 113-175.

Breuning, S. 1943. Novae species Cerambycidarum 12, Folia Zool. Hydrob., 12(1), 12-66.

Breuning, S. 1953. Revision du genre Xystrocera Serv. (Coleoptera, Cerambycidae), Bull. de I'I.F.A.N.T. XLX. ser.A4, 1223-1271.

Breuning, S. 1954. Revision von 35 Gattungen aus der Gruppe der Saperdini Muls., (Coleoptera, Cerambycidae), Entomol. Arb. Mus. Frey, 5,401-567, pls.21, 22.

Breuning, S. 1956. Revision der Gatung *Glenea* Newm. (Col. Ceramb.) (1), Entomol. Arb. Mus. Frey, 7,1-199, 671-893.

Breuning, S. 1958a. Revision du genre *Exocentrus* Mulsant (Col., Cerambycidae), Bull. British Mus. (Nat. Hist.) Entomology, 7(5), 209-328, Figs.1-5.

Breuning, S. 1958b. Revision der Gatung *Glenea* Newm. (Col. Ceramb.) (2), (3), Entomol. Arb. Mus. Frey, 9, 229-351, 804-907.

Breuning, S. 1960-1962. Revision systematique de especies du Genre *Oberea* Mulsant du Globe (Coleoptera Cerambycidae) 1-3, Frustula Entomol., 3-5, 1-233+I-VI.

Breuning, S. 1960. Catalogue des Lamiaires du Monde (Col., Cerambycidae). 3, Lief., Mus. G. Frey. München, pp.109-182.

Breuning, S. 1961. Catalogue des Lamiaires du Monde (Col., Cerambycidae). 4,5, Lief., Mus. G. Frey. München, pp.183-284, 287-382.

Breuning, S. 1962. Catalogue des Lamiaires du Monde (Col., Cerambycidae). 6, Lief., Mus. G. Frey. München, pp.387-459.

Breuning, S. 1962. Bestimmungstabelle der Lamiiden-Triben nebst Revision der Pteropliini der asiatischen Region (Col. Cerambycidae) I, Entomol. Arb. Mus. Frey, 12, 371-493.

Breuning, S. 1963. Catalogue des Lamiaires du Monde (Col., Cerambycidae). 7, Lief., Mus. G. Frey. München, pp.463-555.

Breuning, S. 1963. Bestimmungstabelle der Lamiiden-Triben nebst Revision der Pteropliini der asiatischen Region (Col. Cerambycidae) II,III, Entomol. Arb. Mus. Frey, 14, 168-251, 466-537.

Breuning, S. 1965. Revision der 35 Gattung der Pteropliini der asiatischen Region (Col. Cerambycidae) I, Entomol. Arb. Mus. Frey, 1965, 161-472.

Breuning, S. 1975. Revision de la Tribu des Rhodopinini Gress. de la region Asiato-Australienne (Coleoptera, Cerambycidae) (1), Sc. nat. 1975, 1-70. 2pls.

Breuning, S. 1976. Revision de la Tribu des Rhodopinini Gress. de la region Asiato-Australienne (Coleoptera, Cerambycidae) (2), Sc. nat. 1975, 71-150, 2pls.

Breuning, S. 1977. Revision de la Tribu des Acanthocinini de la region Asiato-Australienne (Coleoptera: Cerambycidae) I,II, Mitt. Zool. Mus. Berlin, 53(1), 111-155, 2pls., 53(2), 199- 276, 4pls.

Breuning, S. 1978. Revision de la Tribu des Acanthocinini de la region Asiato-Australienne (Coleoptera: Cerambycidae) III, Mitt. Zool. Mus. Berlin, 54(1),1-78, 6pls.

Breuning and de Jong, C. 1941. Neue und Seltene Lamiinae (Coleoptera, Cerambycidae), Zool. Mededeel., 2, 47-106.

Corbett, G.H. and Gater, B.A.R. 1926. A preliminary list of food-plants of some Malayan insects. Bull. Dep.

Agric. Straits Settl. & F.M.S., 38, xvii+95pp.

Dammerman, K.W. 1913. De Boorders in *Ficus elastica*, Roxb. Meded. Afil. Plziekt. Bultenzorg, 7, 43pp., 4pls.

Dammerman, K.W. 1919. Landouwidierkunde van Oost-Indie. Die Schadelijke en Nuttige Diren voor Land-, Tuin-ein Boschbouw in Oost-Indie. Amsterdam.

Dillon, I.S. and Dillon, E.S. 1951. The Lamiine tribe Gnomini (Coleoptera, Cerambycidae), Philipp. Jl. Sc., 74(1), 11-57, pls.1-3.

Duffy, E.A.J. 1953. A monograph of the immature stages of British and imported timber beetles (Cerambycidae)., British Museum (Natural History), London.

Duffy, E.A.J. 1968. A monograph of the immature stages of timber beetles (Cerambycidae), 434pp., 13pls., British Museum (Natural History), London.

Fauziah, B.A. and Hidaka, T. 1989. Collection of the Aibizia Bark Borer, *Xystrocera festiva* Pascoe, in Burmas plantation, Sabah, Malasia, (In) T. Hidaka (ed.), Researches on behavioural strategy of small animals in the humid tropics 1987, pp.17-20, Kyoto University.

Fisher, W.S. 1925. New Malaysian Cerambycidae, Subfamily Lamiinae. Philipp. Jl. Sci. 28(2); 205-275.

Fisher, W.S. 1934. Malaysian Cerambycidae (Coleopt.). Bull. Mus. Nat. Belgique, 10(15), 1-6.

Fisher, W.S. 1935. Cerambycidae from Mount Kinabaru. Jl. Fed. Malay St. Mus., 17(4), 581- 631.

Fisher, W.S. 1936. New Cerambycidae from Java, Fauna Javanica, 169-198.

Franssen, C.J.H. 1937. Over de levens wijze van den Albizzia-boktor (*Xystrocera festiva* Pascoe) en zijin bestrijding. Bergcultures, 11(49), 1728-1731, 6 Figs, Batavia.

Gater, B.A.R. 1925. Annual report of the Entomological Devision for 1924. Malay. Agric. J., 13(7), 220-226, Kuala Lumpur.

Gilmour, E.F., 1958. Revision of the Genera *Apriona* Chevrolat. Idea, 11, 35-131.

Gressitt, J.L. 1951. Longicorn beetles of China. Longicornia, II, 667pp, 22pls., P. Lechevalier, Paris.

Gressitt, J.L., Rondon, J.A. and Breuning, S. 1970. Cerambycid-beetles of Laos (Longicornes du Laos), Pac. Ins. Mon., 24, 1-651.

Hayashi, M. 1876. On some longicorn beetles from Malaysia with descriptions of six new species (Col.: Ceramb.), Bull. Jap. Entomol. Acad., 9(2), 24-41.

Holzschuh, C. 1992. Neue Bockkafer aus Asien III, FBVA-Berichte, 69, 5-63.

Hüdepohl, K-E. 1994. Uber sudostasiatische Cerambyciden XII (Coleoptera: Cerambycidae), Entomofauna, 15(15), 185-196.

Hüdepohl, K-E. 1998. Uber sudostasiatische Cerambyciden XV und Disteniiden (Coleoptera: Cerambycidae, Disteniidae), Entomofauna, 19(12), 209-232.

Kalshoven, L.G.E. 1933. Een groove boorder in den voet van poespaboomen (*Trachylophus approximator* Gah., Fam. Cerambycidae). Tectona, 26:498-507, 7Figs.

Kalshoven, L.G.E. 1951. De plagen van de cultuurgewassen in Indonesie, 2, The Hague.

Kalshoven, L.G.E. 1955. Notes on the habits and ecology of Indonesian forest insects of minor importance I,II, Entomol. Berg. Amst., 15; 438-440, 528-533, 1Fig.

Lameere, A. 1903. Revision des Prionides (VII). Mem. Soc. Entomol. Belg., 11; 1-216.

Lameere, A. 1909. Revision des Prionides (Megopis), Mem. Soc. Entomol. Belg., 53; 135-170.

Lameere, A. 1913. Cerambycidae: Prioninae, Coleopterorum catalogus, 52, 108pp.

Lameere, A. 1919. Coleoptera Fam. Cerambycidae, Subfam. Prioninae. In Wytsman, P. (Ed.), Genera Insectorum (172). 189pp. Bruxelles.

Makihara, H. 1999. Atlas of Longicorn Beetles in Bukit Soeharto Education Forest, Mulawarman University, East Kalimantan, Indonesia, PUSREHUT Special Publication 7, 1-140.

Makihara, H., Simboron, H., Sugiarto, Budi, F. and Iskandar, B. 2002. Atlas of Longicorn Beetles of Bukit Bangkirai Forest, PT. Inhutani I, East Kalimantan, Indonesia, JICA Expt. Report, 70pp., 56pls.

Makihara, H. and Woro A. Noerdjito. 2001. Longicorn beetles from Gunung Halimun National Park, West Java, Indonesia in 1977-2001, JICA Expt. Rep., Biodiversity Conservation Project, 2001, 53pp.

Mathur, R.N. and Balwant Singh. 1959. A list of insect pests of forest plants in India and the adjacent countries (Arranged alphabetically according to the plant genera and species for the use of forest officers). part 5, Forest Bull., Dehra Dun, 171(4) (N.S.) Entomol., 165pp.

Mathur, R.N. and Balwant Singh. 1960. A list of insect pests of forest plants in India and the adjacent countries (Arranged alphabetically according to the plant genera and species for the use of forest officers). part 4,6-8, Forest Bull., Dehra Dun, 171(4), 165pp; 171(3), 45pp.; 171(5), 91pp.; 171(6), 148pp.; 171(7) (N.S.) Entomol., 130pp.

Matsumoto, K. 1994. Studies on the ecological characteristic and methods of control of insect pests of trees in reforested areas in Indonesia. Rep.

JIRCAS, 63pp., 5pls.

Matsumoto, K. and Irianto, R.S.B. 1995. Ecology and control of the Albizzia borer, *Xystrocera festiva*, JIRCAS Newsletter, 5;5.

Pascoe, F.P. 1858. Descriptions of new genera and species of Asiatic longicorn coleoptera, Trans. Entomol. Soc. London, (2)IV:42-112, 2pls.

Pascoe, F.P. 1859. Descriptions of new genera and species of Asiatic longicorn coleoptera. part 3, Trans. Entomol. Soc. London, (2)IV:236-267, pls.26, 26.

Pascoe, F.P. 1864-1869. Longicornia Malayana, Trans. Ent.omol. Soc. London, (3)3,1-712, 24 pls.

Pascoe, F.P. 1866. Catalogue of Longicorn Coleoptera, collected in the Island of Penang by James Lamb, Esq. I,II. Proc. Zool. Soc. London, 1866, 222-267, pls.26-29;504-536, pls. 41-43.

Sakaguti, K. 1981. Insects of the World 2, Southeast Asia II including Australia, 259pp., Hoikusha, Osaka (in Japanese).

Schwarzer, B. 1931. Beitrag zur Kenntnis der Cerambyciden (Ins. Col.) II, Senckenbergiana, 13, 59-78.

Schwarzer, B. 1931. Beitrag zur Kenntnis der Cerambyciden (Ins. Col.) III, Senckenbergiana, 13, 197-214.

White, A. 1853. Catalogue of coleopterous insects in the collection of the British Museum, part 7, Longicornia, 1, 1-174.

インドネシア、ジャワ西部のグヌン・ハリムーン国立公園で1997-2002年に捕獲されたカミキリムシ類

槇原　寛[1)*]・WORO A. NOERDJITO[2)]・SUGIARTO[3)]

要　旨

グヌン・ハリムーン国立公園は約40,000ヘクタール、海抜500～1929mで、ジャワ西部では最も大規模な天然林を有している。この地域の生物相調査を1997年からインドネシア（RDCB-LIPI）と日本のJICA（Biodiversity Conservation Project）が共同で行ってきた。調査地は海抜約1,000mで面積も数ヘクタールと国立公園のごく一部にすぎない。多数の昆虫が捕獲されているが、未同定のものが大半で、比較的よく知られているカミキリムシ類はこれまで128種が確認された。そして、詳細な同定作業の結果、99種の種名を決定することができた。そのうち、43種がジャワ島特産種で、さらに10種がジャワ未記録種であった。本文では、未同定を含む128種全てを図示し、そのデータ、分布を記し、ホスト、生態が知られているものは追記した。また、簡単ではあるが、カミキリムシ相の特徴についても記述した。

1)* 森林総合研究所　海外研究領域　〒305-8687　つくば市松の里１　e-mail: makihara@ffpri.affrc.go.jp
2) インドネシア科学院　生物学研究センター　動物学研究所
3) 愛媛大学