Neotropical Miridae, XLIV: On a Historical Collection made by P. W. Lund and J. T. Reinhardt in Brazil (Hemiptera).

By José C. M. Carvalho Museu Nacional, Rio de Janeiro.

Through the courtesy of Dr. S. L. Tuxen, whilst studying types in the Zoologisk Museum at København, I was able to determine the species contained in a small collection of Mirids made in Brazil by the above mentioned zoologists.

Peter Wilhelm Lund was born in 1801 and died in 1880. After graduating in Medicine in Denmark he went to Brazil where he stayed from 1825 to 1829. Returning to København he went soon afterwards to Kiel where he took the degree of Doctor in Ornithology. He also stayed at Paris where he wrote a paper on entomology under the title: "Lettre sur les habitudes de quelques fourmis du Bresil (1831)". In 1831 he returned to Brazil, taking up his residence at Lagoa Santa, Minas Gerais, where he remained until his death in 1880. On his first visit to Brazil, he sent insect specimens to B. W. Westermann (Danish merchant and amateur entomologist) whose large collection was left by will to the Museum. After 1833, Lund still collected a few insects, but, discovering the caves at Lagoa Santa, he spent the rest of his life working with fossil vertebrates found there.

Johannes Theodor Reinhardt was born in 1816 and died in 1882. As with Lund, he first studied Medicine and afterwards zoology. He took part as a zoologist in the first Galathea Expedition (1845 to 1847) around the world. In Rio de Janeiro he left the boat (1847) and went to Lagoa Santa to pay a visit to Lund. During this soujourn he collected generally, especially insects, bringing back to Denmark 967 species amongst 2,700 specimens (the number of species being probably much greater). On his return to Denmark in 1848, he became the curator of vertebrates and studied the material he had collected in Brazil. From 1850 to 1852 and from 1854 to 1856 he made fresh trips to Brazil, collecting at Minas Gerais and Rio de Janeiro, especially at Lagoa Santa. Only one entomological paper was written by him, one in which he deals with the phosphorescent light in a fish and in insect larvae from Brazil.

The species of Mirids collected by these two zoologists are:

Platytylus nattereri Reuter, 1907, Lagoa Santa, J. T. R. Platytylellus seminigrus (Stal, 1860), Lagoa Santa, J. T. R. Platytylellus atroluteus (Walker, 1873), L. Santa, J. T. R. Platytylellus pyrrhomelaenus (Stal, 1860), Brazil, Lund. Platytylellus luteiceps (Stal, 1860), Brazil, Lund. Platytylellus sp., L. Santa, J. T. R. Chiloxionotus nigrofasciatus Reuter, 1907, L. Santa, J. T. R. Paraxenetus amyoti (Stal, 1860), L. Santa, J. T. R. Xenetus petiolatus (Stal, 1860), L. Santa, J. T. R. Minytus argillaceus Distant, 1883, L. Santa, J. T. R. Euchilocoris hahni (Stal, 1860), L. Santa, J. T. R. Poeas reuteri Distant, 1893, L. Santa, J. T. R. Parapantilius sp., L. Santa, J. T. R. Garganus gracilentus (Stal, 1860), Rio de Janeiro, Galathea, J. T. R. Collaria oleosa (Distant, 1883), R. Janeiro, Galathea; Brazil, Lund. Polymerus rubricuneus (Berg, 1892), R. Janeiro, J. T. R. Polymerus testaiceps (Stal, 1860), L. Santa, J.T.R.; Brazil, Lund. Creontiades purgatus (Stal, 1860), Rio Janeiro, J. T. R. Phytocoris effictus (Stal, 1860), Rio Janeiro, J. T. R. Lygus fraudulentus (Stal, 1860), Rio Janeiro, J. T. R. Lygus obsoletus (Blanchard, 1852), Rio Janeiro, Galathea, J. T. R. Horcias signoreti (Stal, 1860), Brazil, Lund; Rio Janeiro, J. T. R. Horcias guttatipes Reuter, 1907, L. Santa, J. T. R. Horcias pentheri Reuter, 1907, Sete Lagoas, J. T. R. Dolichomiris costicollis (Berg, 1879), R. Janeiro, Galathea, J. T. R. Monalonion schaefferi (Stal, 1860), L. Santa, J. T. R.

9*

Sisynas pallidipes (Stal, 1860), L. Santa, J. T. R. Aspidobothrus designatus (Distant, 1888), L. Santa, J. T. R. Eccritotarsus cruxnigra Stal, 1860, L. Santa, J. T. R. Eccritotarsus nigrocruciatus Stal, 1860, R. Janeiro, J. T. R. Bothrophorella nigra (Stal, 1860), Rio Janeiro, Galathea, J. T. R. Ellenia cuneata (Stal, 1860), L. Santa and Rio de Janeiro, J. T. R. Orthotylus sp., L. Santa, J. T. R. Annona bimaculata (Distant, 1884), Rio de Janeiro and L. Santa, Mund. Ambracius dufouri Stal, 1860, Rio Janeiro, J. T. R.

Amongst Lund's and Reinhardt's material there are two specimens belonging to a new species, which is congeneric with *Cimatlan pertingens* Distant, 1884, and *Cimatlan minuens* Distant, 1884, but not congeneric with *Cimatlan delicatum* Distant, 1884, the type of the genus, which belongs to the genus *Deraeocoris* Kirschbaum, 1855 (type *D. olivaceus* (Fabricius, 1776)). The two first mentioned species, as well as the new one herewith described are to be included in a new genus, *Lundiella* n. gen. and the genus *Cimatlan* Distant, 1884, must be sunk as a synonym of *Deraeocoris* as stated. (syn. nov.).

Lundiella n. gen.

Deraeocorinae, characterized by the small size of the body, wide embolium, strongly declivous cuneus with wide incisure and roundish external margin, pilosity of body and membrane.

Body short, somewhat rounded, long and erectly pilose. Head small, vertex convex, frons declivous and smooth; eyes large, contiguous to pronotum, taking more than half of the lateral area of head, slightly emarginate on inferior border; clypeus rather prominent, its base level with the insertion of the antennae or inferior third of eye; rostrum reaching the middle coxae, the first segment reaching the base of I coxae.

Antennae with segment I thicker than the others (\mathbb{Q}) or equal in thickness to II (\mathcal{A}), about as long as width

of vertex; second segment slender and slightly incrassate toward apex (Q) or equally thick throughout (\mathcal{J}) ; third and fourth very slender; the second segment in the male is long and erectly pilose, the hairs as long as width of segment.

Pronotum strongly declivous, deeply punctate; calli level with surface of pronotum, not quite visible; collar well marked, with mesal length equal to thickness of first antennal segment; posterior margin somewhat rounded, the edges with sharp edge; mesoscutum covered; scutellum large, smooth and convex.

Hemielytra very finely punctate, shining, the clavocorial and basal half of embolio-corial commissures with a row of punctures (high magnification); the embolium is very wide on basal half, narrowing toward the apex, flat, distinctly rounded externally, corium convex and somewhat inflated near apex; cuneus strongly declivous, rounded externally, with wide incisure; membrane short and densely pubescent, with a single areola with a rounded inner apical angle.

Legs rather short, tarsi of the Deraeocorinae type.

Type of genus: Lundiella pertingens (Distant, 1884).

This genus is a unique member of this tribe, being well distinguished by its small size, deep incisure of cuneal fracture and pubescence.

Lundiella reinhardti n. sp.

Characterized by its colour, length of antennal segments and male genitalia.

Male: length 3.8 mm, width 1.9 mm. Head: length 0.2 mm, width 0.7 mm, vertex 0.33 mm. Antennae: segment I, length 0.3 mm; II, 0.9 mm; III, 0.6 mm; IV, 0.4 mm. Pronotum: length 0.7 mm, width at base 1.3 mm. Rostrum: length 0.9 mm.

Colour: testaceous to reddish testaceous; head and antennae lighter, sometimes reddish, the second segment

totally dark (\mathcal{J}) or yellow with dark apex (\mathcal{Q}); pronotum usually darker toward the collar; apex of scutellum, base and apex of corium usually lighter; hemielytra darker at middle of corium, in some specimens with a reddish



Fig. 1. Lundiella reinhardti n. sp. (male, holotype).

tinge on apex of embolium, corium and cuneus; membrane fuscous on basal third and light on apical two thirds; sternum dark testaceous, especially on sides of mesosternum and metapleura; abdomen reddish; ostiolar peritreme yellow; legs yellow to pale with traces of reddish. There is a fairly wide range of variation in the colour of different specimens.



Fig. 2. *Lundiella reinhardti* n. sp. a) aedeagus; b) right clasper; c) left clasper.

Genitalia: penis (aedeagus) with a basal plate and the vesica provided with lobes covered by chitinous teeth or small spines (fig. 2 a). Left clasper much larger than the opposite, falciform, with a group of setae near base (fig. 2 c). Right clasper small, with a blade-like apical portion, as seen in figure (fig. 2 b).

Female: identical to male, buth with second antennal segment much slender and slightly incrassate toward the apex.

Host-plant: Araceae growing in a moist forest.

Holotype: male, Rio de Janeiro, Brazil, Reinhardt coll., in the Entomological Collection of the Zoologisk Museum, København, Denmark.

Allotype: female, Vicosa, Minas Gerais, Brazil, J. C. M. Carvalho coll., ⁶/₀-44, in the Author's Collection.

Paratypes: 1 female, Lagoa Santa, Minas Gerais, Reinhardt coll. (København); 1 male and 1 female, Vicosa, Minas Gerais, J. C. M. Carvalho coll. $^{6}/_{9}$ -44 in the Collections of the British Museum and the Author.

This species is close to *pertingens* (Distant), but easily differentiated by the length of antennal segments, incisure of cuneus, colour and male genitalia.

Key to the species of Lundiella n.gen.

1.	Second antennal segment (\mathcal{Q}) as long as the width of head.
	reinhardti n. sp.
	Second antennal segment (\mathcal{Q}) about twice as long as the
	head 2.
2.	Eyes very large, compressed, straight posteriorly and obli-
	quely placed on the head; cuneus dark minuens (Distant)-
	Eyes not noticeably large and compressed, rounded poste-
	riorly; cuneus reddish pertingens (Distant).

I wish to acknowledge the facilities given by Messrs N. D. Riley and W. E. China of the Dept. of Entomology, British Museum (Nat. Hist.) in my study of the Mirid types in that Institution.