

X. — CATALOGUE OF THE COREIDAE IN THE RIJKSMUSEUM VAN NATUURLIJKE HISTORIE. PART I, CORIZINAE, ALYDINAE. BY H. C. BLÖTE. (WITH 10 TEXTFIGURES).

As a result of my further work on the reordering of the collection of bugs in the Leiden Museum I am giving now a catalogue of the Coreidae in the Museum, which will appear in some parts, as the group is rather large.

Again I was enabled to visit the British Museum (Natural History), and I will include in the present paper some remarks upon species of which types are in this Museum. Of course it was of great importance for the identification of our specimens too, that I could compare the doubtful things with the rich collection in this Museum. I am very thankful to Mr. China again for his kind assistance.

Some years ago (in 1928) the Leiden Museum acquired the extensive collection of bugs of Mr. A. J. F. Fokker. This collection has to be kept separately from the main collection; in the following catalogue is indicated which specimens form a part of this collection.

The general classification used in this catalogue is that of A. Handlirsch in Schroeder's „Handbuch der Entomologie”, III, Jena, 1925.

CORIZINAE.

*Harmostes apicatus* Stål. 1. Corrientes, Argentina, Staudinger 1932.

*Harmostes brevispinus* nov. spec. (fig. 1). Pronotum with a narrow, yellowish, medial keel; lateral borders irregularly and rather coarsely crenulated. The three basal segments of the venter with a distinct furrow. The third joint of the antennae distinctly longer than the second. Head with a medial, longitudinal furrow, which ends in a small impression at the base of the tylus. From this impression furrows are directed to the ocelli, and from there to the eyes and to the base of the head. Before the ocelli the vertex shows a distinct, somewhat triangular impression. The border of the pronotum is white, and distinctly broader than in *Harmostes nebulosus* Stål. Colour reddish brown, the clavus and corium somewhat greyish, the upper surface coarsely and thickly punctate. Underside brownish orange, with large, reddish points, which are of lighter colour in their centre. Membrane transparent, spotted with brown. Legs ochraceous, the posterior femora spotted with brown in their apical half, and armed beneath with about eight spines, three of which are larger

than the others. Length of the ♂  $8\frac{1}{2}$  mm.—1. Yungas, Bolivia, Staudinger 1933 (Holotype).

**Harmostes dorsalis** Burm. 1—3. Brasil, Mus. Berlin.

**Harmostes nebulosus** Stål. 1. Jalapa, Mexico, Staudinger 1932.

**Harmostes ochraceus** nov. spec. (fig. 2). Pronotum with a narrow, smooth, longitudinal line in the middle, the lateral borders finely crenulated. The two basal ventral segments distinctly, the third faintly furrowed. Third joint of the antennae distinctly longer than the second. Head with a longitudinal, medial furrow, a transverse furrow between the ocelli, furrows between the ocelli and the inner corners of the eyes, and small furrows near the anterior inner edge of the eyes. The anterior corners of the lateral edges of the pronotum are situated distinctly behind the anterior edge of the pronotum. The lateral border of the pronotum is nearly concolourous to the disk. Colour yellowish ochraceous, the head, the anterior part of the pronotum and the scutellum, except its apex, slightly darker. Thorax and hemielytra rather thickly punctured with brownish ochraceous. Underside yellowish, the prosternum punctured with ochraceous, the meso- and metasternum with concolourous punctuation; the venter of the abdomen very finely transversely furrowed. Anterior legs yellow, claws black. Ultimate joint of the antennae brownish. Length of the ♀ 8 mm. — 1. Caracas, v. Lansberge (Holotype).

**Harmostes prolixus** Stål. 1. Rio Grande do Sul, Staudinger 1932. — 2—4. Minas Geraes, Staudinger 1934.

**Harmostes reflexulus** Say. 1. Texas, Stål. — 2. Beltsville, Md., 17 May 1914, W. L. Mac Atee. — 3—4. Wilmerding, Pa., Staudinger 1934.

**Harmostes serratus** F. 1—3. Columbia, Klug. — 4—5. Mt. St. Benedict, Trinidad, July 1929, D. C. Geyskes. — 6. Tunapuna, Trinidad, August 1929, D. C. Geyskes. — 7. Marcapata, Peru, Staudinger. — 8. Pachitea, Peru, Staudinger.

**Harmostes subrufus** Dist. 1. Marcapata, Peru. — 2. Upper Peru. — 3. Blumenau, Brasil. — 4. Mapiri, Bolivia. (Altogether: Staudinger 1932).

**Therapha albomarginata** nov. spec. In general aspect very similar to *T. hyoscyami* L., and, like this species, rather variable. Commonly the specimens are somewhat more hairy, the black markings on the head and on the forewings are somewhat larger, and the four black points at the posterior border of the pronotum are not confluent in the greater part of the specimens examined. In many cases the forewings are partly

yellowish transparent. The posterior border of the metasternum is entirely whitish, often the posterior borders of the pro- and mesosternum are whitish too. The ultimate and penultimate segments of the back of the abdomen are black, the three foregoing segments red, the base black again. The male specimens are differing from those of *T. hyoscyami* in having the lateral corners of the apical border of the ultimate ventral segment more strongly produced and rounded (see fig. 3a), the space between the

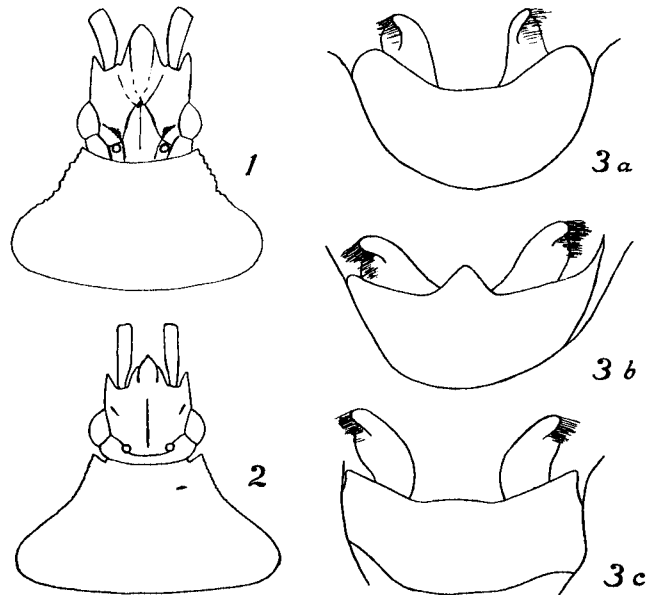


Fig. 1. Head and pronotum of *Harmostes brevispinus*.

Fig. 2. Head and pronotum of *Harmostes ochraceus*.

Fig. 3. Ultimate ventral segments of the males, seen from behind, of

a. *Therapha albomarginata*.      b. *Therapha atropyga*.

c. *Therapha hyoscyami*.

lateral expansions is incurved, not as in *T. hyoscyami*, slightly bent outward. Length  $8\frac{3}{4}$ —10 mm. — 1. Inn-Shan, Mongolia, Staudinger 1934 (Holotype ♂). — 2—3. Turan, Baikal, Staudinger 1933 (Allotype ♀ and Paratype). — 4. Borochojewa, Transbaikal, Staudinger 1933 (Paratype). — 5. Namangan, Fergana, Staudinger 1934 (Paratype). — 6. Kokand, Fergana, Staudinger 1934 (Paratype), — and a number of paratypes in Staudinger's stock, from the same localities and from Ak-Tash, Tashkend; Alex-Mountains, Turkestan and Wernyi, Turkestan.

Var. *pallens* nov. var. Similar to the typical form, but differing in colour, which is ochraceous instead of red. The black markings on head

and thorax are somewhat less extending. The first joint of the antennae is yellowish at the inner side; the second joint in the middle, the third joint except the base and the apex, and the fourth joint nearly entirely ochraceous. Legs yellow; the femora with black points near the apex, the tarsi black, except the base of the first joint. — 1—2. Kokand, Fergana, Staudinger 1934 (Holo- and Allotype of the var.). — 3—4. Wernyi, Turkestan, Staudinger 1933 (Paratypes).

**Therapha atropyga** nov. spec. Still more similar to *T. hyoscyami* L. in general aspect, but differing in the shape of the ultimate ventral segment of the ♂, which is black, shining, with fine transverse striae, the apical edge showing a medial, triangular extension (see fig. 3*b*). In both sexes the foregoing ventral segment shows a large, triangular black marking, reaching the centre of the apical edge. Ultimate segment of the back of the abdomen black, the four foregoing segments red, the base black. Length 9—10½ mm. — 1. Borshom, Caucasus (Holotype ♂). — 2—3. Fergana, Turkestan (Allotype ♀ and Paratype). — 4—5. Kokand, Fergana (Paratypes); altogether from Staudinger, 1934; and a number of paratypes in Staudinger's stock, from the same localities and from Tedschen, Transcaspia; Tiflis, Caucasus; Elisabethpol, Caucasus and Ak-Tash, Tashkend.

As this and the foregoing species, together with *T. limbata* Reut., *T. tetraspila* Horv., and perhaps a fourth species are occurring together at the same localities, I was not able to obtain certainty about characters for separating the females in all cases.

**Therapha brevicornis** Horv. 1. Tiflis, Caucasus. 1—2. Elisabethpol, Caucasus; both: Staudinger 1934.

**Therapha hyoscyami** L. (Ultimate ventral segment of the ♂: fig. 3*c*).  
 1. Holland?, v. Vollenhoven. — 2. Zierikzee, August 1877, Fokker. — 3. Bonn, August 1885. — 4—8. Thüringen, Dr. O. Schmiedeknecht. — 9. Pusterthal, August 1893, Fokker. — 10. Cortina, Tyrol, Sept. 1893, Fokker. — 11—12. Riva, Tyrol, August, Fokker. — 13. Fucine, Tyrol, August 1895, Fokker. — 14. Bozen, Eggenenthal, August, Fokker. — 15. Simplon. — 16. Velebit-mountains, Croatia, Sequens. — 17—21. Gospić, Croatia, Sequens. — 22. Monfalcone, Istria, Fokker. — 23. Olympia, 1901, Dr. Schmiedeknecht. — 24. Gardone, August 1897, Fokker. — 25—26. Edolo, Italia, August 1895, Fokker. — 27. Capo di Ponte, Italia, August 1895, Fokker. — 28. Madonna di Campiglia, August 1895, Fokker. — 29—31. France, Meyer-Dür. — 32—33. Charente, H. Giraudeau. — 34—35. Grasse, S. France, D. v. d. Hoop. — 36. Caunterets, Pyrenées, 1893, Everts. — 37. Caunterets. — 38—40. Collioure. — 41—43. Corsica, May

1893, D. v. d. Hoop. — 44. Iviza, Balaeares, Dr. O. M. Schmiedeknecht. — 45. Ivize, Spain, Dr. O. M. Schmiedeknecht. — 46—47. Sierra Nevada, Spain, Staudinger. — 48. Culoz, April 1893, de Meijere. — 49. Oran, 1895, Dr. Schmiedeknecht. — 50. Saida, 1895, Dr. Schmiedeknecht. — 51. Hamman-Bou-Hadjar, Oran, 1895, Dr. Schmiedeknecht. — 52. Tlemcen, Oran, 1895, Dr. Schmiedeknecht. (These 52 specimen in Fokker's collection). — 90. Bérisol, Sept. 1901, in Fokker's collection. — 91—92. Germany. — 93—97. Switzerland, Meyer-Dür. — 98. Italy, Cantraine. — 99(—102?). Holland, Snellen v. Vollenhoven. — 103—104. Gavarnie, Pyrenées, May, Leesberg. — 105. Spain, Heira. — 106—107. Piemont, Gribodo. — 108. Loopschans, Breda, 16 Sept. 1873, Heylaerts. — 109. Brieg, July 1924, R. v. d. Veen. — 110. Bahr el Abiad, Felder. — 111. Dalmatia, May 1890. — 112. Ems, August 1929, Chr. Berger.

Var. **flavicans** Put. 113. Corsica, Marsh.

Var. **nigridorsum** Put. 53—56. Rio Salato, Oran, 1895, Dr. Schmiedeknecht. — 57—59. Hamman-Bou-Hadjar, Oran, 1895, Dr. Schmiedeknecht. — 60—62. Oran, 1895, Dr. Schmiedeknecht. — 63. Saida, 1895, Dr. Schmiedeknecht. — 64—66. Tunis, 1898, Dr. Schmiedeknecht. (These 14 specimens in Fokker's collection). — 114. Algeria, Staudinger 1933.

Var. **pallescens** Bergr. 67—68. Djebel-Tessalah, Oran. — 69—75. Hamman-Bou-Hadjar, Oran. — 76—84. Rio Salato, Oran. — 85—86. Tlemcen, Oran. — 87—89. Saida; altogether: 1895, Dr. Schmiedeknecht, in Fokker's collection.

**Therapha limbata** Reut.

Var. **subsimilis** Horv. 1. Margelan, Turkestan, Staudinger 1934.

**Liorhyssus hyalinus** F. 1. Corsica, Meyer-Dür. — 2. Genoa, Italia, Mantero. — 3. Riva, Tyrol, August, Fokker. — 4—7. Abbazia, Istria, August, Fokker. — 8—9. Monfalcone, Istria, August, Fokker. — 10. Zara, Dalmatia, Novak. — 11. Athens, 1901. — 12—13. Olympia, 1901. — 14—16. Corfu, 1901. — 17. Cephalonia, 1901. — 18. Wadi-Hoffi, Arabian desert, Egypt, March—April 1897. — 19—21. Tourrah, near Cairo, Egypt, March—April 1897. — 22—27. Rio Salato, Oran, 1895. — 28. Saida. — 29—32. Tlemcen, Oran. — 33. Djebel Tessalah, Oran, 1895. — 34—46. Hamman-Bou-Hadjar, Oran, 1895. — 47. Djebel Tessalah, Oran, 1895. — 48—51. Tunis, 1898. (The specimens 11 to 51 collected by Dr. Schmiedeknecht; the specimens 1 to 51 in Fokker's collection). — 65. Brasil, Museum Berlin. — 66. Algeria, Richter. — 67—70. Tunis, 1898, Dr. Schmiedeknecht. — 71. Djebel Tessalah, Oran, 1895, Dr.

Schmiedeknecht. — 72—73. Kerki, Buchara, Staudinger 1934. — 74. St. Antoine, Algeria, A. Théry, Staudinger 1934. — 75. Namangan, Fergana, Staudinger 1934.

**Var. marginatus** Jak. 76. Wernyi, Turkestan, Staudinger 1934.

**Var. rubricatus** Reut. 52. Abbazia, Istria, August, Fokker. — 53—54. Mallorca, Baleares, Dr. O. M. Schmiedeknecht. — 55—56. Palma, Baleares, Dr. O. M. Schmiedeknecht. — 57. Rio Salato, Oran, 1895, Dr. O. M. Schmiedeknecht. — 58. Djebel Tessalah, Oran, 1895, Dr. O. M. Schmiedeknecht. — 59—61. Hamman-Bou-Hadjar, Oran, 1895, Dr. O. M. Schmiedeknecht. — 62. Tunis, 1898, Dr. O. M. Schmiedeknecht. (These 12 specimens in Fokker's collection).

**Var. sanguineus** Costa. 63. Corfu, 1901, Dr. O. M. Schmiedeknecht, in Fokker's collection. — 64. Olympia, 1901, Dr. O. M. Schmiedeknecht, in Fokker's collection. — 77. Philippeville, Algeria, Staudinger 1934.

**Liorhyssus natalensis** Stål. 1. Okanjanda, S. W. Africa, Staudinger 1912. — 2. Harrar, Abyssinia, Staudinger 1933.

**Liorhyssus rubicundus** Sign. 1. Anuradhapura, Ceylon, W. Horn, Staudinger 1934. — 2. Takao, Formosa, 8 December 1907, H. Sauter. — 3—5. Takao, Formosa, Staudinger 1934. — 6. Formosa, Staudinger 1934. — 7—13.?

**Peliochrous nigromaculatus** Stål. 1—6. Ghinda, Erythraea, Staudinger 1933.

**Corizus conspersus** Fieb. 1. Switzerland, Meyer-Dür. — 2.?, Staudinger 1931.

**Corizus distinctus** Sign. 1—3. Thüringen, Dr. O. M. Schmiedeknecht, in Fokker's collection. — 4. Zara, Dalmatia, Novak, in Fokker's collection. — 5—6. Gospić, Croatia, Sequens, in Fokker's collection. — 7.?. — 8. Aslanbob, Fergana, Staudinger 1934.

**Corizus latus** Jak. 1. Ompo, Korea, Staudinger 1933. — 2. Sieshin, Korea, Staudinger 1933. — 3. Su-Tschan, Ussuri, Staudinger 1934.

**Corizus maculatus** Fieb. 1. Nijmegen, ter Haar. — 2. Breda, 26 June 1870, Snellen. — 3. Bavaria. — 4—6. Switzerland, Meyer-Dür. (These 6 specimens in Fokker's collection). — 7. Sweden, Type of *Corizus ledi* Bohemann, Stål. — 8—15. Switzerland, Meyer-Dür. — 16. Winterswijk, 16—18 July 1921, H. C. L. v. Eldik. — 17. Austria, Mayr.

**Corizus ornatus** Court. 1. Meru, Kenya, 1931, Brouwer and Harinxma thoe Slooten.

**Corizus parumpunctatus** Schill. 1. Hattum, August, Snellen v. Vollenhoven. — 2. Arnhem, May, v. Medenbach de Rooy. — 3. Arnhem, Sept., v. Medenbach de Rooy. — 4—6. Arnhem, 16 August 1872. — 7. Arnhem, May 1887. — 8. Velp, August 1874, Ritsema. — 9—10. Nijmegen. — 11(—12?). Utrecht, v. Hasselt. — 13. Driebergen, Six. — 14—17. Naarden, July 1887, Snellen v. Vollenhoven. — 18. Aerenhout, 21 June 1868, Ritsema. — 19—20. Noordwijk, 28—31 August, Snellen v. Vollenhoven. — 21. Katwijk, August. — 22. Wassenaar, 27 January, Snellen v. Vollenhoven. — 23. Wassenaar, 5 August 1860, Snellen v. Vollenhoven. — 24. Wassenaar, 6 August. — 25. The Hague, v. Hasselt. — 26. Holland, Franssen. — 27(—28?). Holland. — 29—32. Renesse, July 1888. — 33. Bergen op Zoom, July 1889. — 34. Schelde, 22 July, Snellen v. Vollenhoven. — 35—36. Haamstede, August 1894, Fokker. — 37—70. Orval, Belgium, August, Fokker. — 71—74. Pont de Bourre, August 1885. — 75—76. Marché les Dames, August 1885. — 77—78. Barvaux, August 1885. — 79. Durbuy, August 1885. — 80—82. Charente, H. Giraudeau. — 83. Corsica, Meyer-Dür. — 84. Clusone, Italia, August 1895, Fokker. — 85. Switzerland, Meyer-Dür. — 86. Hanz, Switzerland, Sept. 1898, Fokker. — 87. Zermatt, Switzerland, August 1894, Fokker. — 88. Burgdorf. — 89. Zillerthal, July, Fokker. — 90. Bozen, Eggenthal, August, Fokker. — 91—104. Thüringen, Dr. O. M. Schmiedeknecht. — 105—129. Gospić, Croatia, Sequens. — 130. Velebit-mountains, Croatia, Sequens. — 131. Zante, Dr. Schmiedeknecht. — 132—134. Corfu, 1901, Dr. Schmiedeknecht. — 135—136. Olympia, 1901, Dr. Schmiedeknecht. — 137. Alai, Turkestan. — 138—140. Djebel Tessalah, Oran, 1895, Dr. Schmiedeknecht. — 141. Hamman-Bou-Hadjar, Oran, 1895, Dr. Schmiedeknecht. — 142. Tlemcen, Oran, June 1895, Dr. Schmiedeknecht. — 143—162. Tunis, 1898, Dr. Schmiedeknecht. — 163. Thüringen, Dr. Schmiedeknecht. — 164. Bohemia, L. Duda. — 165—168. Gospić, Croatia, Sequens. — 169. Corfu, 1889, Dr. Schmiedeknecht. (These 169 specimens in Fokker's collection). — 170. Zeeland. — 171—172. Rozendaal, August, Snellen v. Vollenhoven. — 173—174. Holland, Snellen v. Vollenhoven. — 175. Holland, de Haan. — 176. Bavaria, Sturm. — 177—179. de Bildt, August, Six. — 180. Wassenaar, 6 August. — 181—184. Katwijk, August. — 185. De Bilt, Sept. — 186. Noordwijk, Sept., on alder-trees. — 187. Wassenaar, 6 August. — 188. Noordwijk, Sept. — 189. Katwijk, August. — 190—192. Holland, de Haan. — 193. Holland, Snellen v. Vollenhoven. — 194—206. Wassenaar, 22 June—25 August 1925—'26. — 207. Katwijk, 19 July 1925. — 208—228. Wassenaar, 9 August—16 Sept. 1925. (The specimens 194—228 collected by H. C. Blöte). — 229. Bisamberg, Austria, Mayr. —

230—233. Switzerland, Meyer-Dür. — 234. Wassenaar, 25 August 1926, H. C. Blöte. — 235. Scheveningen, 22 July, C. Ritsema. — 236. The Hague, 29 July. — 237—238. ?, dunes, v. Hasselt. — 239. Noordwijk, 7 July 1874. — 240—243. Loosduinen, Sept., v. Hasselt. — 244—246. Scheveningen, v. Hasselt. — 247. Scheveningen, 13 July. — 248. Oosterbeek, v. Hasselt. — 249—250. The Hague, v. Hasselt. — 251. Noordwijk, 30 August. — 252. Waalsdorp, dunes. — 253. Utrecht, v. Hasselt. — 254—257. ?, dunes, 5 June, v. Hasselt. — 258. Eerbeek, 27—28 August 1927, Dr. H. Boschma. — 259—260. Wassenaar, 28 August 1925, J. v. d. Vecht. — 261. Wassenaar, 9 April 1925, H. C. Blöte. — 262—263. The Hague, 29 July 1923, H. C. Blöte. — 264—265. Weert, 29 August 1924, H. C. Blöte. — 266. Amersfoort, 14 Sept. 1924, H. C. Blöte. — 267. Hilversum, 30 July 1923, A. Reclaire. — 269—270. Tedschen, Transcaspia, Staudinger 1934. — 271. Japan, Staudinger 1934.

Var. *subspeciosus* Schum. 268. Weert, 29 August 1924, H. C. Blöte.

*Corizus rubricosus* Bol. 1—4. Meru, Kenya, 1931, Brouwer and Harinxma thoe Slooten.

*Corizus rufus* Schill. 1. Naarden, July 1885, Snellen v. Vollenhoven. — 2. Bohemia, L. Duda. — 3. Gospić, Croatia, Sequens. — 4. Corsica, Meyer-Dür. — 5—10. Hamman-Bou-Hadjar, Oran, 1895, Dr. Schmiedeknecht. — 11. Djebel Tessalah, Oran, 1895, Dr. Schmiedeknecht. — 12. Rio Salato, Oran, 1895, Dr. Schmiedeknecht. (These 12 specimens in Fokker's collection). — 19. Katwijk, July 1924, H. G. Wittenrood.

Var. *lepidus* Fieb. 13. Oran, 1889, Desbrochers, in Fokker's collection. — 14—18. Djebel Tessalah, 1895, Dr. Schmiedeknecht, in Fokker's collection.

*Corizus sparsus* nov. spec. Rather similar, in general aspect, to the

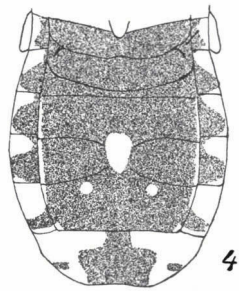


Fig. 4. Dorsum of the abdomen of *Corizus sparsus*.

European species of this genus. Dorsum black, a white patch on the disk, two small rounded spots behind this patch, and lateral transverse spots at the base of the last segment yellow (see fig. 4). The connexivum yellow, with black transverse bands at the hind border of each segment. Pronotum somewhat longer than in the European species, the space before the transverse furrow distinctly broader, and only very faintly elevated. Scutellum with a rather acute apex. Colour above yellowish ochraceous, a small spot between ocelli and eyes black, the points on the scutellum, and partly those on the pronotum, dark brown. Hemielytra with two rows of brown spots, the



apex of the corium reddish. Underside yellowish. Points on the pleurae brown. Venter of the abdomen smooth, with reddish patches. Central part of the back of the abdomen thickly punctured, the connexivum and the ultimate segment nearly smooth, shining. Antennae yellow, with a black stripe at the outer side of the first and second joint. (The fourth joint is missing in both specimens). Legs yellow, with reddish brown points. Length of the ♀  $6\frac{1}{2}$  mm. 1—2. Ping-Shiang, S. China, Dr. Kreyenberg, Staudinger 1933 (♀♀, Holo- and Paratype).

**Corizus subrufus** Gmel. 1. Driebergen, Six. — 2. Friesland, ter Haar. — 3—4. Valkenberg, June 1894. — 5. Houthem, July 1894, Versluys. — 6—7. Maastricht, June 1894. — 8. Pont de Bourre, August 1885. — 9. Huy, August 1885. — 10. Bérisol, Sept. 1901. — 11. Collioure. — 12—13. Landes, France. — 14. France. — 15. Corsica. — 16—20. Orval, Belgium, August, Fokker. — 21. Dohan, Belgium, August, Fokker. — 22—25. Switzerland, Meyer-Dür. — 26. Brunnen, Switzerland, August, Fokker. — 27—30. Thüringen, Dr. O. M. Schmiedeknecht. — 31—32. Ulm, June 1893. — 33—55. Riva, Tyrol, August, Fokker. — 56. Bozen, Eggenthal, August, Fokker. — 57—58. Bozen, Sept. 1893, Fokker. — 59—61. Bozen, Oct. 1894, v. d. Hoop. — 62. Tyrol, Alpes, August 1895, Dr. Veth. — 63. Austria. — 64. Adelsberg, Krain, August, Fokker. — 65—66. Monfalcone, Istria, August, Fokker. — 67—76. Gospić, Croatia, Sequens. — 77. Edolo, Italia, August 1895, Fokker. — 78—79. Gardone di Garda, Italia, August 1897, Fokker. — 80—81. Monte Baldo, Lago di Garda, Dr. O. Schmiedeknecht. — 82—88. Tunis, 1898, Dr. O. Schmiedeknecht. (These 88 specimens in Fokker's collection). — 89. Bavaria, Sturm. — 90—95. Switzerland, Meyer-Dür. — 96. Arcachon, May, Leesberg. — 97—98. Torino, Gribodo. — 99—101. Naples, Everts. — 102. Göttingen, Everts. — 103. Italia, Camerano. — 104—105. Vallombroso, Italia, Dr. H. J. Veth. — 106. Dellaggio, May 1898, Dr. H. J. Veth. — 107. Dalmatia, May 1899. — 108. ?. — 109. Boppau, Oct. 1885. — 110. Dohan, Belgium, August, Fokker. — 111. Torino, Gribodo.

**Rhopalus tigrinus** Schill. 1—4. Monte Baldo, Lago di Garda, Dr. O. Schmiedeknecht. — 5—6. Gospić, Croatia, Sequens. — 7—8. Constance, Dobrudja, A. L. Montandon. — 9. Astrachan, Dr. Staudinger. — 10. Athens. — 11. Olympia, 1901. — 12—19. Corfu, 1901. — 20—23. Oran, 1895. — 24—29. Rio Salato, Oran, 1895. — 30—31. Djebel Tessalah, Oran, 1895. — 32—45. Hamman-Bou-Hadjar, Oran, 1895. — 46. Tunis, 1898. (The specimens 10—46 collected by Dr. Schmiedeknecht; the specimens 1—46 in Fokker's collection). — 47. Dalmatia, Cantraine. —

48. Amasia, Asia minor, Staudinger 1934. — 49. Tedschen, Transcaspia, Staudinger, 1934.

**Stictopleurus abutilon** Rossi. 1. Vresse, Belgium, July, Fokker. — 2—6. Orval, Belgium, August, Fokker. — 7. Harz. — 8—24. Thüringen, Dr. Schmiedeknecht. — 25—25a. Windorf, Thüringen, 26 July 1891, Dr. Schmiedeknecht. — 26. Charente, H. Giraudeau. — 27. France, Meyer-Dür. — 28. Aix les Bains. — 29. Coste, S. France, D. v. d. Hoop. — 30. Sierra Nevada, Spain, Staudinger. — 31—33. Ivize, Spain, Schmiedeknecht. — 34. Iviza, Baleares, Schmiedeknecht. — 35. Palma, Baleares, Schmiedeknecht. — 36. Corsica, May 1893, D. v. d. Hoop. — 37. Valle di Sole, Tyrol, 1895. — 38—39. Monte Baldo, Lago di Garda, Dr. O. Schmiedeknecht. — 40. Abbazia, Istria, August, Fokker. — 41—49. Gospić, Croatia, Sequens. — 50. Greece. — 51. Parnassus. — 52—53. Olympia, 1901, Dr. Schmiedeknecht. — 54—55. Corfu, 1901, Dr. Schmiedeknecht. — 56—61. Astrachan, Dr. Staudinger. — 62. Alai, Turkestan. — 63—71. Saïda, 1895. — 72—74. Oran, 1895. — 75—103. Rio Salato, Oran, 1895. — 104—107. Tlemcen, Oran, 1895. — 108—147. Hamman-Bou-Hadjar, Oran, 1895. — 148—156. Djebel Tessalah, Oran, 1895. — 157—172. Tunis, 1898. (The specimens 63—172 collected by Dr. Schmiedeknecht; the specimens 1—172 in Fokker's collection). — 173. Austria, Mayr. — 174. Bozias. — 175—176. Bavaria, Sturm. — 177. Torino, Gribodo. — 178. Dalmatia, May 1899. — 179—182. Martinet, Lerida, spanish Pyrenées, Sept. 1930, N. Tinbergen. — 183. St. Charles, Algeria, A. Théry. — 184. Ak-Tash, Tashkent, Staudinger 1934. — 185. Kazalinsk, Syr Darja, Staudinger 1934. — 186. Elisabethpol, Caucasus, Staudinger 1934. — 187. Kokand, Fergana, Staudinger 1934. — 188. Corsica, Staudinger 1934. — 189. Bocognana, Corsica, 1905. O. Leonhard, Staudinger 1934.

**Stictopleurus angustus** Reut. 1. Wernyi, Turkestan, Staudinger 1934.

**Stictopleurus brevicornis** nov. spec. This species is rather distinct by the little prominent eyes, which are touching the anterior corners of the pronotum. Antennae short, first joint only two times as long as large, second joint about three times as long as the first, third joint slightly shorter, fourth joint slightly longer than the second; brown, the second joint in the middle, the third joint nearly entirely yellowish. Pronotum reddish brown, growing darker toward the anterior margin. Lateral borders only very slightly inflexed, yellow. Scutellum obscure reddish brown, the lateral borders yellow, the top orange-yellow. Hemelytra transparent, the nervatures in the apical half brown, the costal

and subcostal nerves yellow. Dorsum of the abdomen brown, with an ill-defined central yellow spot on the disk and yellowish parts on the basal segment. The ultimate segment greenish yellow, with a large, longitudinal, brownish black band on the middle. Connexivum yellow, the apical half of each segment black. Underside brownish ochraceous, the abdomen slightly darker than the thorax. A large black stripe at both sides of the thorax and black spots between the anterior and inter-medial coxae. Rostrum brownish ochraceous, growing darker toward the top. Legs reddish ochraceous, the centre of the tibiae yellow, the top of the tibiae and the tarsi greyish brown. Femora spotted with small, reddish brown points. Ultimate ventral segment of the ♂ (fig. 5a) with a rather acute tooth on the centre of the apical edge; apical parts of the paramera shining black. Length of the ♂  $6\frac{1}{2}$  mm—1. Fort de Kock, Sumatra; 920 m, Febr. 1922, E. Jacobson (Holotype ♂).

**Stictopleurus crassicornis** L. 1. Vonèche, Belgium, July, Fokker. — 2—11. Thüringen, Dr. O. M. Schmiedeknecht. — 12. Winnenden, 15 Sept. 1892. — 13—15. Aix les Bains. — 16. Triberg, Schwarzwald, Fokker. — 17. Switzerland, Meyer-Dür. — 18—20. Locarno, Fokker. — 21. Monte Baldo, Lago di Garda, Dr. O. Schmiedeknecht. — 22—25. Madonna di Campiglia, August 1895, Fokker. — 26—27. Monfalcone, Istria, August, Fokker. — 28—30. Gospić, Croatia, Sequens. — 31. Cuenca, Castilia. — 32. Olympia, 1901. — 33. Tlemcen, Oran, June 1895. — 34—35. Hamman-Bou-Hadjjar, Oran, 1895. — 36. Djebel Tessalah, Oran, 1895. — 37—38. Tunis, 1898. (The specimens 32—38 collected by Dr. Schmiedeknecht; the specimens 1—38 in Fokker's collection). — 39—40. Bavaria, Sturm. — 41. Switzerland, Meyer-Dür. — 42. Elisabethpol, Caucasus, Staudinger 1934.

**Stictopleurus elongatus** nov. spec. Similar to *S. angustus* Reut. and *S. nysioides* Reut. in general aspect. Dorsum of the abdomen nearly entirely black, only a narrow, transverse band on the third segment, a rounded spot on the disk and two interrupted longitudinal lines on the ultimate segment yellow. Connexivum yellow. Head and pronotum whitish ochraceous, with a black spot behind the eyes and the ocelli, black spots outward of and before the ring-shaped impressions of the pronotum and black spots near its hind corners. The punctuation of the pronotum is brown. Scutellum greenish ochraceous at the top, turning into dark brown at the base. Head, pronotum and scutellum rather thickly covered with fine, erected, whitish tomentum. Hemielytra transparent, the nervature of the clavus and corium ochraceous, the top of the corium brownish ochraceous. A costal stripe on the middle, occupying about  $\frac{1}{3}$

of the costal length, dark brown. Antennae ochraceous, first, second and fourth joint with a brown stripe at their upper side. Under side and legs yellow. Rostrum black at the top. A small black point on each side

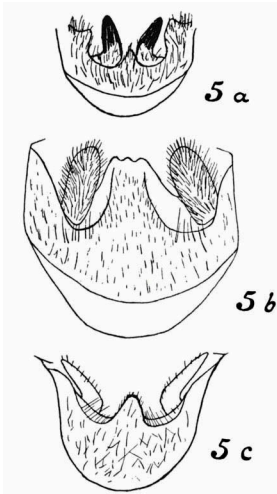


Fig. 5. Ultimate ventral segments of the males, seen from behind, of:  
 a. *Stictopleurus brevicornis*.  
 b. *Stictopleurus elongatus*.  
 c. *Stictopleurus minutus*.

of the head under the eyes and on each segment of thorax and abdomen; fourth and fifth segment of the venter of the abdomen each with four black points at their bases. Ultimate ventral segment of the ♂ (fig. 5b) with a large processus at the middle of the apical edge, terminated by three small, angular teeth. Length of the ♂ 8 $\frac{1}{4}$  mm. 1. Zahlé, E. Libanon, Syria, Staudinger 1933 (Holotype ♂).

*Stictopleurus minutus* nov. spec. Similar in general aspect to the european species, e. g., *S. punctatonervosus* Goeze, but of smaller size. The ring-shaped impressions at both sides in the anterior part of the pronotum are not entirely closed at the anterior side. The part before the transverse ridge is only very narrowly impunctured. Head and pronotum brownish ochraceous, punctured with brown. A spot between eyes and ocelli, in connection with a short stripe directed backward, and spots behind the ocelli

black. Posterior border of the vertex yellow. Lateral and posterior borders widened anteriorly. Scutellum dark brown, with yellow borders and a yellow wedge-shaped spot on each side of the base. Hemielytra transparent, the nerves yellow, near the basal corner of the membrane partly black. Top of the corium brown. Back of the abdomen black, with a central medial yellow spot on the posterior half of the fourth and on the fifth segment, coherent to the yellow anterior border of the sixth segment, which marking is widened into a spot on both sides on the middle of the lateral borders. Connexivum yellow, with large black spots on the end of each segment. Underside yellowish ochraceous, the sides slightly brownish. Meso- and metapleurae with ill-defined brown slaps, and brown stripes between anterior and intermediate coxae. Rostrum reaching the intermediate coxae, the basal joints yellow, with a narrow brown longitudinal line at the frontal side, the third and fourth joint brown. First joint of the antennae brown. Tops of the intermediate and posterior tibiae and of the metatarsi black. Ultimate ventral segment of the ♂ with a very distinct tooth at the middle of the apical edge (fig. 5c). Length of the ♂ 6 mm. — 1. Tshi-li. China, Staudinger 1934 (Holotype).

**Stictopleurus nysioides** Reut. Astrachan, Dr. Staudinger, in Fokker's collection.

**Stictopleurus pallidus** Sahlb. 1—2. Radde, Amur, Staudinger 1933. — 3. Turan, Baikal, Staudinger 1934.

**Stictopleurus punctatonervosus** Goeze. 1—3. Thüringen, Dr. O. M. Schmiedeknecht. — 4. France. — 5. Landes, France. — 6—8. Charente, H. Giraudeau. — 9—10. Stalden, Switzerland, Sept. 1894, Fokker. — 11. Meran, Tyrol, Everts. — 12—15. Bozen, Oct. 1894, v. d. Hoop. — 16—17. Eggenthal, August, Fokker. — 18—22. Locarno, Sept., Fokker. — 23. Desenzano, Italia, August, Fokker. — 24. Monfalcone, Istria, August, Fokker. — 25. Corfu, 1889, Schmiedeknecht. — 26—27. Olympia, 1901, Schmiedeknecht. — 28. Saïda, 1895, Schmiedeknecht. — 29—59. Tunis, 1898, Schmiedeknecht. (These 59 specimens in Fokker's collection). — 60. Torino, Gribodo. — 61—62. Austria, Mayr. — 63—67. Switzerland, Meyer-Dür. — 68. ?. — 69. Brieg, Sept. 1924, R. v. d. Veen. — 70. Tunis, 1898, Dr. O. Schmiedeknecht. — 71. Tunkin, White mountains, Sajan, Turan, 2000 m, July, Staudinger 1933.

**Stictopleurus sericeus** Horv. 1. Indirsk, Ural (Holotype), Staudinger, in Fokker's collection.

**Stictopleurus unicolor** Jak. 1—3. Kirghisia, Staudinger 1933.

**Stictopleurus zebraicus** Dist. 1. Soepajang, March 1877, Sumatra-exped. — 2—3. Fort de Kock, Sumatra, 920 m, April 1921, E. Jacobson. — 4. Fort de Kock, 1924, E. Jacobson. — 5. Fort de Kock, 1926, E. Jacobson. — 6. Soekaboemi, Java, April 1933, F. A. Th. H. Verbeek.

**Niesthrea sidae** F. 1—4. St. Thomas, Klug. — 5—6. Brasil, Museum Berlin. — 7. Taiti (Paratype of *Corizus pictipes* Stål), Stål. — 8. Ascuncion, Paraguay. — 9. Minas Geraes. — 10—13. Marcapata, Peru. — 14—15. Coroico, Bolivia. — 16. Mapiri, Bolivia. — 17—18. Cruz Alta, Rio Grande do Sul. — 19. Chiriqui, Panama. (The specimens 8—19 from Staudinger 1933—'34).

**Niesthrea vincentii** Westw. 1. St. Vincent (Paratype), Hope.

**Arhyssus bohemanni** Sign. 1. Great Falls, Va., 25 July 1914, W. L. Mac Atee.

**Arhyssus lateralis** Say. 1. Wisconsin, Kumlien. — 2. Beltsville, Md., 17 May 1914, W. L. Mac Atee.

**Macevethus lineola** F. 1. Hyères, May 1894, v. d. Hoop. — 2. Palma, Baleares, Schmiedeknecht. — 3. Corsica. — 4—7. Olympia, 1901,

8. Corfu, 1889. — 9—10. Corfu, 1901. — 11. Zante, 1901. — 12. Oran, 1895. — 13. Rio Salato, Oran, 1895. — 14. Djebel Tessalah, Oran, 1895. — 15. Hamman-Bou-Hadjar, Oran, 1895. — 16—22. Tunis, 1898. (The specimens 4—22 collected by Dr. Schmiedeknecht; the specimens 1—22 in Fokker's collection). — 76. Torino, Gribodo.

Var. *errans* F. 23. Grasse, S. France, May 1894, v. d. Hoop. — 24—25. Hyères, May 1894, v. d. Hoop. — 26. Sierra Nevada, Spain, Staudinger. — 27—29. Ivize, Spain, Schmiedeknecht. — 30—31. Iviza, Baleares, Schmiedeknecht. — 32—33. Palma, Baleares, Schmiedeknecht. — 34. Corsica. — 35. Corsica, Meyer-Dür. — 36. Corsica, May 1893, v. d. Hoop. — 37. Greece. — 38—43. Olympia, 1901. — 44. Corfu, 1889. — 45—53. Corfu, 1901. — 54. Zante, 1901. — 55. Saïda, 1895. — 56—59. Oran, 1895. — 60—62. Rio Salato, Oran, 1895. — 63. Djebel Tessalah, Oran, 1895. — 64—75. Tunis, 1898. (The specimens 38—75 collected by Dr. O. Schmiedeknecht; the specimens 23—75 in Fokker's collection). — 77. Algeria, Richter. — 78—80. Dalmatia, May 1899. — 81. Sidi bel Abbas, Staudinger.

*Maccevethus persicus* Jak. 1. Kokand, Fergana, Staudinger 1934. — 2. Namangan, Fergana, Staudinger 1934.

*Agraphopus viridis* Jak. 1. S. Russia, Reuter. — 2. Egypt, March—April 1897, Dr. Schmiedeknecht. Both in Fokker's collection.

*Leptocoris abdominalis* F. 1—2. Java, Reinwardt. — 3. Java. — 4. Sumatra. — 5—6. Sumatra, Muller. — 7. Sylhet, 1861, H. Deyrolle. — 8. Kepahiang, Sumatra, Mr. v. Lansberge. — 9. Ambarawa, Ludeking. — 10—12. Tandjong Morawa, Serdang, Dr. B. Hagen. — 13—14. Between Serdang and the Toba-lake, Dr. B. Hagen. — 15. Goenoeng Kenepai, Jan. 1894, Dr. Nieuwenhuis, Borneo-exped. — 16. Bentau, Riouw, 1895, A. L. v. Hasselt. — 17. Southern Mountains, Java, E. Jacobson. — 18—19. Semarang, Java, E. Jacobson. — 20—21. Java, May 1908. — 22—23. Sinabang, Simalur, Febr. 1913. — 24—25. Pulu Babi, April 1913. — 26—29. Pulu Pandjang, May 1913. — 30. Labuan Badjan, June 1913. — 31—32. Fort de Kock, Sumatra, Oct. 1913. — 33—35. Fort de Kock, Nov. 1913. — 36—37. Tanangtalu, Sumatra, May 1915. (The specimens 22—37 collected by E. Jacobson). — 38. Pontianak, Borneo, 19 Dec. 1922, Jurriaanse. — 39. Tandjonggadang, W.-coast of Sumatra, 1200 m, March 1926, E. Jacobson. — 40. Muara Antjol, Batavia, Nov. 1908, E. Jacobson. — 41. Semarang, Java, Jan. 1910, E. Jacobson

Var. *taprobanensis* Dall. 42.?, Heylaerts. — 43—46. Ceylon, Schaum.

**Leptocoris amicta** Germ. 1. Upangwe, German E. Africa, Staudinger 1933. — 2. German E. Africa, Staudinger 1933. — 3—4. Amara, Erythraea, Staudinger 1933.

**Leptocoris augur** F. 1—2. Java, Reinwardt. — 3—5. Formosa, H. Sauter 1908. — 6. Taihauroku, Formosa, Staudinger 1934.

**Leptocoris fimbriata** Dall. 1—2. Sumbawa, v. Lansberge.

**Leptocoris fraterna** Westw. 1—4. German E. Africa, Staudinger 1934.

**Leptocoris griseiventris** Westw. 1. Tombuktu, Hope.

**Leptocoris hexophthalma** Thb. 1—2. Manow, German E. Africa, Staudinger 1933.

**Leptocoris insularis** Kirk. 1. Savaii, Samoa, W. v. Bülow.

**Leptocoris isolata** Dist. 1—2. Radack, Chamisso.

**Leptocoris longirostris** Dall. 1 Muara Lambu, Sumatra, Oct. 1877, Sumatra-exped. — 2—23. Tandjong Morawa, Serdang, Dr. B. Hagen. — 24—25. Semarang, Java, 1905, E. Jacobson. — 26. Tandjong Priok, Oct. 1908, Dr. P. Buitendijk. — 27—29. Tandjong Priok, April 1910, Dr. P. Buitendijk. — 30—31. Fort de Kock, Sumatra, 1924, E. Jacobson.

**Leptocoris marginata** nov. spec. This species is similar to *L. spectabilis* Bredd. and to *L. abdominalis* F. in general aspect. The ground colour of the upper side is bright red, as in *L. abdominalis*; the underside shows distinct white tomentum on the segments of thorax and abdomen (ultimate joint excepted), whilst the ground colour of the central parts of the underside is dark greyish brown. Legs, antennae (fourth joint missing), and rostrum blackish. This species differs from its allies in having the lateral and posterior borders of the pronotum very distinctly margined, the margin reaching at both sides the transverse impression. Moreover both sexes are easily recognizable by the structure of the ultimate ventral segments. In the ♂ the ultimate ventral segment shows two pointed teeth at its apical edge, close together, and somewhat directed toward each other. In the ♀ the ultimate ventral segment is not bilobate, but somewhat truncate in the middle and rounded at the sides. Length of the ♂ 17 mm, of the ♀ 21—23 mm. 1. Minahassa, N. Celebes, P. J. v. d. Bergh leg., ♂ (Holotype). — 2. Bolaang Mongondow, Modajag, N. Celebes, Sept. 1917, W. Kaudern, ♀ (Allotype). — Gurupahi, N. Celebes, 21 April 1917, W. Kaudern, ♀ Paratype in Museum Göteborg.

**Leptocoris minuscula** nov. spec. (fig. 6). Bright red above, the head, except the swollen area behind the eyes and ocelli, the anterior impression

of the pronotum, the scutellum and the membrane black. Underside red, except the bucculae (and in one female a spot beneath the eyes), a transverse band on the prosternum, contiguous to the impression on the pronotum and the anterior parts of meso- and metasternum black. Fifth and

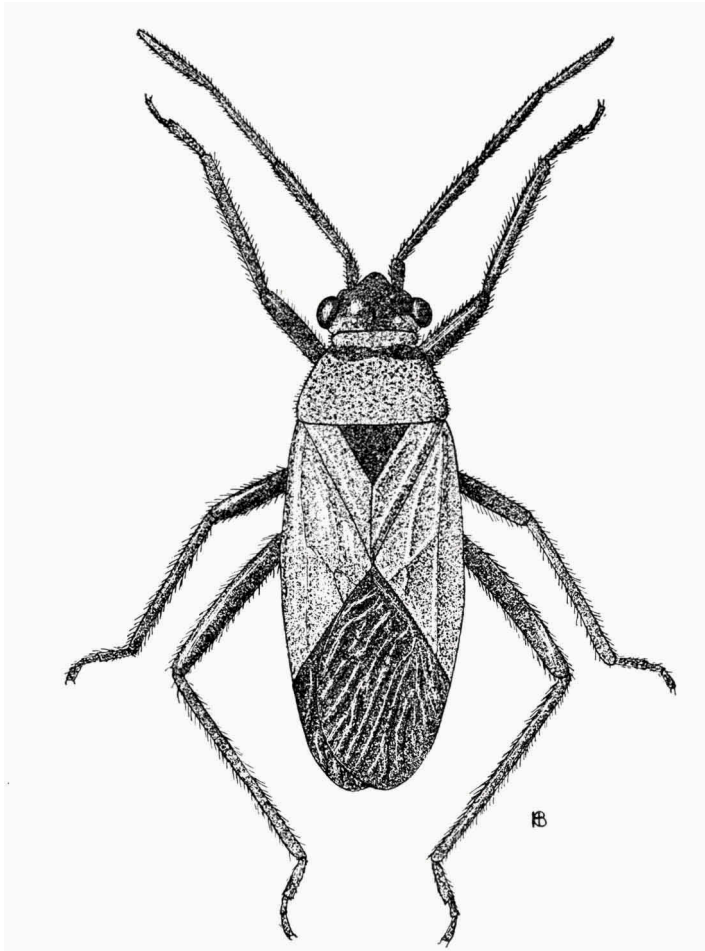


Fig. 6. *Leptocoris minusculus*,  $\times 6\frac{1}{2}$ .

sixth ventral segments slightly brownish in the middle. Legs, rostrum and antennae black; rostrum reaching beyond the first segment of the abdomen. Ultimate ventral segment of the  $\sigma$  with straight apical edge, black. Ultimate ventral segment of the  $\text{♀}$  slightly truncate in the middle, rounded at the sides. Length of the  $\sigma$   $10\frac{1}{3}$  mm, of the  $\text{♀}$   $10\frac{1}{2}$ —12 mm. 1—3 Timor, Macklot, Holo-, Allo- and Paratype.



**Leptocoris mitellatus** Bergr. 1. Rockhampton. — 2. Peak Downs.

**Leptocoris nigricornis** Walk. After having examined the type of Walker's *Astacops nigricornis*, I am convinced that Distant is right in placing this species into the genus *Leptocoris*, but that the species is different from *L. vicina* Dall., and must stand as a distinct species. 1. Sumbawa, v. Lansberge. — 2—3. Wetter, C. Schädler 1893.

**Leptocoris rufomarginata** F. 1. ?, Calkoen. — 2. Sumatra, Muller. — 3. N. E. Borneo.

**Leptocoris spectabilis** Bredd. 1—2. Tondano, Celebes, Staudinger 1933. — 3. Timor, Muller.

**Leptocoris tagalica** Burm. 1. E. Flores, 1891, H. ten Kate. — 2. Semarang, Java, E. Jacobson. — 3—5. N. Palawan, Staudinger 1934. — 6—7. Java, Staudinger 1934.

**Leptocoris vulgaris** Berger. 1. New S. Wales, Staudinger 1933.

**Pyrrhotes aeola** Dall. 1. Paramaribo, Miss M. Koning, 1900. — 2. Colima, Vulcano, Mexico, L. Conrad. — 3. Tehuacan, Mexico, Staudinger 1933.

**Pyrrhotes haematoloma** H.-S. 1—2. Mexico, Klug.

**Pyrrhotes obscura** Westw. 1—2. ?, Calkoen. — 3. Paraguay, Staudinger 1934.

**Pyrrhotes rufoculus** Kirby. 1. Curaçao, Father Jansen.

**Pyrrhotes sanguinolenta** F. 1—2? — 3—5. N. E. Venezuela, 1886, ten Kate. — 6. Paramaribo, Miss M. Koning, 1900.

**Myrmus formosus** Jak. 1—2. Turan, Baikal, Staudinger 1933.

**Myrmus longiventris** Horváth. 1—2. Turkestan, Alai (Holo- and Allotype), in Fokker's collection.

**Myrmus miriformis** Fall. 1—2. Steenwijk, July 1883. — 3—6. Ruurlo, July 1880, Fokker. — 7—10. Winterswijk, July 1886. — 11—12. Wolfhezen, July 1882, Fokker. — 13—14. Amersfoort, July 1885. — 15—17. Baarn, July 1885. — 18. Noordwijkerhout, 16 Oct. 1871, C. Ritsema. — 19. Schothorst, August, Snellen v. Vollenhoven. — 20. Loosduinen, v. Hasselt. — 21—22. Renesse, July 1888. — 23. Bergen op Zoom, July 1889. — 24. Ossendrecht, July 1889. — 25. Warnsveld, June 1895. — 26—28. Oisterwijk, July, Fokker. — 29. Houthem, July 1894, Versluys. — 30. Alle, Belgium, July, Fokker. — 31. Vresse, Belgium, July, Fokker. — 32. Vonêche, Belgium, July, Fokker. — 33.

St. Cécile, Belgium, August 1889. — 34—35. Pont de Bourre, August 1885. — 36. Barvaux, August 1885. — 37—51. Thüringen, Dr. O. Schmiedeknecht. — 52—63. Switzerland, Meyer-Dür. — 64—65. Vulpera, Switzerland, August 1892, Fokker. — 66. Corfu, 1901, Dr. Schmiedeknecht. (The specimens 1—66 in Fokker's collection). — 67—73. Holland, de Haan. — 74. Holland, v. Vollenhoven. — 75. Utrecht, Six. — 76—80. Switzerland, Meyer-Dür. — 81. Doorn, August. — 82. Wassenaar, July. — 83. The Hague, dunes, August. — 84—85. Scheveningen, dunes, 30 June. — 86. Wassenaar, 10 July 1923. — 87. The Hague, 3 Sept. 1923. — 88—89. Bergen op Zoom, 4 July 1924. — 90—95. Weert, 29 August 1924. — 96. Amersfoort, 12 Sept. 1924. — 97—98. Wassenaar, 11 July 1925. — 99. Katwijk, 19 July 1925. — 100. Wassenaar, 11 August 1925. — 101. Wassenaar, 21 August 1925. — 102. Wassenaar, 16 July 1926. — 103—104. Wassenaar, 22 July 1926. — 105. Eerde, 7 July 1926. — 106. Soesterberg, 11 Sept. 1926. (The specimens 86—106 collected by H. C. Blöte). — 107—117. Renkum, 9—13 July 1925, J. Knock. — 118—120. Katwijk, 12 August 1925. — 121—123. Eerbeek, 24—29 August 1927, Dr. H. Boschma. — 124. Gasteren, Anlo, 29 June 1930, H. C. Blöte. — 125. Tunbridge Wells, Kent, 10 Sept. 1929, H. C. Blöte. — 126. The Devil's Dyke, Brighton, 7 Sept. 1929, H. C. Blöte. — 127. Elisabethpol, Caucasus, Staudinger 1934.

**Chorosoma schillingi** Schill. 1. Texel, July 1896. — 2. Cuyk, ter Haar. — 3. Bussum, 1895. — 4. Laag Soeren, August, ter Haar. — 5. Amersfoort, July 1885. — 6. Overveen, 7 July, Ritsema. — 7—8. Noordwijkerhout, 8 Sept. 1878. — 9—10(—11?). Wassenaar, 27 June, Snellen v. Vollenhoven. — 12—13. Loosduinen, v. Hasselt. — 14. Holland, Franssen. — 15. Renesse, dunes, August 1879, Fokker. — 16. Renesse, August 1882. — 17. Domburg, ter Haar. — 18. Warnsveld, June 1895. — 19. Oisterwijk, July, Fokker. — 20. Sarepta, A. Becker. — 21. Astrachan, Dr. Staudinger. — 22—23. Rio Salato, Oran, 1895, Dr. Schmiedeknecht. (The specimens 1—23 in Fokker's collection). — 24. Scheveningen, July. — 25—27. Scheveningen, 22 July. — 28—29. The Hague, v. Hasselt. — 30—31.? dunes, June. — 32—34. Holland, v. Vollenhoven. — 35—36. Podolia, Dohrn. — 37.?. — 38. The Hague, Sept. — 39. Noordwijkerhout, June. — 40—41. Noordwijk, 25 July. — 42. Katwijk, August. — 43. Loosduinen, 21 July 1922. — 44. Laren, 8 July 1920. — 45. The Hague, 1 August 1923. — 46—47. Katwijk aan Zee, 14 August 1924. — 48. Schin op Geulle, 1 Sept. 1924. — 49—51. Katwijk, 19 July 1925. — 52. Wassenaar, 9 August 1925. — 53. Wassenaar, 16 July 1926. — 54. Soesterberg, 11 Sept. 1926. (The speci-

mens 43—54 collected by H. C. Blöte). — 55. Harderwijk, T. Karstens. — 56. Ede, 17 August 1925, J. Knock. — 57. Renkum, 12 July 1925, J. Knock. — 58. Katwijk, 3 July 1925, J. Knock. — 59—61. Katwijk, 12 August 1925, J. Knock. — 62. Berlicum (N. Br.), 25 July 1928, D. C. Geyskes. — 63. Alai, Turkestan, in Fokker's collection. — 64. Laren, N. Holland, 8 July 1920, H. C. Blöte. — 65—66. Katwijk aan Zee, 14 August 1924, H. C. Blöte. — 67—68. Valkenswaard, 5 Sept. 1931.

## ALYDINAE

## MICRELYTRINI.

**Trachelium spectabile** Bergr. 1. Pachitea, Peru, Staudinger 1934.

**Cydamus trispinosus** de Geer. 1—4. Suriname, Staudinger 1934.

**Calamocoris nigrolimbatus** Bredd. 1. Coroico, Bolivia, Staudinger 1933.

**Bactrophia peruviana** Bredd. 1—2. Callanga, Peru, Staudinger 1934.

**Darmistus subvittatus** Stål. 1—2. Colorado Springs. — 3—6. Jalapa, Mexico, Staudinger 1934.

**Micrelytra fossularum** Rossi. 1. Chaloye, France. — 2. Sierra Nevada, Spain, Staudinger. — 3—4. Corsica, Meyer-Dür. — 5—6. Corsica, May 1893, v. d. Hoop. — 7. Corsica. — 8—9. Corfu, 1889. — 10—12. Cephalonia, 1901. — 13—16. Zante, 1901. — 17—22. Saida, 1895. — 23—31. Rio Salato, Oran, 1895. — 32—40. Hamman-Bou-Hadjar, Oran, 1895. — 41. Tunis, 1898. (The specimens 8—41 collected by Dr. Schmiedeknecht; the specimens 1—41 in Fokker's collection). — 42. Philippeville, Algeria, Puton. — 43. Alger, H. J. Veth.

**Stachyolobus cuspidatus** Dist. 1—2. Padang, Sumatra, Sept. 1913, E. Jacobson.

**Marcus** Stål. After having examined the type of *Barbaranus ornatulus* Dist., I am convinced that the genus *Barbaranus* is synonym to *Marcus* Stål, and that Distant's species *ornatulus* is very similar, if not identical, to *M. quinquespinosus* Stål, but as I have not seen Stål's type, I cannot be certain about that, and preserve Distant's name for the indian species.

**Marcus ornatulus** Dist. 1. Sumatra, Muller. — 2—3. Timor, Muller. — 4. Bua, March 1877, Sumatra exped. — 5—6. Bua, March 1914. — 7. Aur Kumanis, Sumatra, March 1914. — 8—10. Fort de Kock, Sumatra, 920 m, 1925. — 11—12. Fort de Kock, 1926. — 13. Anai cleft, Sumatra, 500 m, 1926. (The specimens 5—13 collected by E. Jacobson).

**Marcus subinermis** nov. spec. (fig. 7). Similar to *M. ornatulus* Dist., but differing in the following characters. Eyes somewhat smaller, head less narrowed behind, the spines on the anterior part of the pronotum

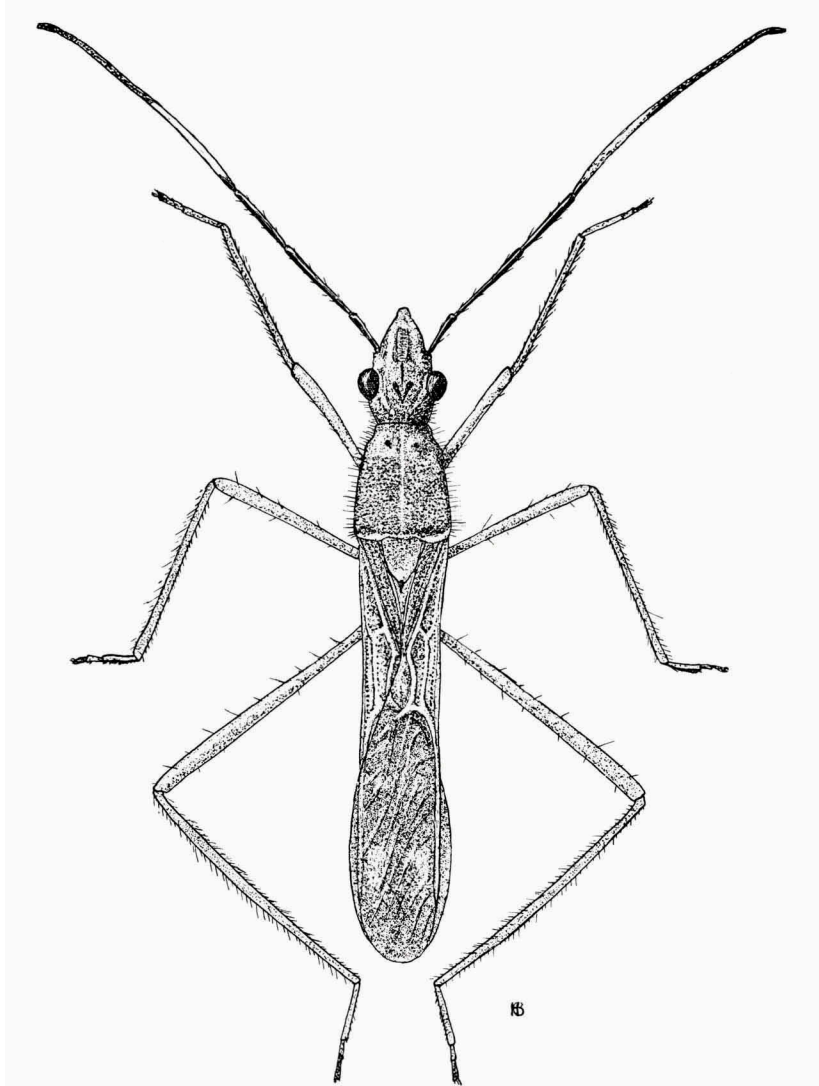


Fig 7. *Marcus subinermis*,  $\times 6$ .

are short and blunt, tuberculiform; there are no spines on the posterior corners of the pronotum. The spine on the scutellum is slightly shorter than in *M. ornatulus*, but still rather long, somewhat curved backward.

Side borders of the pronotum and of the head behind the eyes with long, whitish, erected hairs.

Head above reddish ochraceous, with yellowish and brown markings, and with a black stripe on the sides; beneath yellow, with a reddish-brown stripe at both sides on the gula. Pronotum greyish ochraceous, with brown punctuation. The impunctured part near the anterior tubercles reddish ochraceous, the top of the tubercles black. The posterior border, which is widened at both sides, yellow; before it the pronotum shows a blackish, transverse slap. Sides with black lines, vanishing behind. Scutellum reddish ochraceous, the spine yellow at the base, black at the top. Underside yellow, prosternum with fine, meso- and metasternum with rather coarse, brown punctuation. Rostrum nearly reaching the posterior coxae; blackish, the first joint ochraceous. Hemelytra yellow, with dark brown punctuation along the nerves. The clavus and the posterior cells of the corium infuscated. Membrane brownish, transparent. Back of the abdomen dark brown, the base of the second and third segment, a small spot at both sides on the suture between the third and fourth segment and a larger, triangular spot on the suture between the fourth and fifth segment, reaching beyond  $\frac{2}{3}$  of the fifth segment, yellow. Connexivum brown, with a small, yellow spot in the middle of each segment. Legs ochraceous, shining, the femora slightly lighter toward the base, and slightly darker toward the top. Posterior tibiae yellowish in their apical third part. Apical joints of the tarsi blackish. Antennae dark brown, the basal joints shining, the apical joint opaque, with a yellow annulation near the base. Ultimate ventral segment of the ♂ with a long, blunt tooth in the middle of the apical edge, which is longer, and more distinctly directed backward than it is in *M. ornatulus*. The sides with a large, rectangular processus. — Length of the ♂ 14—14½ mm; of the ♀ 15 mm. — 1. Matur, Sumatra, Oct. 1913 (Paratype). — 2—5. Fort de Kock, Sumatra, 920 m (Holo-Allo- and Paratype) (Altogether collected by E. Jacobson). — Sumatra, Siolak Daras, Korinchi-valley, 3100', March 1914 (Paratype in the British Museum). — Laos, Vientiane, 20 Oct. 1919, R. V. de Salvasa (Paratype in the British Museum). — Tonkin, June 1917, R. V. de Salvasa (Paratype in the British Museum).

#### ALYDINI.

*Hyalymenus* (H.) *dentatus* F. 1—2. Brasil, Calkoen.

*Hyalymenus* (H.) *vespiformis* F. 1. Juantué, Staudinger 1934. — 2. Suriname, Staudinger 1934.

**Hyalymenus (Tivarbus) aterrimus** Bredd. 1—2. Marcapata, Peru, Staudinger 1934.

**Hyalymenus (Tivarbus) calcarator** F. 1. Pozuzu, Peru, Staudinger 1933.

**Hyalymenus (Tivarbus) pulcher** Stål. 1.?. — 2—3. Suriname, Dr. P. Buitendijk. — 4. Callanga, Peru, Staudinger 1933. — 5. Pachitea, Peru, Staudinger 1933. — 6—7. Coroico, Bolivia, Staudinger 1933.

**Hyalymenus (Tivarbus) sinuatus** F. 1. Bahia, Museum Berlin. — 2. Peru, Staudinger. — 3—4. Pachitea, Peru, Staudinger 1933.

**Hyalymenus (Tivarbus) tarsatus** F. 1. Brasil. — 2. Demerary, Hope. — 3—4.?. — 5—6. Paramaribo, 1911, W. C. v. Heurn. — 7. Mt. St. Benedict, Trinidad, July 1929, D. C. Geyskes. — 8—19. Brasso, Trinidad, May-June 1932, G. Belmontes. — 20. Pachitea, Peru, Staudinger 1933. — 21—22. Suriname, v. Brussel.

**Euthetus pulcherrimus** Bergr. 1—2. Goar, Nov. 1927, Staudinger 1932.

**Alydus calcaratus** L. 1—3. Rheder Steeg, July 1874, C. Ritsema. — 4. Arnhem, Sept., v. Medenbach de Rooy. — 5. Oosterbeek, 2 July, v. Medenbach de Rooy. — 6. Wageningen, July 1882, Fokker. — 7. Driebergen, v. Bemmelen. — 8. Breda, Heylaerts. — 9. Nijmegen, ter Haar. — 10—11. Valkenburg, July 1887. — 12. Valkenburg, July, Everts. — 13. Maastricht, July, Everts. — 14. Vresse, Belgium, July, Fokker. — 15. Orval, Belgium, August, Fokker. — 16. Bertrich, Germany, August 1877, Fokker. — 17—27. Thüringen, Dr. O. M. Schmiedeknecht. — 28—32. Charente, H. Giraudeau. — 33—34. Vulpera, Switzerland, August 1892, Fokker. — 35—37. Viège, Switzerland, August 1894, Fokker. — 38. Tarasp, Switzerland, 1895, Brants. — 39. Silvaplana, Switzerland, August 1899, Fokker. — 40—48. Locarno, Sept., Fokker. — 49. Decenzano, Italia, August, Fokker. — 50—54. Adelsberg, Krain, August, Fokker. — 55. Gospić, Croatia, Sequens. — 56. Corfu, 1889, Schmiedeknecht. — 57. Alai, Turkestan. (The specimens 1—57 in Fokker's collection). — 58. Rheder Steeg, 30 August. — 59—62. Breda, Sept., Leesberg. — 63. Breda, 30 July 1870. — 64. Breda, 2 Sept. 1870. — 65—66. Breda, on *Spartium scoparium*, 2 Dec. 1874. — 67—68. Arnhem, Sept. 1905, Dammerman. — 69. Plasmolen, 25 June 1924, J. v. d. Vecht. — 70—71. Laren, 7 July 1920, H. C. Blöte. — 72—73. Weert, 29 August 1924, H. C. Blöte. — 74—76. Switzerland, Meyer-Dür. — 77—79. Martinet, Lerida, Spanish Pyrenées, Sept. 1930, N. Tinbergen.

Var. **hirsutus** Kol. 80—82. Ompo, Korea, Staudinger 1932. — 83. Turan, Baikal, Staudinger 1932.

**Alydus conspersus** Mont. 1. Pike Peak, 15000', N. America, H. Fruhstorfer.

**Alydus eurygnus** Say. 1—2. Requa, California, 14 Sept. 1920, C. D. Duncan. — 3. Woods Hole, Mass., August—Sept. 1924, Dr. H. Boschma. — 4. Four miles Run, Va., 31 May 1924, W. L. Mc Atee.

**Alydus pilosulus** H.-S. 1. Near Glen Echo, Md., 16 Sept. 1914, L. O. Jackson.

**Alydus rupestris** Fieb. 1. Simplon, Hueber. — 2—7. Saas-Fee, Switzerland, Sept. 1894, Fokker. 8—9. Monteratsch glacier, Sept. 1899, Fokker. (Altogether in Fokker's collection).

**Megalotomus junceus** Scop. 1. Lees-Veldes, Krain, August, Fokker. — 2—3. Gorice, Illyria. (The specimens 1—3 in Fokker's collection). — 4. Laibach, Dohrn. — 5. Tessin, Switzerland, Meyer-Dür.

**Megalotomus ornaticeps** Stål. 1. Sarepta, A. Becker, in Fokker's collection. — 2. Aulie Ata, Syr Darja, Staudinger 1934. — 3. Turan, Baikal, Staudinger 1934.

**Megalotomus parvus** Westw. 1. Paramaribo, J. H. Spitzly. — 2. Venezuela, La Guayra, 27 April 1900, C. C. Kayser.

**Megalotomus quinquespinosus** Say. 1. Glencarlyn to mouth of the Four Miles Run, Va., 17 June 1914, W. L. Mac Atee.

**Megalotomus rufipes** Westw. 1.?, Cotype of *Alydus consobrinus* Westw., Westwood.

**Mirperus (M.) jaculus** Thb. 1. Cape of Good Hope, Horstock. — 2. ? — 3—4. Ghinda, Erythraea, Staudinger 1934. — 5. Uganda, British East Africa, Staudinger 1934. — 6. Nigeria, Staudinger, 1934.

**Mirperus (M.) torridus** Westw. 1—18. Liberia, Stampfli. — 19. Robertsport, 22 March 1890, A. F. Demery. — 20—22. Juring, Sulymariv., Liberia, Febr. 1891, A. F. Demery.

**Mirperus (Melanacanthus) ferrugineus** Stål. 1. Sindanglaja, Java, Dr. Bolsius. — 2. Tandjong Priok, Dr. P. Buitendijk, 1908. — 3. ?

**Tupalus fasciatus** Dall. 1—2. Bamako, French Sudan, Staudinger 1934.

**Camptopus lateralis** Germ. 1—2. Aix les Bains. — 3—5. Charente, H. Giraudeau. — 6. Viège, Switzerland, August, Fokker. — 7. Monte

Brione, Lago di Garda, Dr. Schmiedeknecht. — 8. Capo di Ponte, Italia, August 1895, Fokker. — 9. Monfalcone, Istria, August, Fokker. — 10—11. Gospić, Croatia, Sequens. — 12. Corfu, 1901, Dr. Schmiedeknecht. — 13—14. Ivize, Spain, Dr. Schmiedeknecht. — 15. Palma, Baleares, Dr. Schmiedeknecht. — 16. Bastio, Corsica, May 1893, D. v. d. Hoop. — 17—20. Corsica, May 1893, D. v. d. Hoop. — 21—28. Corsica. — 29—30. Saida, 1895. — 31—40. Rio Salato, Oran, 1895. — 41—51. Hamman-Bou-Hadjar, Oran, 1895. — 52—53. Oran, 1895. — 54—66. Tunis, 1898. (The specimens 29—66 collected by Dr. Schmiedeknecht, the specimens 1—66 in Fokker's collection). — 108. Dalmatia, Cantraine. — 109. Syria, Museum Berlin. — 110(—111?). Germany. — 112. Canton de Vaud, v. Vollenhoven. — 113. Switzerland, Meyer-Dür. — 114—116. Algeria, Richter. — 117. Brig, 13—19 July 1924, R. v. d. Veen. — 118. Linz, Ulrich. — 119. Spain, Heine. — 120—122. Piemont, Gribodo.

Var. *brevipes* H.-S. 67. Aix les Bains. — 68—69. Charente, H. Giraudeau. — 70—71. Collioure, France. — 72. Piemont. — 73. Capo di Ponte, Italia, August 1895, Fokker. — 74. Gardone, Italia, August 1897, Fokker. — 75—77. Monte Brione, Lago di Garda, Schmiedeknecht. — 78. Riva, Tyrol, August, Fokker. — 79. Monfalcone, Istria, August, Fokker. — 80—85. Gospić, Croatia, Sequens. — 86—87. Corfu, 1889, Schmiedeknecht. — 88. Corsica, Meyer-Dür. — 89—107. Tunis, 1898, Dr. Schmiedeknecht. (The specimens 67—107 in Fokker's collection). — 123. Dalmatia, Sturm. — 124. Dalmatia, Cantraine. — 125. Germany. — 126. Syr Darja, Staudinger. — 127. Linz, Ulrich. — 128. ?

Var. *obscurus* Reut. 129. Lagunetas, Gran Canaria, Oct. 1927, Dr. D. L. Uyttenboogaart.

*Camptopus tragacanthae* Kol. 1. Transcaucasia, Sajó, in Fokker's collection.

*Riptortus annulicornis* Boisd. 1. Ceram, Forsten. — 2. Ternate, Forsten. — 3. Ternate, Bernstein. — 4—5. Waigeu, Bernstein. — 6—7. Ojalela, Halmaheira, J. W. v. Nouhuys. — 8. Fakfak, N.W. New Guinea, C. J. L. Palmer. — 9—24. Assike on the Digul, S. New Guinea, 1 April 1923, Kopstein.

*Riptortus clavatus* Thb. 1—6. Japan, v. Siebold. — 7. Kiusiu, Japan, Mäklin. — 8—10. Ningpo, Felder.

*Riptortus dentipes* F. 1. Guinea, Westerman. — 2. Mayotte, Pollen and v. Dam. — 3—4. Nossi Bé, V. Signoret. — 5. Robertsport, L. Demery. — 6—9. Kassai territ., Belgian Congo, H. C. Kooyman 1898.



**Riptortus distinguendus** nov. spec. Brownish ochraceous; sides of the head and the thorax with a yellow band, reaching the posterior coxae, and nearly percurrent, but without a darker border. Ultimate dorsal segment of the abdomen in the ♂ rather strongly bent outward, the apical edge being rounded in the middle and inflexed at both sides. Pronotum nearly unicolorous, the apices of the spines and the posterior border only slightly darker. The disk of the pronotum and the sides of the thorax without black granules. Back of the abdomen ochraceous, the connexivum only infuscated in the apical parts of the segments. Venter of the abdomen yellow, with ill-defined brown markings. Antennae ochraceous, with a yellow, basal annulation on the apical joint. Legs pale ochraceous, the spines on the posterior femora with blackish tops. Ultimate ventral segment of the ♂ (fig. 8a) with an angular incisure in the middle of the outer edge, showing a nearly rectangular extension in the middle. Length of the ♂: 13—15 mm, of the ♀: 14<sup>1</sup>/<sub>2</sub>—16 mm. — 1—2. Timor, Macklot. — 3. Timor, Febr., Wienecke. — 4. Timor, Wienecke. — 5. Timor, Muller. — 6—7. Wetter, C. Schädler, 1893. — 8. Sindanglaja, Java, Dr. Bolsius. — 9. Saleyer, Sept. 1880, H. E. D. Engelhard. (The specimens 1—9: Paratypes). — 10—21. Krakatau, May 1908, E. Jacobson (Holo-, Allo- and Paratypes). — 22. Lang Eiland, Krakatau, May 1908, E. Jacobson (Paratype).

Var. **basalis** nov. var. Similar to the typical form, but with a distinct black spot behind the ocelli, sometimes coherent with black stripes between the ocelli and the eyes; and with a black, transverse band at the base of the pronotum. In some of the specimens the venter shows a sharp-cut, brown, longitudinal band at both sides on the second, third, fourth, fifth and sixth segment. The specimens belonging to this variety seem to be slightly larger than the typical specimens; about 16—17 mm in both sexes. — 23—25. Timor, Macklot (Holo- and Allotype of the var., and Paratype). — 26. Timor, Febr., Wienecke (Paratype). — 27. Timor, March, Wienecke (Paratype). — 28. Sumbawa, Mr. v. Lansberge (Paratype).

**Riptortus flavolineatus** Stål. 1—3. Victoria, Cameroon, Staudinger 1933.

**Riptortus fuliginosus** Hagenbach. In the collection of the Leiden Museum I found an undescribed species, labelled „*Alydus fuliginosus* Hagenbach” and besides that the manuscript of the description of this species, made by J. J. Hagenbach, more than a century ago. As the species is still new, it seems to me to be of historical interest to have the description of Hagenbach published now.

„*Alydus fuliginosus*.

A. ex fuliginoso nigricans, angulis posticis thoracis spinula terminatis, abdominis dorso atro, opaco; femoribus pedum posteriorum 6 dentatis”.

„Beschreibung.

„Der Kopf ist klein und nach vorne winklig hervorgezogen. Der Brustschild ist länglich 4-eckig, mit scharfen Rändern, die sich hinten in ein Dornchen endigen. Die Flügeldecken sind braun, mit blasser Membran, der Rücken des Hinterleibs ist tiefschwarz; die Ränder und den After ausgenommen, welche glänzend sind. Die Schenkel der hinteren Füße sind sehr verdickt, an ihrer inneren Seite mit 4—6 Zähnen besetzt. Länge 6''' . Vaterland: Java”.

The description of Hagenbach was probably only based upon the ♀ specimen, which is still in the Leiden Museum. I will add to the description the following.

Sides of the head and thorax with sometimes indistinct, smooth, brownish spots, forming an interrupted, longitudinal row. Ultimate dorsal segment of the ♂ with the apical edge only slightly bent outward. Top of the scutellum not callous. Thorax without black granules. Colour pitchy brown, nearly black. Head before the ocelli, anterior area of the pronotum, an ill-defined spot on the ultimate segments of the dorsum of the abdomen reddish brown. Venter more or less brownish, the sides sometimes yellowish, or with yellow spots. Legs obscure brown, the tibiae somewhat lighter. Antennae pitchy black, the bases of the third and fourth joints slightly lighter. Ultimate ventral segment of the ♂ (fig. 8b) with a somewhat gutter-shaped outgrowth, showing a semicircular incisure at its end. Length 13½—14 mm. — 1. Java, Kuhl and v. Hasselt (Holotype ♀). — 2—3. Timor, Muller (Homoeotype). — 4. Tandjong Morawa, Serdang, Dr. B. Hagen (Homoeotype). — 5—6. Semarang, Java, E. Jacobson (Plesiotype ♂ and Homoeotype). — 7. Batavia, Dec. 1907, E. Jacobson (Homoeotype). — 8. Batavia, May 1908, E. Jacobson (Homoeotype). — 9. Buo, Padang, Febr. 1914, E. Jacobson (Homoeotype).

*Riptortus horvathi* Bergr. 1—3. Merauke, Dutch New Guinea, Staudinger 1933.

*Riptortus insularis* China. — 1—5. Savaii, Samoa, W. v. Bülow. — 6. Tonga Isl. — 7. ?.

*Riptortus linearis* F. 1. Borneo, Schwaner. — 2. Tondano, Forsten. — 3. Java, Kuhl and v. Hasselt. — 4. New Holland, Naturalists Society of the Dutch Indies. — 5—6. Sindanglaja, Java, Dr. Bolsius. — 7. Ambarawa, Ludeking. — 8—15. Surulangun, April 1878, Sumatra-

exped. — 16—17. Rawas, May 1878, Sumatra-exped. — 18—26. Tandjong Morawa, Serdang, Dr. B. Hagen. — 27—34. Between Serdang and the Toba-lake, Dr. B. Hagen. — 35—38. Batavia, May 1908. — 39. Semarang, July 1909. — 40—41. Semarang, 1905. — 42. Java. — 43. Fort de Kock, Sumatra, Jan. 1921. — 44—47. Fort de Kock, 1925. — 48—54. Fort de Kock, 1926. (The specimens 35—54 collected by E. Jacobson). — 55. Formosa, H. Sauter 1908. — 86. Tondano, Forsten. — 108. Timbang, Langkat, Deli, 1889, E. Eyster.

Var. *atricornis* Stål. 56. Timor, Muller. — 57. Java, Kuhl and v. Hasselt. — 58—60. Sindanglaja, Java, Dr. Bolsius. — 61. Mendeling and Ankola, W. Sumatra, A. L. v. Hasselt. — 62—66. Surulangun, Apr. 1878, Sumatra exped. — 67. ? — 68—70. Tandjong Morawa, Serdang, Dr. B. Hagen. — 71. Between Serdang and the Toba-lake, Dr. B. Hagen. — 72. Tandjong Priok, Dr. P. Buitendijk, 1908. — 73—74. Semarang, Java, 1905. — 75—76. Batavia, Dec. 1907. — 77. Batavia, May 1908. — 78. Fort de Kock, March 1921. — 79. Fort de Kock, 1925. — 80—85. Fort de Kock, 1926. (The specimens 72—85 collected by E. Jacobson). — 109. Malang, 3 June 1926, F. J. Wijnman. — 110. Malang, 23 August 1926, F. J. Wijnman. — 111—113. N. E. Borneo.

Var. *pallidicornis* nov. var. Besides the var. *atricornis* Stål, with entirely black antennae, there are specimens with entirely reddish antennae, for which I establish the var. *pallidicornis*. The specimens belonging to this variety are mostly of somewhat smaller size than the typical specimens of this species. Length of the ♂:  $10\frac{2}{3}$ — $11\frac{2}{3}$  mm (average 11.1 mm); of the ♀:  $10\frac{1}{2}$ —14 mm (average 11.8 mm). — 87. Sumatra, Muller. — 88. Java. — 89. Sindanglaja, Java, Dr. Bolsius. — 90. Bloehari, Borneo, 1866, Semmelink. — 91. Merumei, Naruda Isl., E. E. W. Schroeder. — 92. Singkarak, 1 March 1877, Sumatra-expedition (Allotype of the var.). — 93. Supajang, March 1877, Sumatra expedition. — 94. Silago, July 1877, Sumatra-expedition. — 95—97. Sidjundjung, July 1877, Sumatra-expedition. — 98. Between Serdang and the Toba-lake, Dr. B. Hagen. — 99—101. Semarang, Java, 1905, E. Jacobson. — 102. Wonosobo, Java, May 1909, E. Jacobson. — 103. Sinabang, Simalur, Febr. 1913, E. Jacobson (Holotype of the var.). — 104. Lasikin, Simalur, April 1913, E. Jacobson. — 105. Cleft of Harau, Oct. 1913, E. Jacobson. — 106. Formosa, H. Sauter 1908. — 107. Java, Piepers.

*Riptortus masculus* Bredd. 1—2. Gorontalo, Forsten. — 3—4. Tondano, Forsten.

*Riptortus pedestris* F. 1. Java, Reinwardt. — 2. Sumatra, Muller. —

3—6. Timor, Muller. — 7. Borneo, Muller. — 8. Timor, Macklot. — 9. Java, v. Lansberge. — 10—13. Tandjong Morawa, Serdang, Dr. B. Hagen. — 14—15. Between Serdang and the Toba-lake, Dr. B. Hagen. — 16. Ledon Donok, Sept. 1909, Abdul Richmen. — 17—18. Nongkodjadjar, Java, Jan. 1911. — 19. Lasikin, Simalur, April 1913. — 20. Sonsang, Sumatra, Nov. 1913. — 21. Fort de Kock, Sumatra, 920 m, 1924. — 22. Fort de Kock, 1925. — 23—24. Fort de Kock, 1926. (The specimens 17—24 collected by E. Jacobson). — 38. Java, Mr. v. Lansberge.

Var. *fuscus* F. 25. Java, Mäklin. — 27. Sindanglaja, Java, Dr. Bolsius. — 28—30. Tandjong Morawa, Serdang, Dr. B. Hagen. — 31—32. Between Serdang and the Toba-lake, Dr. B. Hagen. — 33. Weltevreden, Jan. 1919, Dr. P. Buitendijk. — 34. Fort de Kock, Sumatra, 920 m, 1925, E. Jacobson. — 35—37. Fort de Kock, 1926, E. Jacobson. — 39. Padang-Deli, E. coast of Sumatra, E. Büttikofer.

**Riptortus pilosus** Thbg. 1—2. Ambarawa, Ludeking. — 3. Semarang, E. Jacobson.

**Riptortus robustus** Dall. 1—4. New S. Wales, Staudinger 1934.

**Riptortus rubronotatus** nov. spec. Allied to *R. serripes* F., but of much darker colour. Ground colour of the body pitchy brown or black. Vertex with a more or less distinct reddish spot before the ocelli. Anterior area of the pronotum somewhat reddish brown. Top of the scutellum very narrowly yellowish. Sides of the head with red spots, coherent to the spots on the propleurae. Mesopleurae with rounded, red spots. Meta-pleurae with a smooth, rounded, red spot in the centre, coherent with the red, coarsely punctate, posterior corners. Abdomen red; venter with two broad black stripes, confluent at the penultimate segment; sometimes on the foregoing segments too. Legs black, the anterior and intermediate tibiae brownish in some of the female specimens, the posterior tibiae show a distinct, yellowish annulation. Antennae pitchy brown, the bases of the joints more or less yellowish. Ultimate ventral segment of the ♂ (fig. 8c) with a somewhat rectangular incisure. The paramera thick and smooth, with blunt tops. Length  $16\frac{1}{2}$ — $18\frac{1}{2}$  mm. — 1—3. Ceram, Forsten (Holo-Allo- and Paratype). — 4. Amboina, Forsten (Paratype). — 5. Amboina, May, Hoedt 1864 (Paratype).

**Riptortus serripes** F. 1.?, Audouin.

**Riptortus tutuilensis** China. 1. Tonga Islands.

**Apidaurus conspersus** Stål. 1. Caracas, v. Lansberge.

**Daclera levana** Dist. 1. Rawas, May 1878, Sumatra-expedition.

**Daclera opaca** nov. spec. Much resembling *D. levana* Dist., but differing, besides in the structure of the ultimate ventral segment of the ♂, in the following characters. The posterior part of the pronotum is less roughly punctate, the punctures having a tendency to be ordered in transverse rows, the spaces between them not callous, dull. The central longitudinal keel very indistinct behind. Underside of the head in the ♀ with a black, central fascia on the rostral impression, and with two black stripes under the eyes.

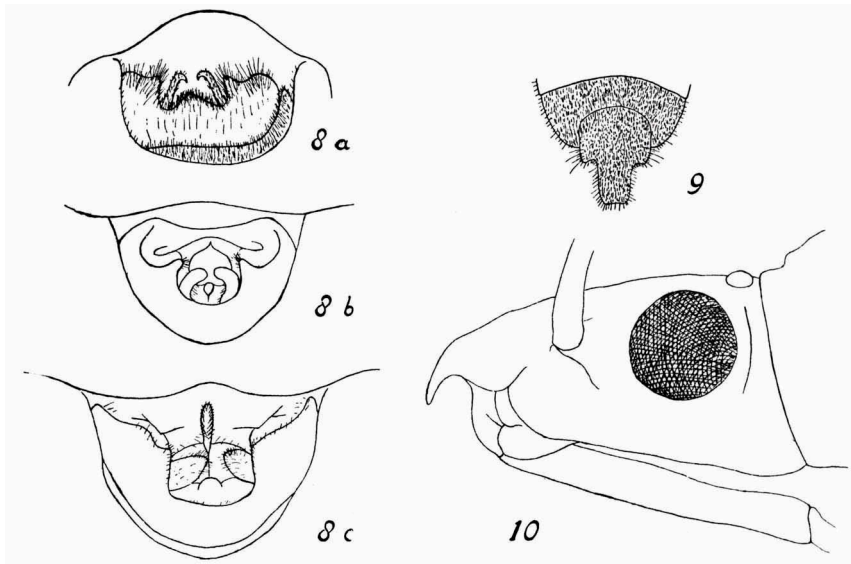


Fig. 8. Ultimate ventral segments of the males, seen from behind, of

a. *Riptortus distinguendus*. b. *Riptortus fuliginosus*. c. *Riptortus rubronotatus*.

Fig. 9. Ultimate ventral segment of the male of *Daclera opaca*, seen from below.

Fig. 10. Lateral view of the head of *Leptocorixa (Rhabdocoris) inflexigena*.

Brownish ochraceous above, the ♂ slightly darker than the ♀. The head and the anterior portion of the pronotum with two indistinct brown fasciae near the middle. Apical edge of the pronotum with five small callosities. Top of the scutellum yellow. Hemielytra brownish, the nervures somewhat reddish, especially in the top of the corium. Abdomen above reddish ochraceous, the apical part of each segment of the connexivum black, the basal parts yellow. Underside of the ♂ reddish brown, the central part of the venter lighter, the connexivum with sub-basal, yellow spots on the segments; underside of the ♀ greyish ochraceous, dotted with very small red points and with a black point on the sides of each abdominal segment. Legs ochraceous with numerous brown

dots; the posterior legs of the ♂, bases of the femora excepted, entirely brown. Antennae brownish ochraceous, in the ♀ with the second and third joint yellow in the middle. Basal portion of the fourth joint yellow. Rostrum brown in the ♂, yellow with black top in the ♀. Ultimate ventral segment of the ♂ (fig. 9) with a long, truncate, horizontally erected lamella at the apical edge, covering the very long, and acutely pointed paramera, which are obtusangularly inflexed in the middle. — Length 14—14½ mm. — 1—2. Gurupahi, N. Celebes, 13 & 17 April 1917, W. Kaudern (Holo- and Allotype).

**Hypselopus cinctiventris** Germ. 1—3. Cape of Good Hope, Museum Berlin. — 4. Pretoria, E. Blaauw.

#### LEPTOCORISINI.

**Mutusca brevicornis** Dall. 1. Sydney. — 2. New S. Wales, Staudinger 1934.

**Mutusca prolixa** Stål. 1. Rawas, May 1878, Sumatra-expedition. — 2. Lasikin, Simalur, April 1913, E. Jacobson. — 3. Lubuk Gadang, Dec. 1877, Sumatra-expedition.

**Leptocorixa (Rhabdocoris) acuta** Thbg. 1—5. Japan, v. Siebold. — 6. Simpang, Dec., M. Ritsema. — 7—10. Sindanglaja, Java, Dr. Bolsius. — 11. Ambarawa, Ludeking. — 12. ? — 13—26. Silago, June 1877, Sumatra-expedition. — 27—28. Silago, July 1877, Sumatra-expedition. — 29. Solok, Nov. 1877, Sumatra-expedition. — 30—31. Surulangun, April 1878, Sumatra-expedition. — 32—34. Rawas, May 1878, Sumatra-expedition. — 35—36. Timor, Muller. — 37. Borneo, Schwaner. — 38—39. Java, Kuhl and v. Hasselt. — 40. Buitenzorg, Java, d'Amory v. d. Hoeven. — 41—42. Great Sangir, C. E. W. Schröder. — 43. Philippines, 19 June 1879, A. v. d. Valk. — 44. Palabuan. — 45. Patuka, Tjigembong, 1200 m, Sept. — 46. Blitar. — 47. Sambas, W. Borneo, Dr. G. Bosscha, 1891. — 48—53. Garut, W. Java, F. Adèr-Verver, 1893. — 54—57. Java? — 58. ? — 59. Semarang, Java, E. Jacobson, 1905. — 60. Roadstead of Pekalongan, P. Buitendijk. — 61. Tandjong Priok, Java, May 1906, P. Buitendijk. — 62—66. Formosa, H. Sauter 1908. — 67. Tjibodas, June 1909, W. C. v. Heurn. — 68—71. Buitenzorg, June, v. d. Weele. — 72. Tegal, Febr. 1909, P. Buitendijk. — 73. Solok, W. coast of Sumatra, P. O. Stolz. — 74. Batavia, Dec. 1907. — 75—77. Batavia, May 1908. — 78. Crater of the Tankuban Prah, June 1908. — 79—83. Semarang, Java, July 1909. — 84. Nongkodjadar, Java, Jan. 1911. — 85. Fort de Kock, Sumatra, 920 m, Dec. 1920. —

86. Fort de Kock, March 1921. — 87. Fort de Kock, 1926. — 88—89. Anai-cleft, Sumatra, 500 m, 1926. (The specimens 74—89 collected by E. Jacobson). — 90. Makasser, 1927—'28, J. Sonneveld. — 91. Buitenzorg, 4 Sept. 1928, J. v. d. Vecht. — 92.?. — 93—94. Fort de Kock, Dec. 1921, E. Jacobson. — 95. Fort de Kock, 1926, E. Jacobson.

**Leptocorixa (Rhabdocoris) corbetti** China. 1. Java, Kuhl and v. Hasselt. — 2. Pulu Weh, Dec. 1907—April 1908, P. Buitendijk. — 3. Batavia, May 1908, E. Jacobson. — 4. Nias, 1911, Kleiweg de Zwaan. — 5—6. Solok, Padang 1911, P. O. Stolz. — 7—11. Solok, 1914, P. O. Stolz. — 12. Sibigo, Simalur, June 1913, E. Jacobson. — 13. Fort de Kock, Sumatra, Oct. 1913, E. Jacobson. — 14. Cleft of Harau, Oct. 1913, E. Jacobson. — 15. Buitenzorg, from paddie-field, Febr. 1922. — 16—21. Fort de Kock, 1926, E. Jacobson. — 22—23. Anai-cleft, W. coast of Sumatra, 1926, E. Jacobson.

**Leptocorixa (Rhabdocoris) costalis** H.-S. 1. Timor, Muller. — 2. Borneo, Muller. — 3. Java, Kuhl and v. Hasselt. — 4—5. Solok, April 1877. — 6. Supajang, April 1877. — 7. Rengkean Lulus, May 1877. — 8. Surulangun, April 1878. (The specimens 4—8 collected by the Sumatra-expedition). — 9—15. Tandjong Morawa, Serdang, Dr. B. Hagen. — 16. Between Serdang and the Toba-lake, Dr. B. Hagen. — 17. Gunung Ungarang, Java, Oct. 1909. — 18—19. Sibolga, Sumatra, August 1913. — 20. Airbangis, Sumatra, Nov. 1913. — 21. Buo, Padang, Febr. 1914. — 22—24. Fort de Kock, Sumatra, 920 m, Dec. 1921. — 25—31. Fort de Kock, 1925. — 32—34. Fort de Kock, 1926. — 35. Anai cleft, Sumatra, 500 m, 1926. (The specimens 17—35 collected by E. Jacobson).

**Leptocorixa (Rhabdocoris) discoidalis** Walk. 1. Key Islands, Staudinger 1934.

**Leptocorixa (Rhabdocoris) inflexigena** nov. spec. This species is easily distinguishable from the other species of this subgenus, in having the genae with strongly inflexed tops (fig. 10). Colour greenish, probably with some metallic luster when alive. Disk of the pronotum brownish, lateral borders with green lines, which lines are bordered with brown on both sides. Scutellum green, with a red spot in the centre. Hemelytra transparent, with green nerves; the subcostal nerve blackish. Under-side of the head and the pleurae green; sternum and venter orange-yellow, ultimate segment and an apical spot on the penultimate segment black. Antennae black, first joint with somewhat reddish tinge; base of the fourth joint greenish yellow. Femora green, with darker tops; tibiae and tarsi brownish. Apical edge of the ultimate ventral segment of the

♂ strongly inflexed in the middle; at both sides of this inflexion with rounded processus, which are finely serrate on the tops. The lateral corners of the apical edge with rather long, pointed teeth. Length of the ♂ 16 mm; of the ♀ 17½ mm. — 1—2. Moulmain, 12 May 1929, Staudinger 1933 (Holo- and Allotype).

**Leptocorixa (Rhabdocoris) lepida** Bredd. 1. Putus Sibau, 30 Nov. 1893, Borneo-expedition.

**Leptocorixa (Rhabdocoris) varicornis** F. 1. Gorontalo, Forsten. — 2—3. Tondano, Forsten. — 4. Timor, Macklot. — 5. Borneo, Schwaner. — 6. Java. — 7. Coalang Sanggit. — 8—9. ? — 10—11. Peak Downs. — 12. Solok, April 1877. — 13—14. Silago, June 1877. — 15. Silago, July 1877. — 16. Solok, Nov. 1877. — 17. Surian, Jan. 1878. — 18—22. Surulangun, April 1878. — 23—26. Rawas, May 1878. — 27. Palembang, Highlands, May-June 1878. — 28. Surulangun, July 1878. — 29—31. Surulangun, August 1878. — 32—35. Klumpang, August 1878. (The specimens 12—35 collected by the Sumatra-expedition). — 36. Timor, Wienecke. — 37—39. Andai, N. Guinea, Rosenberg 1870. — 40. Bungamas, Palembang, 1881, J. C. v. Hasselt. — 41. Mahakkam, 1894, Dr. Nieuwenhuis (Borneo-expedition). — 42. Bluhu, 28 Sept. 1894, Dr. Nieuwenhuis. — 43. Smitau, Borneo, Febr., Büttikofer. — 44. Wetter, C. Schädler 1898. — 45—106. Tandjong Morawa, Serdang, Dr. B. Hagen. — 107—118. Between Serdang and the Toba-lake, Dr. B. Hagen. — 119. Pulu-Weh, July 1908, Dr. P. Buitendijk. — 120. Pulu Weh, Jan. 1909, Dr. P. Buitendijk. — 121. Sabang, 21 April 1909, Dr. H. W. v. d. Weele. — 122—125. Buitenzorg, June 1909, Dr. H. W. v. d. Weele. — 126. Nias, C. E. W. Schröder, 1908. — 127—131. Nias, 1911, Kleiweg de Zwaan. — 132—134. Sinabang, Simalur, Febr. 1913. — 135. Sugu, Simalur, May 1913. — 136—137. Aur Kumanis, Sumatra, March 1914. — 138. Tandjong Andalas, May 1914. — 139—140. Muara Kiawai, June 1914. — 141. Anai-cleft, Sumatra, 500 m, 1926. (The specimens 132—141 collected by E. Jacobson). — 142. Deli, D. v. d. Hoop leg. — 143. Timbang, Langkat, Deli, 1889, E. Eyter. — 144. Sumatra, Staudinger. — 145. Shortlands Island, Solomon Archipelago, C. Ribbe. — 146—147. Savaii, Samoa, W. v. Bülow.

**Leptocorixa (Erbula) apicalis** Westw. 1—2. Liberia, Stampfli. — 3—8. Kassai-territories, Belgian Congo, H. C. Kooyman 1896.

**Leptocorixa (L.) filiformis** F. 1. St. Vincent, Hope. — 2. Rio Grande do Sul, Staudinger 1933. — 3—4. Blumenau, Brasil, Staudinger 1933.



**Leptocorixa (Stenocoris) tipuloides** de Geer. 1—3. Porto Rico, Klug. — 4—7. Brasso, Trinidad, 26 May—16 June 1932, G. Belmontes.

**Noliphus annulipes** Walk. 1. New Holland(?), Naturalists Society of the Dutch Indies. — 2—4. Timor, Jan.—March, Wienecke.

**Noliphus erythrocephalus** Stål. 1. Java, Reinwardt. — 2. Sumatra, Muller. — 3. Timor, Muller. — 4. Tondano, Forsten. — 5. Silago, July 1877, Sumatra-expedition. — 6. Batavia, Nov. 1907. — 7. Lasikin, Simalur, March 1913. — 8. Sibigo, Simalur, August 1913. (The specimens 6—8 collected by E. Jacobson). — 9. Nias, J. D. Pasteur.

**Noliphus papuensis** Stål. 1. Salawatti, J. W. v. Lansberge. — 2. New Guinea.

**Cosmoleptus limbaticollis** Stål. 1. Waigeu, Bernstein.

**Cosmoleptus sumatranus** nov. spec. Similar in general aspect to the foregoing species, but slightly narrower and less shining. Head yellow. Pronotum yellow, the disk brownish, the brown colour not extending beyond the anterior area, the posterior corners with a dark, smooth spot. A small spot behind the eyes, coherent to a broad band on the pleurae brown. These brown stripes on the pleurae are limited beneath by a straight line, and are not extending between the coxae. The sternum between anterior and intermedial coxae shining brown, the rest of the thorax yellow. Scutellum reddish ochraceous. Back of the abdomen reddish, with brown spots on the centre of the fourth and fifth segments. Connexivum yellow. Venter yellow, with brown, submarginal spots, and, in one specimen, with large, red, longitudinal bands. Hemielytra brownish, with yellow nerves, and with a yellow, triangular spot against the middle of the base of the membrane. Membrane tawny, darker at the base. Apical border of the sixth, the whole seventh, and the centre of the ultimate ventral segments of the ♂ brown; the apical border of the ultimate segment somewhat truncate, nearly straight in the middle, not, as in *C. limbaticollis*, with an inflexed excrescence between two excavations. Length  $14\frac{1}{2}$ —15 mm. 1. Tandjong Morawa, Serdang, Dr. B. Hagen (Holotype). — 2—3. Aur Kumanis, Sumatra, March 1914, E. Jacobson (Allo- and Paratype).