昆 蟲 学 評 論

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Chrysomelid Beetles of Nepal, Collected by the Hokkaido University Scientific Expeditions to Nepal Himalaya Part IV[1] (Coleoptera: Chrysomelidae)

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This is the 4th report on Nepalese Chrysomelidae collected by the Hokkaido University Scientific Expeditions to Nepal Himalaya. The specimens dealt with were mostly collected by Drs. S. TAKAGI, T. KUMATA, M. SUWA and S. KUDO on 1983 expedition to C. Nepal. A total of 141 species are enumerated, of which 4 are described as new to science: *Cleorina chlorina*, *Zangastra nepalensis*, *Calomicrus takagii*, *Mimastra suwai* n. spp., and 32 species are recorded from Nepal for the first time.

All the specimens except for a series of duplicates kept in the author's collection, will be preserved in the collection of the Entomological Institute, Hokkaido University, Sapporo.

On this occasion I wish to express my hearty thanks to Drs. S. TAKAGI, T. KUMATA and M. SUWA of Hokkaido University for giving me chance to work with this interesting material, and to Dr. S. KIMOTO of Kurume University for his continuous help in various ways.

Enumeration

Subfamily **Criocerinae**

1. *Lilioceris atrilateralis* KIMOTO et TAKIZAWA, 1973
   Bagmati — 1 ex., Thankot; 1 ex., Phulchok[2].

Scientific results of Hokkaido University Expedition to the Himalaya, Entomology No. 32.

[1] Part III, Ent. Rev. Japan, 35: 51-65, 1981.

[2] Dates and altitude of collecting sites are given in appendix.

2. *Lilioceris impressa* (FABRICIUS, 1787)
Janakpur — 3 exs., Malipu-Suri Dhoban; 1 ex., Suri Dhoban-Gongar.

3. *Lilioceris infraticornis* GRESSITT et KIMOTO, 1961
Janakpur — 1 ex., Suri Dhoban; 4 exs., Suri Dhoban-Gongar; 1 ex., Malipu-Suri Dhoban.

4. *Lilioceris laosensis* (PIC, 1916)
Janakpur — 1 ex., Charikot. Bagmati — 1 ex., Thare-Dhunche.

5. *Lilioceris nigropectoralis ochracea* GRESSITT, 1942 (Pl. 1, fig. 1)
Bagmati — 1 ex., Kulmusang-Pati Bhanjyang, 12. X. 1975, S. TAKAGI leg.
Distribution. Nepal*, SE. China.

6. *Lilioceris semipunctata* (FABRICIUS, 1801)
Narayani — 1 ex., Pathraia, Terai Forest.

7. *Lema constrictofasciata* JACOBY, 1908
= *Lema epipleuralis*: TAKIZAWA, 1983, Ent. Rev. Japan, 39 : 11.
Bagmati — 1 ex., Kakani.
Distribution. Nepal*, India.

8. *Lema coromandeliana* (FABRICIUS, 1798)
Bagmati — 1 ex., Betrawati-Manigaon.

9. *Lema cyanea* FABRICIUS, 1798
Bagmati — 1 ex., Syabru-Lama Hotel; 1 ex., Kakani.

10. *Lema quadripunctata* OLIVIER, 1795 (Pl. 1, fig. 2)
Narayani — 1 ex., Pathraia, Terai Forest.
Distribution. Nepal*, Burma, Sri Lanka, Andamans, Sumatra, Java.

11. *Lema* sp.
Bagmati — 1 ex., Sundarijal-Mulkharka. Narayani — 1 ex., Pathraia, Terai Forest.

12. *Oulema downesi* (BALY, 1865)
Bagmati — 2 exs., Godavari.
Distribution. Nepal*, India.

Subfamily **Clytrinae**

13. *Diapromorpha dejeani* (LACORDAIRE, 1848)
Janakpur — 10 exs., Malipu-Dolakha; 2 exs., Suri Dhoban-Gongar; 4 exs., Gongar; 1 ex., Charikot; 1 ex., Simigaon.

14. *Clytra montana* (JACOBY, 1895)
Janakpur — 1 ex., Malipu-Dolakha.

15. *Smaragdina higuchii* KIMOTO et TAKIZAWA, 1981
Janakpur — 1 ex., Simigaon-Shakpa.

Subfamily **Cryptocephalinae**

* An asterisk indicates the species newly recorded from Nepal.

16. *Adiscus* sp.
Helambu — 2 exs., Kutumsang.

17. *Coenobius* sp.
Bagmati — 1 ex., Kakani.

18. *Cryptocephalus baroniurbanii* LOPATIN, 1982
Bagmati — 1 ex., Siwapuri. Janakpur — 1 ex., Malipu-Dolakha; 1 ex., Shakpa-Chusa Kharka.

19. *Cryptocephalus nepalensis* BRYANT, 1952
Bagmati — 5 exs., Siwapuri; 2 exs., Sundarijal-Mulkharka. Janakpur — 1 ex., Malipu-Dolakha.

20. *Cryptocephalus tricinctus* REDTENBACHER, 1848
Bagmati — 1 ex., Godavari; 1 ex., Siwapuri.
Distribution. Nepal*, India.

Subfamily **Eumolpinae**

21. *Basilepta abdominale* (BALY, 1908) (Text fig. 1a)
Bagmati — 6 exs., Siwapuri; 2 exs., Naubise. Janakpur — 2 exs., Malipu-Suri Dhoban.

22. *Basilepta kumatai* KIMOTO et TAKIZAWA, 1973 (Text fig. 1d)
Bagmati — 2 exs., Siwapuri.

23. *Basilepta puncticolle* (LEFEVRE, 1889) (Text fig. 1b)
Bagmati — 3 exs., Siwapuri. Janakpur — 1 ex., Malipu-Dolakha. Narayani — 2 exs., Chitwan, Terai Forest.

24. *Basilepta splendens* (HOPE, 1831)
Bagmati — 6 exs., Godavari. Janakpur — 1 ex., Simigaon; 1 ex., Gongar.

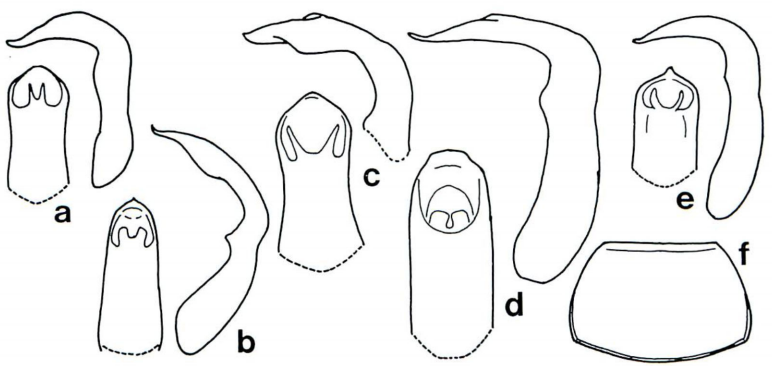

Fig. 1. Aedeagi (a–e) and pronotum (f).
a, *Basilepta abdominale* (BALY) (from Siwapuri); b, *B. puncticolle* (LEFEVRE) (from Chitwan); c, *B. variabile* (DUVIVIER) (from Siwapuri); d, *B. kumatai* KIMOTO et TAKIZAWA (from Siwapuri); e & f, *Cleorina chlorina* n. sp. (holotype)

25. *Basilepta plagiosum* (BALY, 1880)
Bagmati — 6 exs., Siwapuri; 1 ex., Phulchok.

26. *Basilepta quadrifasciatum* (JACOBY, 1908)
Bagmati — 4 exs., Siwapuri.

27. *Basilepta sakaii* TAKIZAWA, 1987
Bagmati — 2 exs., Godavari.

28. *Basilepta variabile* (DUVIVIER, 1892) (Text fig. 1c)
Bagmati — 4 exs., Siwapuri; 1 ex., Kakani; 2 exs., Sundarijal-Mulkharka.

29. *Basilepta* sp.
Bagmati — 1 ex., Balaju.

30. *Nodina crassipes* JACOBY, 1908
Janakpur — 2 exs., Simigaon.
Distribution. Nepal*, India.

31. *Nodina nepalensis* TAKIZAWA, 1987
Janakpur — 1 ex., Gongar.

32. *Nodina parvula* JACOBY, 1892
Bagmati — 3 exs., Kakani; 3 exs., Siwapuri; 1 ex., Balaju; 1 ex., Sundarijal-Mulkharka. Janakpur — 2 exs., Simigaon; 2 exs., Charikot.

33. *Pagria signata* (MOTSCHULSKY, 1858)
Janakpur — 1 ex., Dolakha-Charikot.

34. *Cleorina chlorina* n. sp.
Distribution. Nepal, Sikkim.

35. *Colasposoma semicostatum* JACOBY, 1908
Bagmati — 2 exs., Kakani; 6 exs., Siwapuri; 6 exs., Sundarijal-Mulkharka; 1 ex., Naubise. Janakpur — 1 ex., Malipu-Dolakha; 1 ex., Dolakha-Charikot; 1 ex., Charikot. Narayani — 1 ex., Chitwan, Terai Forest.

36. *Platycorynus pyrophorus* (PARRY, 1843)
Janakpur — 1 ex., Suri Dhoban-Gongar.

37. *Chrysochus* sp.
Bagmati — 1 ex., Godavari.

38. *Aoria nigripes* (BALY, 1860)
Bagmati — 1 ex., Mulkharka.
Distribution. Nepal*, India, Andamans, Burma, Thailand, Cambodia, Laos, Vietnam, S. China, Hainan, Taiwan, Sumatra.

39. *Trichotheca hirta* BALY, 1860
Bagmati — 2 exs., Sundarijal-Mulkharka. Janakpur — 1 ex., Suri Dhoban-Gongar; 2 exs., Dongo Kharka-Beding.

40. *Xanthonia fulva* TAKIZAWA, 1987
Bagmati — 1 ex., Mulkharka.

Subfamily **Chrysomelinae**

41. *Ambrostoma mahesa* (HOPE, 1831)
Bagmati — 3 exs., Siwapuri. Helambu — 1 ex., Chipling-Kutumsang.

42. *Ambrostoma ambiguum* CHEN, 1934
Bagmati — 2 exs., Syabru-Lama Hotel; 1 ex., Dhunche-Syabru.

43. *Ambrostoma sublaevis* CHEN, 1934
Narayani — 2 exs., Daman, Mahabharat Lekh.

44. *Chrysolina conglomerata* MAULIK, 1926
Bagmati — 1 ex., Balaju.
Distribution. Nepal*, India.

45. *Chrysolina vishnu* (HOPE, 1831)
Bagmati — 2 exs., Thare-Dhunche; 1 ex., Siwapuri. Janakpur — 1 ex., Suri Dhoban-Gongar. Narayani — 1 ex., Daman, Mahabharat Lekh.

46. *Agrosteomela indica* (HOPE, 1831)
Bagmati — 2 exs., Thare-Dhunche; 2 exs., Phulchok; 1 ex., Godavari; 1 ex., Siwapuri. Helambu — 1 ex., Chipling-Kutumsang.

47. *Plagiodera miniaticollis* (HOPE, 1831)
Janakpur — 1 ex., Malipu-Suri Dhoban.
Distribution. Nepal*, India, Burma.

48. *Linaeidea chlorina* (MAULIK, 1926)
Bagmati — 19 exs., Balaju; 9 exs., Sundarijal.

49. *Paropsides nigropunctata* JACOBY, 1892 (Pl. 1, fig. 3)
Bagmati — 1 ex., Siwapuri.
Distribution. Nepal*, India.

Subfamily **Galerucinae**

50. *Sastra purpurascens* (HOPE, 1831)
Bagmati — 1 ex., Godavari.

51. *Zangastra nepalensis* n. sp.
Distribution. Nepal.

52. *Zangastra nitidicollis* CHEN et JIANG, 1981 (Text figs. 2b, g)
Janakpur — 2 exs., Dongo Kharka-Beding.
Distribution. Nepal*, China (Xiang).

53. *Galerucella placida* (BALY, 1878)
Bagmati — 1 ex., Dhunche-Syabru. Janakpur — 6 exs., Dolakha-Charikot. Narayani — 1 ex., Pathraia, Terai Forest.

54. *Pyrrhalta* sp.
Janakpur — 1 ex., Suri Dhoban-Gongar.

55. *Pseudadimonia variolosa* (HOPE, 1831)
Janakpur — 1 ex., Gongar-Chetchet.

56. *Apophylia assamensis* (JACOBY, 1891)

Janakpur — 1 ex., Suri Dhoban-Gongar.
Distribution. Nepal*, Assam, Burma.

57. *Apophylia crotchi* (JACOBY, 1887)
Bagmati — 2 exs., Dhunche-Syabru. Janakpur — 1 ex., Suri Dhoban-Gongar; 2 exs., Simigaon.
Distribution. Nepal*, India, Sri Lanka.

58. *Dercetina hainana* GRESSITT et KIMOTO, 1963
Bagmati — 2 exs., Godavari; 1 ex., Dhunche-Syabru; 1 ex., Sheopuri, 1,600-2,000 m, 26. VIII. 1975, S. TAKAGI leg.

59. *Dercetina major* KIMOTO, 1977
Janakpur — 2 exs., Malipu-Suri Dhoban; 1 ex., Malipu-Charikot.
Distribution. Nepal*, Bhutan, N. India.

60. *Dercetisoma* sp.
Helambu — 1 ex., Kutumsang.

61. *Pseudoides flavovittis* (MOTSCHULSKY, 1858)
Narayani — 1 ex., Chit'wan, Terai Forest.
Distribution. Nepal*, Burma, Cambodia, Vietnam.

62. *Arthrotus pallidus* (LABOISSIÈRE, 1932)
Bagmati — 1 ex., Godavari; 1 ex., Sheopuri, 1,600-2,000m, 26. VIII. 1975, S. TAKAGI leg.

63. *Shamshera benetii* (HOPE, 1831)
Helambu — 1 ex., Kutumsang.

64. *Aplosonyx chalybea* (HOPE, 1831)
Bagmati — 1 ex., Sundarijal-Mulkharka; 1 ex., Godavari.

65. *Sphenoraia bicolor* (HOPE, 1831)
Bagmati — 1 ex., Godavari. Janakpur — 1 ex., Charikot.

66. *Meristata dohrni* (BALY, 1861)
Bagmati — 2 exs., Godavari; 1 ex., Phulchok.

67. *Meristata quadrifasciata* (HOPE, 1831)
Bagmati — 1 ex., Kathmandu City.

68. *Meristata trifasciata* (HOPE, 1831)
Janakpur — 1 ex., Simigaon-Dongo Kharka.

69. *Spitiella collaris* (BALY, 1878)
Bagmati — 1 ex., Lama Hotel-Ghora Tobela. Janakpur — 1 ex., Chusa Kharka.

70. *Nepalogaleruca elegans elegans* KIMOTO, 1970
Bagmati — 1 ex., Siwapuri; 1 ex., Lantang-Kyanjing.

71. *Morphosphaera brunnea* MAULIK, 1936 (Pl. 2, fig. 5)
Janakpur — 1 ex., Suri Dhoban-Gongar.
Distribution. Nepal*, Burma.

72. *Aulacophora almora* MAULIK, 1936
Janakpur — 1 ex., Suri Dhoban-Gongar.

73. *Aulacophora lewisi* BALY, 1886

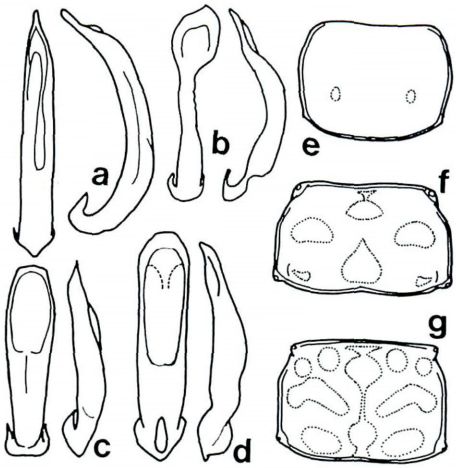

Fig. 2. Aedeagi (a–d) and pronota (e–g).
a & f, *Zangastra nepalensis* n. sp. (holotype); b & g, *Z. nitidicollis* CHEN et JIANG (from Dongo Kharka-Beding); c & e, *Calomicrus takagii* n. sp. (from Phulchok); d, *C. iniquus* (WEISE) (from Dongo Kharka-Beding)

Bagmati — 1 ex., Kathmandu, 16. VIII. 1975, S. TAKAGI leg.
Distribution. Nepal*, India, Sri Lanka, China, Taiwan, Ryukyu Is., Japan.

74. *Paridea tetraspilota* (HOPE, 1831)
Bagmati — 8 exs., Kathmandu City.

75. *Paridea unifasciata* JACOBY, 1892
Narayani — 1 ex., Daman, Mahabharat Lekh. Helambu — 1 ex., Chipling-Kutumsang.
Distribution. Nepal*, N. India, Burma.

76. *Parexosoma flaviventre* (BALY, 1878)
Bagmati — 1 ex., Godavari.

77. *Stenoluperus minor* KIMOTO, 1977
Janakpur — 5 exs., Dongo Kharka-Beding; 1 ex., Nangaon.
Distribution. Nepal*, Bhutan.

78. *Calomicrus iniquus* (WEISE, 1889) (Text fig. 2d)
Bagmati — 1 ex., Lama Hotel-Ghora Tobela; 1 ex., Langtang-Kyanjing; 1 ex., Dolakharka-Gopte. Janakpur — 2 exs., Dongo Kharka-Beding.

79. *Calomicrus takagii* n. sp.
Distribution. Nepal.

80. *Calomicrus* sp. 1.
Bagmati — 1 ex., Lama Hotel-Ghora Tobela. Janakpur — 2 exs., Simigaon.

81. *Calomicrus* sp. 2.
Bagmati — 2 exs., Dhunche-Syabru.

82. *Japonitata tricostata* CHEN et JIANG, 1981
Bagmati — 1 ex., Siwapuri.

83. *Hoplasoma sexmaculata* (HOPE, 1831)
Bagmati — 1 ex., Kakani. Janakpur — 1 ex., Charikot.

84. *Hoplasoma unicolor* (ILLIGER, 1800)
Narayani — 55 exs., Chitwan, Terai Forest; 108 exs., Narayangarh, Terai Forest.

85. *Haplosomoides egena* (WEISE, 1922)
Biratanti — 2 exs., No. 4 West, 29. IV. 1968, T KUMATA leg.

86. *Mimastra cyanura* (HOPE, 1831)
Bagmati — 1 ex., Kakani.

87. *Mimastra gracilis* BALY, 1878
Janakpur — 1 ex., Dongo Kharka-Beding. Palpa — 1 ex., Rukuche Khola, 9. V. 1968, T. KUMATA leg.

88. *Mimastra suwai* n. sp.
Distribution. Nepal.

89. *Trichomimastra kumatai* KIMOTO et TAKIZAWA, 1972
Bagmati — 1 ex., Mulkharka. Janakpur — 1 ex., Charikot; 1 ex., Dolakha-Charikot.

90. *Cneorane manipurana* MAULIK, 1926
Bagmati — 1 ex., Siwapuri.

91. *Cneorane rubricollis* (HOPE, 1831)
Bagmati — 3 exs., Godavari.

92. *Cneorane rugulipennis* BALY, 1886
Bagmati — 1 ex., Mulkharka.

93. *Cneorane tibialis* CHÛJÔ, 1966
Bagmati — 1 ex., Siwapuri.

94. *Cneorane* sp.
Bagmati — 1 ex., Siwapuri.

95. *Monolepta satoi* KIMOTO et TAKIZAWA, 1983
Bagmati — 8 exs., Siwapuri.

96. *Monolepta signata* (OLIVIER, 1808)
Bagmati — 1 ex., Siwapuri; 1 ex., Godavari. Janakpur — 2 exs., Malipu-Dolakha, 2 exs., Charikot. Narayani — 5 exs., Chitwan, Terai Forest; 2 exs., Daman, Mahabharat Lekh.

97. *Monolepta* sp.
Bagmati — 1 ex., Sundarijal-Mulkharka.

98. *Atrachya kusamai* TAKIZAWA, 1985
Bagmati — 1 ex., Phulchok.

99. *Macrima pallida* (LABOISSIÈRE, 1936)
Bagmati — 2 exs., Siwapuri. Narayani — 1 ex., Daman, Mahabharat Lekh.

100. *Macrima aurantiaca* (LABOISSIÈRE, 1936)
Bagmati — 1 ex., Kyanjing; 1 ex., Langtang-Kyanjing.

101. *Doryscus testaceus* JACOBY, 1887
Bagmati — 1 ex., Godavari; 1 ex., Sundarijal-Mulkharka.

102. *Cerophysa* sp.
Bagmati — 1 ex., Siwapuri.

103. *Hyphaenia* sp.
Narayani — 1 ex., Daman, Mahabharat Lekh.

Subfamily **Alticinae**

104. *Ophrida scaphoides* (BALY, 1865)
Bagmati — 1 ex., Balaju-Jamachok.
Distribution. Nepal*, Assam, N. Vietnam, China, Taiwan.

105. *Hespera cyanea* MAULIK, 1926
Bagmati — 3 exs., Ghora Tobela-Langtang; 1 ex., Lama Hotel-Ghora Tobela; 1 ex., Langtang.
Distribution. Nepal*, India, N. Burma, N. Vietnam, W. China.

106. *Hespera krishna* MAULIK, 1926
Bagmati — 2 exs., Siwapuri. Janakpur — 1 ex., Shakpa-Chusa Kharka.

107. *Hespera kumaonensis* SCHERER, 1969
Bagmati — 17 exs., Siwapuri; 8 exs., Kakani. Janakpur — 5 exs., Simigaon.

108. *Hespera nigripes* MAULIK, 1926
Janakpur — 2 exs., Simigaon.

109. *Hespera violaceipennis* SCHERER, 1969
Narayani — 1 ex., Daman, Mahabharat Lekh.
Distribution. Nepal*, India.

110. *Hespera* sp.
Janakpur — 1 ex., Simigaon. Bagmati — 1 ex., Thare-Dhunche.

111. *Aphthona crypta* SCHERER, 1969
Bagmati — 3 exs., Siwapuri; 1 ex., Langtang; 1 ex., Lama Hotel-Ghora Tobela.
Distribution. Nepal*, India.

112. *Aphthona nigrilabris* DUVIVIER, 1892
Narayani — 2 exs., Pathraia, Terai Forest.

113. *Longitarsus* sp.
Bagmati — 1 ex., Thare-Dhunche.

114. *Altica cyanea* (WEBER, 1801)
Janakpur — 15 exs., Malipu-Suri Dhoban; 3 exs., Charikot.

115. *Altica himalayensis* (CHEN, 1936)
Bagmati — 11 exs., Godavari; 5 exs., Siwapuri; 2 exs., Syabru-Syng Gomba. Janakpur — 1 ex., Shakpa-Chusa Kharka; 2 exs., Suri Dhoban-Gongar; 1 ex., Charikot. Helambu — 1 ex., Kutumsang.

116. *Microcrepis nigra* SCHERER, 1969
Janakpur — 1 ex., Simigaon.
Distribution. Nepal*, India.

117. *Manobia parvula* (BALY, 1874)

Bagmati — 1 ex., Sundarijal–Mulkharka; 1 ex., Pati Bhanjyang–Mulkharka.

118. *Nisotra gemella* (ERICHSON, 1834)
Janakpur — 2 exs., Malipu–Suri Dhoban; 1 ex., Dolakha Bazar.

119. *Nisotra* sp.
Narayani — 1 ex., Chitwan, Terai Forest.

120. *Chaetocnema cupreata* CHEN, 1934
Janakpur — 1 ex., Simigaon.
Distribution. Nepal*, N. Vietnam.

121. *Chaetocnema nepalensis* SCHERER, 1969
Janakpur — 2 exs., Simigaon; 1 ex., Suri Dhoban–Malipu.

122. *Chaetocnema shanensis* BRYANT, 1939
Janakpur — 1 ex., Charikot.
Distribution. Nepal*, Burma.

123. *Hemipyxis castaneipennis* (SCHERER, 1969)
Janakpur — 1 ex., Suri Dhoban.
Distribution. Nepal*, India.

124. *Hemipyxis patkaia* (MAULIK, 1926)
Bagmati — 1 ex., Godavari.
Distribution. Nepal*, Assam, India.

125. *Hyphasis nigricornis* (BALY, 1877)
Bagmati — 1 ex., Kathmandu.

126. *Hyphasis fuscipennis* (WEISE, 1922)
Helambu — 2 exs., Kutumsang; 1 ex., Chipling–Kutumsang.
Distribution. Nepal*, N. Vietnam.

127. *Acrocrypta tsuckuchensis* KIMOTO et TAKIZAWA, 1973
Bagmati — 1 ex., Sundarijal–Mulkharka.

128. *Euphitrea micans* BALY, 1875
Bagmati — 3 exs., Godavari; 7 exs., Kakani. Janakpur — 2 exs., Gongar; 1 ex., Gongar–Chetchet; 1 ex., Simigaon.

129. *Sphaeroderma* sp.
Bagmati — 1 ex., Manigaon–Thare.

130. *Psylliodes viridana* MOTSCHULSKY, 1858
Bagmati — 2 exs., Godavari.
Distribution. Nepal*, India, Sri Lanka.

131. *Nonarthra variabilis* BALY, 1862
Bagmati — 1 ex., Dhunche–Syabru; 1 ex., Kakani; 1 ex., Siwapuri; 1 ex., Syabru–Lama Hotel; 1 ex., Lama Hotel–Ghora Tobela; 1 ex., Thare–Dhunche. Janakpur — 1 ex., Simigaon; 1 ex., Shakpa–Chusa Kharka. Helambu — 1 ex., Chipling–Kutumsang; 1 ex., Kutumsang.

Subfamily **Cassidinae**

132. *Notosacantha tenuicula* (SPAETH, 1913) (Pl. 2, fig. 8)
Bagmati — 1 ex., Godavari, reared from larva mining on *Cleyera japonica*

(Theaceae).
Distribution. Nepal*, India, Assam.

133. *Cassida syrtica* BOHEMAN, 1856
Janakpur — 1 ex., Suri Dhoban-Gongar.

134. *Laccoptera quadrimaculata* (THUNBERG, 1789)
Janakpur — 1 ex., Suri Dhoban.

Subfamily **Hispinae**

135. *Lasiochila cylindrica* (HOPE, 1831) (Pl. 2, fig. 7)
Bagmati — 1 ex., Siwapuri.

136. *Dactylispa brevispinosa* (CHAPUIS, 1877)
Bagmati — 2 exs., Syabru-Lama Hotel; 2 exs., Thare-Dhunche. Janakpur — 1 ex., Dolakha-Charikot.

137. *Dactylispa lohita* MAULIK, 1926
Narayani — 1 ex., Daman, reared from larva mining on *Cochlianthus gracilis* (Leguminosae).

138. *Dactylispa* sp. 1.
Narayani — 1 ex., Daman, Mahabharat Lekh.

139. *Dactylispa* sp. 2.
Bagmati — 1 ex., Sundarijal, reared from larva mining on *Stranvaesia nussia* (Rosaceae); 1 ex., Kakani, reared from larva mining on *Pyrachantha crenulata* (Rosaceae).

140. *Dactylispa* sp. 3.
Bagmati — 1 ex., Godavari, reared from larva mining on *Rubus* sp. (Rosaceae).

141. *Rhadinosa lebongensis* MAULIK, 1926
Bagmati — 1 ex., Siwapuri.
Distribution. Nepal*, Sikkim, India.

Descriptions of new species

Cleorina chlorina n. sp. (Text figs. 1e, f)

Male. Body subquadrate, metallic green; labrum, legs, antennae on 4 basal segments reddish brown; tarsi and antennae beyond 5th segment blackish brown; palpi infuscate at apex; venter dark metallic green, sparsely covered with fine pubescence.

Head rather densely covered with deep punctures; vertex with a short longitudinal impression medially; frontoclypeus longitudinally raised along antennal insertions, gently emarginate at anterior margin; labrum gently arched at anterior margin; antennae about 4/5 as long as body, densely pubescent beyond 4th segment; each segment beyond 4th slightly widened to apex; 1st segment stout; 2nd shortest, about 1/2 as long as 5th; 10th almost 1/3 as wide as long; relative lengths of antennal

segments as: 5th > 6th ≒ 11th > 7th > 1st ≒ 8th > 3rd ≒ 4th ≒ 9th ≒ 10th > 2nd. Pronotum strongly and evenly convex, 1⅔ as wide as long, almost straight at anterior margin, gently produced at posterior margin, widest slightly before base, thence almost straightly narrowed to anterior corner; disc sparsely covered with fine, indistinct punctures; anterior sulci distinct for full length. Scutellum subpentagonal, and distinctly punctate. Elytra distinctly wider than pronotum at base, almost subparallel-sided on basal ¾, thence roundly narrowed to apex; each elytron 2 times as long as wide; disc longitudinally depressed on scutellar row of punctures, and inwardly to humerus, with moderately raised subbasal elevation, behind which is deeply depressed transversely, densely covered with large punctures, the diameter of which is larger than their interspace, on lateral half nearly rugose; interspaces with fine punctures; interstices weakly costate near apex; lateral margin narrowly but distinctly reflexed; epipleuron convex and shining. Proepimeron impunctate; aedeagus as shown in Fig. 1e; anterior tarsi with 1st segment widened.

Female. Body stouter; legs dark brown with slight metallic luster on femora, and with tibiae at apex light brownish, sometimes light brown as in male; antennae slightly shorter, less than ⅘ of body length; 3rd slightly shorter than 4th; scutellum with fine punctures; elytra with punctures slightly smaller than in male; disc rugosely punctate on lateral area.

Size. Male: 1.5–1.6 mm in length, 1.0–1.1 mm in width, female: 1.9–2.2 mm in length, 1.2–1.4 mm in width.

Specimens examined. Nepal — 3 ♂♂ (one the holotype, EHU), 1 ♀, Godavari, 1,500–2,000 m, Kathmandu Valley, Bagmati, 14. VII. 1983, Ent. Inst. Hokkaido Univ. Sikkim — 1 ♀, Kewzing, 1,800 m, 10. V. 1962, G. RAMAKRISHNA leg. (in Zoological Survey of India, Calcutta).

This new species resembles closely to *Cleorina robusta* TAKIZAWA et BASU from Sikkim, in having the elytra irregularly punctate. From the latter, this new species is distinguished by the pronotum which is very finely punctate and by metallic green coloration. Combination of the finely punctate pronotum and irregularly punctate elytra is sufficient to distinguish this species from the similarly colored congeners.

Zangastra nepalensis n. sp. (Pl. 1, fig. 4, Text figs. 2a, f)

Male. Body subparallel-sided, reddish brown; scutellum piceous; abdomen, femora at apex, tibiae on dorsal side and antennal segments at apices more or less infuscate.

Head almost as wide as prothorax at apex; eyes large; vertex raised, largely and irregularly depressed with indistinct large punctures posteriorly to frontal tubercles; surface very finely reticulate; frontal tubercles well developed, rectangular with its apex distinctly and broadly produced and raised between antennal insertions, separated from each

other by a deep sulcus; clypeus largely depressed below antennal insertions, raised in a reversed T-shape, gently emarginate at anterior margin; surface finely granulate; labrum rounded at apex; interocular space as wide as longitudinal diameter of eye; antennae slightly less than 4/5 of body length, densely pubescent beyond 2nd segment; 1st segment stout and club-shaped; 4th to 8th, each slightly widened apically; 11th 2 times as long as 10th; relative lengths of antennal segments as: 11th> 1st≒3rd≒9th>4th≒5th≒7th>6th≒8th≒10th>2nd. Pronotum transverse, 1 3/5 as wide as long, widest at base, only slightly emarginate at anterior margin, sinuately produced at basal margin, nearly subparallel-sided on basal 2/3 on lateral margin and thence acutely narrowed to anterior angle; disc uneven with 6 more or less distinct depressions, viz. a pair of transverse ones laterally, a deep round ones anteriorly to scutellum, a round one anteriorly, and with a pair of shallow ones interiorly to posterior angle, distinctly margined on all sides and reflexed along sides; surface shining, scattered with large punctures. Scutellum large, distinctly longer than wide, weakly narrowed to broadly rounded apex; surface densely pubescent and covered with obscure punctures. Elytra distinctly wider than pronotum; each elytron fully 3 times as long as wide, gently narrowed on posterior 1/3, distinctly reflexed along lateral margin; disc densely covered with obscure punctures, the diameter of which is larger than their interspaces, weakly rugose, and distinctly pubescent, very shallowly and broadly depressed along suture and inwardly to humerus, so that subbasal elevation is distinctly longitudinal; epipleuron rather broadly subparallel-sided on basal 1/4, thence narrowed and continued to apical 1/4; surface longitudinally channeled and sparsely pubescent. Metasternite broadly convex, and deeply depressed between hind coxae; abdomen rather densely pubescent; last visible abdominal sternite gently emarginate at apex; fore tarsi with 1st segment stout, as wide as 2nd.

Size. Male: 6.5–7.0 mm in length, 3.0–3.3 mm in width, female: 7.0–7.5 mm in length, 3.4–3.5 mm in width.

Specimens examined. Nepal — 3 ♂♂ (one the holotype, EHU), 1 ♀, Shakpa-Chusa Kharka, 3,000–3,400 m, Rolwaling Valley, Janakpur, 13. VIII. 1983, Ent. Inst. Hokk. Univ.; 1 ♂, Dongo Kharka-Beding, 2,800–3,000 m, Rolwaling Valley, Janakpur, 22–23. VIII. 1983, Ent. Inst. Hokk. Univ.; 2♀♀, Beding, 3,300–3,700 m, Rolwaling Valley, Janakpur, 16. VIII. 1983, Ent. Inst. Hokk. Univ. W. Sikkim — 1 ♀, Chuka, 3,050 m, nr. Yuksam, 23. IX. 1983, M. SAKAI leg. (NSM, Tokyo)

This new species is easily distinguished from *Z. nitidicollis* CHEN et JIANG which has greenish tinge on elytra, by wholly yellowish brown body and by much weakly depressed pronotum.

Mimastra suwai n. sp. (Pl. 2, fig. 6)

= *Mimastra* sp. 1 : TAKIZAWA, 1988 (in press).

Female. Body large and oblong, widened posteriorly ; reddish brown ; elytra light brownish, each with 4 small black spots, one on humerus and 3 longitudinal ones arranged in oblique line near apical 1/3 ; mandibles, labial palpi, antennae on 6 or 7 basal segments, femora apically, tibiae and tarsi blackish brown to black ; scutellum blackish ; thorax and abdomen laterally stained with dark brown ; glabrous on the dorsum, covered with long pubescence on the venter.

Head slightly narrower than prothorax basally ; vertex smooth with fine punctures and wrinkles, depressed behind frontal tubercles ; frontal tubercles subpentagonal, broadly extending between antennal insertions, separated from each other by deeply impressed line ; interocular space wide, 1½ as wide as depth of eye ; frons broadly raised, flat between antennal insertions ; labrum transverse, weakly incised medially on anterior margin ; eyes convex ; antennae 7/10 as long as body, thickly pubescent beyond 2nd segment ; 1st segment broad, slightly shorter than 3rd ; 2nd shortest, 1/3 as long as 4th ; 3rd to 7th, each weakly widened to apex and slantly cut at apex ; relative lengths of antennal segments as : 11th>4th>5th>6th>3rd≒7th≒8th≒9th≒10th>1st>2nd. Pronotum subpentagonal, 1⅖ as wide as long, almost straight at anterior margin, gently and broadly produced at posterior margin, weakly widened from base to apical 1/5, thence narrowed to anterior angle ; anterior angle distinctly thickened, and the posterior obtuse ; disc evenly convex, with a trace of shallow depressions medially on each side, obscurely depressed interiorly to posterior angle, weakly reflexed along lateral margin, very sparsely punctulate medially and rather densely covered with fine punctures latero-anteriorly ; interspaces smooth and shining. Scutellum broadly triangular, almost as long as wide, finely granulate on the surface. Elytra distinctly wider than pronotum at base ; elytron 3 times as long as wide, subparallel-sided for basal 1/3, thence gently widened to apical 1/3, and roundly narrowed to apex ; disc weakly raised subbasally, widely declivitous laterally, so that the lateral margin is invisible from above for basal 1/3 ; disc densely covered with distinct punctures, the diameter of which is almost as large as interspaces, narrowly reflexed on lateral margin ; humerus well developed and expanded ; epipleuron gradually narrowed from base to apical 1/3, sharply margined on both sides ; surface impunctate and shining ; last visible abdominal sternite gently and evenly produced at apical margin. Legs rather stout ; hind tarsi with 1st segment as long as following 2 combined together.

Size. 10.0-11.5 mm in length, 5.0-5.5 mm in width.

Specimens examined. 1 ♀ (holotype in EHU), Beding, 3,600–3,800 m, Rolwaling Valley, Janakpur, 17–21. VIII. 1983, Ent. Inst. Hokk. Univ.; 1 ♀, Langtang, 3,300–3,500 m, Bagmati, 13. IX. 1983, Ent. Inst. Hokk. Univ., M. SUWA leg.; 1 ♀, Ridge E, Ghoropani Pass, 3,150 m, Parbat Distr., 7. X. 1983, SMETANA & LÖBL leg. (in Canadian National Collection, Ottawa).

This new species is characterized by rather broad body and coloration of the dorsum, which has 4 small black spots on light yellowish elytron. With these characters this new species is easily distinguished from the known congeners.

Calomicrus takagii n. sp. (Text figs. 2c, e)

Male. Body small and oblong, weakly widened posteriorly; metallic dark blue; abdomen, mouth-parts, antennae and legs with dark brownish tinge.

Head narrower than prothorax; vertex evenly and gently convex, impunctate and shining, depressed along frontal tubercles; frontal tubercles subquadrate and separated from each other by a narrow line; clypeus broadly raised and weakly emarginate at anterior margin; antennae rather stout, 3/5 as long as body, thickly pubescent beyond 3rd segment; 1st segment stout, 1½ as long as 2nd; 2nd robuster than and as long as 3rd; 4th to 8th, each weakly widened to apex; 10th almost ½ as wide as long; 11th longest, 2½ as long as 3rd; relative lengths of antennal segments as: 11th > 7th > 5th ≒ 8th ≒ 9th ≒ 10th > 6th > 1st ≒ 4th > 2nd ≒ 3rd. Pronotum 1⅖ as wide as long, widest at apical ⅓, thence weakly narrowed to posterior angle and roundly narrowed to anterior angle, weakly emarginate at anterior margin, broadly produced at posterior margin; anterior angle obliquely thickened, the posterior obtuse and slightly produced; disc evenly convex, with a pair of shallow and small depressions medio-laterally, smooth and shining, almost impunctate medially and finely punctulate antero-laterally. Scutellum as long as wide, broadly triangular, finely wrinkled on the surface. Elytra distinctly wider than pronotum basally; each elytron 3 times as long as wide, gently widened from base to near apical ⅓, thence roundly narrowed to apex; lateral margin broadly declivous laterally, so that the lateral margin is invisible for basal ¾ in dorsal view; disc with weak subbasal elevation and well-developed humerus, densely covered with large punctures, the diameter of which is distinctly larger than interspace on basal ⅔, with sparse erect hairs posteriorly; epipleuron wide on basal ¼, thence narrowed and continued to near apex; surface smooth and impunctate; last visible abdominal sternite weakly produced posteriorly; aedeagus subtruncate at apex.

Size. 2.6–3.1 mm in length, 1.2–1.6 mm in width in both sexes.

Specimens examined. 5 ♂♂ (one the holotype, EHU), 10 ♀♀, Phulchok, 2,500–2,700 m, Kathmandu Valley, Bagmati, Ent. Inst. Hokk. Univ.; 1 ♀, Simigaon, ca.

2,000 m, Rolwaling Valley, Janakpur, 12. VIII. 1983, Ent. Inst. Hokk. Univ.

This new species is somewhat similar to *C. parvicollis* (WEISE, 1889) from W. China in the coloration, but is distinguished from the latter by the aedeagus bluntly truncate and not acuminate at apex.

Appendix

Itinerary of collecting trips with altitude of collecting sites.

Janakpur — Rolwaling Valley Trek.

Beding, 3,300-3,800 m, 16-21. VIII. 1983; Charikot, 2,000 m, 8. VIII. 1983; Chusa Kharka, 3,300 m, 13. VIII. 1983; Chusa Kharka-Shakpa, 2,500-3,000 m, 13. VIII. 1983; Dolakha-Charikot, 1,700-2,000 m, 9. VIII. 1983; Dolakha-Malipu, 1,000-1,700 m, 9. VIII. 1983; Dongo Kharka-Beding, 2,800-3,000 m, 22-23. VIII. 1983; Gongar, 1,400 m, 26. VIII. 1983; Gongar-Chetchet, ca. 1,400 m, 12. VIII. 1983; Gongar-Suri Dhoban, 1,100-1,300 m, 11, 27. VIII. 1983; Malipu-Suri Dhoban, 1,000-1,100 m, 10, 29. VIII. 1983; Nangaon, 4,000-4,100 m, 18. VIII. 1983; Simigaon, ca. 2,000 m, 8, 12, 24-25. VIII. 1983; Simigaon-Shakpa, 2,500-3,000 m, 13. VIII. 1983; Simigaon-Dongo Kharka, 2,000-2,800 m, 24. VIII. 1983; Suri Dhoban, 1,100 m, 27-28. VIII. 1983.

Bagmati — Langtang Khola Valley, Gosainkund Trek.

Balaju, 1,400 m, 23. VII. 1983; Balaju-Jamachok, 1,400-2,000 m, 25. IX. 1983; Betrawati-Manigaon, 700-1,300 m, 7. IX. 1983; Dhunche-Syabru, 1,800-2,300 m, 10. IX. 1983; Dhunche-Thare, 2,000-2,200 m, 9. IX. 1983; Dolakharka-Gopte, 3,300-3,600 m, 26. IX. 1983; Ghora Tobela-Langtang, 3,000-3,400 m, 12. IX. 1983; Ghora Tobela-Lama Hotel, 2,500-3,000 m, 12. IX. 1983; Godavari, 1,500-2,000 m, 14, 27-28. VII. 1983; Kakani, 1,500-2,000 m, 30. VII. 1983; Kathmandu, 12. VII, 26. IX. 1983; Kyanjing, 3,800 m, 14-15. IX. 1983; Kyanjing-Langtang, 3,400-3,800 m, 14-18. IX. 1983; Langtang, 3,300-3,500 m, 13. IX. 1983; Manigaon-Thare, 1,300-2,000 m, 29. IX. 1983; Mulkharka-Sundarijal, 1,400-2,000 m, 16. VII. 1983; Mulkharka, 2,000 m, 18-20. IX. 1983; Mulkharka-Pati Bhanjyang, 1,700-2,300 m, 29. IX. 1983; Naubise, 1,000 m, 25. VII. 1983; Phulchok, 2,500-2,700 m, 27. VII. 1983; Siwapuri, 1,500-2,700 m, 18-20. VII. 1983; Sundarijal, 1,400 m, 30. IX. 1983; Thankot, 1,700-2,000 m, 27. IX. 1983.

Narayani

Chitwan, Terai Forest, 300 m, 24-25. VII. 1983; Daman, Mahabharat Lekh, 2,500 m, 6-8. IX. 1983; Narayangarh, Terai Forest, 300 m, 24-25. VII. 1983; Pathraia, Terai Forest, 300 m, 9-10. IX. 1983.

Helambu

Chipling-Kutumsang, 2,000-2,500 m, 28. IX. 1983; Kutumsang, 2,400-2,500 m, 27. IX. 1983.

Explanation of Plates 1-2.

Pl. 1, Fig. 1. *Lilioceris nigropectoralis ochracea* GRESSITT (from Kulmusang-Pati Bhanjyang); 2. *Lema quadripunctata* OLIVIER (from Pathraia); 3. *Paropsides nigropunctata* JACOBY (from Siwapuri); 4. *Zangastra nepalensis* n. sp. (holotype).

Pl. 2, Fig. 5. *Morphosphaera brunnea* MAULIK (from Suri Dhoban-Gongar); 6. *Mimastra suwai* n. sp. (holotype); 7. *Lasiochila cylindrica* (HOPE) (from Siwapuri); 8. *Notosacantha tenuicula* (SPAETH) (from Godavari).

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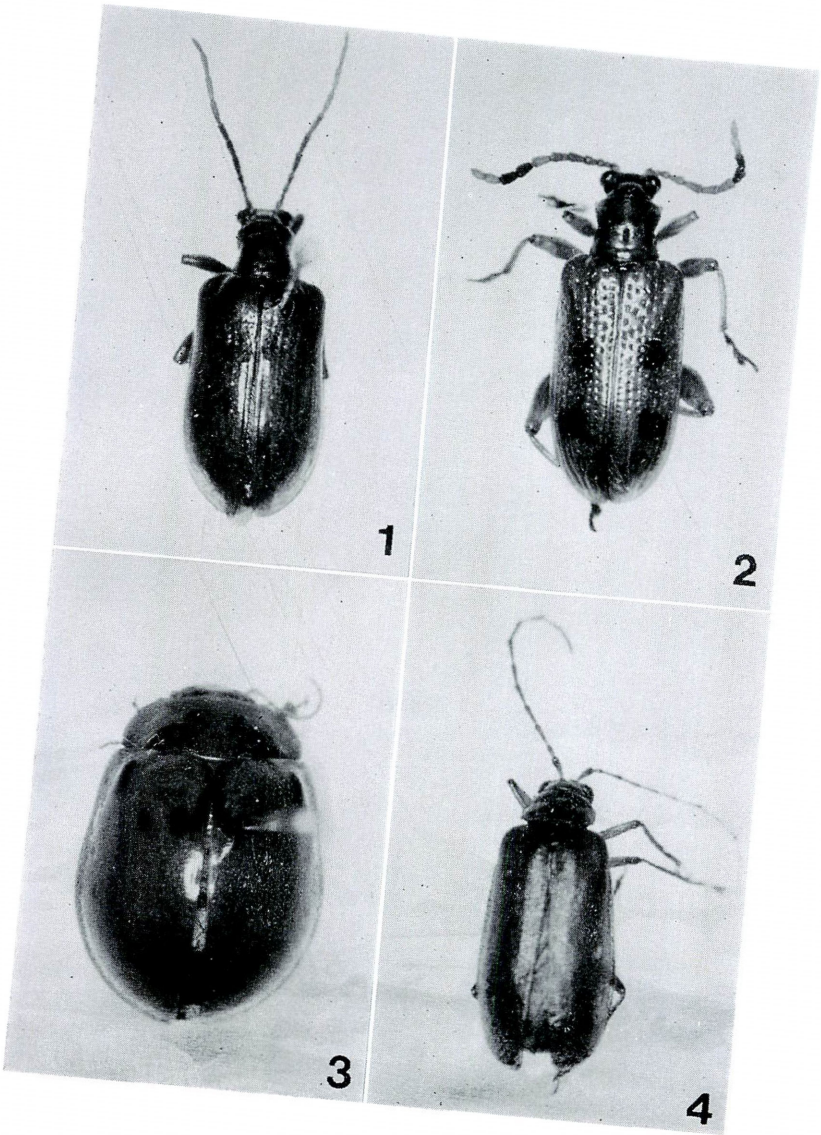
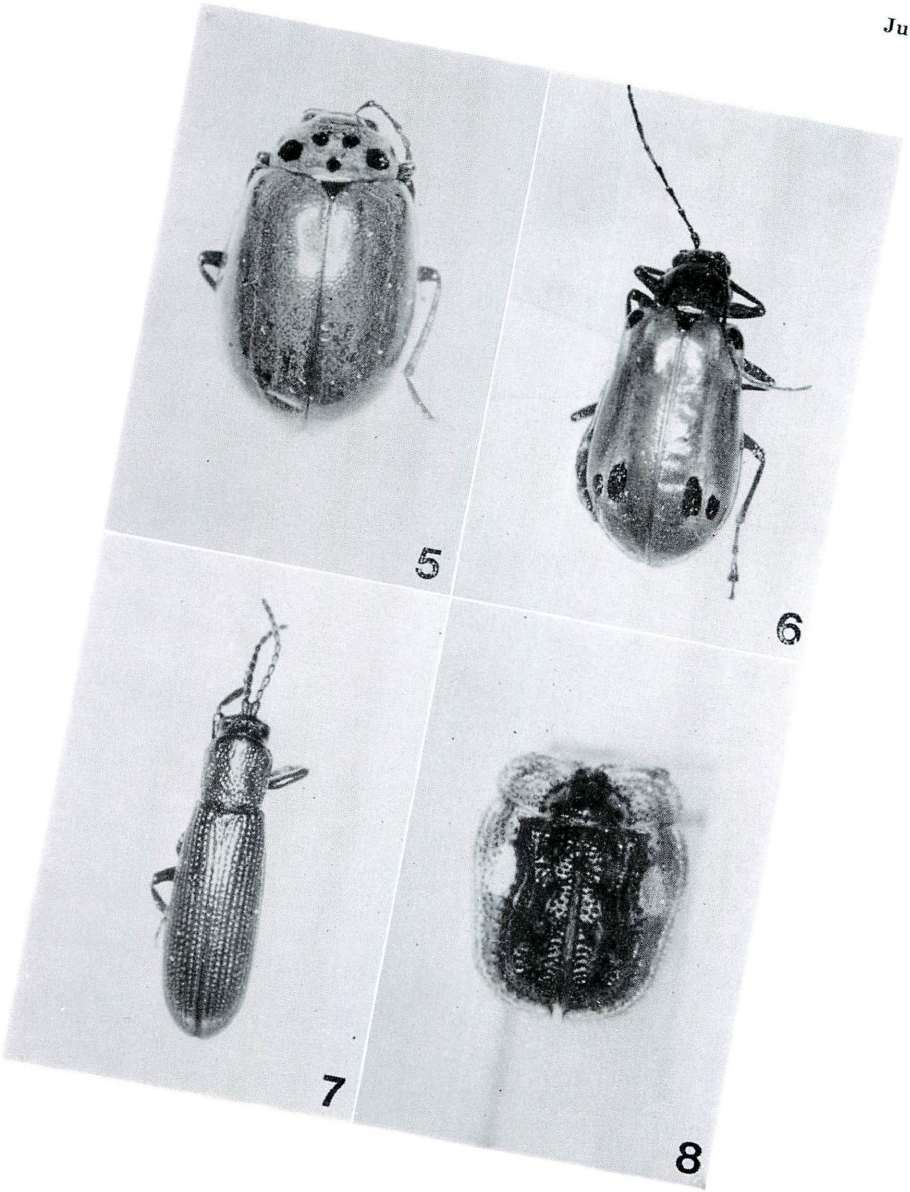
June, 1988.



(H. TAKIZAWA photo.)



(H. TAKIZAWA photo.)

Studies on Staphylinidae from Japan. II.

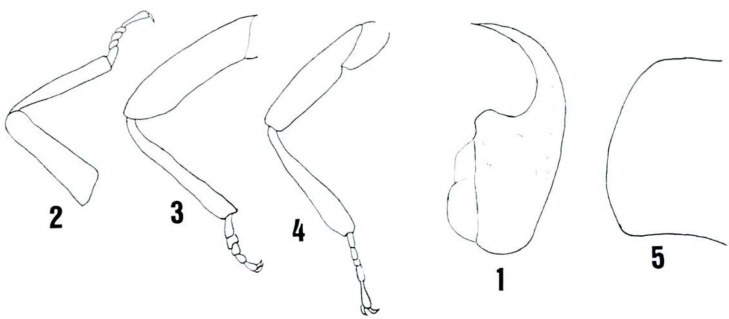
By Yasuhiko Hayashi

Proteinus Latreille from Japan (2).

Proteinus ezoensis sp. nov. (Figs. 1–5)

Body oblong-oval, lustreless but elytra fairly shining; brown to yellowish brown, head blackish, pronotal base and elytral apex narrowly yellowish, antennae with apical 2 or 3 segments infuscate, mouth organs and legs pale brownish yellow. Length: 1.3–1.7 mm.

♂: Head rather convex above, about five-eighths as broad as pronotum, with punctures hardly visible, extremely fine and sparse. Antennae scarcely reaching basal angles of pronotum; basal 3 and 11th segments a little longer than broad, 4th as long as broad and slightly shorter than 5th, from 5th subclaviform distally, 5th, 7th and 8th subequal in length to each other and a little longer than 6th, 11th a little less than twice as long as 10th. Fourth segment of maxillary palpi very slender, acicular, not thickened basally and a little longer than the preceding 2 segments together; ligula divided into 2 large lobes, which are rather oblique and rounded in front.



Figs. 1–5. *Proteinus ezoensis* sp. nov., ♂.
1, lateral view of genitalia; 2, fore-leg; 3, mid-leg; 4, hind-leg; 5, left side of pronotum.

[Ent. Rev. Japan, Vol. XLIII, No. 1, pp. 17–23, June, 1988]

Pronotum (fig. 5) broader than long (1.8 : 1), a little narrower (0.8 : 1) and fairly shorter than elytra (1 : 2.1), broadest at basal one-fourth, sides gently arcuate and apex narrower than base, which is finely but distinctly bordered; disc finely, sparsely and somewhat granularly punctate, strongly and deeply impressed medianly; basal angles obtuse and rounded. Elytra nearly as long as broad and weakly dilated in a gentle curve to apex; surface rather densely and microgranularly punctate. Abdomen sparsely and microgranularly punctate, apical margin of 8th sternite narrowly and semicircularly notched at middle.

Legs slender, tibiae substraight, protibiae (fig. 2) gradually thickened apically, 1st segment of protarsi not dilated, narrow, short and one-fourth as long as the following 4 segments together, metatibiae (fig. 4) gently clavate; tarsi rather short, ratio of lengths of tibiae to tarsi as about 1.9 (pro-), 2.0 (meso-) and 1.8 (meta-).

Male genitalia without parameres; in lateral view penis (fig. 1) semicircular in basal half, with apical narrow process strongly curved ventrally and tapering to pointed tip.

♀: Apical margin of 8th abdominal sternite shallowly emarginate, 1st segment of protarsi slightly slenderer and shorter than in ♂, meso- and metatibiae also slenderer.

Holotype: ♂, allotype: ♀ and paratypes: 2♂♂, 1♀, Mt. Kurodake, Daisetsu Mts., Hokkaido, 30. VIII. 1979, N. YASUDA leg., through the kindness of Dr. K. SAWADA (in coll. T. SHIBATA and mine).

The present new species is easily distinguishable from all the other Japanese species by strong median impression of the pronotum. Although it is much closely allied to *P. gotoi* HAYASHI, in the present new species the body is larger and lighter in color, basal border of the pronotum distinct, the pro- and the mesotarsi much longer (in *gotoi*, ratio of lengths of each tibia to the tarsus as about 2.5 and 2.4), apical notch of the 8th abdominal sternite much deeper and the male genitalia thicker.

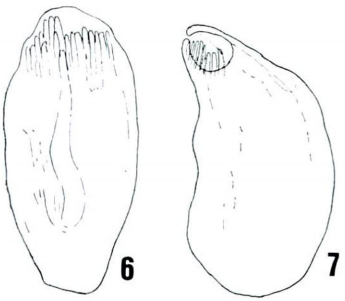
Proteinus sawadai sp. nov. (Figs. 6–11)

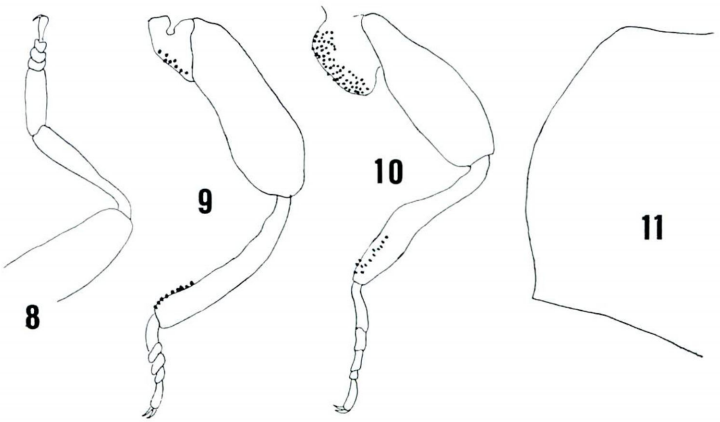
Body suboval, weakly but elytra fairly shining; head and abdomen almost black, pronotum dark brown with basal margin narrowly pale brown, elytra brown, mouth organs pale yellow except maxillary palpi pitchy, antennae brown with basal 2 or 3 segments pale brownish yellow as well as legs. Length: 2.0–2.2 mm.

♂: Head about two-thirds as broad as pronotum and almost invisibly punctate. Antennae rather slender and short, barely reaching pronotal basal third; basal 5 and 11th segments a little longer than broad, 6th nearly as long as broad, from 7th to 10th more or less transverse and subclaviform together with 11th, which is 3 times as long as 10th.

Pronotum (fig. 11) about two-thirds as long as broad, considerably narrower (29 : 39) and shorter than elytra (9 : 19), the broadest point placed just before middle, from which sides more arcuately narrowed in front than behind and somewhat sinuate before basal angles, which are rectangulate and sharp at tip; disc extremely finely and sparsely punctate and weakly impressed medianly; base finely but distinctly bordered except near basal angles. Elytra nearly as long as broad, finely and densely punctate, sides feebly arcuate and weakly narrowed in front. Abdomen extremely finely, rather closely and granularly punctate, the punctures slightly coarser on sternites than on tergites; apical margin of 8th sternite broadly and semicircularly notched in middle.

Legs thick and stout; protibiae (fig. 8) suddenly curved at extreme base and gradually thickened apically, 1st segment of protarsi dilated, broader than 2nd, very long, almost as long as the following 4 segments together; mesotibiae (fig. 9) regularly incurved and bearing about 20 fine black granules on apical one-fourth of inner side; metatibiae (fig. 10)





Figs. 6–11. *Proteinus sawadai* sp. nov., ♂. 6, ventral view of genitalia; 7, lateral view of genitalia; 8, fore-leg; 9, mid-leg; 10, hind-leg; 11, left side of pronotum.

feebly sinuate, strongly thickened in apical half and bearing about 30 fine black granules in double rows on apical two-fifths of inner side; tarsi rather long, ratio of lengths of tibiae to tarsi as about 1.3 (pro-), 1.3 (meso-) and 1.4 (meta-); mesotrochanters subtriangular as usual, but bearing several fine black granules along hind margin; metatrochanters strongly expanded as a large protuberance, which is plate-like and on its hind half with clustered numerous fine black granules.

Male genitalia without parameres; penis (figs. 6, 7) thick and stout, suboval, chitinized enough and exposing a part of membranous and comb-like inner appendages in apical orifice.

♀: Eleventh segment of antennae shorter, nearly twice as long as 10th, base of pronotum bordered throughout and its basal angles more sharply angulate, punctures on elytra much finer and denser, legs much slenderer and without any granules, metatarsi fairly shorter than the tibiae (1 : 1.7), 1st segment of protarsi not dilated, narrow, short and nearly a half length of the following 4 segments together, and apical margin of 8th abdominal sternite shallowly emarginate in middle.

Holotype: ♂, allotype: ♀, Mt. Kisokoma (alt. about 2,000 m.), Nagano Pref., 24. VIII. 1962, Y. HAYASHI leg. (in coll. T. SHIBATA).

Specimen examined: 1 ♂, same data as holotype.

The present new species is closely allied to *P. ovalis* STEPHENS from Europe and Siberia in having some granules on mesotrochanters, meso- and metatibiae, but in ♂ of the latter the 1st segment of protarsi is much shorter than the following 4 segments together, the metatibiae are only feebly curved and not thickened apically, the metatrochanters are not expanded and have not any granules, and the penis is distinctly elongate and acute at tip.

Proteinus tateoitoi sp. nov. (Fig. 12-18)

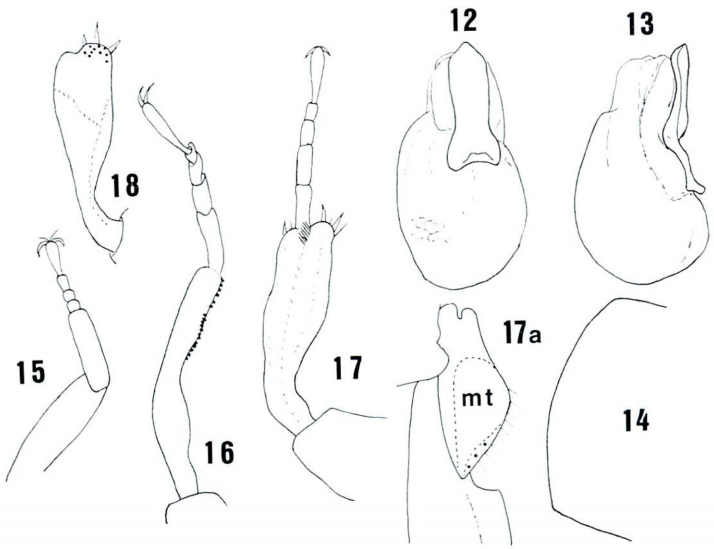
♂: Body oblong-oval, shining; dark brown (the color on elytra somewhat vaguely lightened in parts), head and abdomen blackish, pronotum narrowly brownish in lateral and basal sides, basal 2 or 3 segments of antennae and legs light brownish yellow (in a specimen from Kurama the pronotal sides broadly, the elytra and the abdomen light brown). Length: 2.0-2.4 mm.

Head flattened above, a little more than two-thirds as broad as pronotum, extremely finely and sparsely punctate on frons and along inner sides of eyes. Antennae thick, short and hardly reaching middle of pronotum; basal 4 and 11th segments a little longer than broad, 5th nearly as long as broad, from 6th subclavate distally and more or less transverse, 11th a little less than 2.5 times as long as 10th.

Pronotum (fig. 14) 1.6 times as broad as long, considerably narrower (8 : 11) and shorter than elytra (3 : 7) and broadest at middle; sides

weakly and uniformly arcuate, basal angles obtuse and narrowly rounded; disc very finely and sparsely punctate and without median impression; base finely but distinctly bordered. Elytra nearly as broad as long, gradually and substraightly broadened apically at sides; surface coarsely, weakly and rather sparsely punctate. Abdomen very sparsely and microgranularly punctate; apical margin of 8th sternite rather broadly and semicircularly notched at middle.

Legs thick and stout; protibiae (fig. 15) substraight, fairly thickened apically, 1st segment of protarsi distinctly dilated, long and almost as long as the following 4 segments together; mesotibiae (fig. 16) distinctly incurved and weakly sinuate at inner margins, which are sparingly and finely pubescent, and the inner side with double rows consisting of about 20 fine black granules on the apical half; metatibiae (figs. 17, 18) oar-shaped, very thick in apical half, strongly sinuate on inside of the base, weakly convex beneath, bearing about 10, fine and black gathered granules on the apical portion, and inner margin with dense, fine and short setae on the apical part; metatrochanter (fig. 17a) broadly and weakly depressed, with a few, fine and black granules on near distal



Figs. 12–18. *Proteinus tateoitoi* sp. nov., ♂.

12, ventral view of genitalia; 13, lateral view of genitalia; 14, left side of pronotum; 15, ventral view of fore-leg; 16, mid-leg; 17, dorsal view of hind-leg; 17a, ventral view of metatrochanter; 18, ventral view of metatibia. mt: metatrochanter.

end; pro- and metatarsi fairly long and mesotarsi rather short, ratio of lengths of tibiae to tarsi as about 1.2 (pro-), 1.8 (meso-) and 1.0 (meta-).

Male genitalia (figs. 12, 13) with penis thick, suboval, quite membranous dorso-medianly but strongly chitinized in apical two-thirds of ventral side, the rest weakly chitinized; parameres well developed, rocket-shaped, about two-thirds as long as penis, but slightly produced beyond penis and bearing broad tubercle at the base.

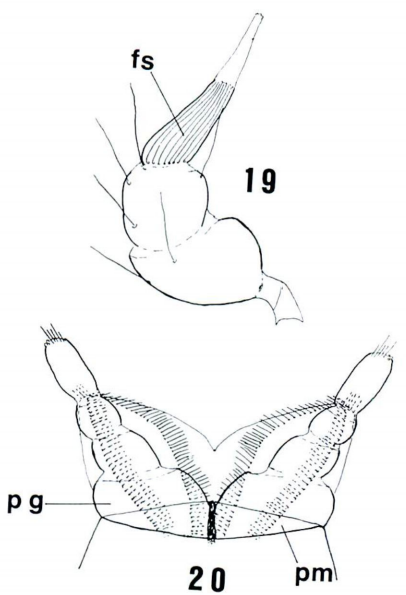
Female unknown.

Holotype: ♂, Hanase, Kyoto Pref., 20. X. 1987, T. Ito leg. (in coll. T. Shibata). Paratypes: 2 ♂♂, same data as the holotype; 1 ♂, Kurama, Kyoto Pref., 1. XI. 1964, T. Ito leg. (all the specimens captured from fungi).

The present new species is closely related to *P. macropterus* Gyllenhall from Russia in having similar feature of the legs, but it may be easily distinguished from the latter by larger size of the body, distinct border of the pronotal base, greater number of granules on mesotibiae and thicker metatibiae with some granules.

Key to the species of *Proteinus* from Japan.

1. Basal angles of pronotum well marked, subrectangular; base of pronotum distinctly bordered 2
— Basal angles of pronotum rounded and rather obtuse; base of pronotum distinctly or indistinctly bordered 3
2. Elytra finely and densely punctate; pronotum less than 1.7 times as broad as long; in ♂ surface of meso- and metatrochanters and inner side of their tibiae bearing some fine granules ..... *sawadai* sp. nov.
— Elytra coarsely and sparsely punctate; pronotum nearly twice as broad as long; in ♂ legs without any granules ..... *crassicornis* Sharp
3. Pronotum more or less distinctly impressed medianly 4
— Pronotum not impressed medianly 5
4. Pronotum strongly and deeply impressed medianly, with base distinctly bordered ..... *ezoensis* sp. nov.
— Pronotum only weakly impressed medianly, with base indistinctly bordered ..... *shibatai* Hayashi
5. Body larger, more than 2 mm in length; base of pronotum distinctly



Figs. 19–20. *Proteinus crassicornis* Sharp. 19, maxillary palpus; 20, labium. pg: palpiger. pm: prementum. fs: filamentous sensilla.

bordered; in ♂ meso- and metatibiae bearing some fine granules on their under surface ..... *tateoitoi* sp. nov.
— Body smaller, less than 1.3 mm in length; base of pronotum indistinctly bordered; in ♂ legs without any granules ..... *gotoi* HAYASHI

Some notes on the mouth organs of *Proteinus crassicornis* SHARP and its allies from Japan. (Figs. 19–20)

In the structure of male genital organs *P. crassicornis* is very closely related to *shibatai* as well as in mouth organs. And also *gotoi* well resembles *ezoensis* in those organs. But *crassicornis-shibatai* group somewhat differs from *gotoi-ezoensis* group as followings: the 4th segment of maxillary palpi of the former group is distinctly tapering distally from the base, but that of the latter group not tapering, cylindrical (I coudn't examine other detail of the mouth organs in *sawadai* and *tateoitoi* due to scarce materials); the 3rd segment of labial palpi in *gotoi-ezoensis* group is rather thicker, the paraglossae and the ligula are somewhat narrower and a little more divergent apically than in the other group.

References

ADACHI, T., 1957; The staphylinid fauna of Japan. J. Toyo Univ., 11: 166–250.

BERNHAUER, M. et K. SCHUBERT, 1910; Col. Cat. pars 19 (Staphylinidae I): 3–86.

HATCH, M. H., 1957; The beetles of the Pacific Northwest. II. Univ. Wash. Publs. Biol. 16: i–ix, 1–384.

HAYASHI, Y., 1986; Studies on Staphylinidae from Japan, I. Ent. Rev. Japan, 41 (2): 107–112.

LOHSE, G. A., 1965; Staphylinidae. In FREUD, H. et al. (eds.), Die Kaefer Mitteleuropas, 4, Krefeld: 5–264.

SAWADA, K., 1972; Methodological research in taxonomy of Aleocharinae. Contr. Biol. Lab. Kyoto Univ., 24 (1): 31–59, tab. (3 pls.)

SCHEERPELTZ, O., 1933; Col. Cat., pars 129 (Staphylinidae VII, Suppl. I): 989–1500.

SHARP, D., 1874; The Staphylinidae of Japan. Trans. Ent. Soc. London: 1–101.

SHIBATA, Y., 1976; Provisional check list of the family Staphylinidae of Japan, I. Ann. Bull. Nichidai Sanko, 19: 71–212.

SJOEBERG, O., 1930; Zur Kenntnis der Arten der Gattung *Proteinus* LATREILLE. Ent. Tidskrift., 51: 175–190.

STEEL, W. O., 1966; A revision of the staphylinid subfamily Proteininae (Coleoptera), I. Trans. R. Ent. Soc. London, 118 (9): 285–311, 120 figs.

国際動物命名委員会からのお願い (5)

Bulletin of Zoological Nomenclature, Volume 44 (1987) Parts 3 and 4.

OPINION

1448 *Dryophthorus* GERMAR, 1824 (Coleoptera): conserved.

1449 *Cholus* GERMAR, 1824 (Coleoptera): conserved.

1450 *Zygops* SCHOENHERR, 1825 (Coleoptera): conserved.

1451 *Lachnopus* SCHOENHERR, 1840 (Coleoptera): conserved.

1452 *Nemocestes* VAN DYKE, 1936 (Coleoptera): conserved and *Geoderces incomptus* HORN, 1876 designated as type species.

1453 *Strongylaspis* SPAETH, 1936 and *Strongylocassis* HINCKS, 1950 (Coleoptera): *Cassida atripes* LECONTE, 1859 designated as type species.

1454 *Nomadacris* UVAROV, 1923 (Orthoptera): conserved.

APPLICATIONS

Comment or advice on these applications is welcomed for publication in the Bulletin and should be sent to the Executive Secretary, ICZN, c/o British Museum (Natural History), Cromwell Road, London SW7 5BD, U. K.

* *Chelonus* PANZER, 1806 (Hymenoptera) and *Anomala* SAMOUELLE, 1819 (Coleoptera): proposed conservation.

* *Curculio assimilis* PAYKULL, 1792 (currently *Ceutorhynchus assimilis*; Coleoptera): proposed conservation of the specific name.

* *Dytiscus cinereus* LINNAEUS, 1758 (currently *Graphoderus cinereus*; Coleoptera): proposed replacement of neotype, because the previously designated neotype is a specimen of *Graphoderus bilineatus* (DE GEER, 1774).

* *Dytiscus ater* DE GEER, 1774 (currently *Ilybius ater*) and *Dytiscus planus* FABRICIUS, 1781 (currently *Hydroporus planus*; Coleoptera): proposed conservation of the specific names, because *D. ater* DE GEER was preoccupied by *D. ater* FORSTER, 1771, an unused senior homonym of the DE GEER name which is also an unused senior synonym of another commonly used beetle name, *D. planus* FABRICIUS, 1781 (currently *Hydroporus planus*).

* *Parasigara* POISSON, 1957 (Heteroptera): proposed confirmation of *Corisa transversa* FIEBER, 1848 as type species.

* *Dacus parallelus* WIEDEMANN, 1830 (currently *Anastrepha parallela*; Diptera): proposed replacement of lectotype.

* *Pararatus* RICARDO, 1913 (Diptera): proposed designation of *Pararatus ricardoae* DANIELS, 1987 as type species.

* *Glabellula* BEZZI, 1902 (Diptera): proposed designation of *Platygaster arcticus* ZETTERSTÄDT, 1838 as type species.

* Ethmiidae BUSCK, 1909 (Lepidoptera): proposed precedence over Azinidae WALSINGHAM, 1906.

Two New Pterostichine Carabids from the Kii Peninsula, Central Japan (Coleoptera, Carabidae)

By Seiji Morita and Masafumi Ohkura

Abstract Two new pterostichine carabids are described from the Kii Peninsula, Central Japan. One of them, named *P. kiiensis* in this paper, is probably related to *P. bisetosus* (Straneo), but is distinguished from that species by the different structure of aedeagus. The other new species is named *P. tanakaorum*. It is related to *P. uenoi* Straneo, but is mainly characterized by its peculiar apical projection of the terminal sternite in the male.

Mr. Shôtarô Tanaka, a friend of ours, has obtained many pterostichine carabid beetles inclusive of three new species from the southern part of the Kii Peninsula, Central Japan. Of these, one was already described by the first author last year under the name of *P. shotaroi*.

In this paper, we are going to describe the remaining new *Pterostichus* under the name of *P. kiiensis* and *P. tanakaorum*.

The abbreviations used herein are as follows: HW – greatest width of head; PW – greatest width of pronotum; PL – length of pronotum, measured along the mid-line; PA – width of pronotal apex; PB – width of pronotal base; EW – greatest width of elytra; EL – greatest length of elytra; M – arithmetic mean.

The holo- and allotypes are preserved in the National Science Museum (Nat. Hist.), Tokyo. The paratypes are distributed to the above collection and the private collections of Messrs. Shôtarô Tanaka, Tsutomu Matsuda and ours.

Before going further, we wish to express our deep gratitude to Dr. Shun-Ichi Uéno of the National Science Museum (Nat. Hist.), Tokyo, for giving us advice and for reading the manuscript of this paper. Thanks are also due to Mr. Shôtarô Tanaka and his family for kindly supplying us with important material, and to Messrs. Kôyô Akiyama, Kimio Masumoto and Tsutomu Matsuda for their kind help.

Pterostichus kiiensis Morita et Ohkura, sp. nov. (Figs. 1–7)

[Japanese name: Shirahama-nagagomimushi]

Length: 12.4–13.7 mm (from apical margin of clypeus to apices of elytra).

[Ent. Rev. Japan, Vol. XLIII, No. 1, pp. 25–32, June, 1988]

Body rather flat. Colour blackish brown, shiny but hardly iridescent on elytra; clypeus, labrum, mandibles, antennae, legs and ventral segments of abdomen lighter than dorsum; palpi dark reddish brown.

Head moderately convex, surface smooth; frontal furrows short and somewhat deep, parallel or a little divergent posteriad and reaching the mid-eye level; clypeus somewhat convex; eyes small and rather flattened; genae tumid, a little shorter than eyes, and usually smooth or often feebly rugose near buccal fissure; lateral grooves deep, straight and extending to the posterior supraorbital pores; mandibles short and stout, usually hooked at apices, though often obtuse; terminal segment of maxillary palpus almost as long as the penultimate, cylindrical, rather truncate at apex; apical margin of labrum somewhat emarginate or almost straight; mentum tooth bifid; microsculpture partially visible, forming isodiametric or wide meshes; antennae subfiliform and long, reaching the middle of elytra; relative lengths of antennal segments as follows:—1 : 2 : 3 : 4 : 5 : 6 : 11≒1 : 0.60 : 1.04 : 1.13 : 1.11 : 1.12 : 1.04.

Pronotum subcordate, rather flat, widest at about apical fourth; PW/HW 1.26-1.38 (M 1.34) in 10♂♂, 1.29-1.42 (M 1.35) in 10♀♀, PW/PL 1.23-1.33 (M 1.27) in 10♂♂, 1.19-1.35 (M 1.28) in 10♀♀, PW/PA 1.26-1.37 (M 1.31) in 10♂♂, 1.27-1.34 (M 1.30) in 10♀♀, PW/PB 1.38-1.54 (M 1.46) in 10♂♂, 1.43-1.50 (M 1.47) in 10♀♀; apical margin widely emarginate, not bordered, a little wider than base; PA/PB 1.07-1.19 (M 1.12) in 10♂♂, 1.07-1.17 (M 1.13) in 10♀♀; sides moderately arcuate in front, weakly sinuate and then usually divergent towards hind angles or rarely parallel; reflexed lateral borders narrow, though becoming more or less wider towards apices and vaguely punctate in basal halves; basal margin widely emarginate at the median part; apical angles produced, rounded at the tips; hind ones almost rectangular without carina; median line sharply impressed, though reaching neither apex nor base; anterior transverse impression vague; basal foveae linear, deep, a little diverging anteriorly or almost parallel with coarse punctures and wrinkles; anterior pair of marginal setae inserted a little before the widest part and not doubled (in *P. bisetosus,* one or two additional setae usually present); posterior pair a little before and inside hind angles; microsculpture formed by transverse meshes.

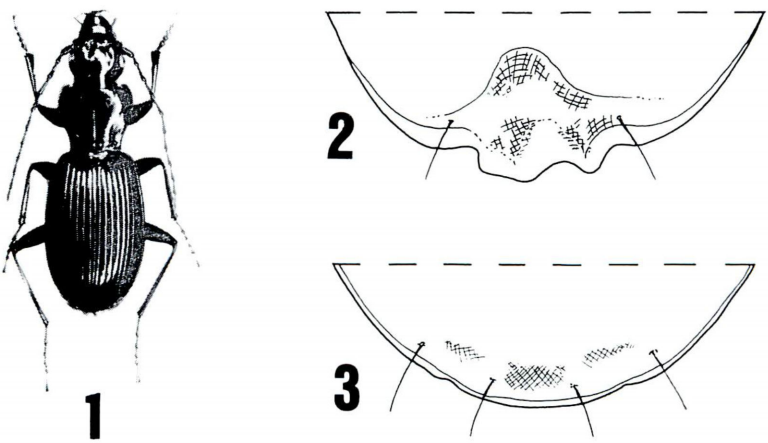
Elytra elongated subovoid, widest a little behind the middle; EW/PW 1.25-1.37 (M 1.33) in 10♂♂, 1.27-1.36 (M 1.32) in 10♀♀, EL/EW 1.49-1.60 (M 1.54) in 10♂♂, 1.54-1.62 (M 1.58) in 10♀♀; basal border gently arcuate and joining scutellar striole which is very short and lies on interval 1; shoulders rounded, not angulate; sides gently divergent to behind middle and slightly emarginate before apices; apices separately rounded in

general, forming a small re-entrant angle; epipleuron gradually narrowed towards apex; inner plica slightly visible in lateral view; striae smooth throughout, rarely crenulate; intervals somewhat convex and impunctate; basal pore situated at the basal anastomosis of striae 2 and 3; three dorsal pores on interval 3, anterior one adjoining stria 3 and the others adjoining stria 2; marginal series composed of sixteen to nineteen pores; microsculpture formed by transverse lines.

Prepisternum usually with coarse punctures along the middle of inner margin; apical fourth of mesepisterna, sides of metasternum, and metepisterna with coarse punctures; basal two sternites with irregular wrinkles; in ♂, apical sternite deeply and widely excavated at the middle along apical margin which has two projections; these projections rather variable in form though the left projection is always narrower and shorter than the right one (in *P. bisetosus,* apical sternite in ♂ deeply and very widely excavated at the middle, and with two projections, the left projection being always longer than the right); in ♀, apical sternite bordered and depressed between two pairs of setae, with the apical margin usually notched on each side.

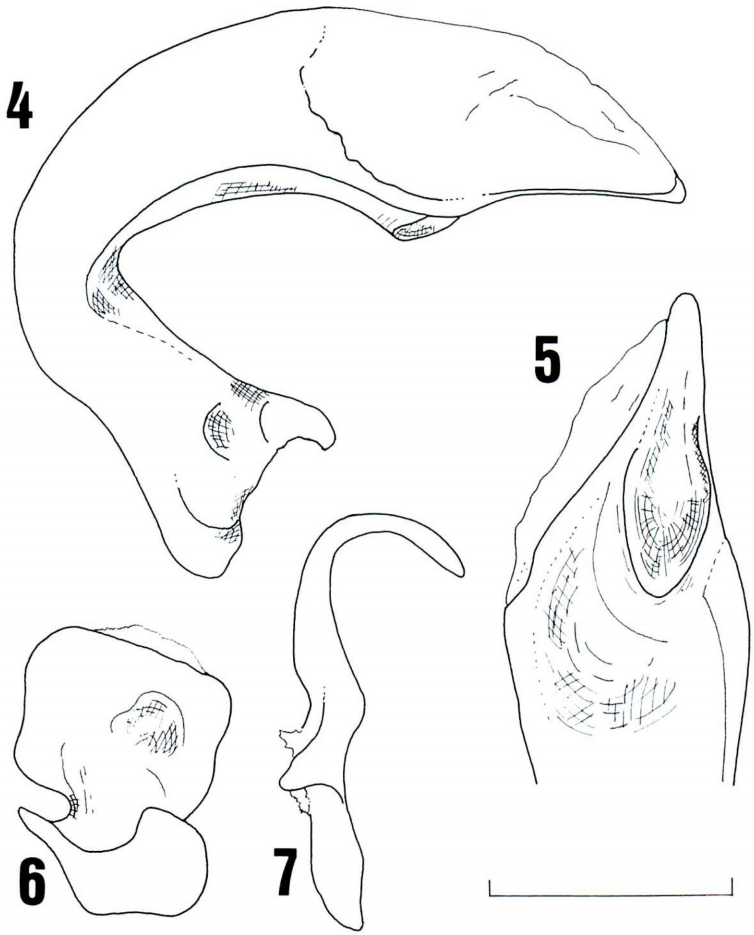
Legs slender; basal three segments of tarsi each with three sulci, though the median sulcus is rudimentary or disappearing.

Aedeagus stout, rather strongly bent at the basal third; viewed ventrally, apical part with an oval concavity anteriorly surrounded by a ridge, which is rather widely open towards apex; the anterior end of



Figs. 1–3. *Pterostichus kiiensis* MORITA et OHKURA, sp. nov., from Mt. Gyôtokusan, Shagawa, in Shirahama-chô, Wakayama Pref.
1, ♂; 2, apical sternite in ♂; 3, apical sternite in ♀.

this ridge is ventrally produced; apex narrowly rounded; ventral surface with a wide depression at the middle; right paramere as in *P. bisetosus*, long and strongly curved at apical 2/9; left one square with a deep cavity and rather constricted near the basal part.



Figs. 4–7. Male genitalia of *Pterostichus kiiensis* MORITA et OHKURA, sp. nov., from Mt. Gyôtokusan, Shagawa, in Shirahama-chô, Wakayama Pref.

4, aedeagus, left lateral view; 5, apical part of aedeagus, ventral view; 6, separated left paramere, left lateral view; 7, separated right paramere, left lateral view. (Scale: 1 mm)

Type series. Holotype: ♂, 22. IX. 1985, S. TANAKA leg. Allotype: ♀, 6. IX. 1981, S. TANAKA leg. Paratypes: 1 ♂, 1 ♀, 23. VII. 1977, S. MORITA leg.; 9 ♂♂, 13 ♀♀, 6. IX. 1981, S. TANAKA leg.; 2 ♂♂, 4 ♀♀, 21. IX. 1981, S. TANAKA leg.; 4 ♀♀, 16. X. 1981, S. MORITA leg.; 1 ♂, 1 ♀, 6. VI. 1982, S. TANAKA leg.; 8 ♂♂, 5 ♀♀, 28. VII. 1982, S. TANAKA leg.; 7 ♂♂, 6 ♀♀, 14. VIII. 1982, S. TANAKA leg.; 6 ♂♂, 7 ♀♀, 23. IX. 1983, S. TANAKA leg.; 7 ♂♂, 9 ♀♀, 8. X. 1983, S. TANAKA leg.; 1 ♂, 1 ♀, 13. V. 1984, S. TANAKA leg.; 1 ♂, 1 ♀, 16. IX. 1984, S. TANAKA leg.; 2 ♂♂, 4 ♀♀, 22. IX. 1985, S. TANAKA leg.

Type locality. Mt. Gyôtokusan, Shagawa, Shirahama-chô, Wakayama Prefecture, near the southern tip of the Kii Peninsula of Honshu, Central Japan.

The beetles were found from under stones lying at the edges of narrow streams.

It is difficult to determine the true affinity of this new *Pterostichus*. It resembles *P. bisetosus* (STRANEO) (1938, pp. 230-231)[1] not only in external morphology but also in the configuration of aedeagus and the right paramere, but differs from it in having a remarkable carina on the ventral surface of aedeagus. It is probably endemic to the southern part of the Kii Peninsula.

Pterostichus tanakaorum MORITA et OHKURA, sp. nov. (Figs. 8-14)

〔Japanese name: Ryûjin-nagagomimushi〕

Length: 12.8-13.6 mm (from apical margin of clypeus to apices of elytra).

Colour as in *P. kiiensis*.

Head large and rather convex; frontal furrows short, a little divergent posteriad or almost parallel; lateral grooves deep, almost straight or often arcuate inwards at the posterior parts; mandibles rather short and stout; eyes more convex than in *P. kiiensis*; genae tumid, shorter than eyes, and smooth beneath them; microsculpture partially visible, forming isodiametric or wide meshes; relative lengths of antennal segments as follows: — 1 : 2 : 3 : 4 : 5 : 6 : 11≒1 : 0.57 : 0.99 : 1.08 : 1.07 : 1.05 : 0.98.

Pronotum as in *P. kiiensis*, but the sides are more strongly arcuate in front and gradually narrowed behind, and the hind angles are a little obtuse or rectangular, not produced outwards; PW/HW 1.27-1.39 (M 1.33) in 10 ♂♂, 1.29-1.34 (M 1.31) in 10 ♀♀, PW/PL 1.22-1.30 (M 1.26) in 10 ♂♂, 1.25-1.30 (M 1.28) in 10 ♀♀, PW/PA 1.32-1.38 (M 1.35) in 10 ♂♂, 1.29-1.37 (M 1.33) in 10 ♀♀, PW/PB 1.41-1.56 (M 1.49) in 10 ♂♂, 1.39-1.55 (M 1.46) in 10 ♀♀, PA/PB 1.04-1.17 (M 1.11) in 10 ♂♂, 1.07-1.15 (M 1.10) in 10 ♀♀; microsculpture formed by transverse meshes.

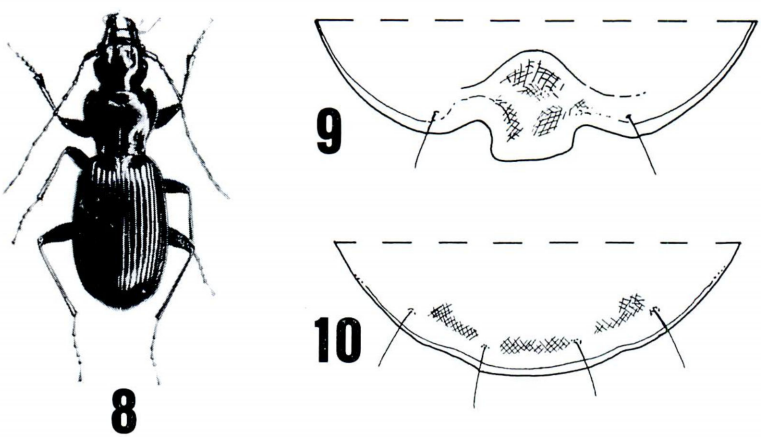
Elytra elongated subovoid, a little narrower than in *P. kiiensis*, widest

1) When Mr. K. MASUMOTO visited the British Museum (Natural History), he kindly made for us a comparative study between this new species and the type of *P. bisetosus*.

at about or a little behind middle; EW/PW 1.22–1.29 (M 1.27) in 10♂♂, 1.23–1.39 (M 1.29) in 10♀♀, EL/EW 1.52–1.66 (M 1.61) in 10♂♂, 1.46–1.65 (M 1.58) in 10♀♀; basal border gently arcuate and joining scutellar striole which is short and lies on interval 1; shoulders rounded, not angulate; epipleuron gradually narrowed towards apex; inner plica slightly visible in lateral view; apices separately rounded in general, forming a small re-entrant angle; striae smooth throughout, rarely crenulate; intervals a little less convex than in *P. kiiensis*; basal pore situated at the base of stria 1; three dorsal pores on interval 3, anterior one adjoining stria 3 and others adjoining stria 2; marginal series composed of sixteen to nineteen pores; microsculpture formed by fine transverse lines.

Apical parts of mesepisterna, sides of metasternum and basal sternites sparsely and coarsely punctate; in ♂, apical sternite deeply concave at about middle along apical margin which has a single asymmetrical projection, which is wide and stout (in *P. uenoi,* apical sternite in ♂ with a single projection which is very short and very wide, and usually has an emargination); in ♀, apical sternite very weakly depressed between two pairs of setae, with apical margin slightly emarginate on each side.

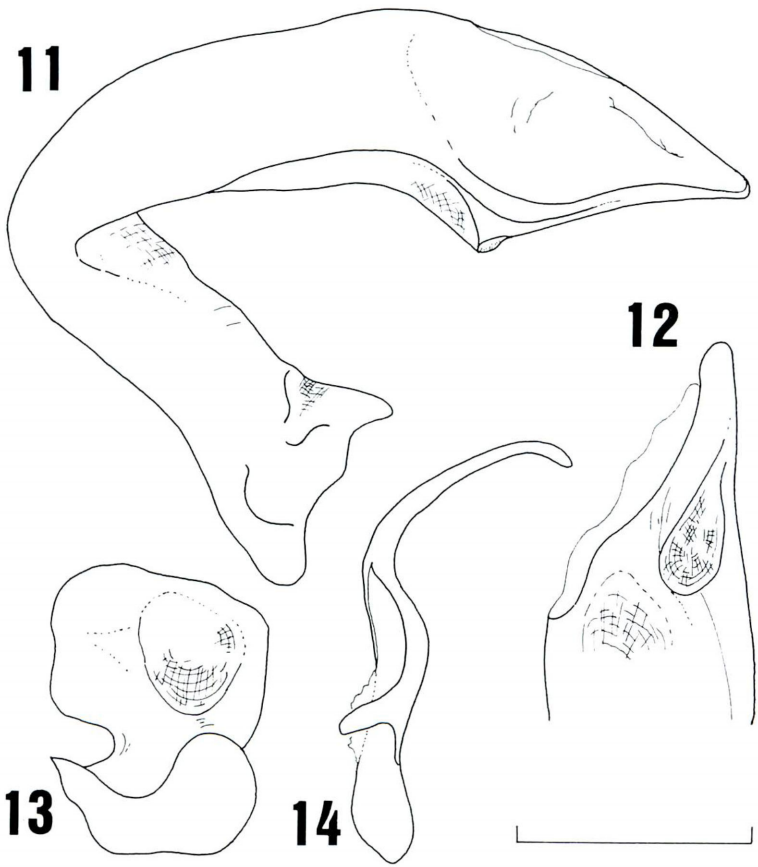
Legs slender; in ♀, protarsus usually with inner and outer sulci, though vaguely; basal three segments of meso- and metatarsi each with inner and outer sulci.



Figs. 8–10. *Pterostichus tanakaorum* MORITA et OHKURA, sp. nov., from Hirano-dani, Ryújin-mura, Wakayama Pref.
8, ♂; 9, apical sternite in ♂; 10, apical sternite in ♀.

Male genital organ basically similar to those of *P. uenoi*; aedeagus very strongly bent at basal third in lateral view; viewed ventrally, apical part with an ovally curved carina as in *P. uenoi* and *P. kiiensis*; apex very short and narrowly rounded; left paramere wide and square with a deep cavity; the right one very long and slender, rather strongly curved at about middle and 1/10 from apex respectively.

Type series. Holotype: ♂, 22. V. 1983, S. TANAKA leg. Allotype: ♀, 1. VII. 1984, S. TANAKA leg. Paratypes: 4 ♂♂, 2♀♀, 2. VIII. 1982, S. TANAKA leg.; 2 ♂♂,



Figs. 11–14. Male genitalia of *Pterostichus tanakaorum* MORITA et OHKURA, sp. nov., from Hirano-dani, Ryûjin-mura, Wakayama Pref.
11, aedeagus, left lateral view; 12, apical part of aedeagus, ventral view; 13, separated left paramere, left lateral view; 14, separated right paramere, left lateral view. (Scale: 1 mm)

2 ♀♀, 7. VIII. 1982, S. TANAKA leg.; 8 ♂♂, 6 ♀♀, 13. VIII. 1982, S. TANAKA leg.; 4 ♂♂, 2 ♀♀, 22. V. 1983, S. TANAKA leg.; 5 ♂♂, 5 ♀♀, 10. IX. 1983, S. TANAKA leg.; 4 ♂♂, 4 ♀♀, 11. IX. 1983, S. TANAKA leg.; 4 ♂♂, 4 ♀♀, 1. VII. 1984, S. TANAKA leg.; 2 ♂♂, 1 ♀, 26. VIII. 1985, S. TANAKA leg.

Type locality. Hirano-dani, Ryûjin-mura, Wakayama Prefecture, near the southern part of the Kii Peninsula of Honshu, Central Japan.

In the similarity of genitalic characters, this new species seems related to *P. uenoi* STRANEO (1955, pp. 100–101, figs. 13, 23). It is, however, different from the latter in the external morphology. Besides, the known distributional ranges of the two species are geographically remote, and the intervening area is occupied by two related but different species.

On the other hand, this new species is similar to *P. kiiensis* in general appearance, but it is readily distinguished from it by having a strongly bent aedeagus and a single projection on the apical sternite in the male.

References

ISHIDA, H., 1958 a. Some new or little-known species of the genus *Pterostichus* BONELLI (Coleoptera: Harpalidae) from Japan. (I). Ent. Rev. Japan, Osaka, 9: 5–8.

—— 1958 b. Ditto. (II). ibid., 33–36.

KASAHARA, S., 1987. Notes on Japanese ground beetles, III: On *Pterostichus* (*Paralianoe*) *uenoi horioi* NAKANE et ISHIDA. Coleopt. News, Tokyo, (78): 5–6. (In Japanese).

NAKANE, T., 1979. The beetles of Japan (new series) 59. Nature & Insects, Tokyo, 14: 4–9. (In Japanese).

STRANEO, S. L., 1938. Nuovi Pterostichini (Coleopt. Carab.). Mem. Soc. ent. Ital., 16: 226–231.

—— 1955. Nuove specie di *Pterostichus* del Giappone, (Coleopt. Carabid.). Ann. Mus. civ. Stor. nat. Genova, 68: 85–101.

A Study of the Taiwanese Lagriidae

By Kimio Masumoto

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Abstract A study of the Taiwanese Lagriidae is presented. The genus *Chlorophila* Semenow is transferred from the subfamily Lagriinae to the subfamily Statirinae. Two new genera, *Taiwanolagria* and *Hosohamudama* are erected. Ten new species, *Lagria oharai*, *Lagria kondoi*, *Lagria sakaii*, *Cerogria hajimei*, *Arthromacra tsuyukii*, *Arthromacra minuta*, *Chlorophila kurosawai*, *Taiwanolagria merkli*, *Hosohamudama sasajii* and *Hosohamudama miyakei* are described. *Cerogria gardneri* Borchmann is regarded as a junior synonym of *C. miwai* Kôno, and *Anisostira sinuatipes* (Pic) and *A. abnormipes* (Borchmann) are also of *A. rugipennis* (Lewis). *Hosohamudama abnormalis* (Kôno) is newly combined. A lectotype is designated for *Lagria formosensis* Borchmann. A list of the known species from Taiwan is also given.

Introduction

I have been studying the Taiwanese Heteromera since 1971, and am very much interested in the tenebrionid-lagriid beetles occurring on that island, because they are closely related not only to the fauna of the Ryukyu Is. but also to that of South China, and are richer in species and genera. Recently, I completed a study of the Japanese Lagriidae, and I felt it better to start my next project, a study of the Taiwanese Lagriidae. As we know little about them, we have to clarify the situation concerning the Taiwanese fauna.

In the past, Borchmann (1912, 1915, 1930, 1936), Pic (1910, 1912), Kôno (1929) and Sasaji (1986) described new species from Taiwan. In his revisional study of "Die Lagriiden Japans", Kôno recorded 10 species and 3 forms from the island. Miwa (1931) listed 13 species and 3 forms in his catalogue of the Taiwanese Coleoptera.

In this paper, I am going to propose all the results that I have studied.

I wish to express my sincere gratitude to Dr. Ottó Merkl, Természettudományi Múzeum, Budapest, Prof. Dr. Hiroyuki Sasaji, Fukui University, and Dr. Mamoru Owada, National Science Museum (Nat. Hist.), Tokyo, for their invaluable advice. Special thanks are due to Dr. Lother Zerche, Institut für Pflanzenschutzforschung der Akademie der Landwirtschaftswissenschaften der DDR, Bereich, Eberswalde, and Dr. Masaaki Suwa, Hokkaido University, for permitting me to examine type specimens. I also appreciate Dr. Yoshihiko Kurosawa and Messrs. Kôyô Akiyama, Shigeaki Kondo, Yoshikazu Miyake, Masahiro Ohara and Shigeru Tsuyuki, for their contri-

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bution of specimens. I thank Mr. KAORU SAKAI for taking the photographs for this paper. Finally, I appreciate Mr. LEE ROGERS, British Museum (Nat. Hist.), who kindly read through the manuscript.

All the holotypes to be designated in this paper are preserved in the collection of the National Science Museum (Nat. Hist.), Tokyo.

Descriptions of new genera and species

Lagria oharai sp. nov.

(Pl. 3, fig. 1; Pl. 6, figs. 19, 20)

Brownish black, with each side of pronotum, scutellum and elytra yellowish brown, hairs on surfaces pale yellow, pronotum often rather reddish brown and basal portion of elytra also somewhat triangularly darkened. Oblong-oval and gently convex above; each surface distinctly clothed with rather long hairs.

Male. Head slightly transversely elliptic, a little narrower than pronotum, gently convex above and fairly closely, rather strongly punctate, with a V-shaped groove in the middle; fronto-clypeal border narrowly arcuate and grooved; clypeus transversely hexagonal and slightly depressed, truncate and bent downwards in front; eyes medium-sized though fairly noticeably narrowed by genae, interocular space about twice as wide as the transverse diameter of the eye; vertex with narrow smooth area; antennae gently thickened towards apex, reaching a little before basal 1/3, with 1st segment stout, 2nd, 8th, 9th and 10th more or less subconical, 3rd and 4th rather slender, 11th oblong-oval, with ratio of the length from 1st to 11th: 1.6, 0.7, 1.6, 1.5, 1.3, 1.3, 1.3, 1.3, 1.4, 1.2, 2.5.

Pronotum about 1.2 times as wide as long, widest at the middle, feebly sinuous in basal half; apical margin not bordered; base shallowly bordered; disc feebly convex, often gently depressed at basal 1/3 on each side, rather closely punctate. Scutellum triangular with rounded apex, scattered with fine punctures.

Elytra a little less than 1.9 times as long as wide, widest at apical 3/8, about 5 times longer and a little more than 2.4 times wider than pronotum; disc moderately convex and slightly flattened anteriorly, fairly closely rugoso-punctate.

Ratio of the length of pro-, meso- and metatarsomeres: 1.1, 0.9, 0.7, 1.2, 2.2; 1.8, 0.8, 0.8, 1.3, 2.2; 3.1, 1.3, 1.3, 2.5, respectively.

Male genitalia very characteristic (see Pl. 6, figs. 19, 20).

Female. Body more robust; head more convex with the groove less distinct; eyes less transverse; 11th antennal segment shorter.

Body length: 9–11 mm.

Holotype: ♂, Alishan, Chiayi Hsien, Taiwan, 8. IV. 1986, M. OHARA leg. Paratypes: 2 exs., same data as the holotype; 1 ex., Alishan, 10. IV. 1986, M. OHARA leg.; 3 exs., Shihou, Alishan, 9. IV. 1986, M. OHARA leg.; 2 exs., Fenchihu, Chiayi Hsien, 25. V. 1975, K. AKIYAMA leg.; 3 exs., Meifeng, Nantou Hsien, 20. V. 1971, K. SAKAI leg.; 4 exs., Lalashan, Taoyuan Hsien, 4. V. 1981, S. FUKUDA leg.; 1 ex., Lalashan, 30. III. 1980, T. SHIMOMURA leg.; 1 ex., Taoyuan, Kaohsiung Hsien, 2. V. 1986, M. OHARA leg.; 1 ex., Qilan, Yilan Hsien, 28. III. 1986, M. OHARA leg.; 1 ex., Lishan, Taichung Hsien, 29. III. 1986, M. OHARA leg.; 1 ex., Shanping, Kaohsiung Hsien, 27. IV. 1981, S. FUKUDA leg.; 1 ex., Tsuifeng, Nantou Hsien, 2. IV. 1986, M. OHARA leg.; 1 ex., Suling, Taoyuan Hsien, 3. V. 1981, S. FUKUDA leg.; 1 ex., Pilu, Hualien Hsien, 20. V. 1985, LUO CHINCHIH leg.; 3 exs., Lalashan, 2. V. 1981, S. TSUYUKI leg.; 8 exs., Lalashan, 4. V. 1981, S. TSUYUKI leg.; 2 exs., Alishan, 5–6. VII. 1965, T. NAKANE leg.; 1 ex., Tattaka, 16. IV. 1927, T. KANO leg.; 1 ex., Alishan, 5–6. VII. 1965, Y. KUROSAWA leg.

Notes. This new species is closely related to *Lagria kikuchii* KÔNO, but can be distinguished from the latter by the darker body, the dorsal surface being less closely punctate though more densely clothed with long hairs, and the larger eyes. (As *Lagria kikuchii* was described based on a female specimen, the above comparisons are made by using female specimens.)

Lagria kondoi sp. nov.

(Pl. 3, fig. 2; Pl. 6, figs. 21, 22)

Yellowish brown, with antennae and legs more or less darker in colour, eyes often black, hairs on surfaces pale yellow; each surface moderately shining, fairly densely covered with bent hairs. Oblong oval and moderately convex above.

Male. Head rather round, slightly narrower than pronotum, gently convex above, fairly closely and irregularly punctate; fronto-clypeal border feebly arcuate and sulcate, each end of sulcus reaching outer margin; clypeus trapezoid and slightly depressed in basal portion, truncate at apex; eyes distinctly large, rounded laterally, distance between them about 0.6 times their transverse diameter; antennae feebly thickened towards apex, reaching a little before basal ⅓ of elytra, ratio of the length from 1st segment to 11th: 0.8, 0.4, 0.9, 0.8, 0.8, 0.7, 0.7, 0.7, 0.7, 0.6, 3.2.

Pronotum about 1.3 times as wide as long, widest at the middle, more or less sinuous in basal half; apical margin hardly bordered; base weakly bordered and slightly reflexed above; disc gently convex, weakly and obliquely impressed at basal ⅓ on each side, closely punctate. Scutellum rather linguiform, finely punctate.

Elytra about 1.6 times as long as wide, widest at apical ⅓, 4.5 times longer and 2.2 times wider than pronotum; disc gently convex above, rugoso-punctate; lateral margins feebly explanate and visible from above.

Ratio of the length of pro-, meso- and metatarsomeres: 0.9, 0.4, 0.4, 0.6, 1.2; 1.2, 0.5, 0.4, 0.6, 1.3; 1.7, 0.6, 0.6, 1.3, respectively.

Male genitalia rather slender.

Female. Body wider; eyes smaller with distance between them about 1.4 times their transverse diameter; antennae shorter, reaching basal 1/5 of elytra; pronotum more transverse.

Body length: 5.5–7 mm.

Holotype: ♂, Liukuei, Kaohsiung Hsien, Taiwan, 1. V. 1986, M. OHARA leg. Paratypes: 3 exs., same data as the holotype; 2 exs., Shanping, Kaohsiung Hsien, 27. IV. 1981, S. FUKUDA leg.; 1 ex., Nanshanchi, Nantou Hsien, 16. V. 1971, K. SAKAI leg.; 1 ex., Kuantzuling, Chiayi Hsien, 29. IV. 1971, K. SAKAI leg.; 3 exs., Shanping, 27. IV. 1981, S. TSUYUKI leg.

Notes. This new species is quite unique in having a small body with large eyes.

Lagria sakaii sp. nov.

(Pl. 3, fig. 3; Pl. 6, figs. 23, 24)

Reddish brown, with eyes, antennae, tibiae and tarsi darkened in colour, hairs on surfaces pale yellow; each surface moderately shining and covered with hairs. Rather elongate and gently convex above.

Male. Head almost round, a little narrower than pronotum, moderately convex above, rather closely punctate; fronto-clypeal border arcuate; clypeus small and trapezoid, clearly depressed, declined to truncate apex; eyes medium-sized, narrowed by genae, feebly, roundly produced laterad, distance between them about the same width as the transverse diameter of the eye; antennae reaching basal 1/4 of elytra, 3rd segment to 10th rather noticeably dilated to each apex, ratio of the length from 1st to 11th: 1.3, 0.6, 1.1, 1.3, 0.8, 1.2, 0.9, 0.9, 0.9, 0.9, 3.4.

Pronotum somewhat subcylindrical, about 1.2 times as wide as long, widest near base, rather distinctly sinuous at basal 2/5, widened at apical 2/5; apical margin neither bordered nor reflexed; base weakly bordered; disc feebly convex, fairly closely and irregularly punctate. Scutellum triangular and fairly densely haired.

Elytra 1.8 times as long as wide, widest at apical 1/3, 5 times longer and 2.3 times wider than pronotum; disc gently convex above, rugoso-punctate; lateral margins finely explanate and visible from above.

Ratio of the length of pro-, meso- and metatarsomeres: 1.3, 0.6, 0.6, 0.8, 1.5; 1.5, 0.7, 0.6, 0.8, 1.7; 2.4, 0.8, 0.8, 1.7, respectively.

Female. Body robust and more closely, finely punctate; eyes smaller; antennae shorter and reaching 1/5 of elytra.

Body length: 7.5–8.5 mm.

Holotype: ♂, Kenting Park, Pingtung Hsien, Taiwan, 3. V. 1971, K. SAKAI leg.

Paratypes: 1 ex., Kenting Park, 30. III. 1970, Y. MIYAKE leg.; 1 ex., Kenting Park, 14. VII. 1970, C. LIN leg.; 1 ex., Kuraru (Kenting), 9. V. 1926, T. KANO leg.

Notes. This new species resembles *Lagria okinawana* (M.T. CHÛJÔ), but can be distinguished from the latter by the smaller eyes (strongly narrowed by genae), the pronotum constricted at basal 2/5 with the disc more strongly and closely punctate, the less closely punctate elytra, and the differently shaped male genitalia.

Cerogria hajimei sp. nov.

(Pl. 3, fig. 4; Pl. 6, figs. 25–27)

Blackish brown, with 2 apical sternites of abdomen yellowish brown, hairs on surfaces yellowish brown; each surface moderately shining and rather noticeably clothed with hairs, dorsal surface bearing feeble metallic lustre. Rather elongate and gently convex above.

Male. Head nearly round, a little narrower than pronotum, feebly convex above, coarsely punctate; fronto-clypeal border dilated and V-shaped; clypeus trapezoid and clearly depressed, closely and coarsely punctate, with apex emarginate medially; eyes rather transverse, roundly produced laterad, distance between them about as wide as the transverse diameter of the eye; antennae reaching basal 1/3 of elytra, the shape as Pl. 6, fig. 27, ratio of the length from 1st segment to 11th: 1.8, 0.5, 0.9, 1.2, 0.6, 0.7, 0.8, 0.8, 0.8, 0.9, 5.0.

Pronotum a little wider than long, widest at apical 2/5, feebly sinuous in basal 3/5; apical margin finely reflexed above; base rather thickly bordered; disc gently convex, strongly and irregularly punctate. Scutellum subcordate with base nearly straight, scattered with small punctures.

Elytra 1.7 times as long as wide, widest a little behind the middle, 4 times longer and 2.6 times wider than pronotum; disc gently convex above and slightly flattened anteriorly, shallowly rugoso-punctate; lateral margins finely though clearly explanate and easily visible from above.

Anal sternite clearly emarginate at apex.

Ratio of the length of pro-, meso- and metatarsomeres: 1.4, 0.6, 0.6, 0.7, 1.6; 1.7, 0.7, 0.6, 0.7, 1.4; 2.6, 0.9, 0.7, 1.6, respectively.

Male genitalia extremely elongate (see Pl. 6, figs. 25, 26).

Female. Unknown.

Body length: 14 mm.

Holotype: ♂, Tenghsi, Kaohsiung Hsien, Taiwan, 13. VI. 1983, K. MASUMOTO leg. Paratypes: 1 ex., Suiharyô, Chiayi Hsien, 10. VII. 1961, S.-I. UÉNO leg.; 1 ex., Karapin, 11. VI. 1938, Y. YANO leg.; 1 ex., Kouden, 29. IV. 1941, no collector's name.

Notes. This new species resembles *Cerogria chinensis* (FAIRMAIRE), but can be easily distinguished from the latter by the more robust and more coarsely punctate body, the larger eyes, the wider and less strongly shining pronotum, and the differently shaped male antennae and genitalia.

Arthromacra tsuyukii sp. nov.

(Pl. 3, fig. 5; Pl. 6, figs. 28, 29)

Dark greenish blue, with head dark blue posteriorly, pronotum and scutellum golden green, elytra with feeble golden lustre, mouth parts and antennae brownish yellow, legs dark brown with feeble golden coppery lustre, hairs on each surface pale yellow (coloration varies in individuals — dorsal surface sometimes fairly lighter in colour —); dorsal surface weakly, rather sericiously shining and sparsely covered with hairs; ventral surface moderately shining and rather noticeably covered with hairs. Elongate and moderately convex longitudinally.

Male. Head rather elliptic, slightly convex above, finely and closely, somewhat rugoso-punctate; fronto-clypeal border vaguely arcuate and almost impunctate; clypeus rather short, depressed and flattened, with each front corner rounded; eyes medium-sized, feebly convex above and fairly strongly produced laterad, distance between them about 2.6 times their transverse diameter; antennae nearly filiform, reaching basal ⅓ of elytra, ratio of the length from 1st segment to 11th: 0.8, 0.6, 1.1, 1.1, 1.1, 1.2, 1.2, 1.2, 1.2, 1.0, 4.2.

Pronotum slightly wider than long, widest at apical ⅓, rather distinctly sinuous in basal half; apical margin nearly straight; base feebly bisinuous; front angles rounded; hind angles obtusely produced obliquely laterad; disc moderately convex longitudinally, faintly impressed in the middle on each side, closely punctate, punctures small though fairly deep, often confluent each other. Scutellum nearly linguiform, slightly rugose, shallowly depressed medially.

Elytra 3.1 times as long as wide, widest at basal ¼, 4.7 times longer and 1.6 times wider than pronotum; disc moderately convex longitudinally, very feebly flattened antero-medially, irregularly punctate, punctures about twice as large as those on pronotum, distance between them about 0.7–1.5 times their diameter; humeral portions weakly swollen; sutural portion weakly ridged; lateral margins finely bordered and slightly explanate, thus barely visible from above.

Ratio of the length of pro-, meso- and metatarsomeres: 1.2, 0.9, 0.7, 0.7, 1.3; 1.3, 0.8, 0.7, 0.7, 1.3; 3.1, 1.6, 0.7, 1.7, respectively.

Female. Unknown.

Body length: 7–8 mm.

Holotype: ♂, Nanfengshan, Kaohsiung Hsien, Taiwan, 28. IV. 1981, S. TSUYUKI leg. Paratypes: 1 ex., Ikenohata (Suleng), Taoyuan Hsien, 29. III. 1980, T. SHIMOMURA leg.; 1 ex., Nanshanchi, Nantou Hsien, 23. III. 1980, T. SHIMOMURA leg.

Notes. This new species is quite unique in having the strongly produced eyes, the distinctly though finely punctate pronotum, and the microshagreened elytral

surface.

Arthromacra minuta sp. nov.

(Pl. 3, fig. 6; Pl. 6, figs. 30, 31)

Brownish black, with dorsal surface indigo-blue (or coppery brown in some individuals), ventral surface bearing dark bluish tinge (or coppery brownish tinge in some individuals), antennae, mouth parts and legs brownish yellow; each surface metallically shining and very sparsely clothed with pale yellowish hairs; antennae and legs moderately shining; fore body above rather noticeably microshagreened, elytra feebly so. Elongate, moderately convex longitudinally.

Male. Head rather elliptic, feebly convex above, faintly impressed medially, and sometimes also on each side, fairly closely, rather strongly and fairly coarsely punctate; fronto-clypeal border gently arcuate and clearly grooved; clypeus transverse, feebly convex above in the middle; eyes rather small, roundly produced laterad, distance between them about 5 times their transverse diameter; antennae somewhat subclavate, reaching basal 1/5 of elytra, ratio of length from 1st segment to 11th: 0.7, 0.5, 1.0, 0.7, 0.7, 0.7, 0.7, 0.7, 0.6, 0.6, 2.6.

Pronotum subcylindrical and nearly as wide as long, widest at base, rounded at apical 2/5 laterally; apical margin nearly straight; base nearly straight; front angles rounded; hind angles rather acutely produced obliquely laterad; disc fairly closely, rather strongly and coarsely punctate, punctures nearly same size as cephalic ones though almost not confluent each other. Scutellum subcordate, finely rugose basally and fairly smooth apically.

Elytra 2.6 times as long as wide, widest at basal 1/5, 4.3 times longer and 1.6 times wider than pronotum; disc moderately convex longitudinally and feebly flattened antero-medially, fairly closely rugoso-punctate, punctures about twice as large as those on pronotum; humeral portions weakly swollen; sutural portion slightly ridged medially and posteriorly; lateral margins finely bordered and slightly explanate obliquely laterad, thus hardly visible from above.

Ratio of the length of pro-, meso- and metatarsomeres: 0.8, 0.6, 0.7, 0.9, 1.5; 1.0, 0.7, 0.7, 0.8, 1.6; 2.3, 1.4, 0.8, 1.8, respectively.

Female. Body slightly more robust (except for this, there is no difference between two sexes).

Body length: 7–9 mm.

Holotype: ♂, Mt. Lalashan, Taoyuan Hsien, Taiwan, 2. V. 1981, S. TSUYUKI leg. Paratypes: 3 exs., Rengechi (Lienhuachi), Hualien Hsien, 17. III. 1978, J. ITOH leg.; 1 ex., Nanshanchi, Nantou Hsien, 17–18. III. 1980, T. SHIMOMURA leg.; 1 ex., Ikenohata

(Suleng), Taoyuan Hsien, 29. III. 1980, T. SHIMOMURA leg.; Lienhuachi, 14–16. VI. 1980, T. SHIMOMURA leg.; 1 ex., Hsieling, 26. IV. 1982, N. OHBAYASHI leg.

Notes. This new species somewhat resembles *Arthromacra formosana* SASAJI, but can be easily distinguished from the latter by the body fairly smaller, the antennae distinctly shorter, and the differently shaped male genitalia.

Chlorophila kurosawai sp. nov.

(Pl. 4, fig. 7; Pl. 6, figs. 32, 33)

Piceous, with head, scutellum and elytra blue, pronotum golden green, posterior half of ventral surface bluish green, humeral portions of elytra violet, legs mostly pale yellow, mouth parts, antennae, apical portions of femora, and so on, darkened in colour; each surface metallically shining, dorsal surface of pronotum and humeral portions of elytra distinctly so. Elongate and gently convex longitudinally.

Male. Head rather triangular, clearly narrower than pronotum, flattened and irregularly punctate in the middle; fronto-clypeal border widely arcuate, steeply inclined forwards; clypeus trapezoid and clearly depressed, slightly convex above, shortly truncate apically; eyes medium-sized, roundly produced laterad, distance between them about 1.8 times as wide as the transverse diameter of the eye; antennae rather filiform, ratio of the length from 1st segment to 11th: 1.4, 0.7, 2.2, 1.7, 1.7, 1.7, 1.6, 1.6, 1.4, 1.2, 9.9.

Pronotum slightly wider than long, widest at base, basal 4/7 and also near apex (bisinuous along each lateral margin in dorsal view); apical margin arcuate and finely rimmed; base feebly reflexed; front angles roundly produced; hind angles triangularly angulate in dorsal view; disc gently convex, roundly impressed at basal 2/5 on each side, sparsely scattered with microscopic punctures, very shallowly wrinkled transversely. Scutellum shortly linguiform and feebly elevated, almost impunctate.

Elytra about 2.7 times as long as wide, widest at basal 2/9, about 5 times longer and 1.9 times wider than pronotum; disc moderately convex longitudinally, rather strongly, fairly closely punctate, often weakly, transversely rugose; lateral margins clearly bordered and explanate, thus easily visible from above; humeral portions rather distinctly swollen.

Procoxae narrowly though clearly separated; prosternal process fairly large though truncate at apex; anal sternite not emarginate; male genitalia slender.

Ratio of the length of pro-, meso- and metatarsomeres: 2.3, 1.4, 1.2, 1.4, 2.4; 3.7, 2.0, 1.6, 1.4, 2.7; 6.3, 3.1, 1.7, 3.7, respectively.

Female. Unknown.

Body length: 11.7-13.2 mm.

Holotype: ♂, Ikenohata (Suleng), Taoyuan Hsien, Taiwan, 29. III. 1980, T. SHIMOMURA leg. Paratypes: 2 exs., same data as the holotype; 1 ex., Suleng, 28. IV. 1982, N. OHBAYASHI leg. (preserved in the Természettudományi Múzeum, Budapest); 3 exs., Ikenohata, 31. III. 1980, T. SHIMOMURA leg.

Notes. This new species somewhat resembles *Chlorophila admirabilis* SASAJI, but can be easily distinguished from the latter by the nearly impunctate and strongly metallically shining pronotum, the less closely punctate elytra, and the much more slender legs.

BORCHMANN (1915, 1936) treated this genus as a member of the subfamily Lagriinae, but because of the slender body with the separated procoxae and the large prosternal process, the genus should be a member of the subfamily Statirinae.

Genus *Taiwanolagria* gen. nov.

Type species: *Taiwanolagria merkli* gen. et sp. nov.

Body rather large, elongate and subcylindrical.

Head more or less narrower than pronotum; eyes medium-sized; antennae filiform; terminal segment of maxillary palpus nearly fusiform.

Pronotum rather barrel-shaped; apical margin more or less bordered and/or reflexed; base more or less bordered and/or reflexed; front angles obtuse; hind angles produced laterad; disc moderately convex and more or less punctate.

Elytra moderately convex longitudinally, clearly punctate-striate; intervals neither strongly nor irregularly punctate; lateral margins bordered and hardly visible from above.

Procoxae rather narrowly though clearly separated from each other, prosternal process clearly present; mesosternum strongly depressed anteriorly; anal sternite not emarginate at apex; male genitalia elongate fusiform in dorsal view.

Male profemora and metatibiae distinctly modified.

Notes. This new genus is related to the genus *Anisostira* BORCHMANN, but can be distinguished from the latter by the following characteristics:

1) The body is more elongate.

2) The elytra are regularly punctate-striate and the intervals are neither strongly nor irregularly punctate.

3) Not only the metatibiae but also the profemora in males are distinctly modified.

Taiwanolagria merkli sp. nov.

(Pl. 4, fig. 8; Pl. 6. figs. 34, 35; Text figs. A, B)

Yellowish brown and partly darkened (sometimes wholly darkened), with elytra more or less bearing dark greenish tinges (rarely with oblong

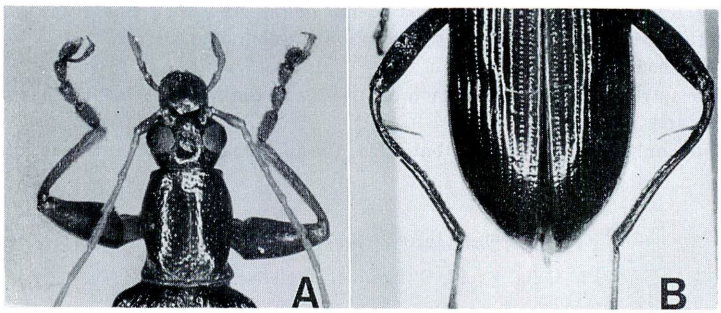
patches); elytra bearing weak metallic lustre. Elongate and subcylindrical, convex longitudinally.

Male. Head nearly rhomboidal with base truncate, clearly narrower than head, moderately convex above, sparsely scattered with shallow punctures; fronto-clypeal border semicircular; clypeus rather noticeably produced forwards, gently convergent and truncate apically, weakly convex above; eyes medium-sized, gently convex above and roundly produced laterad, distance between them about the transverse diameter of the eye; antennae filiform, barely reaching the middle of elytra, ratio of the length from 1st segment to 11th: 1.3, 0.5, 1.3, 1.3, 1.3, 1.3, 1.3, 1.3, 1.3, 1.1, 3.3.

Pronotum 1.2 times as long as wide, widest at apical 2/5, roundly narrowed anteriorly and noticeably sinuous posteriorly; apical margin finely bordered and slightly reflexed; base thickly reflexed above; front angles obtuse with corner rounded; hind angles roundly produced laterad; disc feebly convex above, sparsely scattered with punctures, those in lateral portions becoming deeper. Scutellum linguiform, feebly microshagreened.

Elytra about 3 times as long as wide, widest at apical 1/3, 4.5 times longer and a little less than twice wider than pronotum; disc moderately convex longitudinally, finely punctate-striate, punctures on striae small though rather strong and close; intervals weakly convex and almost impunctate, with apical 1/3 sparsely clothed with fairly long hairs; lateral margins finely bordered, hardly visible from above.

Procoxae clearly though rather narrowly separated from each other; intercoxal space strongly raised, prosternal process subrhombic at top, elliptical and constricted in the middle at bottom; coxae produced laterad. Mesosternum strongly depressed anteriorly, posterior edge of depression nearly a dilated V-shape and strongly raised. Anal sternite not emar-



Figs. A, B. A, *Taiwanolagria merkli* gen. et sp. nov., male fore body and fore legs. B, ditto, male hind legs.

ginate at apex. Genitalia elongate fusiform, lengthened anteriorly.

Profemora strongly depressed and indented in basal 2/5 (see Text fig. A) opposite to the swelling of lateral portion of each procoxa; metatibiae indented in basal 2/5 and irregularly crenulate along inner margin, with a distinct tuft at basal 1/5 (see Text fig. B); ratio of the length from pro-, meso- and metatarsomeres: 1.3, 0.8, 0.7, 0.8, 1.4; 1.8, 1.2, 1.1, 1.0, 1.5; 3.4, 1.7, 1.1, 1.6, respectively.

Female. Clypeus less elongate; eyes smaller; antennae shorter; pronotum a little more closely punctate; legs not modified.

Body length: 12.5–15 mm.

Holotype: ♂, Meifeng, Nantou Hsien, Taiwan, 9. VI. 1976, K. AKIYAMA leg. Paratypes: 1 ex., Rimogan (Fushan), Taipei Hsien, 23. IV. 1926, T. KANO leg.; 4 exs., Mt. Lalashan, Taoyuan Hsien, VI. 1969, Y. MIYAKE leg.; 3 exs., Mt. Lalashan, 30. IV. 1979, S. TSUYUKI leg.; 3 exs., Mt. Lalashan, 2. V. 1981, S. TSUYUKI leg.; 3 exs., Mt. Lalashan, 4. V. 1981, S. TSUYUKI leg.; 4 exs., Mt. Lalashan, 4. V. 1981, S. FUKUDA leg.; 5 exs., Fengkangshan, Kaohsiung Hsien, 8. IV. 1982, no collector's name; 2 exs., Meifeng, Nantou Hsien, 20. V. 1971, K. SAKAI leg.; 4 exs., Puli, Nantou Hsien, 1967, Y. MIYAKE leg.; 3 exs., Tenghsi, Kaohsiung Hsien, 13. V. 1971, CHEN WENLONG leg.; 1 ex., Mt. Lalashan, 7. V. 1982, N. OHBAYASHI leg., 1 ex., Hsileng, Taoyuan Hsien, 26. IV. 1982, N. OHBAYASHI leg., 1 ex., Kenting Park, Pingtung Hsien, 4. V. 1982, N. OHBAYASHI leg., 1 ex., Tzudran, Taoyuan Hsien, 28. IV. 1982, N. OHBAYASHI leg. (4 paratypes are preserved in the Természettudományi Múzeum, Budapest); 1 ex., Suleng, Taoyuan Hsien, 3. IV. 1981, T. SHIMOMURA leg.; 1 ex., near Chihtuan, Taoyuan Hsien, 15. IV. 1980, T. SHIMOMURA leg.; 1 ex., Mt. Lalashan, 30. IV. 1979, K. KINUGASA leg.

Genus *Hosohamudama* gen. nov.

Type species: *Hosohamudama sasajii* gen. et sp. nov.

Body medium-sized, elongate and subparallel-sided, fairly strongly convex longitudinally, each surface fairly distinctly clothed with rather long hairs.

Head somewhat triangular and slightly narrower than pronotum, feebly convex above and more or less punctate; eyes medium-sized; antennae filiform and fairly long (reaching the middle of elytra in males).

Pronotum nearly as wide as long, more or less constricted posteriorly (or sinuous near base); apical margin finely rimmed or margined; base more or less bordered and reflexed; front angles rounded (not distinctly angulate); hind angles obtusely angulate or slightly produced; disc convex and scattered with punctures.

Elytra moderately convex longitudinally, finely punctate-striate; intervals feebly convex, mostly punctate and haired.

Terminal segment of maxillary palpus rather fusiform; procoxae separated from each other and intercoxal space raised, prosternal process

clearly present; anal sternite not emarginate at apex; male genitalia elongate fusiform.

Legs rather slender and not modified in both sexes.

Notes. This new genus is closely related to the genus *Macrolagria* LEWIS, but can be distinguished from the latter by the rather distinctly hairy body and the front angles of the pronotum which are clearly rounded. From *Sora* WALKER, it can be separated by the elongate and hairy body, the fore body less narrower than the elytra, the clearly smaller eyes, the head less convex above, and the clearly punctate pronotum.

Hosohamudama sasajii sp. nov.

(Pl. 4, fig. 9; Pl. 6, figs. 36, 37)

Yellowish brown to blackish brown, with eyes mostly black, hairs on surfaces pale yellow; dorsal surface fairly strongly shining and ventral one moderately so; each surface rather noticeably covered with hairs. Elongate and subcylindrical.

Male. Head somewhat triangular, slightly narrower than pronotum, feebly convex above and finely, irregularly punctate; fronto-clypeal border steeply inclined forwards and arcuate; clypeus transverse, weakly convex above, rather shortly truncate at apex; eyes medium-sized, gently convex above and roundly produced laterad, distance between them about 1.8 times the transverse diameter of the eye; antennae filiform, reaching the middle of elytra, ratio of the length from 1st segment to 11th: 0.8, 0.5, 1.2, 1.2, 1.3, 1.4, 1.4, 1.5, 1.5, 1.4, 3.2.

Pronotum a little wider than long, widest at base and also apical $\frac{2}{5}$, rather distinctly constricted at basal $\frac{2}{5}$, rounded anteriorly; apical margin finely rimmed; base shallowly bordered and weakly reflexed; front angles rounded; hind angles obtusely angulate in dorsal view; disc slightly convex, moderately scattered with small punctures, which are intermixed with larger ones. Scutellum somewhat linguiform, shallowly and irregularly punctate posteriorly.

Elytra a little more than 2.5 times as long as wide, widest at apical $\frac{1}{3}$, 6 times longer and 2.3 times wider than pronotum; disc moderately convex longitudinally, finely punctate-striate, punctures small though deep and close, those in posterior portion becoming smaller, shallower and sparser; intervals feebly convex, each with a row of fine punctures, which are very sparse; lateral margins finely bordered and explanate, fairly easily visible from above; base rather bisinuous; apices slightly, roundly produced posteriad.

Terminal segment of maxillary palpus rather filiform; procoxae narrowly though clearly separated from each other, intercoxal space strongly raised, prosternal process rather small and oblong-oval; meso-

sternum strongly depressed anteriorly, with posterior half noticeably raised; anal sternite not emarginate at apex; genitalia slender.

Legs fairly slender, ratio of the length of pro-, meso- and metatarsomeres: 1.0, 0.7, 0.6, 0.6, 1.4; 2.0, 1.0, 0.8, 0.6, 1.6; 2.8, 1.4, 0.7, 1.7, respectively.

Female. Eyes smaller and shorter; antennae shorter and reaching slightly beyond basal ⅓ of elytra; head and pronotum more closely and finely punctate.

Body length: 11–14 mm.

Holotype: ♂, Pilu, Hualien Hsien, Taiwan, 20. V. 1985, Luo Chinchih leg. Paratypes: 9 exs., same data as the holotype; 1 ex., Meifeng, Nantou Hsien, 9. VI. 1976, K. Akiyama leg.; 1 ex., Nanshanchi, Nantou Hsien, 16. V. 1971, K. Sakai leg.

Hosohamudama miyakei sp. nov.

(Pl. 4, fig. 10; Pl. 6, figs. 38, 39)

Yellowish brown to rather blackish brown, with eyes more or less darker in colour, hairs on each surface pale yellow; fore body above gently shining, elytra rather strongly and somewhat greasily shining; each surface rather distinctly clothed with fine though fairly long hairs. Elongate and subcylindrical.

Male. Head somewhat lozenged though base inserted beneath pronotum, nearly as wide as pronotum, slightly convex above, closely and rather coarsely punctate; fronto-clypeal border clearly arcuate; clypeus transverse and distinctly depressed, gently convex above, finely punctate; eyes medium-sized, gently convex above and roundly produced laterad, distance between them about 1.7 times their transverse diameter; antennae filiform, reaching slightly beyond the middle of elytra, ratio of the length from 1st segment to 11th: 1.3, 0.7, 1.8, 1.8, 1.8, 2.5, 2.5, 2.5, 2.5, 2.5, 4.5.

Pronotum a little wider than long, widest at base and also the middle, fairly noticeably sinuous before base; apical margin nearly straight, finely and unclearly bordered; base slightly bisinuous, finely and rather irregularly bordered; front angles obtuse; hind angles rectangularly, obliquely produced; disc gently convex above, closely punctate, punctures rather rugose anteriorly. Scutellum triangular, slightly elevated and finely punctate.

Elytra 2.5 times as long as wide, widest at apical ⅓, 5.3 times longer and 2.1 times wider than pronotum; disc moderately convex longitudinally, feebly flattened antero-medially, finely punctate-striate, striae often disappeared, punctures small and round, distance between them about 1–2 times their diameter; intervals feebly convex, sparsely and irregularly

scattered with fine punctures, each puncture with a hair; lateral margins finely rimmed and slightly explanate, barely visible from above; apices weakly roundly produced posteriad.

Anal sternite not emarginate at apex; genitalia slender.

Ratio of the length of pro-, meso- and metatarsomeres: 1.5, 0.9, 0.8, 0.8, 1.7; 2.4, 1.2, 1.1, 0.8, 1.8; 3.7, 1.8, 1.2, —, respectively.

Female. Unknown.

Body length: 9-10 mm.

Holotype: ♂, Lalashan, Taoyuan Hsien, Taiwan, 30. III. 1980, T. SHIMOMURA leg. Paratypes: 1 ex., Pilu, Hualien Hsien, 20. V. 1985, LUO CHINCHIH leg.; 1 ex., Shihou, Alishan, Chiayi Hsien, 9. IV. 1986, M. OHARA leg.; 1 ex., Lalashan, 2. V. 1981, S. TSUYUKI leg.; 1 ex., Nanfangshan, Kaohsiung Hsien, 28. IV. 1981, S. TSUYUKI leg; 1 ex., Fengkangshan, Kaohsiung Hsien, 8. IV. 1982, no collector's name; 1 ex., Sungkang, 1. V. 1973, S. TSUYUKI leg.

Notes. This species somewhat resembles the preceding species, but can be distinguished from the latter by the body smaller and less strongly shining above, the more rounded eyes, the fore body above more closely and finely punctate, and the elytra more clearly punctate-striate, with apices more strongly produced.

List of the known species of the Taiwanese Lagriidae

Subfamily **Lagriinae**

Genus *Lagria* FABRICIUS, 1775

Lagria FABRICIUS, 1775, Syst. Ent., 1 (2): 124.

Type species: *Chrysomela hirta* LINNÉ, 1758.

1. *Lagria scutellaris* PIC, 1910

Lagria scutellaris PIC, 1910, Le Naturaliste, 32 : 259. — BORCHMANN, 1936, Gen. Ins., (204): 35.

Specimens examined: 18 exs.; Lalashan, Nanshanchi, Fenchifu, Liukuei, Malibulu.

Distribution: Taiwan.

2. *Lagria formosensis* BORCHMANN, 1912[1] (Pl. 4, fig. 11)

Lagria formosensis BORCHMANN, 1912, Suppl. Ent., (1): 6. — BORCHMANN, 1915, Arch. Naturg., 81 A (6): 86. — KÔNO, 1929, Ins. mats., 4 : 29. — BORCHMANN, 1936, Gen. Ins., (204): 31. — CHÛJÔ, 1959, Mem. Fac. Liberal Arts & Educ., Kagawa Univ., 2 (69): 9. — SASAJI, 1986, Mem. Fac. Educ., Fukui Univ., (2) 36 : 9.

Specimens examined: 24 exs.; Wulai, Suleng, Paling, Lushan, Sungkang, Shanping, Nanfengshan, Kenting.

Distribution: Taiwan; Japan (Ryukyu Is.) [dubious record by CHÛJÔ].

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[1] Lectotype herewith designated for *Lagria formosensis* BORCHMANN.
Lectotype. ♂, labelled as follows: Kosempo Formosa Sauter (printed) VII. (manuscript) 09 (p) / syntypus (p) / *Lagria formosensis* m. (m) / Borchmann det. (p) / Lectotype *Lagria formosensis* BORCHMANN (m) Det. K. Masumoto (p), (m) 19 (p) 88 (m) / Coll. DEI Eberswalde (p). Paralectotypes. 4 exs.

3. *Lagria kikuchii* KÔNO, 1929 (Pl. 4, fig. 12)
Lagria kikuchii KÔNO, 1929, Ins. mats., 4 : 28. — BORCHMANN, 1936, Gen. Ins., (204) : 50.
Specimens examined : 4 exs. ; Baibara (Meiyuan), Lalashan, Sungkang, Tattaka.
Distribution : Taiwan.
4. *Lagria oharai* sp. nov.
5. *Lagria kondoi* sp. nov.
6. *Lagria sakaii* sp. nov.

Genus *Cerogria* BORCHMANN, 1909

Cerogria BORCHMANN, 1909, Bull. Soc. ent. Ital., (40) : 210.
Type species : *Lagria anisocera* WIEDEMANN, 1823.

1. *Cerogria anisocera* (WIEDEMANN, 1823)
Lagria anisocera WIEDEMANN, 1823, Zool. Mag., 2 : 81. — BORCHMANN, 1912, Suppl. Ent., (1) : 7.
Cerogria anisocera : BORCHMANN, 1909, Bull. Soc. ent. Ital., (40) : 210. — BORCHMANN, 1915, Arch. Naturg., 81 A (6) : 112. — KÔNO, 1929, Ins. mats., 4 : 26. — BORCHMANN, 1936, Gen. Ins., (204) : 129.
Specimen examined : not seen.
Distribution : Taiwan ; Java ; Sumatra ; 'Hinterindien' ; 'China ?'.
2. *Cerogria odontocera* (FAIRMAIRE, 1886)
Lagria odontocera FAIRMAIRE, 1886, Ann. Soc. ent. Fr., (6) 6 : 348.
Cerogria odontocera : BORCHMANN, 1909, Bull. Soc. ent. Ital., (40) : 211. — BORCHMANN, 1915, Arch. Naturg., 81 A (6) : 117. — KÔNO, 1929, Ins. mats., 4 : 26. — BORCHMANN, 1936, Gen. Ins., (204) : 120.
Specimen examined : not seen.
Distribution : Taiwan ; China (Yunnan).
3. *Cerogria miwai* KÔNO, 1930 (Pl. 5, fig. 13)
Cerogria miwai KÔNO, 1930, Trans. nat. Hist. Soc. Formosa, 20 : 18. — BORCHMANN, 1936, Gen. Ins., (204) : 136.
Cerogria gardneri BORCHMANN, 1936, Gen. Ins., (204) : 127. **Syn. nov.**
Specimens examined : 8 exs. ; Paling, Lishan, Lushan, Nanshanchi.
Distribution : Taiwan ; China (new record).
4. *Cerogria chinensis* (FAIRMAIRE, 1886)
Lagria chinensis FAIRMAIRE, 1886, Ann. Soc. ent. Fr., (6) 6 : 346.
Specimens examined : 4 exs. ; Lalashan, Paling, Nanfengshan.
Distribution : Taiwan (new record) ; China.
5. *Cerogria hajimei* sp. nov.

Genus *Bothynogria* BORCHMANN, 1915

Bothynogria BORCHMANN, 1915, Arch. Naturg., 81 A (6) : 128.
Type species : *Bothynogria calcarata* BORCHMANN, 1915.

1. *Bothynogria calcarata* BORCHMANN, 1915

Bothynogria calcarata BORCHMANN, 1915, Arch. Naturg., 81 A (6): 129. — BORCHMANN, 1936, Gen. Ins., (204): 115.
Specimens examined: 7 exs.; Lalashan, Nanshanchi, Tenghsi.
Distribution: Taiwan (new record); China.

Genus *Xenocera* BORCHMANN, 1936

Xenocera BORCHMANN, 1936, Gen. Ins., (204): 116.
Type species: *Lagriocera feai* BORCHMANN, 1909.

1. *Xenocera ruficollis* (BORCHMANN, 1912) (Pl. 5, fig. 14)
Lagriocera ruficollis BORCHMANN, 1912, Suppl. Ent., (1): 7. — BORCHMANN, 1915, Arch. Naturg., 81 A (6): 127. — KÔNO, 1929, Ins. mats., 4: 29.
Xenocera ruficollis: BORCHMANN, 1936, Gen. Ins., (204): 117. — SASAJI, 1986, Mem. Fac. Educ., Fukui Univ., (2) 36: 9.
Specimens examined: 14 exs.; Wulai, Paolai, Lienhuachi, Nanshanchi, Shanping, Chipen.
Distribution: Taiwan.

Subfamily **Statirinae**

Genus *Arthromacra* KIRBY, 1837

Arthromacra KIRBY, 1837, Fauna Boreali-Americana: 238.
Type species: *Lagria aenea* SAY, 1824.

1. *Arthromacra formosana* SASAJI, 1986.
Arthromacra formosana SASAJI, 1986, Mem. Fac. Educ., Fukui Univ., (2) 36: 11.
Specimens examined: 20 exs.; Tsuifeng, Meifeng, Pilu, Liukuei.
Distribution: Taiwan.
2. *Arthromacra tsuyukii* sp. nov.
3. *Arthromacra minuta* sp. nov.

Genus *Chlorophila* SEMENOW, 1891

Chlorophila SEMENOW, 1891, Hor. Soc. ent. Ross., 25: 374. Transferred from Lagriinae, see BORCHMANN (1915a, p. 49) and (1936, p. 22).
Type species: *Lagria* (*Chlorophila*) *portschinskii* SEMENOW, 1891.

1. *Chlorophila admirabilis* SASAJI, 1986
Chlorophila admirabilis SASAJI, 1986, Mem. Fac. Educ., Fukui Univ., (2) 36 : 9.
Specimens examined: 14 exs.; Lalashan, Sankuang, Kunyuang, Tzudran, Tsuifeng, Meifeng, Sungkang, Shenmu, Liukuei, Fengkangshan.
Distribution: Taiwan.
2. *Chlorophila kurosawai* sp. nov.

Genus *Sora* WALKER, 1859

Sora WALKER, 1859, Ann. Mag. nat. Hist., (3) 3 : 259.
Type species: *Sora marginata* WALKER, 1859.

Nemostira FAIRMAIRE, 1868, Ann. Soc. ent. Fr., (4) 8 : 815.

1. *Sora viridimetallica* (PIC, 1911) (Pl. 5, fig. 15)
Nemostira viridimetallica PIC, 1911, Mél. exot.-ent., (1) : 7.
Sora (Sora) viridimetallica : BORCHMANN, 1936, Gen. Ins., (204) : 363.
Specimens examined : 2 exs. ; Kenting.
Distribution : Taiwan.

2. *Sora nigripes* (PIC, 1911)
Nemostira nigripes PIC, 1911, Échange, 27 : 190.
Sora (Sora) nigripes : BORCHMANN, 1936, Gen. Ins., (204) : 372.
Specimen examined : not seen.
Distribution : Taiwan.

Genus *Casnonidea* FAIRMAIRE, 1882

Casnonidea FAIRMAIRE, 1882, Notes Leyd. Mus., 4 : 264.
Type species : *Casnonidea homomelaena* FAIRMAIRE, 1882.

1. *Casnonidea occipitalis* (BORCHMANN, 1912)
Nemostira occipitalis BORCHMANN, 1912, Suppl. Ent., (1) : 8. — KÔNO, 1929, Ins. mats., 4 : 34.
Casnonidea occipitalis : BORCHMANN, 1936, Gen. Ins., (204) : 386. — SASAJI, 1986, Mem. Fac. Educ., Fukui Univ., (2) 36 : 13.
Specimens examined : 18 exs. ; Yangmingshan, Lalashan, Paling, Lishan, Meifeng, Wushe, Nanshanchi, Shanping, Fengkangshan.
Distribution : Taiwan ; Japan (Ryukyu Is.).

2. *Casnonidea rufipennis* (BORCHMANN, 1912)
Nemostira rufipennis BORCHMANN, 1912, Suppl. Ent., (1) : 9. — KÔNO, 1929, Ins. mats., 4 : 34.
Casnonidea rufipennis : BORCHMANN, 1936, Gen. Ins., (204) : 386.
Specimen examined : not seen.
Distribution : Taiwan.

Genus *Anisostira* BORCHMANN, 1915

Anisostira BORCHMANN, 1915, Ent. Mitteil., 4 : 296.
Type species : *Anisostira varicolor* BORCHMANN, 1915.

1. *Anisostira cognata* (BORCHMANN, 1912)
Nemostira cognata BORCHMANN, 1912, Suppl. Ent., (1) : 11.
Anisostira cognata : BORCHMANN, 1915, Ent. Mitteil., 4 : 299. — KÔNO, 1929, Ins. mats., 4 : 33. — BORCHMANN, 1936, Gen. Ins., (204) : 457.
Specimen examined : not seen.
Distribution : Taiwan.

2. *Anisostira rugipennis* (LEWIS, 1896) (Pl. 5, fig. 17)
Macrolagria rugipennis LEWIS, 1896, Ann. Mag. nat. Hist., (6) 17 : 341.
Nemostira sinuatipes PIC, 1911, Mél. exot.-ent., (1) : 7. (Pl. 5, fig. 16) **Syn. nov.**
Nemostira abnormipes BORCHMANN, 1912, Suppl. Ent., (1) : 10. **Syn. nov.**
Anisostira abnormipes : BORCHMANN, 1915, Ent. Mitteil., 4 : 299. — KÔNO, 1929,

Ins. mats., 4 : 33. — BORCHMANN, 1936, Gen. Ins., (204) : 456. — SASAJI, 1986, Mem. Fac. Educ., Fukui Univ., (2) 36 : 13. f. *abdominalis* KÔNO, 1929, Ins. mats., 4 : 33 ; f. *flavipes* KÔNO, 1929, Ins. mats., 4 : 33 ; f. *kikuchii* KÔNO, 1929, Ins. mats., 4 : 34.

Anisostira rugipennis : BORCHMANN, 1936, Gen. Ins., (204) : 455. — CHÛJÔ, 1959, Mem. Fac. Liberal Arts & Educ., Kagawa Univ., 2 (69) : 9. Other references are omitted.

Specimens examined : 17 exs. ; Yangmingshan, Wulai, Paling, Wushe, Nanshanchi, Shanping.

Distribution : Taiwan (new record) ; Japan (Ryukyu Is.).

Genus *Exostira* BORCHMANN, 1925

Exostira BORCHMANN, 1925, Treubia, 6 : 353.

Type species : *Exostira sellata* BORCHMANN, 1925.

1. *Exostira punctator* BORCHMANN, 1930

Exostira punctator BORCHMANN, 1930, Phil. J. Sci., 41 : 514. — BORCHMANN, 1936, Gen. Ins., (204) : 422.

Specimens examined : 9 exs. ; Lalashan, Paling, Shanping, Tenghsi.

Distribution : Taiwan.

Genus *Taiwanolagria* gen. nov.

Type species : *Taiwanolagria merkli* sp. nov.

1. *Taiwanolagria merkli* sp. nov.

Genus *Hosohamudama* gen. nov.

Type species : *Hosohamudama sasajii* sp. nov.

1. *Hosohamudama sasajii* sp. nov.
2. *Hosohamudama miyakei* sp. nov.
3. *Hosohamudama abnormalis* (KÔNO, 1929), comb. nov. (Pl. 5, fig. 18)

Arthromacra abnormalis KÔNO, 1929, Ins. mats., 4 : 31. — BORCHMANN, 1936, Gen. Ins., (204) : 184. — CHÛJÔ, M.T., 1985, Coleopt. Japan Col., 3 : 343, Pl. 58, fig. 14.

Specimens examined : 2 exs. ; Alishan, Tsuifeng.

Distribution : Taiwan ; Japan (Ryukyu Is.) [dubious record by M.T. CHÛJÔ]

References

BORCHMANN, F., 1909 (1908). Neue afrikanische Lagriiden aus dem Museum in Genua. Bull. Soc. ent Ital., (40) : 208–219.

—— 1910. Nilionidae, Othniidae, Aegialitidae, Petriidae, Lagriidae. In JUNK, W. et al. (eds.), Coleopt. Catalogus, (2) : 1–32. W. Junk, Berlin.

—— 1912. H. SAUTER's Formosa-Ausbeute, Lagriidae, Alleculidae, Cantharidae (Col.). Supplementa Entomologica, Deutsch. ent. Mus., (1) : 6–12. Berlin-Dahlem.

—— 1915a. Die Lagriinae (Unterfamilie der Lagriidae). Archiv für Naturg., 81 A (6): 46–186.

—— 1915b. Eine neue Gattung der Statirinae. Ent Mitteil., 4: 296–299.

—— 1925. Neue Heteromeren aus malayischen Gebiete. Treubia, 6: 329–354.

—— 1930. Die Lagriiden-fauna der Philippinen. Phil. J. Sci., 41 (4): 403–533, 1 pl.

—— 1936. Coleoptera Heteromera Fam. Lagriidae. In WYTSMANN, P. (ed.), Gen. Ins., (204): 1–561, 9 pls. Louis Desmet-Verteneuil, Bruxelles.

CHÛJÔ, M., 1959. Coleoptera of the Loo-Choo Archipelago (I). Mem. Fac. Liberal Arts & Educ., Kagawa Univ., 2 (69): 1–15.

CHÛJÔ, M.T., 1985. Lagriidae. In KUROSAWA, Y. et al. (eds.), Coleoptera of Japan in Color, 3: 341–344. Hoikusha, Osaka.

FABRICIUS, J. C., 1775. Systema Entomologicae, 1 (2): 1–832. Lipsiae.

FAIRMAIRE, L., 1868. Notes sur les coléoptères recueillis par CHARLES COQUEREL à Madagascar et sur les côtes d'Afrique. Ann. Soc. ent Fr., (4) 8: 735–820.

—— 1882. Coléoptères hétéromères de Sumatra. Notes Leyd. Mus., 4: 219–265.

—— 1886. Description de coléoptères de l'intérieur de la Chine. Ann. Soc. ent. Fr., (6) 6: 303–356.

KIRBY, W., 1837. Family Stenochiadae [sic]. In RICHARDSON, J. et al. (eds.), Fauna Boreali-Americana etc.: 238–239. Norwich.

KÔNO, H., 1929. Die Lagriiden Japans (Col.). Ins. mats., 4: 25–35.

—— 1930. *Cerogria miwai* nova speco (Col. Lagriidae). Trans. nat. Hist. Soc. Formosa, 20: 18–19.

LEWIS, G., 1895. On the Cistelidae and other heteromerous species of Japan. Ann. Mag. nat. Hist., (6) 15: 250–278 & 422–448.

—— 1896. On new species of Coleoptera from Japan, and notice of others. Ann. Mag. nat. Hist., (6) 17: 329–343.

LINNÉ, C., 1758. Systema Naturae, Tom. I, Ed. X, reform.: 1–826 (cf. 368–377). Holmiae.

MIWA, Y., 1931. A systematic catalogue of Formosan Coleoptera. Rep. Dep. Agric. Gov. Res. Inst. Taihoku, 55: 1–4 + I–XI + A–B + 1–359. Taihoku.

PIC, M., 1910. Malacodermes et hétéromères nouveaux d'Afrique et d'Asie. Le Naturaliste, 32: 259.

—— 1911a. Description brèves de vingt-huit hétéromères exotiques. Mél. exot.-ent., (1): 5–13.

—— 1911b. Coléoptères exotiques nouveaux ou peu connus. Échange, 27: 190–191.

SAY, T., 1824. LONG's second expedition etc.: 268–378 (after LE CONTE, J. L. (1869)).

SEMENOW, A., 1891. Diagnoses Coleopterorum novorum ex Asia centrali et orientali. Horae Soc. ent. Ross., 25: 262–382.

SASAJI, H., 1986. The Cucujoidea (Insecta: Coleoptera) collected by the Nagoya University Scientific Expedition to Formosa in 1984. Mem. Fac. Educ., Fukui Univ., (2) 36: 1–14.

WALKER, F., 1859. Characters of some apparently undescribed Ceylon insects. Ann. Mag. nat. Hist., (3) 3: 258–265.

WIEDEMANN, C. R. W., 1823. Zweihundert neue Käfer von Java, Bengalen und dem Vorgebirge der Guten Hoffnung. Zool. Mag., 2: 1–133.

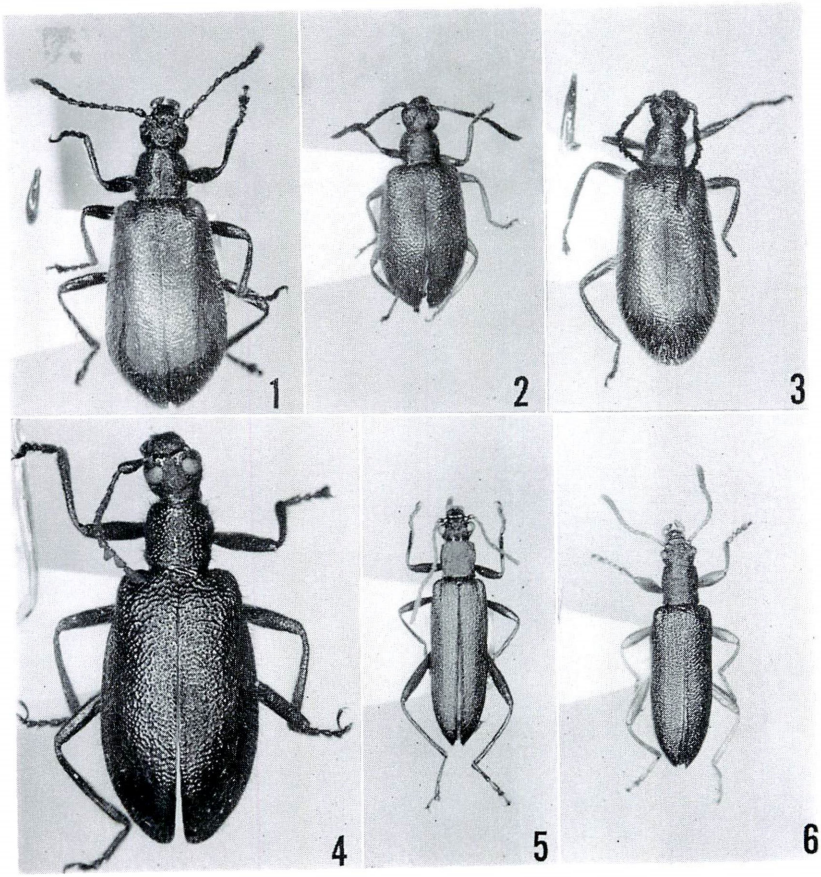
Explanation of Plates 3–6.

Pl. 3, fig. 1. *Lagria oharai* sp. nov., holotype, ♂.
2. *Lagria kondoi* sp. nov., holotype, ♂.
3. *Lagria sakaii* sp. nov., holotype, ♂.
4. *Cerogria hajimei* sp. nov., holotype, ♂.
5. *Arthromacra tsuyukii* sp. nov., holotype, ♂.
6. *Arthromacra minuta* sp. nov., holotype, ♂.

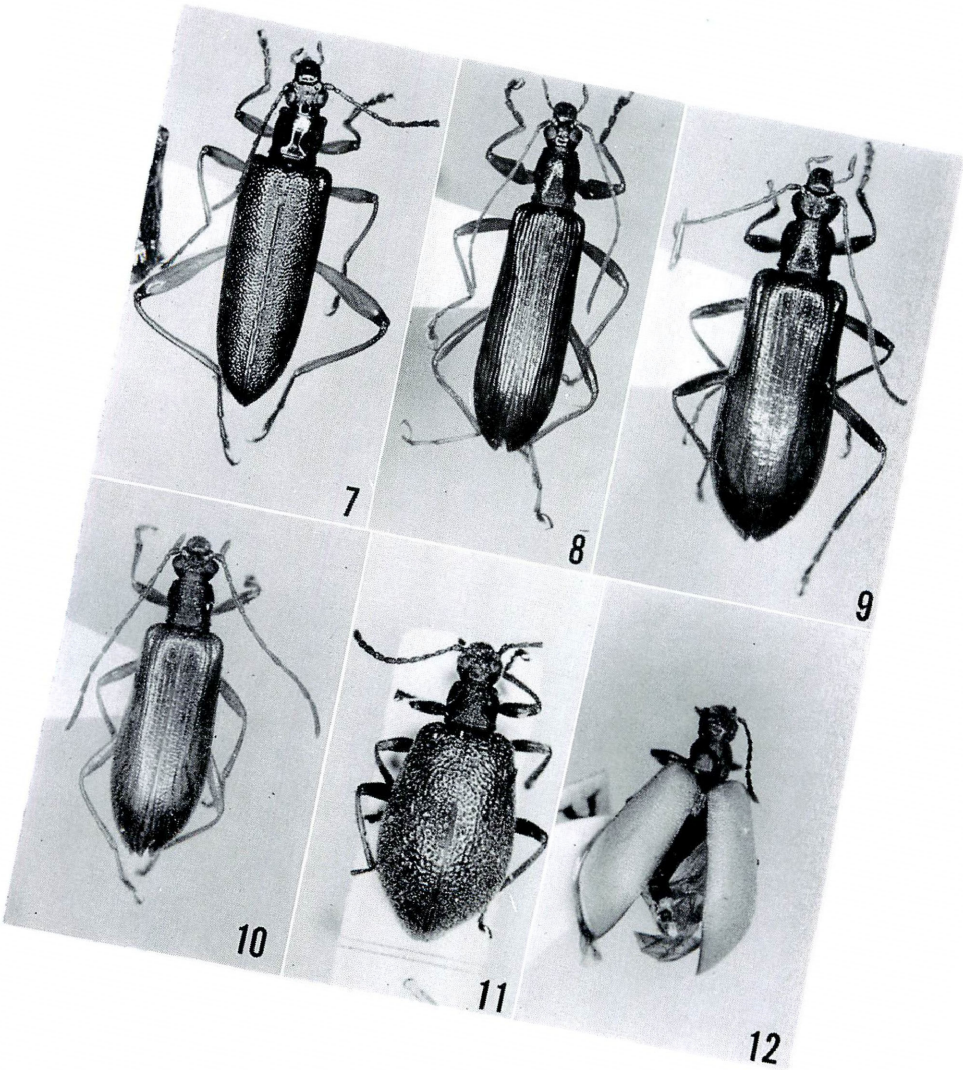
Pl. 4, fig. 7. *Chlorophila kurosawai* sp. nov., holotype, ♂.
8. *Taiwanolagria merkli* gen. et sp. nov., holotype, ♂.
9. *Hosohamudama sasajii* gen. et sp. nov., holotype, ♂.
10. *Hosohamudama miyakei* sp. nov., holotype, ♂.
11. *Lagria formosensis* BORCHMANN, lectotype, ♂.
12. *Lagria kikuchii* KÔNO, holotype, ♀.

Pl. 5, fig. 13. *Cerogria miwai* KÔNO, holotype, ♂.
14. *Xenocera ruficollis* (BORCHMANN), syntype, ♂.
15. *Sora viridimetallica* (PIC), holotype, ♂.
16. *Nemostira sinuatipes* PIC (=*Anisostira rugipennis* (LEWIS)), holotype, ♂.
17. *Anisostira rugipennis* (LEWIS), holotype, ♂.
18. *Hosohamudama abnormalis* (KÔNO), holotype, ♂.

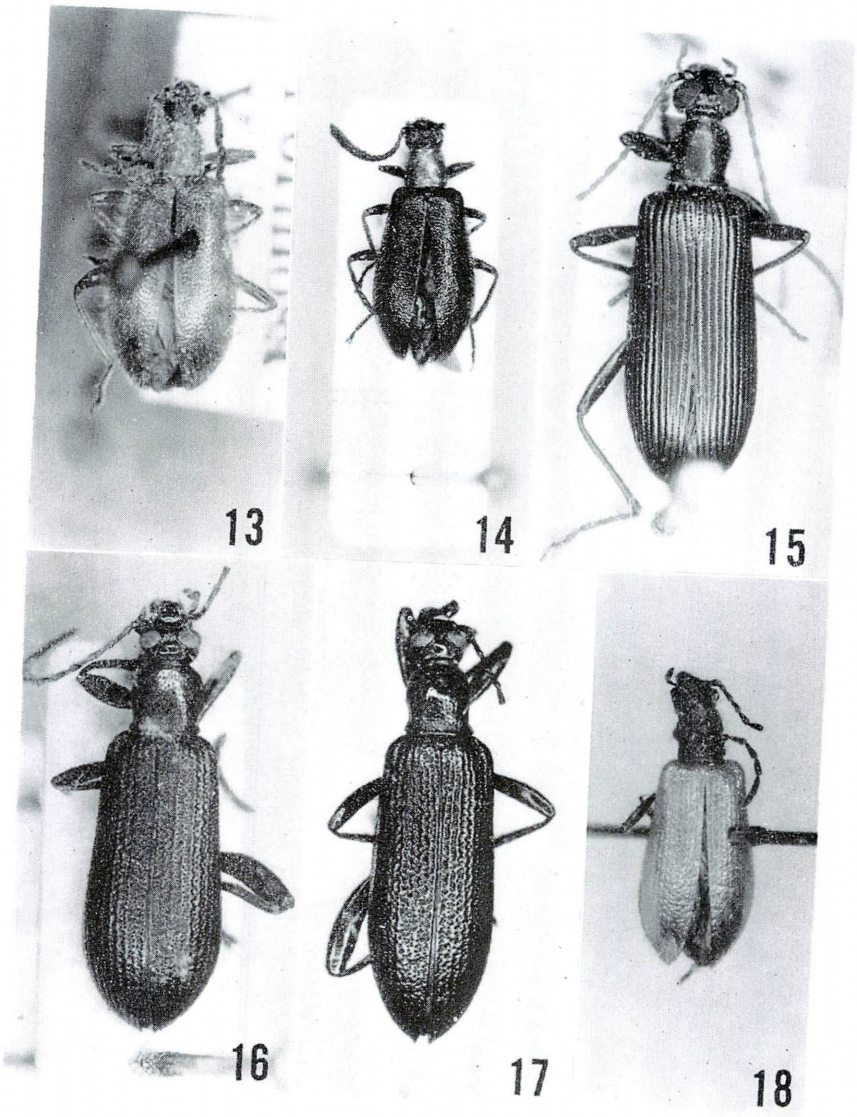
Pl. 6, fig. 19. *Lagria oharai* sp. nov., male genitalia (dorsal view).
20. Ditto (lateral view).
21. *Lagria kondoi* sp. nov., male genitalia (dorsal view).
22. Ditto (lateral view).
23. *Lagria sakaii* sp. nov., male genitalia (dorsal view).
24. Ditto (lateral view).
25. *Cerogria hajimei* sp. nov., male genitalia (dorsal view).
26. Ditto (lateral view).
27. Ditto, male antenna.
28. *Arthromacra tsuyukii* sp. nov., male genitalia (dorsal view).
29. Ditto (lateral view).
30. *Arthromacra minuta* sp. nov., male genitalia (dorsal view).
31. Ditto (lateral view).
32. *Chlorophila kurosawai* sp. nov., male genitalia (dorsal view).
33. Ditto (lateral view).
34. *Taiwanolagria merkli* sp. nov., male genitalia (dorsal view).
35. Ditto (lateral view).
36. *Hosohamudama sasajii* sp. nov., male genitalia (dorsal view).
37. Ditto (lateral view).
38. *Hosohamudama miyakei* sp. nov., male genitalia (dorsal view).
39. Ditto (lateral view).



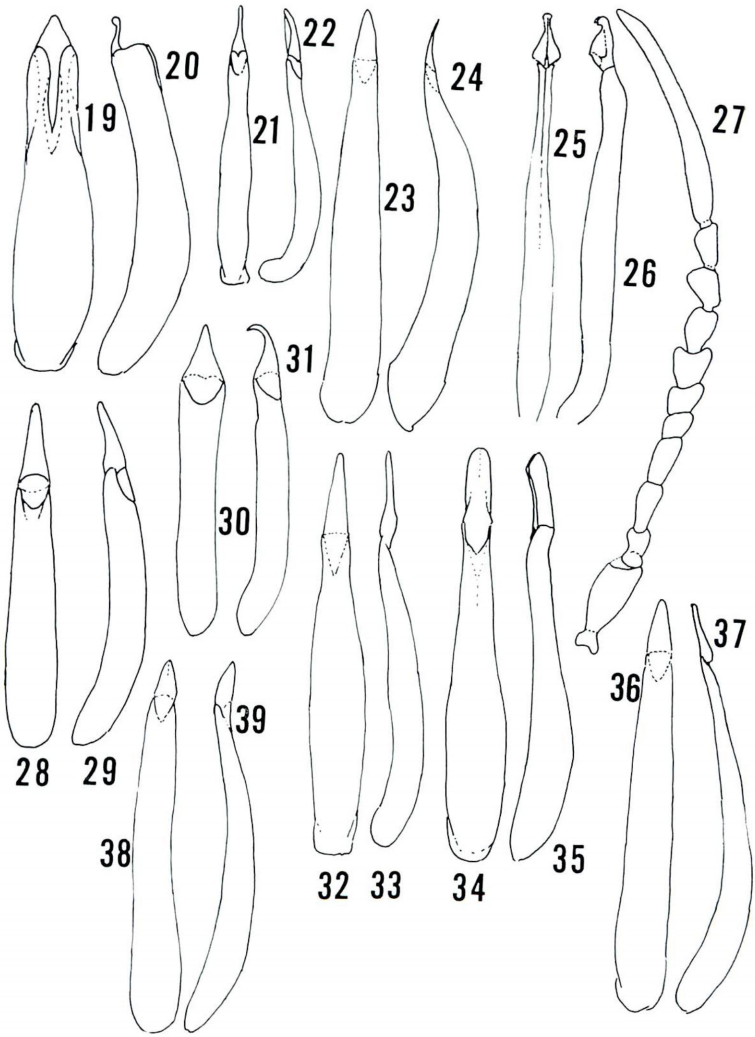
(K. Sakai photo.)



(K. SAKAI photo.)



(K. SAKAI photo.)



(K. Masumoto del.)

Notes on the Taiwanese Buprestidae (I)

Five New Species and One New Subspecies of the Genus *Coraebus* from Taiwan

(Coleoptera, Buprestidae)

By Kôyô Akiyama

15-10, Daidô 2-chôme, Kanazawa-ku, Yokohama 236

Abstract Five new species and one new subspecies of the genus *Coraebus* are described from Taiwan under the names of *Coraebus kurosawai*, *C. tazoei*, *C. lienhwachiensis*, *C. komiyai*, *C. taiwanus* and *C. sakagutii imasakai*.

Sixteen species of the genus *Coraebus* are hitherto known from Taiwan. Recently, I have had the opportunity of examining a large number of specimens from the island, and found twelve new species, one new subspecies and three new synonyms. Among them, I will describe five new species and a new subspecies in this paper. The holotypes designated in this paper are deposited in the National Science Museum (Nat. Hist.), Tokyo.

I wish to express my sincere gratitude to Dr. Yoshihiko Kurosawa, former head of the Department of Zoology, National Science Museum (Nat. Hist.), Tokyo, for his constant guidance, to Prof. Gayle H. Nelson, head of the Department of Anatomy, College of Osteopathic Medicine of the Pacific, California, for his kindness in reading the original manuscript and offering invaluable suggestions, to Mr. Kimio Masumoto, Yokohama City, for his invaluable advice, to Mr. Masao Tôyama, Nishinomiya City, for his kind help with literature, and to Mr. Kaoru Sakai for taking photographs.

Special thanks are due to Dr. Svatopluk Bílý, Department of Entomology, National Museum, Praha, Dr. Lother Zerche, Institut für Pflanzenschutzforschung, Akademie der Landwirtschaftswissenschaften der Deutschen Demokratischen Republik, Eberswalde, and Dr. Shun-Ichi Uéno, Department of Zoology, National Science Museum (Nat. Hist.), Tokyo, for their kindness in permitting me to examine the type specimens preserved in their museums, and to Dr. Lü Chin-Ming, former chief of the Lienhwachi Branch, Taiwan Forestry Research Institute, for his kind arrangement for my field survey.

I am also indebted to Dr. Yoshiaki Komiya, Tokyo University, Mr. Masahide Kubota, Noda City, Mr. Takaharu Hattori, Yokohama City, Mr. Shôichi Imasaka, Shimabara City, Mr. Masao Itô, Yokohama City, Mr. Kamoji Mikage, Ageo City, Mr. Tetsurô Mizunuma, Toyonaka City, Mr. Tatsuya Niisato, Tokyo, Dr. Sadahiro

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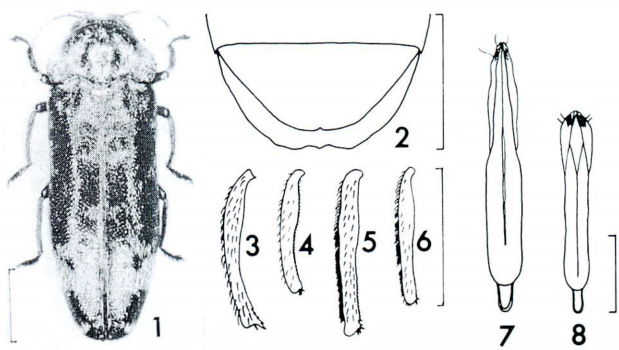
Coraebus kurosawai sp. nov.

(Figs. 1–3, 5 & 7)

Male. Body fairly elongate, longitudinally convex; dorsal surface black with blue tinge; pronotum and elytra ornamented with undulate markings of golden-yellowish pubescence; ventral surface black with slight aenescent tinge; antennae dark aeneous; legs blackish.

Head trapezoidel, convex forward, with median groove deep and running from vertex to centre of frons; vertex strongly gibbose on each side of median groove, transversely rugoso-punctate, densely clothed with golden-yellowish setae; eyes ovate, convergent above in frontal view; clypeus transverse, about 1.2 times as wide as long between antennal cavities, rugoso-punctate along clypeal suture which is straight between antennal cavities, with anterior margin arcuately emarginate, clothed with long golden-yellowish setae on upper half; antennae eleven-segmented, serrate from fourth segment, with first segment stout, about as long as and similar in shape to second, second 1.25 times as long as third, third about as long as fourth.

Pronotum transverse, about 1.7 times as wide as long, widest in basal third; sides moderately arcuate though more strongly so apically; posterior angles obtuse; anterior margin strongly arcuate; posterior



Figs. 1–8. 1–3, 5, 7. *Coraebus kurosawai* sp. nov. 4, 6, 8. *C. aeneopictus* KERREMANS, 1895.
1, dorsal view; 2, anal abdominal sternite; 3–4, left mid tibiae; 5–6, left hind tibiae; 7–8, male genitalia (dorsal view). Scales: 1, 2 mm; 2–8, 1 mm.

margin strongly bisinuate with median lobe broadly produced and subtruncate before scutellum; disc convex in the middle, and depressed on each side in posterior half; surface rather uniformly imbricate-rugose, clothed with bands of golden yellow setae, which lie along sides and medially; from in front of median band to near each lateral band there is an oblique band. Scutellum transverse, basal portion subtrapezoidal, apical portion acutely triangular with lateral margin emarginate.

Elytra about 2.2 times as long as wide, about 3.8 times as long as pronotum and widest in apical third; sides obtusely rounded at humeri, slightly sinuous to apical third, where they are broadly and arcuately rounded, then obliquely narrowed to apices, which are somewhat separately rounded, with sutural angles rounded; lateral margin finely denticulato-serrate in anterior third and near apices; disc obsoletely and broadly depressed along suture; surface coarsely imbricate-rugose, uniformly clothed with inconspicuous silver-whitish setae, and ornamented with undulate markings of golden-yellowish semirecumbent setae arranged on each elytron as follows: an irregular-sized one at the post-scutellar part and in the basal depression; a small C-shaped spot at the basal fourth near suture; a wavy band at basal third; a small spot at the half near suture; a bolder wavy band at posterior third; a wavy band just before apex.

Prosternum coarsely rugoso-punctate, with anterior margin feebly emarginate, clothed with long semirecumbent golden-yellowish setae; prosternal process subconical, slightly depressed, and sharply pointed at tip, coarsely clothed with long semirecumbent golden-yellowish setae. Abdomen beneath imbricate-punctate, clothed with scattered short semirecumbent golden-yellowish setae; the first visible ventral segment with transverse ridge in the middle, and with apex of anal abdominal sternite feebly, irregularly bisinuate (Fig. 2).

Legs short and slender, sparsely clothed with short semirecumbent golden-yellowish setae; mid tibia distinctly arcuate, with inner side near apex distinctly serrate (Fig. 3); hind tibia finely but distinctly dentate-serrate on inner margin at apical third and armed with a small acute hook on inner side near apex (Fig. 5).

Male genital apparatus long and slender (Fig. 7).

Female. More robust than male, the first visible ventral segment of abdomen without transverse ridge, and hind tibia without hook.

Length: 8.5–10.2 mm; width: 2.9–3.5 mm.

Holotype: ♂, Lushan (1,000 m in alt.), Nantou Hsien, 5. V. 1977, T. NIISATO leg. Allotype: ♀, Nanshanchi (800 m in alt.), Nantou Hsien, 18. V. 1977, T. NIISATO leg. Paratypes: 1 ♂, same data as the holotype; 1 ♀, same locality as the holotype, 3. V. 1977, K. MIKAGE leg.; 1 ♂, same locality as the holotype, 3. V. 1977, T. NII-

SATO leg.; 2 exs., same locality as the holotype, 31. VI. 1981, M. ITÔ leg.; 1 ♂, same locality as the holotype, 4. VI. 1982, J. LUO leg.; 1 ex., Mt. Nanfengshan, Kaohsiung Hsien, 18. IV. 1981, T. SHIMOMURA leg.; 2 exs., ditto, 26. V. 1981, M. ITÔ leg.; 1 ex., Wushe, Nantou Hsien, VII. 1958; 1 ex., Puli, Nantou Hsien, VI. 1959.

Remarks. This new species is somewhat allied to *C. aeneopictus* KERREMANS, 1895, from India, Tonkin and Thailand, but can be distinguished from it by the different markings on the elytra, the shape of the last abdominal sternite, the shape of the mid and hind tibiae, and the shape of the male genitalia.

Coraebus tazoei sp. nov.

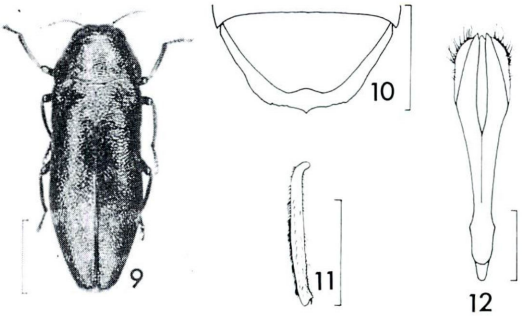
(Figs. 9–12)

Male. Body oblong and somewhat deplanate; head and pronotum cupreous with aeneous tinge; elytra cupreous, and ornamented with undulate markings of silver-whitish pubescence; ventral surface dark aeneous; antennae and legs dark cupreous.

Head trapezoidal, convex forwards; vertex with a feeble gibbosity on each side of median groove, transversely rugoso-punctate, clothed with long silver-greyish setae; frons distinctly broader than long, clothed with long silver-greyish setae; eyes ovate, subparallel with each other in frontal view; clypeus about as long as wide between antennal cavities, rugoso-punctate along clypeal suture which is straight between antennal cavities, with anterior margin arcuately emarginate, densely clothed with silver-greyish setae; antennae rather short and compact, with first and second segments stout, first about as long as second, second 1.6 times as long as third, third subequal to fourth, fourth to terminal segments serrate.

Pronotum transverse, about 1.7 times as wide as long, widest at basal third; sides moderately arcuate though more strongly so apically; posterior angles obtuse; anterior margin slightly arcuate; posterior margin strongly bisinuate, with median lobe subtruncate before scutellum; lateral margins crenulate, almost straight in lateral view; disc slightly convex anteriorly, transversely depressed along base; surface rather uniformly imbricate-rugose, sparsely clothed with silver-whitish setae. Scutellum transverse, basal portion subtrapezoidal apical portion acutely triangular with lateral margin emarginate.

Elytra about 2.4 times as long as wide, about 4.0 times as long as pronotum, and widest apical third; sides moderately rounded at humeri, slightly sinuous to just past middle where they are broadly and arcuately rounded, then obliquely narrowed to apices, which are separately and narrowly rounded; basal margins strongly bisinuate; sutural margin slightly elevated in posterior two-thirds; lateral margin finely but uniformly dentate-serrate in anterior one-fifth and posterior two-thirds;



Figs. 9–12. *Coraebus tazoei* sp. nov.
9, dorsal view; 10, anal abdominal sternite; 11, left hind tibia; 12, male genitalia (dorsal view). Scales: 9, 2 mm; 10–12, 1 mm.

disc broadly but weakly longitudinally depressed along suture; basal depression broad; surface coarsely imbricate-rugose and ornamented with undulate markings of silver-whitish semirecumbent setae arranged on each elytron as follows: a small spot at the anterior third near suture; a small spot at the half near suture; a wavy band at posterior third and another just before apex.

Prosternum coarsely rugoso-punctate, with anterior margin feebly emarginate. Prosternal process subconical, slightly depressed, and sharply pointed at tip. Prosternum and its process coarsely clothed with long semirecumbent silver-greyish setae. Abdomen beneath imbricate-punctate, with scattered short semirecumbent silver-whitish setae; anal abdominal sternite with sharply pointed projection at midline apically (Fig. 10).

Legs short and simple, with hind tibia finely but distinctly dentate-serrate on inner side of apical third (Fig. 11).

Male genitalia as in Fig. 12.

Female. More robust than male, with head and pronotum dark aeneo-cuprescent.

Length: 7.5–10.2 mm; width: 2.6–3.5 mm.

Holotype: ♂, Songkang (2,000 m in alt.), Nantou Hsien, 31. VII. 1976, K. Tazoé leg. Allotype: ♀, Palin (600 m in alt.), Taoyuan Hsien, 25. VI. 1983, J. Luo leg. Paratypes: 1 ♂, Mt. Lalashan (1,500–1,700 m in alt.), Taoyuan Hsien, 19. VI. 1982, T. Shimomura leg.; 1 ♀, Meifeng (2,100 m in alt.), Nantou Hsien, 29. VII. 1978, W. Suzuki leg.; 1 ♀, nr. Wushe (1,000 m in alt.), Nantou Hsien, VI. 1968.

Remarks. This is a unique species in the genus *Coraebus*, and it apparently resembles a number of species in the genus *Cisseis*.

Coraebus lienhwachiensis sp. nov.

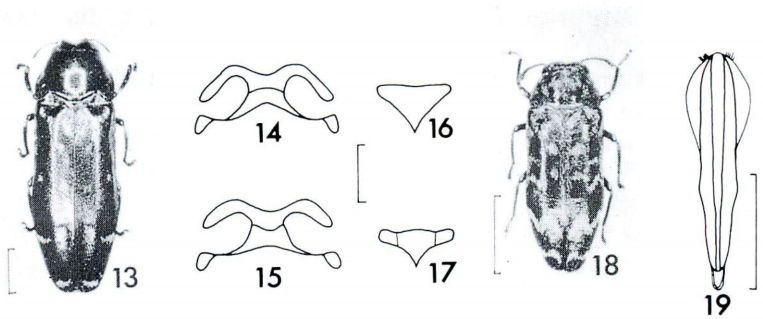
(Figs. 13–14 & 16)

Female. This new species is closely allied to *Coraebus salvazai* BOURGOIN, 1922, known from Laos, but can be distinguished from the latter by the following characteristics: 1) Body darker; 2) ventral surface black with blueish tinge, while in *C. salvazai,* it is black with blue-greenish tinge; 3) body more robust, about 2.87 times as long as wide, while in *C. salvazai,* it is about 3.20 times as long as wide; 4) clypeal suture ∩-shaped between antennal cavities, while in *C. salvazai,* it is ∪-shaped between antennal cavities (Figs. 14–15); 5) antennae with second segment 2.0 times as long as third, while in *C. salvazai,* it is 1.6 times as long as third; 6) scutellum triangular, without longitudinal groove, while in *C. salvazai,* it is subpentagonal, with two longitudinal grooves (Figs. 16–17); 7) elytra more robust, about 2.2 times as long as wide and about 4.2 times as long as pronotum, while in *C. salvazai,* they are about 2.5 times as long as wide and about 3.9 times as long as pronotum; 8) elytra ornamented with wavy band at the posterior one-fourth, while in *C. salvazai,* the band is zigzag.

Length: 10.8 mm; width: 3.8 mm.

Holotype: ♀, Lienhwachi (600 m in alt.), Nantou Hsien, 12. V. 1975, M. KUBOTA leg.

Remarks. Only one female specimen is available for study. *Coraebus lienhwachiensis* closely resembles *C. salvazai,* but appears to be distinct as stated above. The unique type of this interesting species was offered for this study through the courtesy of Mr. MASAHIDE KUBOTA.



Figs. 13–19. 13–14, 16. *Coraebus lienhwachiensis* sp. nov. 15, 17, *C. salvazai* BOURGOIN, 1922. 18–19. *C. komiyai* sp. nov.
13, 18, dorsal views; 14–15, clypei; 16–17, scutella; 19, male genitalia (dorsal view). Scales: 13, 18, 2 mm; 19, 1 mm; 14–17, 0.5 mm.

Coraebus komiyai sp. nov.

(Figs. 18 & 19)

Male. Body small and somewhat robust; frons dark aeneous with green tinge; dorsal surface black with cyaneous tinge; elytra ornamented with undulate markings of silver-whitish pubescence; ventral surface blackish, with slight aenescent tinge; antennae and legs blackish.

Head trapezoidal, convex forward; vertex simply convex, surface coarsely imbricate-rugose, and clothed with long silver-whitish setae; frons distinctly broader than long, clothed with long silver-whitish setae; eyes elliptical, subparallel with each other in frontal view; clypeus rather transverse, about 1.2 times as long as wide (measured between antennal cavities), rugoso-punctate along clypeal suture which is straight between antennal cavities, with anterior margin arcuately emarginate; antennae rather short and compact, clothed with long silver-whitish setae; first and second segments stout, second 1.4 times as long as third, third subequal in length to fourth, fourth to terminal segments serrate or subpectinate.

Pronotum transverse, about 1.8 times as wide as long, widest in basal half; sides moderately arcuate, though more strongly converging but not more arcuate apically; posterior angles obtuse; anterior margin slightly arcuate; posterior margin strongly bisinuate and median lobe broadly arcuate medially, very finely and densely crenulate; lateral margin densely and rather uniformly dentate-serrate (not crenulate); disc slightly convex anteriorly, transversely depressed along base, depressions extending anteriorly towards middle of each side; surface rather uniformly imbricate-punctate, and tuberculate in the middle, clothed with silver-whitish setae. Scutellum transverse, basal portion subtrape zoidal, apical portion acutely triangular and laterally emarginate.

Elytra about 2.1 times as long as wide, about 4.1 times as long as pronotum and widest at humeri and just behind middle; surface obtusely rounded at humeri, slightly sinuous to behind middle, where they are broadly and arcuately rounded, then obliquely narrowed to apices, which are denticulate and somewhat separately rounded, with the sutural angles rounded; lateral margin finely dentate-serrate in the anterior fourth; disc obsoletely and broadly depressed along suture; surface coarsely imbricate-rugose, densely clothed with inconspicuous semirecumbent short and slight silver-whitish setae and ornamented with undulate markings of silver-whitish semirecumbent setae arranged on each elytron as follows: an irregular sized one at post-scutellar part and in basal depression; a small spot at basal fourth near suture; a wavy

band just behind basal third, that is abruptly connected along the suture to the next; an irregular wavy band at middle; a strongly zigzag band at posterior third and a wavy band just before apex.

Body beneath entirely but sparsely clothed with inconspicuous semirecumbent silver-greyish setae. Prosternum coarsely rugoso-punctate, with anterior margin feebly emarginate; prosternal process broad, subconical, slightly depressed, and sharply pointed at tip. Abdomen imbricate-punctate, with apex of last visible sternite truncate.

Legs short and slender, with apex of inner side of each hind tibia armed with a small acute hook.

Male genitalia as in Fig. 11.

Female. Differs from male as follows: more robust in body shape; pronotum and elytra ornamented with undulate markings clothed with bicolorous long setae which are golden-greyish and silver-whitish; hind tibia without hook.

Length: 4.8–6.8 mm; width: 1.9–2.5 mm.

Holotype: ♂, Songkang (2,000 m in alt.), Nantou Hsien, 2. VII. 1983, J. Luo leg. Allotype: ♀, Mt. Alishan (2,100 m in alt.), Chiayi Hsien, 9–12. VII. 1973, T. Mizunuma leg. Paratypes: 1♂, same locality as the holotype, 20. VII. 1983, J. Luo leg.; 1♂, same locality as the holotype, 21. V. 1983, J. Luo leg.; 1♀, Meifeng (2,100 m in alt.), Nantou Hsien, 27. IV. 1977, Y. Komiya leg.; 1♂, ditto, 29. VIII. 1978, W. Suzuki leg.; 1♂, Mt. Habonshan, Nantou Hsien, 2. VIII. 1983, J. Luo leg.; 1♀, Nanshanchi (800 m in alt.), Nantou Hsien, 21. V. 1974, native collector leg.

Remarks. This species is somewhat similar to *C. formosanus formosanus* Miwa et Chûjô, 1935, from the same island, but can be easily distinguished from the latter by the smaller body, the prehumeral carina being absent, the different markings of the elytra, the shape of last visible abdominal sternite, and the shape of the male genitalia.

Coraebus sakagutii imasakai subsp. nov.

(Fig. 20–21 & 23)

Male. Similar to the nominotypical race known from central Japan, but differs from it in the shape of the prosternal process (Figs. 21–22) and the shape of the male genitalia (Figs. 23–24).

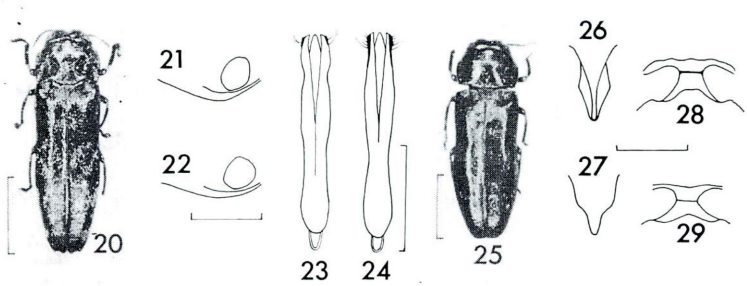
Length: 6.2 mm; width: 1.8 mm.

Holotype: ♂, Nanshanchi (800 m in alt.), Nantou Hsien, 13. IV. 1975, S. Imasaka leg.

Coraebus taiwanus sp. nov.

(Figs. 25–26 & 28)

Female. This new species is closely allied to *C. iriei iriei* Y. Kurosawa, 1985, from the Ryukyus, Japan, but can be distinguished by the following characteristics: 1) body blackish, while in *C. iriei iriei*, it is



Figs. 20–29. 20–21, 23. *Coraebus sakagutii imasakai* subsp. nov. 22, 24. *C. sakagutii sakagutii* Y. KUROSAWA, 1963. 25–26, 28. *C. taiwanus* sp. nov. 27, 29. *C. iriei iriei* Y. KUROSAWA, 1985.
20, 25, dorsal views; 21–22, prosternal processes (lateral view); 26–27, ditto (ventral view); 23–24, male genitalia (dorsal view); 28–29, clypei (frontal view). Scales: 20, 25, 2 mm; 23–24, 1 mm; 21–22, 26–29, 0.5 mm.

dark aeneous; 2) head and clypeus clothed with silver-whitish setae, while in *C. iriei iriei,* they are clothed with dark greyish setae; 3) clypeal suture bolder (Figs. 28–29); 4) antennae with second segment 1.2 times as long as third, while in *C. iriei iriei,* it is 1.4 times as long as third; 5) dorsal surface of elytra sparsely clothed with silver-greyish setae, while in *C. iriei iriei,* it is entirely and uniformly clothed with semirecumbent bicolorous setae which are silver-whitish or silver-greyish and pale brown setae; 6) prosternal process slender (Figs. 26–27).

Length: 5.6 mm; width: 1.9 mm.

Holotype: ♀, Juisui, Hualien Hsien, 16–20. VI. 1973, T. MIZUNUMA leg.

Remarks. Only one female specimen is available for study. *Coraebus taiwanus* closely resembles *C. iriei iriei,* but appears to be distinct as stated above. The unique type of this interesting species was offered for this study through the courtesy of Mr. TETSURÔ MIZUNUMA.

References

AKIYAMA, K., 1986. Notes on two species of the genus *Coraebus* from Taiwan. Coleop. News, Tokyo, 71: 7–8 (In Japanese).

BAUDON, A., 1961. Contribution à l'etude des Buprestides du Laos. Bull. Soc. r. Sci. nat. Laos, 1: 57–89.

—— 1963. Addenda à la liste des Buprestidae du Laos. Ibid., 9: 47–74.

—— 1968. Catalogue commenté des Buprestidae récoltés au Laos. Deuxième partie. Ministère de l'Information, Vientiane, Laos, 190 pp.

BOURGOIN, A., 1922. Diagnoses préliminaires de Buprestides (Col.) de l'Indo-Chine française. Bull. Soc. ent. Fr., 1922: 20–24.

—— 1924. Diagnoses préliminaires de Buprestides nouveaux de l'Indo-Chine française. Ibid., 1924 : 178–179.

—— 1925. Ditto. Ibid., 1925 : 111–112.

DESCARPENTRIES, A. & A. VILLIERS, 1963. Catalogue raisonné des Buprestidae l'Indochine XIII. Coraebini. Ann. Soc. ent. Fr., (N. S.), 3 : 471–492.

DEYROLLE, H., 1864. Description des Buprestides de la Malaisie recueillés par M. WALLACE. Ann. Soc. ent. Belg., 8 : 1–312.

KERREMANS, Ch., 1895. Buprestides Indo-Malais. Ann. Soc. ent. Belg., 39 : 192–224.

—— 1912. H. SAUTER's Formosa-Ausbeute. Arch. f. Naturg., 78 A (7) : 203–209.

KUROSAWA, Y., 1953. Synonymies and identifications of genus *Coraebus* from Eastern Asia, with descriptions of several new forms (Coleoptera). Bull. natn. Sci. Mus., Tokyo, (33) : 96–109.

—— 1963. Buprestid-fauna of Eastern Asia (5) (Coleoptera). Ibid., 6 : 90–111.

—— 1985. Notes on the Oriental species of the coleopterous family Buprestidae (IV). Ibid., (A), 11 : 141–170.

—— 1985. Buprestidae. In KUROSAWA, Y. et al. (eds.), The Coleoptera of Japan in Color, 3 : 2–37, Pls. 1–7 (In Japanese).

LEWIS, G., 1892. On the Buprestidae of Japan. J. Linn. Soc. London, 24 : 327–338.

MIWA, Y. & M. CHÛJÔ, 1935. Some new buprestids from the Japanese Empire. Ent. World, Tokyo, 3 : 270–282, Pl. 105.

—— 1936. Catalogue Coleopterorum Japonicorum, Buprestidae, Taihoku, Formosa, 34 (26+4+3+add. 1) pp.

—— 1940. An iconography of some new and rare species of Buprestidae from the Japanese Empire. Nippon no Kôchû, 3 : 53–74, Pl. 7.

OBENBERGER, J., 1924. Symbolae ad specierum regions palaearcticae buprestidarum cognitionem. Job. Sbornik Čs. Spol. ent., 1924 : 6–59.

—— 1924. Kritische Studien über die Buprestiden (Col.). Arch. f. Naturg., 90 A (3) : 1–171.

—— 1934. De generis *Coraebus* CAST. et GORY speciebus novis. Acta ent. Čechoslov., 31 : 39–44.

—— 1935. Buprestidae, 4. In JUNK, W. & S. SCHENKLING (eds.), Coleopterorum Catalogus, pars 143 : 785–934.

—— 1944. De tribus generis *Coraebus* LAP. speciebus novis (Col. Bupr.). Acta Soc. ent. Boh., 41 : 119–122.

SAUNDERS, E., 1866. Catalogue of Buprestidae collected by the late M. MOUHOT, in Siam, &c., with description of new species. Trans. ent. Soc. London (3) 5 : 297–322.

—— 1873. Description of Buprestidae collected in Japan by GEORGE LEWIS. J. Linn. Soc. London, 11 : 509–523.

THÉRY, A., 1895. Descriptions de quelques buprestides nouveaux de Ho-Chan (Chine). Bull. Soc. ent. Fr., 1895 : 111–115.

—— 1927. Études sur les coléoptères buprestides appartenant aux collections des grands musées (1re Note : British Museum). Ann. Soc. ent. Fr., 96 : 247–261.

THOMSON, J., 1879. Typi buprestidarum musaei Thomsoniani, Appendix 1a, Paris. 87 pp.

Study of Asian Cetoniinae (III)

Notes on *Trigonophorus* with Description of a New Species from Southwest China.

(Coleoptera, Scarabaeidae)

By KIMIO MASUMOTO[1] and KAORU SAKAI[2]

Abstract A new Southwest Chinese species, *Trigonophorus dechambrei* is described, and *Trigonophorus dilutus* BOURGOIN, 1914, originally described from Taiwan is regarded as a good species.

Introduction

The genus *Trigonophorus* HOPE, 1831 comprises 11 species from the Oriental Region. BOURGOIN (1914) described two species of the genus from Taiwan: *T. dilutus* and *T. varians*. Later, MIKŠIĆ (1977) regarded the latter as a subspecies of *T. rothschildi* and the former, as a synonym of *T. rothschildi varians*.

Through the courtesy of Dr. ROGER-PAUL DECHAMBRE of the Muséum National d'Histoire Naturelle, Paris, the present authors have had the opportunity to examine an unknown *Trigonophorus* from Sichuan, Southwest China, and they have concluded that it is new to science. One of the authors, MASUMOTO, on his occasion of visiting the Muséum National d'Histoire Naturelle, Paris, and the British Museum (Nat. Hist.), London, had examined each type specimen of these two species, and he confirmed that *Trigonophorus dilutus* is not a synonym of *T. rothschildi varians*, but a good species.

Before going further in details, the authors wish to express their sincere gratitude to Dr. ROGER-PAUL DECHAMBRE (MNHN), Mr. LES JESSOP, British Museum (Nat. Hist.), London, and Dr. YOSHIHIKO KUROSAWA, former chief of Zoology, National Science Museum (Nat. Hist.), Tokyo, for their invaluable consideration and kind assistance.

The holotype to be described is preserved in the collection of the Muséum National d'Histoire Naturelle, Paris.

Trigonophorus dechambrei sp. nov.

(Figs. 1, 2, 9, 10, 17, 21 & 25)

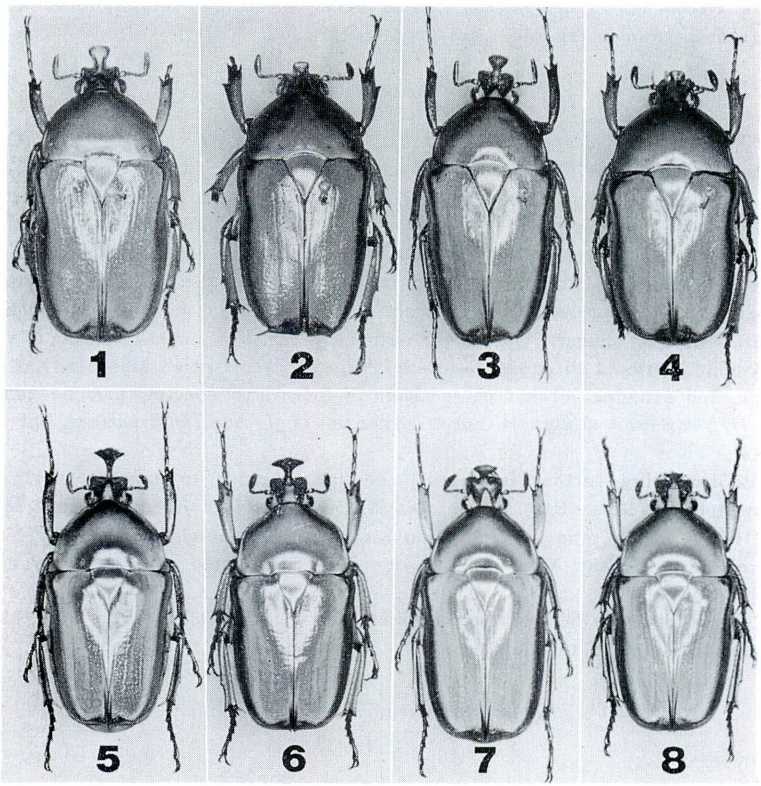
Metallic green, with femora, tibiae and lateral portions of metacoxae

[1] No. 505, NIC, 1-1-1, Iwamacho, Hodogaya, Yokohama 240, Japan.
[2] 2-9-18, Higashiyaguchi, Ota, Tokyo 146, Japan.
[Ent. Rev. Japan, Vol. XLIII, No. 1, pp. 63-68, June, 1988]

partly reddish brown, antennae and tarsi blackish brown.

Male : Head rather elongate, fairly distinctly, broadly concave in the middle, nearly subparallel-sided and irregularly granulate anteriorly; clypeal process nearly upright, gradually widened from the base to the apex, which is about twice as wide as base, arcuate forwards and nearly truncate apically; lateral margins constricted in the middle (before eyes), shortly but distinctly ridged; posterior cephalic process somewhat linguiform, slightly pointed at apex, weakly sinuate near base, about 0.3 times length of head.

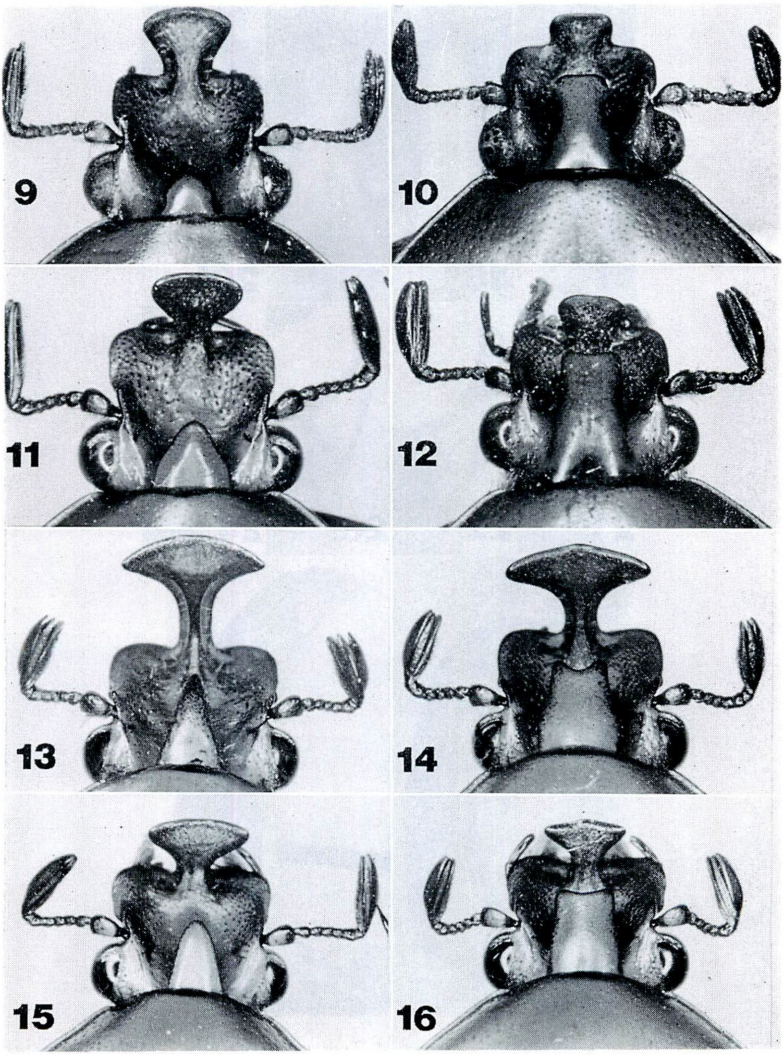
Pronotum 1.5 times as wide as long, feebly coriaceous, scattered with punctures, those in the middle rather sparse and those in lateral portions



Figs. 1–8. Dorsal views of *Trigonophorus* spp.

1, *T. dechambrei*, ♂, holotype; 2, ditto, ♀, paratype; 3, *T. gracilipes*, ♂; 4, ditto, ♀; 5, *T. rothschildi varians*, ♂; 6, ditto, ♀; 7, *T. dilutus*, ♂; 8, ditto, ♀.

fairly close and coarse; lateral margins moderately rounded, slightly sinuate in basal ⅓, with marginal groove rather fine and disappearing before hind angles. Scutellum elongate triangular with rounded base,

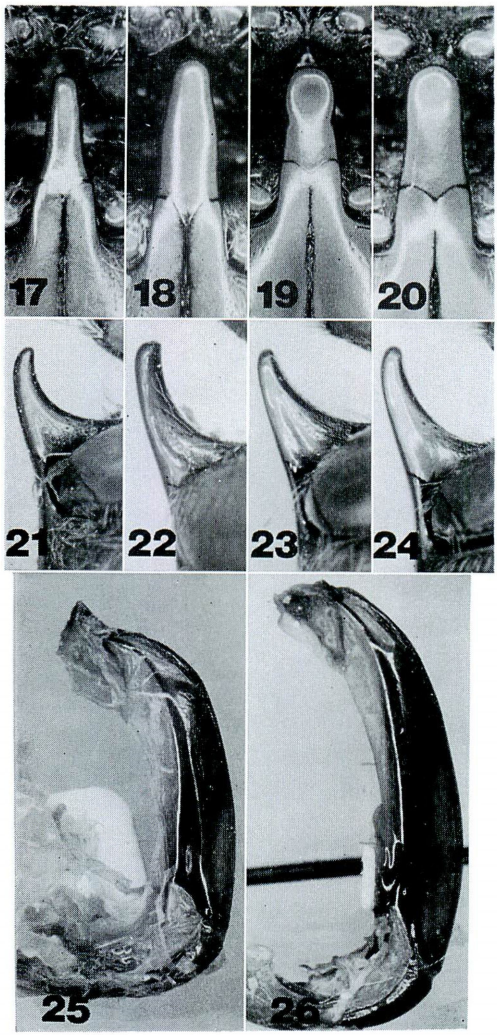


Figs. 9–16. Heads of *Trigonophorus* spp.

9, *T. dechambrei*, ♂, holotype; 10, ditto, ♀, paratype; 11, *T. gracilipes*, ♂; 12, ditto, ♀; 13, *T. rothschildi varians*, ♂; 14, ditto, ♀; 15, *T. dilutus*, ♂; 16, ditto, ♀.

nearly flat and almost impunctate.

Elytra about 1.3 times as long as wide; disc finely punctate-striate, punctures becoming weaker and more irregular posteriorly; intervals



Figs. 17–26. 17–20, Mesosternal processes of *Trigonophorus* spp.; 21–24, Mesosternal processes (lateral view) of *Trigonophorus* spp.; 25–26, Male genitalia (lateral view) of *Trigonophorus* spp.

17, 21, 25, *T. dechambrei*, ♂, holotype; 18, 22, 26, *T. gracilipes*, ♂; 19, 23, *T. rothschildi varians*, ♂; 20, 24, *T. dilutus*, ♂.

scattered with punctures, which are a little smaller than those on striae, shallowly and irregularly rugoso-punctate apically and posteriorly; sutural portion raised in posterior half; apices hardly produced posteriad.

Mesosternal process extremely elongate-triangular, with apex rounded, curved in lateral view (see Fig. 21); metasternum punctate laterally, sparsely clothed with long, pale hairs, with a shallow median groove. Abdomen glabrous and impunctate.

Protibiae slender, with the apex of outer margin is acute; mesotibiae without outer tooth.

Female : Head fairly shorter, clypeal process short and subrectangular; posterior cephalic process oblong, a little more than 0.5 times length of head. Protibiae bolder and armed with two outer teeth; mesotibiae armed with an outer tooth.

Body length: 25.0–25.5 mm.

Holotype: ♂, Sze-Tchuen (Sichuan), China. Paratypes: 4 ♂♂, 2 ♀♀, Sze-Tchuen, China.

Notes. This new species resembles *Trigonophorus gracilipes* WESTWOOD, 1845, from India, but can be distinguished from the latter by the body smaller and more robust, the clypeal process wider at the base, the elytra more clearly punctate, less strongly indented near the base and less distinctly narrowed apically, with the apices hardly produced posteriad, and the sides not crenulate but simply declined to the lateral margins, the mesosternal process more slender and more distinctly curved in lateral view, and the male genitalia shorter and more strongly curved in lateral view.

This new one probably also resembles *T. xizangensis* ZHANG et MA, 1981, from Xizang (Tibet), but may be distinguished from the latter by the differently shaped clypeal process and mesosternal process.

Trigonophorus dilutus BOURGOIN, 1914

(Figs. 7, 8, 15, 16, 20 & 24)

Trigonophorus dilutus BOURGOIN, 1914, Bull. Soc. ent. Fr., p. 438.

Trigonophorus rothschildi varians: MIKSIĆ, 1977, Mon. Cetoniinae paläark. orient. Reg. (nec BOURGOIN, 1914).

MIKŠIĆ (1977) regarded the species as a synonym of *Trigonophorus rothschildi varians* BOURGOIN, but, as stated in the introduction, this is a good species as shown in the following comparison table.

Comparison table

	Trigonophorus rothschildi varians BOURGOIN, 1914	*Trigonophorus dilutus* BOURGOIN, 1914
Body length	27.6–35.4 mm	25.4–28.5 mm

Clypeal process	length nearly same as that of head	length clearly shorter than that of head
	helve longer	helve shorter
Protibiae	closely rugoso-punctate	sparsely rugoso-punctate
Lateral margin of pronotum	more strongly angulate	less strongly angulate
Mesosternal process	shorter; barely reaching posterior margin of procoxae	longer; far beyond posterior margin of procoxae

References

Arrow, G. J., 1910. The Fauna of British India, including Ceylon and Burma. Coleoptera-Lamellicornia (Cetoniinae and Dynastinae): 322 pp., 2 pls., London.

Bourgoin, A., 1914. Description de deux *Trigonophorus* nouveaux de Formose. (Col. Scarabaeidae). Bull. Soc. ent. Fr., 1914: 437–439.

Ma, W.-Z. & Zhang, Y.-W., 1981. Coleoptera: Cetoniidae, Trichiidae. In: Zhongguo Kexueyuan Qingzang Gaoyuan Zonghe Kexue Kaocha Dui, Xizang Kunchong. Vol. 1, i–xi: 600pp., Science Press, Peking.

Mikšić, R., 1977. Monographie der Cetoniinae der paläarktischen und orientalischen Region, Coleoptera: Lamellicornia, 2. Systematischer Teil: Gymnetini (Lomapterina, Clinteriina), Phaedimini, Gnathocerini, Heterorrhinini: 400 pp., 15 pls., Sarajevo.

Westwood, J. O., 1845. On the Asiatic Goliathideous genera *Trigonophorus* and *Rhomborrhina*. Trans. ent. Soc. London, 1845: 87–91.

Notes on the Genus *Batristilbus* RAFFRAY (Coleoptera, Pselaphidae)

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Synopsis. A new myrmecophilous pselaphid beetle, *Batristilbus trichothorax*, is described. Though resembling *B. politus* (SHARP), the present species is distinguished from it by the state of the body pubescence. The male of *B. concolor* is also described in the present paper.

The members of the genus *Batristilbus* are peculiar in having their bloody colouration and their habitat. The genus was proposed by RAFFRAY (1909) for two Japanese species. It is one of the typical myrmecophilous genera of Japan and is usually found in the nest or its surroundings of the genus *Lasius* of Formicidae. In recent studies, I have recognized a new species of *Batristilbus* collected by Mr. HIROSHI KUBOTA from ant nest at Jinmu-ji temple, Kanagawa Prefecture, Central Honshu. The new species is characterized by medium sized body, sparse pubescence on dorsum and by rather small hind-body. It should be placed near *B. politus* (SHARP) by reason of male genital organ. I intend to describe the species together with the male of *B. concolor* (SHARP) which has hitherto been unknown and the additional data about *B. politus*.

Before going further, I am most grateful to Mr. HIROSHI KUBOTA for his kindness in giving me the opportunity of study of the interesting specimens. Thanks are also due to Prof. JUN-ICHI AOKI of the Department of Soil Zoology, Yokohama National University, for his constant guidance and to Prof. Dr. KOHEI SAWADA of the Shukugawa Gakuin Jr. College, for his kindly reading the manuscript.

Batristilbus concolor (SHARP, 1883)

(Figs. 1–3)

Batrisus concolor SHARP, 1883, Trans. ent. Soc. London, 1883: 310; type-depository: Department of Entomology, British Museum, London.

Batristilbus concolor: KUBOTA, 1956, Kanagawa Chûhô, 12: 2, fig.; JEANNEL, 1958, Mém. Mus. Hist. nat. Paris, (A) 18: 44; TANOKUCHI, 1979, Nature and Insects, 14 (10): 30, fig. 2.

[Ent. Rev. Japan, Vol. XLIII, No. 1, pp. 69–76, June, 1988]

Lengh: 2.4–2.5 mm (from apical margin of clypeus to apex of last abdominal tergite).

Mid sized species of attenuated habitus, with smoothly convex pronotum and sparse pubescence on dorsum consisting of each hair very short; abdominal sternite I producing a small protuberance, which is semicircle; PW/HW 0.95–0.96, PW/PL 1.04, PW/PA 1.85–1.86, PW/PB 1.52–1.53, PB/PA 1.20–1.21, EW/PW 1.68–1.69, EW/EL 1.15–1.16, EA/EB 2.28–2.29, AW/AL 2.1, EW/AW 1.04–1.05. Male characters as follows: mesotrochanter larger in male than in female, with a minute uncinate spine at base; mesotrochanter producing an uncinate process in the middle portion.

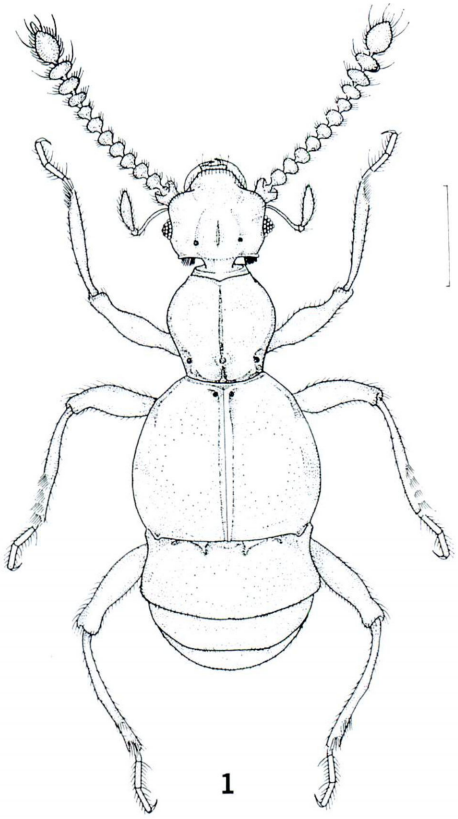
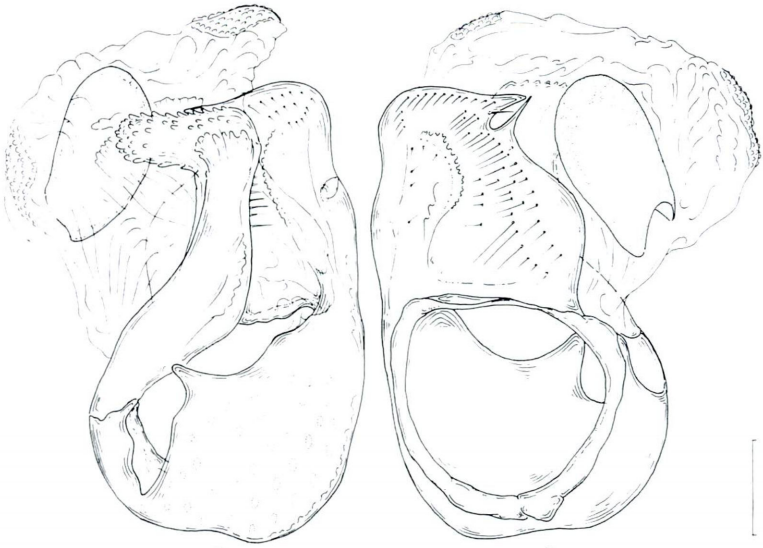


Fig. 1. *Batristilbus concolor* (SHARP), ♂, from Odawara. Scale: 0.5 mm.

Male genital organ fairly large, robust and rather heavily sclerotized. Aedeagus slightly longer than elytron, thick, attenuated and hardly arcuate in profile, apical lobe prolonged with a large apical orifice, right face of which producing an elongate process; basal part large, subquadrate and basal bulb depressed; apical border oblique, emarginate with a deep rent in right side, which produces an arcuate long process with a bent apex; basal orifice very large and circular, with walls thin; apical lobe laminate and narrowed apically with a bicuspidate tip bearing a short seta. Inner sac armed with a fairly large copulatory piece, which is one-third as long as aedeagus and spatulate with rounded apex.

Specimens examined. 1♂, Odawara, Kanagawa Pref., 5–V–1980, M. KUBOTA leg.; 1♂, 3♀♀, Kuno, Odawara City, Kanagawa Pref., 29–VII–1980, H. SAKAI leg., 2♀♀, 2–V–1982, H. KUBOTA leg.; 2♂♂, 4♀♀, Mt. Daiyû-zan, Odawara City, Kanagawa Pref., Central Honshu, 30–V–1987, Y. TANOKUCHI leg.



Figs. 2–3. Male genitalia of *Batristilbus concolor* (SHARP), from Odawara. 2, dorsal view; 3, ventral view. Scale: 0.1 mm.

Notes. This is interesting species different from the following two species, since it bears both specialized and regressive characters. In the external features, *B. concolor* resembles to the other known species except for the absence of lateral striae on pronotum and the reduced number of foveoles at the basis of pronotum and elytra. The male genital organ of *B. concolor*, however, is uniquely modified: very large in size, ovate, laminate apical lobe, broad basal part producing a long process with rent and inner sac armed with a largely spatulate copulatory piece. The present species, on the other hand, shows apparent resemblance to the genus *Batrisoschema* REITTER (1883) in having a faint longitudinal depression on pronotum, protuberance of metatrochanter in male, similar chaetotaxy of maxilla and the characters of the species mentioned above. It is difficult to decide whether characters observed in those species are specialized or generalized. Nevertheless, the existence of the species is important considering the affinities between the genera *Batrisoschema* and *Batristilbus*. The two genera may be regarded as the same phyletic line that has been derived from a common ancestor.

At first, this species was found in ant nest at Yokohama, Central Honshu, Japan. SHARP wrote in his original description that "a single specimen was found at Yokohama with black ant." By recent information, it is made clear that the species inhabits the colonies of *Lasius fuliginosus* or *L. spathepus*. Both species of ants usually build nest in hollow of old tree and make a long procession for feeding. Though *B. concolor* is always prowling about around the nest or procession between April and September, it never intrudes into the colony of the ants. "A black ant" in the original description probably indicates *L. fuliginosus* due to its black colour

of the body.

Batristilbus trichothorax TANOKUCHI, sp. nov.

(Figs. 4 and 7–8)

Length: 2.5–2.6 mm (from apical margin of clypeus to apex of last abdominal tergite).

Colour light maroon, shining and rather strongly polished on elytra and abdomen; palpi, mesosternum and apical sternites more or less lighter in colour than dorsum. Body surface covered with pubescence irregularly and sparsely except for glabrous hind-body; each hair of the pubescence more or less warped.

Head subquadrate, somewhat wider than long, surface convex, especially so in vertical area, and frons covered with shallow punctuation; sides subparallel, though feebly emarginate at middle portion and each gena gently protruding with arcuate border before obtuse angulation; eyes large, well projecting and situated a little behind the middle; antennal tubercles gently convex and protruding, the borders being reflexed; frons somewhat compressed, continuous to protruding clypeus with arcuate margin; antennae long but fairly stout, each segment subglobate except for scape, and reaching at about two-ninths of elytra; scape cylindrical with divergent apices; segments II–IX each globose, broader than long and nearly same size except for larger segment IX; segments IX–XI hardly forming a club, segment X a little wider than segment IX and globular

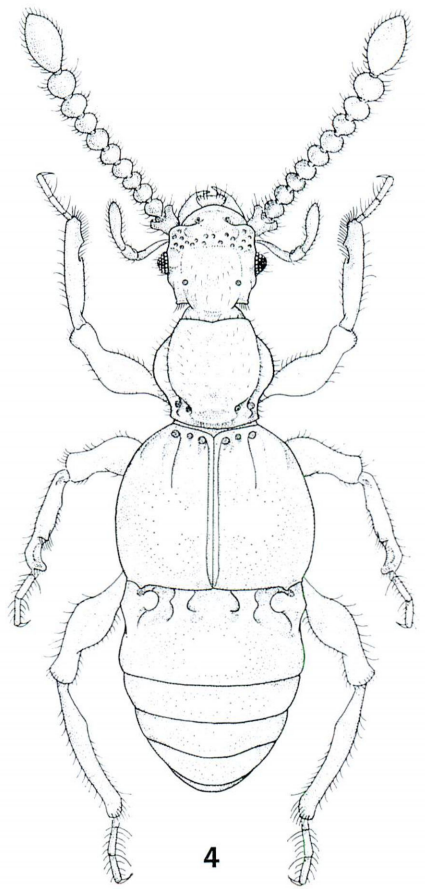


Fig. 4. *Batristilbus trichothorax* TANOKUCHI, sp. nov., from Jinmu-ji Temple. Scale: 0.5 mm.

with a nail in male; terminal segment fully twice as long as segment X and lemon-shaped, with a small hook at the base in male.

Pronotum large, cask-shaped, a little wider than head, slightly wider than long, widest at middle, and more contracted anteriorly than posteriorly; PW/HW 1.16-1.17, PW/PL 0.08, PW/PA 1.92-1.93, PW/PB 1.41-1.42; surface extremely convex between lateral striae, though disc flattened; sides shortly oblique with gently rounded apically, strongly protruding between basal one-fourth and apical one-fifth, each border moderately arcuate with obtuse angulation anteriorly and more or less strong posteriorly, and then continuous to subparallel basal portion; anterior margin almost straight with distinct narrow rim, more or less emarginate at middle portion with faint sinuation; posterior margin slightly arcuate with narrow rim; PB/PA 1.35-1.36; lateral striae widely arcuate, sutural depression shallow and broad with shallow foveolation, conjoining transverse faint furrow.

Elytra rather short, ovate and widest at little behind middle; EW/PW 1.58-1.59, EW/EL 1.22-1.23, EA/EB 2.0; surface fairly convex, though more or less compressed at middle portion; shoulders gently convex and rounded, with prehumeral borders oblique and gently arcuate; sides widely arcuate except for behind shoulders, which are more or less compressed with very feebly arcuate borders; base almost conjoint emargination, and border somewhat sinuate; basal foveae small but deep, the outermost one with a distinct discal stria which is subparallel to mid line, reaching at about three-sevenths from base; sutural convexity narrow and parallel-sided with furrows.

Abdomen elongate, evidently longer than elytra, prolonged semiovate and moderately convex on disc; tergite I ample, transverse, slightly narrower than elytra, parallel sided, with shallow emargination at middle portion, AW/AL 1.08-1.18, EW/AW 1.12-1.13; sternite I with fan-shaped protuberance which is gently rised at basal mid portion.

Legs rather long but stout, with fairly expanded femora; in male, mesotrochanter triangular, mesofemora with obtuse spine which is projecting obliquely near base of expansion, protibia shallowly grooved at preapical portion.

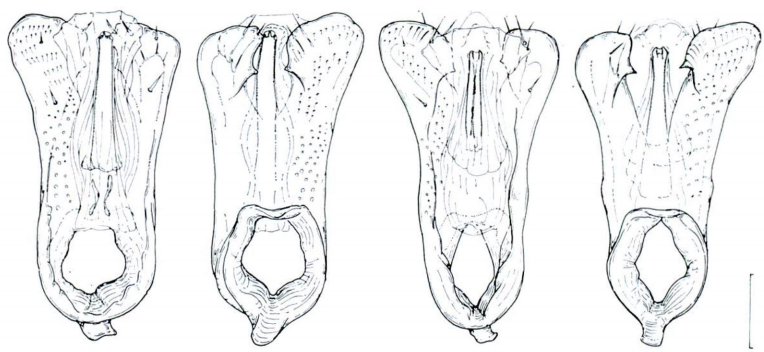
Male genital organ relatively large, elongate and moderately sclerotized. Aedeagus strongly flattened, gutter-shaped though gradually dilated towards apices, about four-sevenths as long as elytron, gently arcuate with a fairly long bifoliate apical lobe and elongate basal part; basal part slightly divergent with oval basal bulb, and lateral walls rather thick; basal orifice relatively large, longitudinally lenticulate with fairly thick walls, whose border ovate though truncated anteriad and basal bulb producing single process which is inclined to the left

and slightly dilated at apex; apical lobe bifid with divergent apices at about middle of genitalia, very similar in shape, bearing a small tubercle inside and provided with four setae. Inner sac armed with an elongate copulatory piece; gutter-shaped with slightly furcate apices, lying at middle and more than one-third as long as aedeagus.

Type series. Holotype: ♂, allotype: ♀, paratypes: 2♂♂, 2♀♀, Jinmu-ji Temple, Zushi City, Kanagawa Pref., Central Honshu, Japan, 16-V-1983, H. KUBOTA leg. The holotype and allotype will be deposited in the collection of the Muséum d'Histoire Naturelle, Genève, Switzerland and the paratypes are preserved in the author's private collection.

Notes. Externally similar to *B. politus*, but distinguished at first sight from the species by the presence of pubescence on surface and smaller hind-body. There is no doubt a close relationship between *B. trichothorax* and the following species, as is clearly shown by the similarity of their external features as well as of their male genitalia. It is, however, apparent that the differentiation of Jinmu-ji population is attained to the species level, considering that the antennae form the club, surface of fore-body is covered with sparse, short hairs, aedeagus is gradually dilated towards apices and copulatory piece is gutter-shaped. The present species, on the other hand, more or less resembles *B. concolor* in the presence of pubescence on dorsum and spatulated copulatory piece, and is closely related to *B. politus*. Thus the present species may be an intermediate stage between *B. concolor* and *B. politus*.

The present species was found in the nest of *Lasius hayashi* built underside of big fallen tree, which lay in the precincts of Jinmu-ji Temple, south of Yokohama City, Central Honshu.



Figs. 5–8. Male genitalia of *Batristilbus* spp.
5, 7, dorsal views; 6, 8, ventral views.
5–6, *B. politus* (SHARP), from Lake Chûzenji-ko; 7–8, *B. trichothorax* TANOKUCHI, sp. nov., from Jinmu-ji Temple. Scale 0.1 mm.

Batristilbus politus (SHARP, 1883)

(Figs. 5–6)

Batrisus politus SHARP, 1883, Trans. ent. Soc. London, 1883: 310; type depository: Department of Entomology, British Museum, London.

Batristilbus politus: RAFFRAY, 1909, Ann. Soc. ent. Fr., 78: 22, fig. 4; KUBOTA, 1956, Kanagawa Chûhô, 12: 2; JEANNEL, 1958, Mém. Mus. Hist. nat. Paris, (A) 18: 43, figs. 44–45; TANOKUCHI, 1979, Nature and Insects, 14 (10): 30.

Length: 2.8–3.0 mm (from apical margin of clypeus to apex of last abdominal tergite).

Fairly large species readily recognized by the following combination of features. Head relatively large, with prolonged sides, margin of frontal tubercles angulate and antennae rather short, which reach basal one-sixth of elytra, and club ambiguous. Pronotum a little wider than head, widest at about middle; disc gently convex with vague depressions narrow; sides protruding and arcuate between apical and basal one-sixth, PW/HW 1.07–1.08, PW/PL 1.07–1.08, PW/PA 1.86–1.87, PW/PB 1.32–1.33, PB/PA 1.40. Elytra large, much wider than pronotum, with sides widely arcuate and widest at about five-ninths from base; EW/PW 1.70–1.71, EW/EL 1.25–1.26, EA/EB 2.0. Abdomen elongate; tergite I ample, slightly narrower than elytra with constriction somewhat more anteriad than middle; sternite I producing transversely a fan-shaped protuberance, which is divergent extremely and raised on surface continuous with ridge, AW/AL 1.92, EW/AW 1.11–1.12. Mesotibia deeply grooved in male.

Male genital organ basically similar to that of *B. trichothorax*, but considerably different in details from the latter. Aedeagus relatively large, about three-fifths as long as elytron, parallel-sided with slightly divergent apices and rounded basal bulb, walls of which are thin and reduced; basal orifice large, subquadrate and its posterior walls producing a broad single process, which is inclined to the left; apical lobe bifoliate with small angulation on each side at about apical one-third. Inner sac armed with elongate copulatory piece, which is half as long as aedeagus, tubular, and slightly twisted with notched tip.

Specimens examined. 1♂, Lake Chûzenji-ko, Tochigi Pref., 4–VII–1942, M. KUBOTA leg.; 1♀, Oku-Nikko, Tochigi Pref., 28–VIII–1984, 4♂♂, 5♀♀, Mt. Daiga-take, Hakone, Kanagawa Pref., 6–VIII–1983, 2♀♀, Mt. Amagi-san, Izu Peninsula, Shizuoka Pref., 10–VI–1977, 1♀, Kifune, Kyoto City, Kyoto Pref., 23–V–1981, Y. TANOKUCHI leg.; 1♂, Kurokawa, N-Echigo, Niigata Pref., Honshu Island, 14–VIII–1964, K. BABA leg.; 1♀, Mt. Ichibusa-yama, Yunoyama, Kumamoto Pref., Kyushu Island, 14–VIII–1983, Y. TANOKUCHI leg.

Notes. This is the largest known species in the genus *Batristilbus* due to the large hind-body and is closely related to the preceding species both in external

feature and structure of male genitalia. It can be descriminated by glabrous dorsal surface, absence of antennal club, parallel-sided aedeagus with broad basal part and long tubular copulatory piece.

This species is usually found in the colony of *Lasius hayashi*, which builds nest in old tree. This ant makes colony in roots of tree with tunnels stretching on bark by scobs. *B. politus* often inhabits the tunnels between April and July. The species, unlike the other two species, is sometimes found in dead leaves and under the bark of fallen tree.

摘　　要

逗子市神武寺境内のアリ (*Lasius hayashi*) の巣から採集されたアリヅカムシを *Batristilbus trichothorax* と命名し，本属の３番目の種として記載した．本種は本属の他の２種のうち *B. politus* と同様のアリを寄主として，形態的にも類似している．しかしながら，体背部の軟毛，腹板等に見られる独特な形質は多少とも *B. concolor* と類似性を示している．また，本報文では未発見だった *B. concolor* の雄も合わせて記載を行った．

References

JEANNEL, R., 1958. Révision des Psélaphides du Japon. Mém. Mus. Hist. nat. Paris, (A) 18: 1–138.

KUBOTA, M., 1956. Myrmecophilous Pselaphidae at Odawara. Kanagawa Chûhô, 12: 1–3. (In Japanese.)

RAFFRAY, A., 1909. Nouvèlles Espèces de Psélaphidae. Ann. Soc. ent. Fr., 78: 15–52.

SHARP, D., 1883. Revision of the Pselaphidae of Japan. Trans. ent. Soc. London, 1883: 291–331.

TANOKUCHI, Y., 1979. Myrmecophilous Pselaphidae from Japan. Nature and Insects, 14 (10): 29–33. (In Japanese.)

Two New Species of *Sericania* from Shikoku and Kyushu, Japan (Col., Scarabaeidae)

By Yoshikazu Miyake

Nagayama 3-3-4-202, Tama-shi, Tokyo 206, Japan

Sericania hiranoi Y. Miyake, sp. nov.

♂: Fuscous, with head black except reddish brown clypeus, outer margin of pronotum, scutellum, and elytra somewhat reddish, legs dull reddish yellow, antennae fulvous. Greater part of body opaque, with head, antennae, central part of metasternum, antennae and legs shining.

Clypeus trapezoidal, 2.2 times as wide as long, strongly, rugosely punctate behind, rather sparsely, coarsely punctate, with a shallow transverse groove and a row of several erect fine hairs in front, weakly convex in the middle; lateral margin weakly arched and reflexed, front margin sinuate and strongly reflexed, front angles widely rounded; clypeofrontal suture obtusely angulate in the middle. Frons strongly punctate, but sparser than those on the clypeus, with an indistinct median carina. Antennae nine-segmented, the club consists of four segments and about 1.4 times as long as its foot-stalk. Pronotum more than twice as wide as long, widest just before the base, rather densely punctate, not so denser at sides; lateral sides, scarcely arched before and sinuate behind, front angles nearly rectangular, hind ones rounded at apices. Scutellum elongate-triangular, densely rugosely, punctate on each side and apical part, sparsely in the middle of basal half, lateral sides nearly straight and the apex rounded. Each elytron shallowly sulcate and inconspicuously striate, scatteringly finely punctate and more or less rugose; intervals rather distinctly costate and almost impunctate, the odd-numbered intervals alternately scarcely higher or wider than even-numbered ones, scatteringly bearing short hairs on their slopes. Pygidium more than twice as wide as long, rather densely finely punctate, bearing hoary hairs behind the middle and at sides, with an impunctate median stripe. Metasternum rather densely finely punctate, with sparsely long and fine suberect hairs in the middle and in front on each side, and a large circular flattish area in the middle. Each abdominal sternite

[Ent. Rev. Japan, Vol. XLIII, No. 1, pp. 77–80, June, 1988]

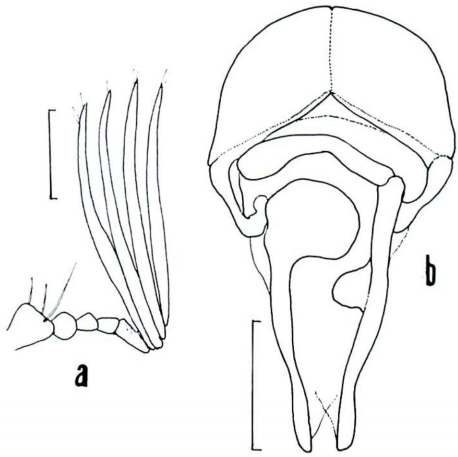


Fig. 1. *Sericania hiranoi* sp. nov.

a. Right antenna of ♂, dorsal view; b. Parameres of ♂ genitalia, dorsal view. (scale 0.5 mm.)

densely finely punctate, with a single transverse row of brownish short hairs. Front tibia bidentate, apical tooth long but the apex rounded, rather shorter than the first tarsal segment, second tooth short and the apex blunt. Hind femur 3.3 times as long as wide, rather sparsely, finely punctate, with a transverse row of seta-bearing punctures just behind anterior margin and an indistinct row of punctures behind the middle, without serrate ridge; longer terminal spur of hind tibia four-fifths as long as the first tarsal segment; each tarsal segment with a serrate ridge and several short setae on the ventral edge.

Length: 10.0 mm. Width: 5.5 mm.

Holotype: ♂, Omogo-kei, Ehime Pref., Shikoku, 7. VI. 1975, Y. HIRANO leg.

The new species is nearly allied to *S. awana* NOMURA, but the colouration of the body is darker, the club of the antenna consists of four segments, the ventral edge of the first tarsal segment of the hind legs bearing a few setae.

Sericania ohtsukai Y. MIYAKE, sp. nov.

Black to piceous, with clypeus, antennae, anterior part of breast and legs reddish brown, antennae testaceous. Greater part of body opaque, with head, antennae, legs, and in ♀, central part of pygidium glabrous. Dorsal surface feebly suffused with silky reflexion.

Body elongate oval. Clypeus subtrapezoidal, 1.7 times as wide as long in both sexes, strongly narrowed anteriorly, densely more or less

rugosely punctate and shallowly sulcate, with a row of several erect fine hairs in front, front margin feebly sinuate and strongly reflexed, front angles rounded; clypeo-frontal suture obtusely arched in the middle. Punctation of frons sparser and shallower than those on the clypeus, with an indistinct median carina. Eyes rather prominent, about one-third as wide as frons between both eyes in ♂, one-fourth in ♀. Antennae nine-segmented, the club consists of five segments and about 2.2 times as long as its foot-stalk, the innermost segment four-fifths as long as the other ones in ♂, the club three segmented, scarcely shorter than its foot-stalk in ♀. Pronotum 1.8 times as wide as long, widest near base, then gradually narrowed basal two-thirds, and strongly convergent anteriorly in ♂; rather strongly narrowed anteriorly in ♀, lateral margins almost regularly curved or feebly sinuate behind, with sparse setae along them, front angles obtuse, and the apices rounded in ♂, nearly rectangular and the apices angulate in ♀, hind angles obtuse and the apices rounded in both sexes, disc sparsely finely punctate. Scutellum triangular, scarcely longer than wide or nearly as long as wide, closely more or less rugosely punctate, rather sparser near the apex, except impunctate antero-median area; lateral sides scarcely sinuate in front, hind angle sharp but the apex blunt. Elytra long, 3.5 times as long as pronotum in ♂, 4.2 times in ♀, scarcely amplificate posteriorly,

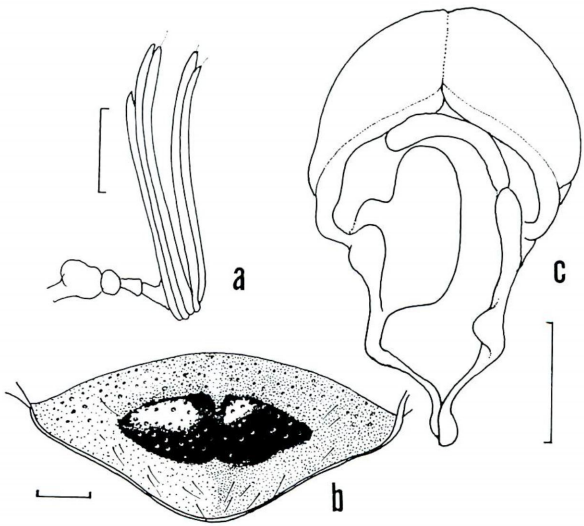


Fig. 2. *Sericania ohtsukai* sp. nov.
a. Right antenna of ♂, dorsal view; b. Pygidium of ♀;
c. Parameres of ♂ genitalia, dorsal view. (scale 0.5 mm.)

disc shallowly sulcate, scatteringly finely punctate and more or less rugose, bearing sparse short hairs, intervals feebly costate, almost impunctate. Pygidium convex, less than twice as wide as long in ♂, more than twice in ♀, densely strongly punctate, bearing sparse fine hairs behind the middle. Metasternum finely punctate, with sparse brownish hairs in the middle. Punctations of metacoxae denser and coarser than those on the metasternum. Each abdominal sternite densely finely punctate with a single row of short setae on each side and irregularly scattered rather longer ones in the middle. Front tibia sharp bidentate, the apices more or less blunt in ♀, the apical tooth scarcely shorter than the first tarsal segment. Hind femur 3.2 times as long as wide, unevenly, sparsely punctate, with a row of seta-bearing punctures just behind anterior margin, without serrate ridge; the first tarsal segment scarcely longer than longer tibial spur, scantily or not impressed, without seta on ventral edge.

Length: 9.5-10.5 mm. Width: 4.8-6.0 mm.

Holotype: ♂, Mt. Yamaingiri, Izumi-mura, Yatsushiro-gun, Kumamoto Pref., 11. VII. 1981, I. OHTSUKA leg. Allotype; ♀, same locality as the holotype, 15. VIII. 1982, I. OHTSUKA and K. YOSHIZAKI leg. Paratypes: 1♂, same data as the holotype; 1♀, same to allotype; 1 ♂ 1♀, 30. VII. 1983, I. OHTSUKA leg.; 1 ♂, 11. VIII. 1986, I. OHTSUKA leg.; 1 ♀, Mt. Kunimidake, Kumamoto Pref., 30. V. 1971; 1 ♀, Mt. Shiratori, Kumamoto Pref., 14. VIII. 1982, K. YOSHIZAKI leg.

The new species is nearly allied to *Sericania shikokuana* NAKANE and *S. opaca* NOMURA, but it differs from them by the following characters: from *shikokuana*, on the both sides of each abdominal sternite, the clothing hairs are transverse row of short setae and are not scattered overall the sternite; the basal segment of the antennal club is longer; the front angle of the pronotum is obtuse in the ♂, and is nearly rectangular in the ♀, their apices are both blunt; the apical tooth of the front tibia is longer than the basal tarsal segment; in the ♂ genitalia, the basal projection of the right paramere is long and narrow; the hind basal tarsal segment is not distinctly sulcate on the dorsal surface. From *opaca*, the apical tooth of the front tibia is longer than the basal tarsal segment; the basal segment of hind tarsus without seta on ventral edge; in the right paramere of ♂ genitalia with a distinct distal projection on the inner edge; in the ♀, the pygidium with a shining spot in the middle, etc.

At the end I wish to express my hearty thanks to Messrs. ISAO OHTSUKA and KAZUAKI YOSHIZAKI of Kumamoto, YASUTOSHI HIRANO and Mrs. NAOMI KODAMA of Tokyo for their kind help in the course of the present study.

Novelties of *Borchmannia*, *Falsonemostira* and *Rouyerus* from the Cameron Highlands, Malaysia (Coleoptera, Tenebrionidae: Lagriini)[1)]

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Abstract Three new lagriine species (*Falsonemostira malayana* sp. nov., *Borchmannia masumotoi* sp. nov., *Borchmannia akiyamai* sp. nov.) are described from the Cameron Highlands, Malaysia. *Rouyerus bimaculatus* Pic, 1911, formerly known only from Sumatra and Borneo, is recorded from the above locality. With 9 figures.

In 1987, Mr. Kimio Masumoto, the recognized specialist of Oriental Tenebrionidae and Scarabaeidae bought a number of lagriine beetles from a native collector in Malaysia. Mr. Masumoto and I have been agreed to exchange his Oriental lagriines for various scarabaeids — the Malaysian lagriines are thus housed in the Hungarian Natural History Museum. Another lot of specimens from the same series was sent to me by Mr. Kôyô Akiyama, in exchange for Buprestidae.

The beetles were collected in the Cameron Highlands, near "Tana Rata" [=Tanah Rata]. Besides other species, the material involves *Rouyerus bimaculatus* Pic, 1911, one new species of *Falsonemostira* Pic, 1917 and two new species of *Borchmannia* Pic, 1912. This finding is highly interesting, because, until now, none of the members of these genera were known from the continental Asia — representatives were mentioned from the Greater Sunda Islands and the Philippines only.

The *Borchmannia-Falsonemostira-Rouyerus* complex is a quite confused group of Lagriini (subtribe Statirina). A thorough revision of species assigned to here is needed and this is impossible without having seen all of the types. Some colour varieties will probably prove to be species and inversely, certain species may be mere colour forms.

In order to avoid arbitrary decisions, I maintain in this paper Borchmann's (1936) opinion about the separation of *Borchmannia*, *Falsonemostira* and *Rouyerus*; however, it should be mentioned that the separating characters seem largely a matter of degree. A future revision will perhaps unite them in one common genus.

Borchmann (1936) characterized the three genera in a satisfactory manner,

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1) 5th contribution to the knowledge of Lagriini.

[Ent. Rev. Japan, Vol. XLIII, No. 1, pp. 81–88, June, 1988]

therefore the descriptions of the new species can be restricted chiefly to the diagnostic features. In contrast to most of the lagriines, sexual dimorphism between males and females of the species belonging to *Borchmannia*, *Falsonemostira* and *Rouyerus* is quite indistinct — merely the relative length and width of antennal segments are different. This is the reason why I ventured to describe the subsequent new species on the basis of only one sex.

The common characters typical to all of the species are the following (not repeated in the descriptions of species): Body rather long and slender; dorsal surface bicolorous, largely glabrous; head elongate, with well-developed temples; antennae thick and slightly flattened dorsoventrally; last segment of maxillar palpi securiform; pronotum evenly convex, broadest at middle; elytra striate-punctate in whole length; elytral intervals costiform (at least laterally and apically); unpaired intervals with a few indistinct preapical setae; no sexual differences in the structure of pronotum, visible sterna and legs.

The four known Malayan species belonging to here are arranged in the following identification key:

1. Unpaired intervals of elytra considerably wider and higher than paired ones. Femora completely black. Size larger (10.5–11.5 mm) ..... *Rouyerus bimaculatus* Pic, 1911
— Intervals of elytra subequal in width and height. Femora yellowish at base. Size smaller (7.5–10.5 mm) 2
2. Pronotum unicoloured black, shining, with few punctures situating far from each other. Strial punctures on elytra finer. Elytra broader. Ratio of elytral length to width 9 : 4..... *Falsonemostira malayana* sp. nov.
— Pronotum bicoloured, coarsely and closely rugulose-punctate. Strial punctures on elytra coarser. Elytra narrower. Ratio of elytral length to width 9 : 3.....3
3. Elytra cinnabar red with apex and sutural stripe black..... *Borchmannia masumotoi* sp. nov.
— Elytra black with yellow juxtamedial and reddish lateral stripes ..... *Borchmannia akiyamai* sp. nov.

The bulk of the specimens investigated, including all holotypes, have been deposited in the Zoological Department of the Hungarian Natural History Museum (HNHM). Some duplicate paratypes were returned to Mr. K. Masumoto's collection, Yokohama, Japan (KMYJ).

Rouyerus bimaculatus Pic, 1911 (Figs. 1, 5)

Rouyerus bimaculatus Pic, 1911: 3; Borchmann, 1936: 497.

Rouyerus bimaculatus v. *innotaticollis* Pic, 1913: 15; Borchmann, 1936: 497.

New record. Malaysia: 19 m. or Tana Rata, Cameron Highlands, late April 1987, Wong Tet Fatt leg. (1 complete and 2 incomplete ♂♂, HNHM).

Supplementary description of some morphological features: antennae with segment length ratios as follows: 3.5 : 1.5 : 5 : 5 : 4.5 : 4.5 : 4 : 4 : 3.5 : 4 : 19; segment III about twice as long as wide; segment IV subquadrate; segments V to X increasingly transverse from segment to segment; segment XI weakly curved; length to width ratio of pronotum

as 23 : 21; unpaired elytral intervals much wider and more elevated than paired ones; aedeagus as figured (Fig. 5).

This species was described from "Sumatra : Pajunkumbo", while the variety from "Bornéo : Brunei". Since that time, no record was published. The specimens from the Cameron Highlands fit well to PIC's description, but the reddish colour on the elytra is more expanded: the basal half is carmine red, the apical half is black, and the red colour is extended backward on unpaired intervals while dark colour is extended forward on paired ones (Fig. 1).

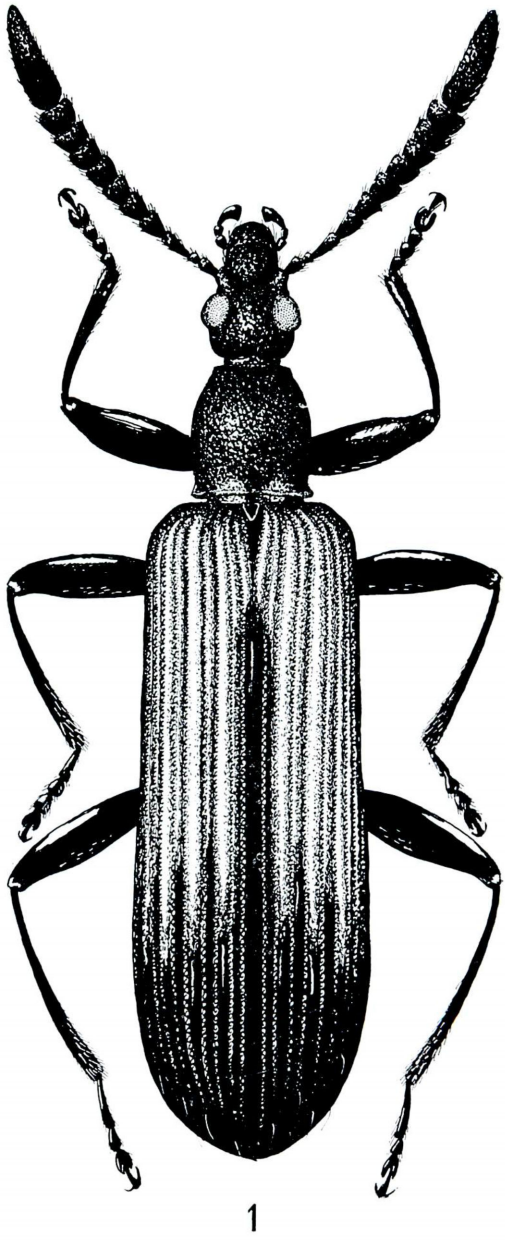

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Fig. 1. *Rouyerus bimaculatus* PIC, ♂.

Falsonemostira malayana sp. nov. (Figs. 2, 6, 8)

Head, antennae and pronotum entirely black; elytra bluish black, intervals III to V yellow, apart from apical part; ventral surface black; legs black, middle and hind legs with femoral base and proximal ⅓ of tibiae pale yellow. Length 8.2 mm.

♂. Head moderately closely punctate, with a small groove on vertex; antennae with segment length ratios as follows: 3 : 1 : 5 : 3.5 : 3.5 : 4 : 2.5 : 3 : 3.5 : 3 : 12; segment III twice as long as wide; segment IV a little longer than wide; segment

V subquadrate; segments VI to X transverse; segment XI stocky, a little curved. Pronotum sparsely punctate, punctures separated by distances much wider than puncture diameter; interspaces smooth and shiny; length to width ratio of pronotum as 23 : 20. Elytra subparallel-sided; inner intervals flat, only apically costiform; outer intervals slightly costiform; strial punctures small, separated by distances about equal to puncture diameter; length to width ratio of elytra 9 : 4. Aedeagus as figured (Fig. 6). Habitus: Fig. 2.

♀. Unknown.

Holotype, ♂, from Malaysia: 19 m. or Tana Rata, Cameron Highlands, late April 1987, WONG TET FATT leg. Deposited in HNHM.

This species appears to be closest to *Falsonemostira glabricollis* (BORCHMANN, 1930) described from the Philippines. The new species, however, has the pronotum completely black (largely yellow with a black median marking in *glabricollis*) and the antennal segments much shorter (Fig. 8) (antenna much more slender in *glabricollis*, Fig. 9).

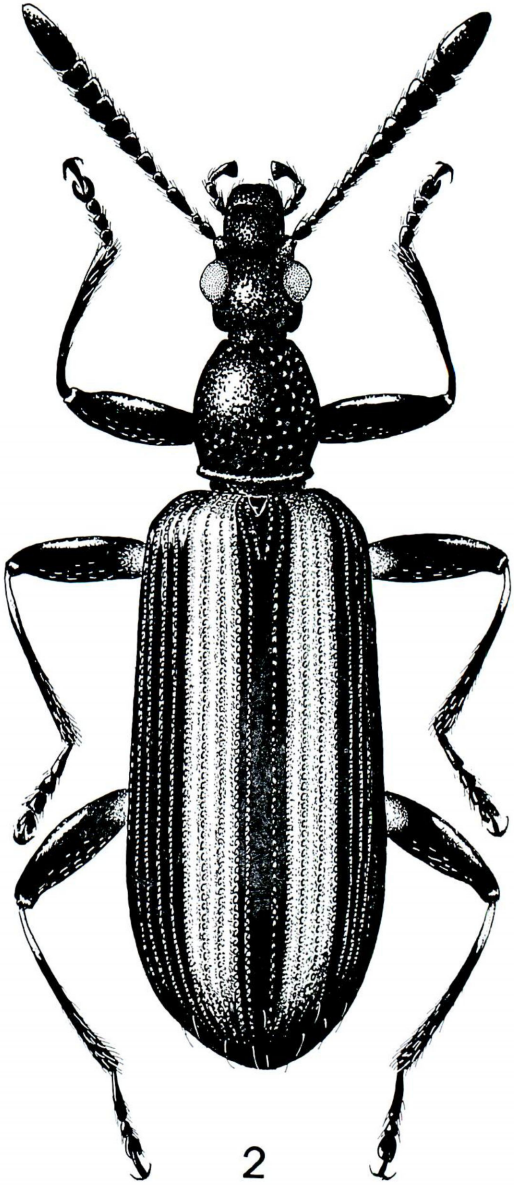


Fig. 2. *Falsonemostira malayana* sp. nov., ♂.

Borchmannia masumotoi sp. nov. (Fig. 3)

Head and antennae

black; mandibles reddish; temples with a red spot; pronotum cinnabar red with a black longitudinal band along midline and with black epipleurae; scutellum black; elytra cinnabar red, with apex and interval I black; with a small black spot above humeral callosity; medially, interval II also black in part; ventral surface black; legs black with femoral base pale yellow. Length 8.1–10.5 mm.

♀. Head coarsely rugulose-punctate; antennae moderately thick, with segment length ratios as follows: 3 : 1.5 : 5 : 4.5 : 3.5 : 4.5 : 5 : 5 : 5 : 5 : 7; segment III twice as long as wide; segment IV a little longer than wide; segments V to X subquadrate; segment XI slightly curved. Pronotum coarsely and closely rugulose-punctate; interspaces finely reticulate; length to width ratio of pronotum as 21 : 21. Elytra subparallel-sided; intervals convex, costiform, subequal in width and elevation; only intervals III and V a little bit wider and more elevated, particularly in basal half; punctural rows consisting of close, large, deep, transversal punctures. Habitus: Fig. 3.

♂. Unknown.

Holotype, ♀, from Malaysia: 19 m. or Tana Rata, Cameron Highlands, late April 1987, WONG TET FATT leg. Deposited in HNHM. Paratypes: 27 ♀♀, labelled as holotype (25, HNHM; 2, KMYJ).

This species is very similar to *Borchmannia suturalis* BORCHMANN, 1936 described from the Philippines.

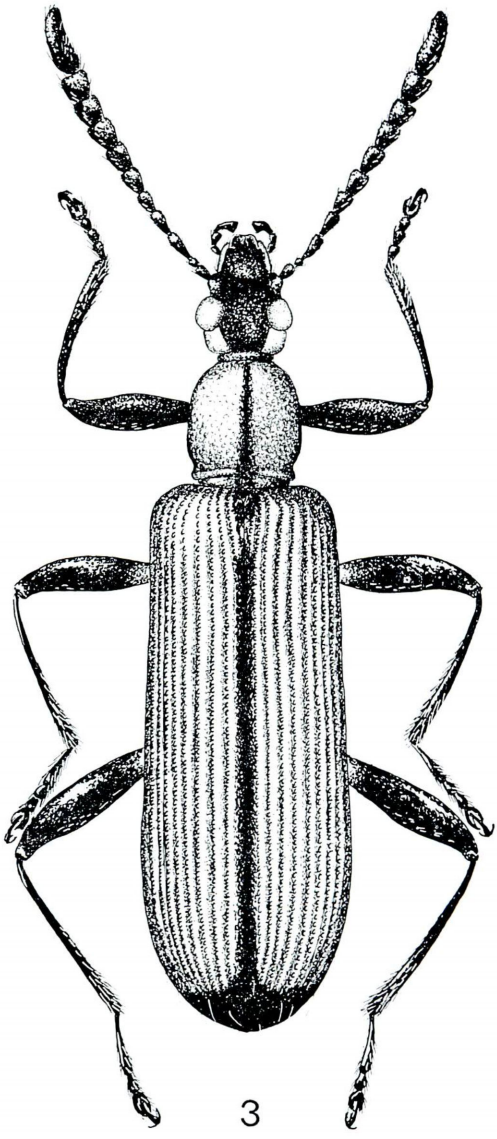


Fig. 3. *Borchmannia masumotoi* sp. nov., ♀.

The latter, however, has no longitudinal black marking along the midline of pronotum. Concerning the colour pattern, *Borchmannia lineaticeps* Pic, 1912 (described from Java) is also similar, but its pronotum is shorter and without black marking, and elytra are much wider and flatter.

Borchmannia akiyamai sp. nov. (Figs 4, 7)

Head and antennae black; mandibles reddish, temples sometimes with a small red spot; pronotum cinnabaric red, with a black longitudinal band along midline and with black epipleurae; elytra black; interval III (apart from apical part) and base of the intervals I to V yellow; sometimes intervals III to V yellow, except apical part; intervals IX and X reddish, apart from base and apex; ventral surface black; legs black with femoral base pale yellow. Length 7.5–8.8 mm.

♂. Head coarsely rugulose-punctate; antennae with segment length ratios as follows: 3 : 1 : 5 : 4 : 5 : 4.5 : 4 : 4 : 2.5 : 2 : 16; segments III and IV twice as long as wide; segments V and VI a little longer than wide; segments VII and VIII subquadrate; segments IX and X strongly transverse; segment XI fairly curved·

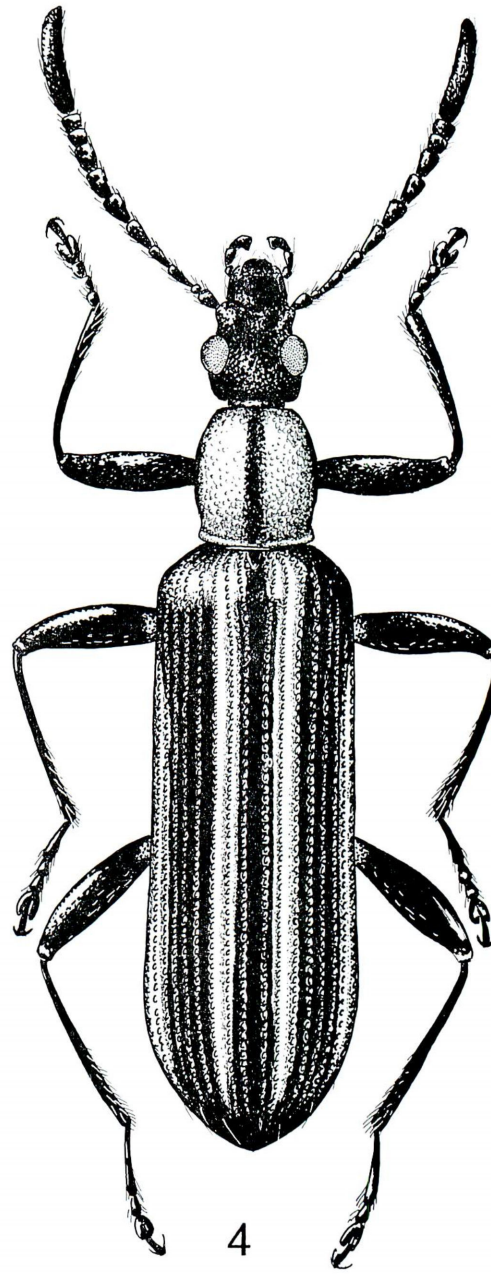
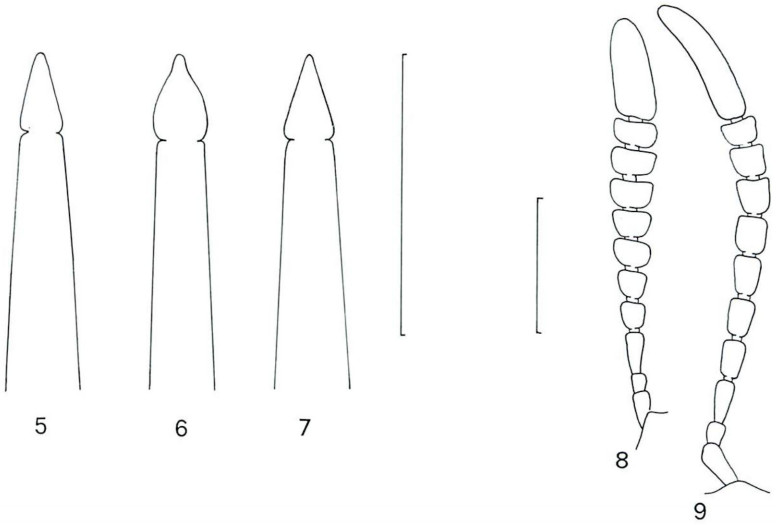


Fig. 4. *Borchmannia akiyamai* sp. nov., ♂.



Figs. 5–9. 5–7, Apical outline of male aedeagi; 8–9, Male antennae. 5, *Rouyerus bimaculatus* PIC; 6, 8, *Falsonemostira malayana* sp. nov.; 7, *Borchmannia akiyamai* sp. nov.; 9, *Falsonemostira glabricollis* (BORCHMANN). Scale=1 mm.

Pronotum coarsely and closely rugulose-punctate; interspaces finely reticulate; length to width ratio of pronotum as 20 : 19. Elytra subparallel-sided; intervals convex, costiform, subequal in width and elevation; strial punctures closely set, large, deep, transverse. Aedeagus as figured (Fig. 7). Habitus: Fig. 4.

♀. Unknown.

Holotype, ♂, from Malaysia: 19 m. or Tana Rata, Cameron Highlands, late April 1987, WONG TET FATT leg. Deposited in HNHM. Paratypes: 28♂♂, labelled as holotype (26, HNHM; 2, KMYJ).

This new species is the most reminiscent of *Borchmannia dissimilis* BORCHMANN, 1912 (described from Borneo), but this species has an entirely black pronotum.

Acknowledgements

I wish to express my sincere thanks to Mr. KIMIO MASUMOTO for his generous help and advices. He and Mr. KÔYÔ AKIYAMA kindly provided me with specimens, forming the basis of the present paper; two of the above novelties are dedicated to them. I am obliged also to Mrs. ÁGNES BARTOS for producing the habitus drawings.

References

BORCHMANN, FR., 1936. Coleoptera Fam. Lagriidae. "Genera Insectorum", fasc. 204, 561 pp.

PIC, M., 1911. Deux nouveaux genres de Coléoptères. Mélang. exot.-ent., 1 : 3–4.

—— 1913. Descriptions de 29 espèces et de plusieurs variétés. Mélang. exot.-ent., 5 : 7–20.

Notes on Buprestid Beetles from Thailand, with Description of a New Species (Part I)

By Sadahiro Ohmomo[1] and Kôyô Akiyama[2]

Abstract: Thirty-seven species of Siamese buprestid beetles are recorded, of which twenty-five species are new to the Siamese fauna. A new splendid species of the genus *Toxoscelus*, named *Toxoscelus kurosawai* sp. nov., is described from northern Thailand.

Introduction

The buprestid fauna of the Indochina Peninsula was studied in detail by several authors, such as E. Saunders, J. Obenberger, A. Descarpentries, A. Baudon, etc., however, the number of species recorded from Thailand is unexpectedly scant. For example, E. Saunders reported only 13 species including ten new species. According to Junk's Coleopterorum Catalogus (1926–1937), in which four species reported by E. Saunders were neglected, only 33 species were known for the Siamese buprestid fauna. After that, A. Descarpentries and A. Villiers (1963–1967) described seven new species and added 12 species to the Siamese fauna in their series of catalogues of buprestid beetles in Laos. Furthermore, A. Descarpentries and M. Chûjô (1961) described a new Siamese species, C. Sommai (1974) reviewed 12 species of the tribe Chrysochroini including six species of new record from Thailand, and Y. Kurosawa (1976–1982) described four Siamese species.

Recently, M. Tôyama (1983–1987) has described two new genera, *Sommaia* and *Agrilosambus*, together with six new species. Nevertheless, there are only a total of 75 Siamese species from all of the references mentioned above. So, the fauna of buprestid beetles in Thailand is in a relatively little known state.

Incidentally, the genus *Chakriia* Tongyai, 1935 from Thailand was regarded as a synonym of the genus *Meliboeus* by A. Descarpentries and A. Villiers (1967).

One of us (S. Ohmomo) had opportunities to catch buprestid beetles in Thailand and examined many of specimens including others caught by Drs. Y. Komiya and K. Ikeda, and Messrs. H. Akiyama, A. Nishiyama, and M. Sawai. In this paper, as the first of our series, we record 37 species of Siamese buprestid beetles, of which 25 species are first records from Thailand, and describe a splendid new species of the genus *Toxoscelus*.

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2) 15-10, 2-chôme, Daidô-chô, Kanazawa-ku, Yokohama, Kanagawa 236, Japan.

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Description of a splendid species

Toxoscelus kurosawai OHMOMO et AKIYAMA sp. nov. (Fig. 1)

Body rather large and robust, somewhat deplanate above; upper surface dark brown with blackish tinge, under surface dark brown and shining; antennae and legs concolorous with under surface.

Head distinctly narrower than base of pronotum, with deep median groove running from vertex to center of frons; vertex gibbose on each side of median groove, concentrically rugoso-punctate on each side of groove; frons deeply and transversely grooved between eyes and transversely gibbose on each side just before groove with each gibbosity transversely rugoso-punctate; eyes ovate, slightly converging below in frontal view; clypeal suture inconspicuous; clypeus strongly narrowed by antennal cavities, with anterior margin arcuately emarginate, about 1.5 times as long as wide; antennal cavities large, with posterior margins strongly carinate; antennae short and compact, serrate from fifth segment, with first and second segments stout, second about 1.5 times as long as third which is distinctly shorter than fourth.

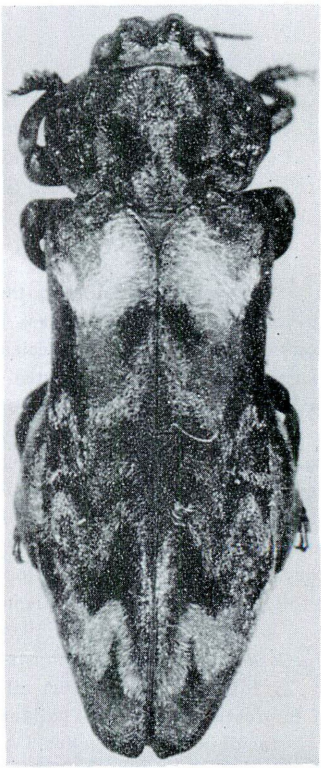

Fig. 1. *Toxoscelus kurosawai* OHMOMO et AKIYAMA sp. nov

Pronotum transverse, about 1.7 times as wide as long, widest at basal three-fifths; sides arcuately expanded anteriorly, and slightly but distinctly bisinuate posteriorly; anterior margin bisinuate and narrowly margined, with median lobe broadly and arcuately produced; posterior margin strongly and angulately emarginate just before each elytral lobe, subtruncate just before scutellum; anterior angles acute and produced in dorsal view; posterior angles obtuse and rounded; marginal carinae entire, sinuate posteriorly in lateral view; disc uneven, with a small, transverse, shallow depression behind anterior lobe, a large, round one just before each elytral lobe, and a small gibbosity outside each large depression; surface irregularly rugoso-punctate. Scutellum triangular

and narrowly margined.

Elytra slightly narrower than pronotum at humeri, about 2.5 times as long as wide, 4.3 times as long as pronotum, widest just before apical third; sides rounded at humeri, slightly expanded behind them, slightly narrowed to the anterior third, broadly expanded and swollen near the middle, then obliquely attenuate to the apices which are finely denticulate; each basal margin sinuate, elevated along scutellum, with a subtriangularly produced lobe; lateral margins unarmed; disc convex, shallowly depressed at humeri; surface evenly and densely rugoso-punctate, clothed with fine, recumbent, dark brown setae, ornamented with distinctly tricolorous setae arranged on each elytron as follows: a broad and round marking of silver and rather long setae along the humeral depression; a broad transverse band of short nut-brown setae just behind the humeral marking; a zigzag band of silver and rather long setae just behind the middle; an ambiguous undulate marking of dark brown setae between the transverse band and the zigzag band; a broad patch of short nut-brown setae at each apex.

Prosternum transversely depressed along anterior margin; prosternal process flattened, rugoso-punctate and gradually narrowed to just behind anterior coxal cavities, then strongly attenuate to pointed tip. Anal segment of abdomen broadly rounded at tip, which is armed with six fine but distinct denticles. Legs short, robust; anterior tibiae curved; middle tibiae strongly curved; posterior tibiae rather straight, with inferior ridge sinuate.

Length: 9.1 mm; width: 2.8 mm.

Holotype: ♀, Mt. Doi Pui, Chiang Mai Prov., Thailand, 23. V. 1983, S. OHMOMO lgt.

Remarks: This new species can be distinguished from the others belonging to the genus *Toxoscelus* by the unique elytral ornamentation with distinctly tricolorous setae. The type specimen is deposited in the National Science Museum (Nat. Hist.), Tokyo.

A list of Siamese buprestid beetles

1. *Sternocera aequisignata punctatofoveata* SAUNDERS, 1866
   1 ex., Mt. Mae Lung, Lanpang, Phrae Prov., 20. V. 1985, S. OHMOMO lgt.
2. *Catoxantha opulenta* GORY, 1832
   1 ♀, Chiang Dao, Chiang Mai Prov., 12. XI. 1982, A. NISHIYAMA lgt.; 1 ♀, Koh Anem, Ban Rai, Kanchanaburi Prov., 15. V. 1985, S. OHMOMO lgt.
   It was observed that this species congregates on leaves at the top of a weakened broad-leaved tree (scientific name unknown) about 20 meters in height.
3. *Demochroa gratiosa* DEYROLLE, 1864
   1 ♂, Koh Anem, Ban Rai, Kanchanaburi Prov., 15. V. 1985, H. AKIYAMA lgt.

This species was already recorded by C. SOMMAI as *Chrysochroa gratiosa.*

4. *Chrysochroa fulgens* DEGEER, 1778
3 ♂♂, Koh Anem, Ban Rai, Kanchanaburi Prov., 14. V. 1985, M. SAWAI lgt.
This species was already recorded by C. SOMMAI as *C. ocellata.*

5. C. *rajah thailandica* KUROSAWA, 1978
1 ♂, Chiang Dao, Chiang Mai Prov., 12. XI. 1982, A. NISHIYAMA lgt.; 1 ♂, Chiang Dao, Chiang Mai Prov., 24. V. 1983, S. OHMOMO lgt.; 1 ♂, 1 ♀, Koh Anem, Ban Rai, Kanchanaburi Prov., 15. V. 1985, S. OHMOMO lgt.; 1 ♂, Wieng Ko Sai Nat. Park, Phrae Prov., 18. V. 1985, K. IKEDA lgt.
This species was already recorded by C. SOMMAI as *C. chinensis.*

6. *C. rugicollis* SAUNDERS, 1867
1 ♀, Mt. Doi Pui, Chiang Mai Prov., 20. V. 1985, S. OHMOMO lgt.

7. *C. saundersi* SAUNDERS, 1866
1 ♀, Weing Ko Sai Nat. Park, Phrae Prov., 19. V. 1985, H. AKIYAMA lgt.

8.* *Psiloptera* (*Lampetis*) *affinis* (SAUNDERS, 1866)
1 ♀, Koh Anem, Ban Rai, Kanchanaburi Prov., 15. V. 1985, S. OHMOMO lgt.

9.* *Chalcophora yunnana yunnana* FAIRMAIRE, 1888
1 ♂, Mt. Doi Pui, Chiang Mai Prov., 10. V. 1983, A. NISHIYAMA lgt.

10.* *Ovalisia beauchenei* FAIRMAIRE, 1888
1 ♂, Mt. Doi Pui, Chiang Mai Prov., 15. V. 1983, A. NISHIYAMA lgt.; 2 ♀♀, Mt. Doi Pui, Chiang Mai Prov., 24. V. 1983, M. SAWAI lgt.

11.* *Philanthaxia splendida* VAN DE POLL, 1892
2 ♂♂, Mt. Doi Pui, Chiang Mai Prov., 8. V. 1983, A. NISHIYAMA lgt.

12.* *Ptosima ashlocki* (BAUDON, 1966)
1 ex., Maekammee, Sa, Nan Prov., 17. V. 1985, M. SAWAI lgt.

13.* *Polyctesis duhaulti* (BAUDON, 1963)
1 ex., Koh Anem, Ban Rai, Kanchanaburi Prov., 15. V. 1985, M. SAWAI lgt.

14. *Belionota fallaciosa* DEYROLLE, 1874
1 ♂, Koh Anem, Ban Rai, Kanchanaburi Prov., 15. V. 1985, S. OHMOMO lgt.

15.* *B. prasima* (THUNBERG, 1789)
1 ♀, Maeklong Watershed Res. Sta., Linthin, Kanchanaburi Prov., 13. V. 1985, S. OHMOMO lgt.; 1 ♀, Koh Anem, Ban Rai, Kanchanaburi Prov., 15. V. 1985, S. OHMOMO lgt.

16.* *Paratrachys chinensis* OBENBERGER, 1958
1 ex., Chiang Dao, Chiang Mai Prov., 27. IV. 1983, A. NISHIYAMA lgt.; 1 ex., Maekammee, Sa, Nan Prov., 17. V. 1985, S. OHMOMO lgt.

17.* *Coraebus aeneopictus* (KERREMANS, 1895)
1 ex., Mt. Doi Pui, Chiang Mai Prov., 10. V. 1983, A. NISHIYAMA lgt.; 2 exs., Mt. Doi Pui, Chiang Mai Prov., 24. V. 1983, K. IKEDA lgt.; 1 ex., Mt. Doi Pui, Chiang Mai Prov., 5. VI. 1983, Y. KOMIYA lgt.; 1 ex., Mt. Doi Pui, Chiang Mai Prov., 21. V. 1985, S. OHMOMO lgt.

A mark of * on the number shows the species newly recorded from Thailand.

18.* *C. annamensis* DESCARPENTRIES et VILLIERS, 1967
1 ex., Mt. Doi Pui, Chiang Mai Prov., 28. V. 1983, S. OHMOMO lgt.

19.* *C. clermonti* BOURGOIN, 1924
1 ex., Mt. Doi Pui, Chiang Mai Prov., 28. V. 1983, S. OHMOMO lgt.

20.* *C. denticollis* SAUNDERS, 1866
2 exs., Mt. Doi Intanone, Chiang Mai Prov., 26. V. 1983, S. OHMOMO lgt.

21.* *C. dentipennis* KERREMANS, 1900
1 ex., Mt. Doi Pui, Chiang Mai Prov., 15. V. 1983, A. NISHIYAMA lgt.; 4 exs., Mt. Doi Pui, Chiang Mai Prov., 22–28. V. 1983, S. OHMOMO lgt.; 1 ex., Mt. Doi Pui, Chiang Mai Prov., 21. V. 1985, S. OHMOMO lgt.
This species was caught on the leaves of *Rubus* sp.

22.* *C. gagneuxi* BAUDON, 1963
1 ex., Mt. Doi Pui, Chiang Mai Prov., 20. V. 1985, S. OHMOMO lgt.

23. *C. hastanus hastanus* GORY et CASTELNAUD, 1839
1 ex., Mt. Doi Intanone, Chiang Mai Prov., 26. V. 1983, Y. KOMIYA lgt.

24.* *C. salvazai* BOURGOIN, 1922
1 ex., Mt. Doi Pui, Chiang Mai Prov., 22. V. 1985, S. OHMOMO lgt.

25.* *C. sidae* KERREMANS, 1888
4 exs,. Mt. Doi Pui, Chiang Mai Prov., 29. IV.–15. V. 1983, A. NISHIYAMA lgt.; 26 exs., Mt. Doi Pui, Chiang Mai Prov., 17–25. V. 1983, S. OHMOMO lgt.; 1 ex., Mt. Doi Intanone, Chiang Mai Prov., 26. V. 1983, S. OHMOMO lgt.; 24 exs., Mt. Doi Pui, Chiang Mai Prov., 22. V. 1985, S. OHMOMO lgt.
This species was caught on the leaves of *Rubus* sp.

26.* *C. violaceipennis* SAUNDERS, 1866
1 ex., Mt. Doi Intanone, Chiang Mai Prov., 26. V. 1983, Y. KOMIYA lgt.

27.* *Coraebina ikomai* DESCARPENTRIES et CHÛJÔ, 1961
1 ex., Mt. Doi Pui, Chiang Mai Prov., 15. V. 1983, A. NISHIYAMA lgt.; 1 ex., Mt. Doi Pui, Chiang Mai Prov., 31. V. 1983, Y. KOMIYA lgt.; 2 exs., Whuay Kaeu, Chiang Mai Prov., 1. VI. 1983, Y. KOMIYA lgt.; 1 ex., Doi Pa Muang, Lanpang, Phrae Prov., 19. V. 1985, S. OHMOMO lgt.

28.* *Sambus coomani* DESCARPENTRIES et VILLIERS, 1966
1 ♂, Chiang Dao, Chiang Mai Prov., 27. IV. 1983, A. NISHIYAMA lgt.; 3 ♀♀, Mt. Doi Pui, Chiang Mai Prov., 23–26. V. 1983, S. OHMOMO lgt.

29.* *S. novus* THÉRY, 1926
1 ex., Mt. Doi Pui, Chiang Mai Prov., 25. V. 1983, S. OHMOMO lgt.

30.* *Cryptodactylus aeneiventris* BOURGOIN, 1922
1 ex., Mt. Doi Pui, Chiang Mai Prov., 5. V. 1983, A. NISHIYAMA lgt.; 2 exs., Mt. Doi Pui, Chiang Mai Prov., 24. V. 1983, S. OHMOMO lgt.; 2 exs., Mt. Doi Pui, Chiang Mai Prov., 21. V. 1985, S. OHMOMO lgt.

31.* *C. planicollis* DESCARPENTRIES et VILLIERS, 1966
1 ex., Mt. Doi Pui, Chiang Mai Prov., 26. V. 1983, S. OHMOMO lgt.

32.* *Toxoscelus kurosawai* OHMOMO et AKIYAMA sp. nov.
1 ♀, Mt. Doi Pui, Chiang Mai Prov., 23. V. 1983, S. OHMOMO lgt.

The name of this splendid species is dedicated to Dr. YOSHIHIKO KUROSAWA who made great contributions to the studies of Asian buprestid beetles.

33. *Meliboeus cupreomarginatus* SAUNDERS, 1866
1 ex., Maeklong Watershed Res. Sta., Linthin, Kanchanaburi Prov., 12. V. 1985, S. OHMOMO lgt.; 3 exs., Maekammee, Sa, Nan Prov., 17. V. 1985, S. OHMOMO lgt.; 1 ex., Mt. Doi Pui, Chiang Mai Prov., 20. V. 1985, Y. KOMIYA lgt.

34. *Polyonychus tricolor* SAUNDERS, 1866
1 ex., Sai Yok Nat. Park, Kanchanaburi Prov., 14. V. 1985, Y. KOMIYA lgt.

35.* *Nalanda buddhaica* OBENBERGER, 1931
1 ex., Mt. Doi Pui, Chiang Mai Prov., 27. V. 1983, S. OHMOMO lgt.

36.* *N. delauneyi* VAN DE POLL, 1892
1 ex., Mt. Doi Pui, Chiang Mai Prov., 1. V. 1983, A. NISHIYAMA lgt.; 5 exs., Mt. Doi Pui, Chiang Mai Prov., 23. V. 1983, S. OHMOMO lgt.

37.* *N. perroti* DESCARPENTRIES et VILLIERS, 1967
1 ex., Mt. Doi Pui, Chiang Mai Prov., 24. V. 1983, S. OHMOMO lgt.

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Literature cited

BAUDON, A., 1966. Catalogue commenté des Buprestidae récoltés au Laos. Première partie. Mem. Soc. r. ent. Belg., 30: 1–80.

—— 1968. Ditto. Deuxième partie. Imprimé pour le Ministère de l'Information avec l'assistance de la Foundation Asie, Vientiane, 190 p.

DESCARPENTRIES, A., 1958. Buprestidae récoltés par J. BARBIER en Cochinchine. Rev. f. Ent., 25: 57–71.

DESCARPENTRIES, A. and CHÛJÔ, M., 1961. Coleoptera from Southeast Asia, 10. Family Buprestidae. Nat. life Southeast Asia, 1: 325–327.

DESCARPENTRIES, A. and VILLIERS, A., 1963. Catalogue raisonné des Buprestidae d'Indochine. I, Agrilini, genre *Agrilus* (1re partie). Rev. f. Ent., 30: 49–62.

—— 1963. Ditto. II, Agrilini, genre *Agrilus* (2e partie). Ibid., 30: 104–119.

—— 1963. Ditto. III, Agrilini, genre *Agrilus* (3e partie). Inst. r. Sci. Nat. Belg., 39: 1–23.

—— 1963. Ditto. IV, Aphanisticini. Rev. f. Ent., 30: 153–163.

—— 1963. Ditto. V, Dicercini. Ibid., 30 : 262–275.
—— 1964. Ditto. VI, Trachydini (1re partie). Ibid., 31 : 250–262.
—— 1966. Ditto. VII, Trachydini, genre *Trachys* (2e partie). Ann. Soc. ent. Fr. (N. S.), 1 : 723–735.
—— 1966. Ditto. VIII, Trachydini, genre *Trachys* (fin) (3e partie). Ibid., 2 : 585–600.
—— 1966. Ditto. IX, Coraebini (1re partie). Bull Soc. ent. Fr., 71 : 86–88.
—— 1966. Ditto. X, Trachydini (supplément) (4e partie). Ibid., 71 : 131–139.
—— 1966. Ditto. XI, Coraebini (2e partie). Bull. Soc. ent. Fr. (N. S.), 2 : 979–994.
—— 1967. Ditto. XII, Agrilini (supplément). Bull. Mus. Natn. Hist. Nat., 39 : 143–150.
—— 1967. Ditto. XIII, Coraebini (3e partie). Ann. Soc. ent. Fr. (N. S.), 3 : 471–492.
—— 1967. Ditto. XIV, Coraebini (4e partie). Ibid., 3 : 989–1008.

OBENBERGER, J., 1921. Buprestidae nouveaux de l'Indo-chine française. Ann. Soc. ent. Fr., 90 : 235–244.
—— 1926. Buprestidae, I. In JUNK, W. & S. SCHENKLING (eds.), Coleopterorum Catalogus, pars 84 : 1–212.
—— 1930. Buprestidae, II. In JUNK, W. & S. SCHENKLING (eds.), Coleopterorum Catalogus, pars 111 : 215–568.
—— 1934. Buprestidae, III. In JUNK, W. & S. SCHENKLING (eds.), Coleopterorum Catalogus, pars 132 : 571–781.
—— 1935. Buprestidae, IV. In JUNK, W. & S. SCHENKLING (eds.), Coleopterorum Catalogus, pars 143 : 785–934.
—— 1936. Buprestidae, V. In JUNK, W. & S. SCHENKLING (eds.), Coleopterorum Catalogus, pars 152 : 935–1246.
—— 1937. Buprestidae, VI. In JUNK, W. & S. SCHENKLING (eds.), Coleopterorum Catalogus, pars 157 : 1249–1454.

KUROSAWA, Y., 1976. Note on the Oriental species of the coleopterous family Buprestidae (I). Bull. natn. Sci. Mus., Tokyo, (A), 2 : 51–58.
—— 1978. Ditto. (III). Ibid., 4 : 75–77.
—— 1981. A new buprestid beetles of the genus *Agrilus* from northern Thailand, with description of a new subgenus (Coleoptera, Buprestidae). Ent. Rev. Japan, 36 : 5–8.
—— 1982. A remarkable convergence found in Malayan buprestid beetles, with description of two new species from Thailand and Hainan. Bull. natn. Sci. Mus., Tokyo. (A), 8 : 173–204.

SAUNDERS, E., 1866. Catalogue of Buprestidae collected by the late M. MOUHOT, in Siam, with description of new species. Trans. ent. Soc. Lond., (3) 5 : 297–322.

SOMMAI, C., 1974. Taxonomic studies of Thai metallic wood boring beetles in the tribe Chrysochroini (Coleoptera, Buprestidae). Ent. Zool. Div. Tech. Bull., Bangkok, 1 : 1–85.

TÔYAMA, M., 1983. The buprestid beetles of the subfamily Mastogeniinae from the Oriental region (Coleoptera, Buprestidae). Ent. Rev. Japan, 38 : 55–64.
—— 1985. A new buprestid beetles from Thailand (Coleoptera, Buprestidae). Ibid., 40 : 69–72.
—— 1987. New agrilini buprestid beetles (Coleoptera, Buprestidae) from Asia (I). Kontyû, Tokyo, 55 : 298–323.

遼寧営口地区（中華人民共和国）のエンマムシ採集例（1）

大原　昌宏[1)]・李　景科[2)]

Some Records of Histeridae from Continental China (Coleoptera) (I).

By Masahiro Ôhara[1)] and Jingke Li[2)]

中華人民共和国，遼寧営口地区で採集されたエンマムシ科8種を報告する．*Hister concolor* は，日本・千島列島から知られていた種で，大陸からは初記録になる．採集者は全て筆者の一人李である．

1. *Saprinus planiusculus* Motschulsky ドウガネエンマムシ
   大石橋，4 exs., 1. v. 1984；2 exs., 10. x. 1984；1 ex., 27. ix. 1985；1 ex., 9. vii. 1986（蟠竜山の人糞から採集）；吉林長白山，1 ex., 23. vi. 1987.
2. *Merohister jekeli* (Marseul) エンマムシ
   大石橋，2 exs., 27. ix. 1985.
3. *Margarinotus weymarni* Wenzel ヒメエンマムシ
   黄土嶺，1 ex., 10. x. 1984（牛糞から採集）；大石橋，1 ex., 16. vii. 1983；1 ex., 16. v. 1984；9 exs., 27. ix. 1985.
4. *Hister concolor* Lewis クロエンマムシ
   黄土嶺，1 ex., 3. vii. 1984；1 ex., 14. ix. 1985. New to Continental China.
5. *Hister congener* Schmidt イブシエンマムシ
   黄土嶺，2 exs., 16. vi. 1985；1 ex., 26. iv. 1986；1 ex., 31. vii. 1986.
6. *Atholus pirithous* (Marseul) ツヤマルエンマムシ
   黄土嶺，1 ex., 10. x. 1984；大石橋，1 ex., 19. vii. 1985.
7. *Atholus bimaculatus* (Linné) アカモンエンマムシ
   大石橋，1 ex., 30. v. 1986（牛糞から採集）.
8. *Atholus* sp.
   大石橋，1 ex., 29. vii. 1985.

地名：吉林長白山（Jilin Chanbaishan）；営口（Yingkou）；大石橋（Dashiqiao）；黄土嶺（Huantuling）.

1）北海道大学農学部昆虫学教室.
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琉球産イリエケシマメコメツキについて

大　平　仁　夫

Notes on *Thurana iriei* Ôhira, 1977 from the Ryukyu Islands, Japan (Coleoptera : Elateridae)

By Hitoo Ôhira

本種は入江平吉氏が1974年5月8日に石垣島のオモト岳の山頂付近で採集された1雌個体にもとづいて，筆者が新種として記載したものであるが，その後雄個体も調査することができたので，その概要をここに報告する．

本文を草するにあたり，標本についてご支援を頂いた入江平吉氏に心からお礼申しあげる．

1. 形態について

本種は微小種で，体長は 1.5 mm 内外．体は楕円形状で背面は膨隆する．光沢を有し，淡黄褐色～黄褐色で，頭部，前胸背板，上翅などの一部または大部分が暗褐色～黒褐色，体下面も暗褐色～黒褐色を呈する．暗褐色～黒褐色部は変異があり，ときに頭部，前胸背板，小楯板などは全体が黒褐色を呈する．また，上翅の黒斑も変異が多く，不明瞭から明瞭に現われるものまで種々の段階のものがみられるが，翅底部は通常黄褐色である．触角と肢は黄褐色を呈する．

触角は前胸背板の後角より短い．第2節は第3節より明らかに長く，第3節と第4節はほぼ等長，第4節から鋸歯状を呈する (Pl. 7, D, E)．また，末端部の各節はやや数珠状の連結で，末端節は楕円形状を呈する (Pl. 7, F)．小腮ひげの末節はよく発達しており，矩形状を呈する (Pl. 7, J)．前頭横隆線は弧状で細く縁取られる (Pl. 8, G)．また，その基部は弱く2叉状に分枝する (Pl. 8, F の↑)．

前胸背板は膨隆し，長さより幅広い (Pl. 8, A)．表面は一見平滑状であるが，微細なしわを生じ，点刻はやや二重輪状である (Pl. 8, I)．また，後角部の隆起線は側縁に沿って前縁近くまで長く伸長する (Pl. 8, B)．前胸腹側板線は幅広い二重状で外方に彎曲し，同腹板との会合線の前端部はやや溝状を呈する (Pl. 8, C)．前胸腹板突起は，側面からみたとき，前肢基節腔を越えて弱く内方へ彎曲，末端近くで外方へ彎曲し，末端はとがらない (Pl. 7, G, H)．

小楯板は幅広く，半円形状である (Pl. 8, E)．上翅の条線は浅く印し，間室部は弱く隆起し，全面に小点刻を散布する (Pl. 8, H)．中胸腹板溝の両側は平行状，中肢基節腔は中胸腹板

〔昆虫学評論，第43巻，第1号，97-99頁，第7-8図版，6月，1988年〕

と後胸腹板に囲まれるが，後胸腹板は幅広く縁取られる (Pl. 8, D の↑). 腰板は外方へ顕著に幅せまくなる (Pl. 7, I).

雄交尾器の外形は図示 (Pl. 7, A) したように，中央突起の両側は平行状であるが，末端部で弱く外方へ彎曲して細まり，末端は鈍くとがる (Pl. 7, B). 側突起は末端に漸次細まり，末端は鋭くとがる (Pl. 7, C). 雌内部生殖器の bursa copulatrix の袋内には角質化した板状物は有さない.

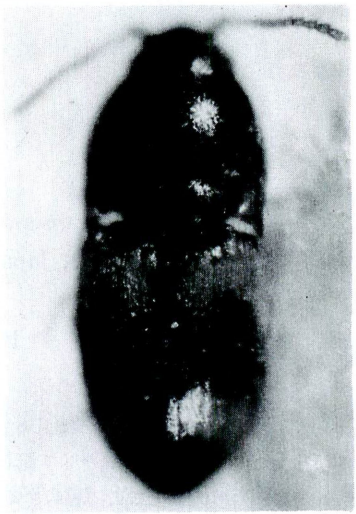


Fig. 1. *Thurana iriei*, male, body length 1.5 mm.

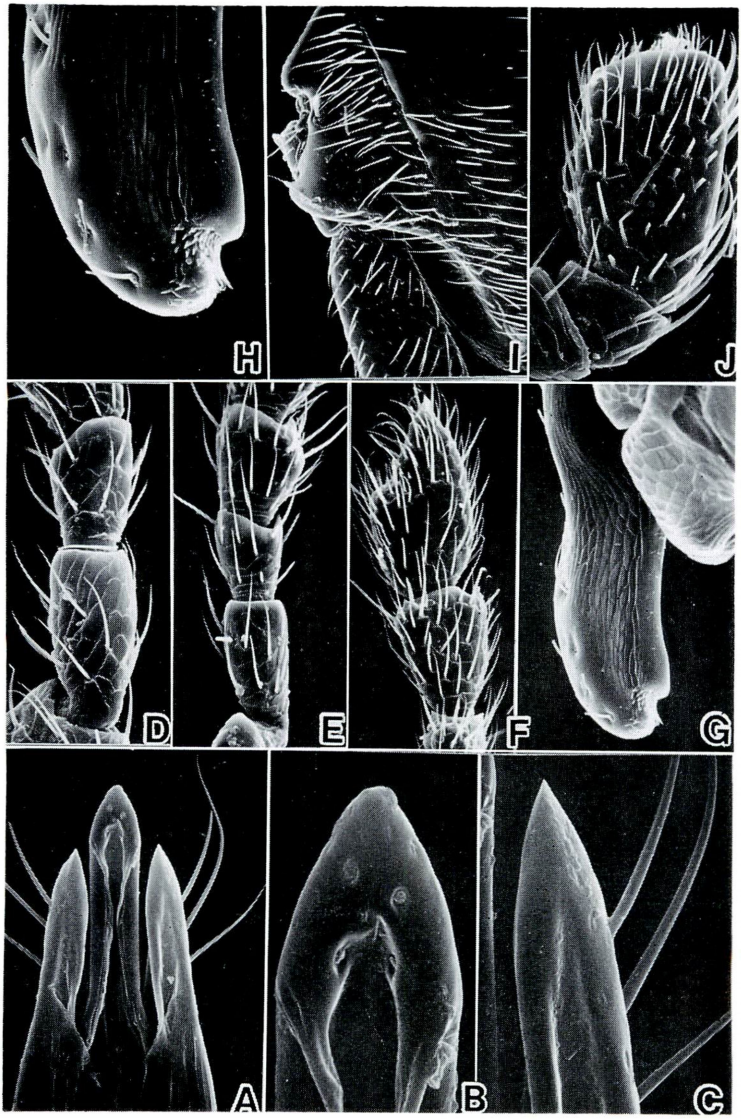
2. 類縁関係について

本種は大平(1984)が若干ふれたように，日本およびその周辺に分布するミズギワコメツキ亜科 (Negastriinae) の種のうちではやや特殊な位置づけにあるものと思われる. *Thurana* 属は STIBICK(1971)によって設立された属で，属の基準種は *Cryptohypnus scitus* CANDÈZE, 1896 という Java 地方に分布している体長 1.2 mm ほどの微小種で，近似種に *Cryptohypnus bellulus* CANDÈZE, 1894と呼ばれる体長 1.2 mm ほどの Sumatra 産の種が知られている. 石垣島産の本種は，これらよりやや大形のようであるが，外形は前2種にきわめて類似しているように判断される. 現在までに世界で以上の3種が知られているのみである.

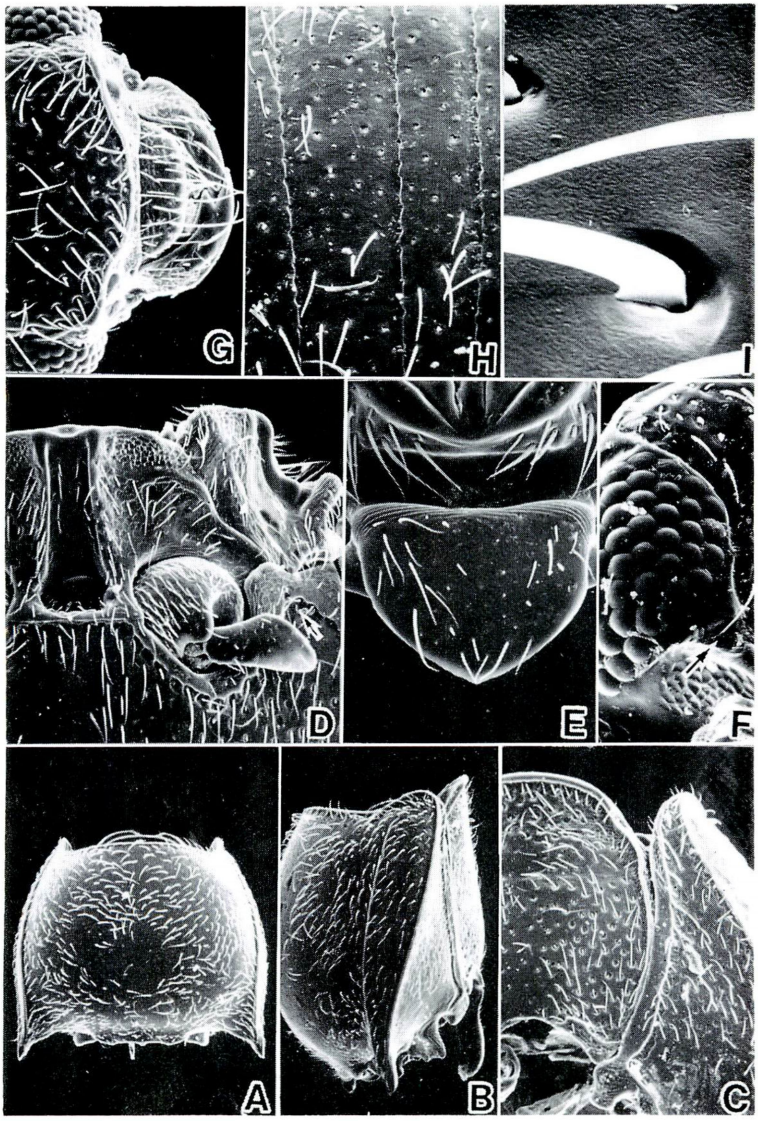
STIBICK (1971) は本属を設立するについて，この属は *Yukoana* 属や *Quasimus* 属にかなり近い関係にあると判断していたようであるが，それは前胸背板後角から伸長する長い隆起線や幅広い二重の前胸腹側板線などの形態の類似性によるものと思われる. また，KISHII (1987) が示した系統表では，本属は *Futomigiwa* 属に近い位置になっているが，*Futomigiwa* 属はこれとは全く異質なグループであるので，この判断も正確ではないと考えられる. 筆者のこの度の調査では，本属は *Zorochrus* 属に最も近い関係にある属と判断される. 日本から知られている本亜科の属では *Pronegastrius* 属がある. また，本種は未発達の複眼や前胸腹板突起，それに中肢基節腔周辺の小板の形態などから判断して，きわめて分化のおくれた種であり，今後本亜科の系統などを考察するうえにもきわめて重要な位置にある種（または属）であると判断される.

3. そ の 他

本種は入江 (1986) によると，石垣島のオモト岳の山頂付近に生えているリュウキュウチクの葉上より打網採集で最初に得たとされているが，その後に地上の礫下や地面に接している下草の葉裏などからも見出されたとされている. 今度，筆者が調査した個体は，同氏が 1977 年6月16日に得たものである.



(H. Ôhira photo.)



(H. Ôhira photo.)

今後は幼虫も含めて，さらに詳しい生態とここと同じ地層の西表島での分布についても確認したいものである．幼虫は地表近くの土壌中に生息するものと思われる．

引 用 文 献

入江平吉 (1986)；イリエケシマメコメツキの思い出．北昆の四季，8：9.

KISHII, T. (1987)；A taxonomic study on the Japanese Elateridae (Coleoptera), with the keys to the subfamilies, tribes and genera：1–262, 12 pls. (Kyoto).

ÔHIRA, H. (1977)；New or little-known Elateridae (Coleoptera) from Japan, XXII. Ent. Rev. Japan, 30 (1/2)：11–12.

大平仁夫 (1984)；九州に産するコメツキムシ科の珍種 (19)．北九州の昆虫，31 (2)：103–106, 1 pl.

STIBICK, J. N. L. (1971)；The generic classification of the Negastriinae (Coleoptera：Elateridae). Pacific Ins., 13 (2)：371–380.

Summary

In the present study, the author has examined some structures of the male specimens of *Thurana iriei* ÔHIRA, 1977, which are collected at Mt. Omoto-dake in Ishigaki-jima Is. of the Ryukyus on 16th June 1977 through the courtesy of Mr. H. IRIE.

Some morphological structures of this species are shown in SEM images (Plates 7 and 8). The conclusion is that the genus *Thurana* STIBICK, 1971 is somewhat related to the genus *Zorochrus* THOMSON, 1858. Also, the species *T. iriei* seems to be one of the most primitive species in the subfamily Nagastriinae found in Japan and its adjacent areas.

Explanation of Plates 7–8.

Pl. 7. *Thurana iriei* ÔHIRA, 1977 (male) (Mt. Omoto-dake, Ishigaki-jima Is.).

A, aedeagus, dorsal aspect (×1,000)；B, ditto, apical portion of median lobe (×4,000)；C, ditto, lateral lobe (×3,000)；D, 2nd and 3rd segments of antenna (×800)；E, 2nd to 4th segments of antenna (×650)；F, apical two segments of antenna (×620)；G, prosternal process, lateral aspect (×650)；H, ditto, apical portion (×1,200)；I, basal plate (×350)；J, apical segment of maxillary palpus (×1,000).

Pl. 8. *Thurana iriei* ÔHIRA, 1977 (male) (Mt. Omoto-dake, Ishigaki-jima Is.).

A, pronotum, dorsal aspect (×110)；B, ditto, lateral aspect (×150)；C, prosterno-pleural suture (×200)；D, mesocoxal area and mesosternal groove (×350)；E, scutellum (×520)；F, basal area of clypeal margin (×600)；G, clypeal margin, dorsal aspect (×300)；H, 2nd and 3rd intervals of left elytron (×600)；I, disc of pronotum (×4,000).

第39回（昭和62年度）大会記録

昭和62年度の第39回大会は，同年12月13日午前10時30分から大阪市立自然史博物館において開催された．午前中は恒例の自由懇談及び甲虫の同定が行われ，各グループでそれぞれ虫談の花が咲いた．

午後１時から澤田幹事の司会により，まず大倉幹事から会務会計報告があった後，林靖彦氏の“日本産チビシデムシの研究と現状”について種の判別基準と問題点・動物地理的系統・今後の課題等について講演が行われた．引続き，木元新作氏から“スリランカのハムシ相について”と題して講演があり，農林水産省果樹試験場大竹昭郎氏の資料によるとスリランカのハムシ相はヒゲナガハムシ・ノミハムシ・サルハムシが優勢であることから台湾・海南島のそれに近いが，季節的にはサマーモンスーンの３月～８月はサルハムシがより優勢に，ウインターモンスーンの10月～翌年２月はノミハムシが優勢になるとのことであった．

当日の出席者（敬称略・＊は懇親会出席者）は下記のとおり．

有本久之・畑山武一郎・林　匡夫・*林　靖彦・平田信夫・市橋　甫・今坂正一・伊藤　武・岩田隆太郎・木元新作・桐山　功・岸井　尚・*的場　績・松田　潔・*中山紘一・*奈良一・*野村　全・*大倉正文・大谷規夫・奥田則雄・斉藤昌弘・澤田高平・*佐々治寛之・*高羽正治・田村　周・*田村　保・*田中昭太郎・豊嶋亮司・*和田賢次・渡辺昭彦・*渡辺　崇・*八木正道・*吉田正隆．

（大倉）

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Eisai
エーザイ

一日いれば、くすり博士。

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