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FROM MEXICO (HEMIPTERA-HETEROPTERA, ARADIDAE)

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A NEW APTEROUS GENUS AND SPECIES OF ARADINAE FROM MEXICO (HEMIPTERA-HETEROPTERA, ARADIDAE)

By NICHOLAS A. KORMILEV¹

ABSTRACT: A new genus (*Aradiolus*) and species (*A. paradoxus*) of flat bug belonging to the Aradinae is described from Mexico. The species represents the only apterous form known in the subfamily.

By the kind offices of Dr. Charles L. Hogue, Curator of Entomology at the Los Angeles County Museum of Natural History, I have had an opportunity to study a very interesting new apterous aradid from Mexico, for which I wish to express to him my sincere thanks.

This specimen represents a new genus belonging to the subfamily Aradinae, in which were previously known, besides macropterous, also brachypterous and stenopterous, but not apterous forms. In the new genus the head, antennae, tip of the abdomen, and the whole ventral surface of the body, are those of an *Aradus*, but the thorax is quite different, somewhat resembling that of *Tretocoris* Usinger and Matsuda (1959), an apterous genus from New Zealand belonging to the subfamily Chinamyrsinae.

Aradiolus, new genus

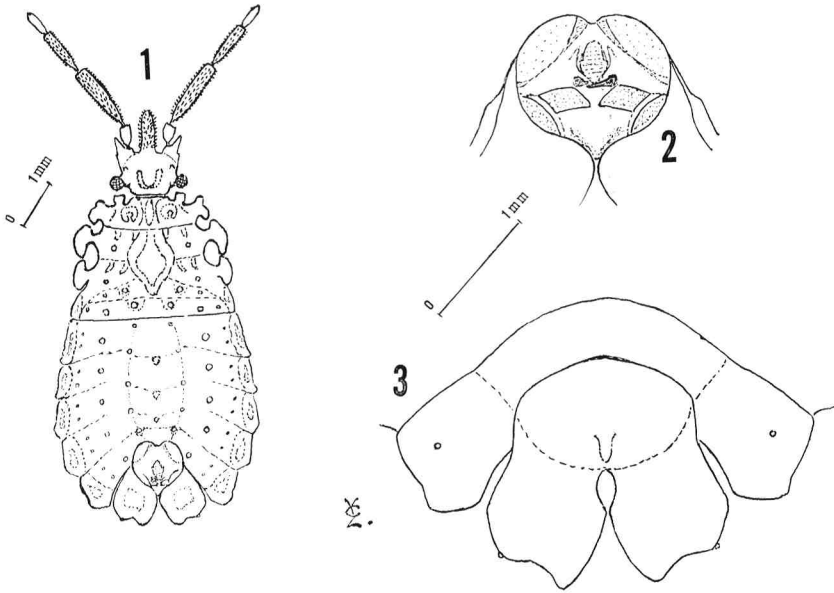
Description:

Head longer than width across the eyes. Anterior process of the head, and antennal segments II and III, covered with dense, short, inclined, incrustated bristles, giving them a look of roughness. Similar, but shorter, bristles on antenniferous tubercles and vertex. Anterior process long and strong, slightly tapering toward the tip, reaching over the base of antennal segment II. Antenniferous tubercles acute, divergent, with a minute lateral tooth. Eyes globose, and slightly stalked, placed near the hind border of the head. Preocular teeth distinct, postocular rounded. Vertex raised in the middle anteriorly, elevation surrounded posteriorly by a semicircular depression. Antennae strong, less than twice as long as the head, and as thick as fore femora. Antennal segments I and IV the shortest and equal in length, II more than three times as long, and III more than twice as long as I. Rostrum placed far from the tip of anterior process; rostral atrium open; bucculae short, rounded, not contiguous anteriorly; rostral groove moderately deep, open posteriorly; rostrum thin, reaches to hind border of prosternum.

Notum partially, and dorsal surface of abdomen almost entirely, covered with dense, round scales.

Pronotum very short and wide. Collar indistinctly separated from the disc. Anterior angles produced into small, rectangular lobes. Lateral borders ex-

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Figures 1-3. *Aradiolus paradoxus*, new genus and species. Fig. 1. dorsal aspect. Fig. 2. hypopygium, dorsal aspect. Fig. 3. sternum VII and genital cap, ventral aspect.

panded into two hammer-shaped lobes. Disc with two parallel carinae along median sulcus, and with two semicircular, black, opaque spots. Laterad of the latter are two fine longitudinal carinae.

Mesonotum separated from pronotum by a thin, but distinct sulcus. Middle of meso- and metanotum together occupied by a spear-shaped plate, depressed in the middle. Four small, black, opaque spots along fore border of mesonotum; two small, round, opaque spots behind outer of these. Lateral borders expanded into two "T"-shaped lobes.

Metanotum laterad of median plate separated from mesonotum by thin sulci; its oblique hind borders, laterad of median plate, semifused with tergum I. Lateral borders expanded into two "T"-shaped lobes. Disc with similar spots as mesonotum.

Wings completely absent.

Abdomen ovate, longer than maximal width across segment V. Tergum I separated from tergum II by a fine, transverse sulcus. Tergum II separated from central dorsal plate by a more distinct sulcus. Formula of round callous spots on terga, 2:1:1. Scars of dorsal scent gland openings situated between terga III, IV, V, and VI respectively. Connexival segments clearly separated from each other, but terga separated from each other only laterally, boundaries

absent mesally. Disc raised along median line, forming a wide, gently sloping ridge. Segment VIII in the male forming two large genital lobes, similar to *Aradus*. Hypopygium covered from ventral side by a semiglobose genital cap (segment IX), but open on dorsal side, as in *Aradus*. Exterior borders of connexiva II to IV straight, but angularly rounded on connexiva V to VII. Spiracles small, ventral, placed far from lateral, and nearer to fore border, on sterna II to VII; lateral and visible from above on genital lobes (VIII).

Ventral surface of the body similar to that of *Aradus*. Pro- and mesosternum deeply sulcate on median line for the reception of rostrum; metanotum and venter finely sulcate on median line.

Legs unarmed; trochanters completely fused with femora, the latter cylindrical; tibiae also cylindrical; fore tibiae near the apex interiorly with a minute tooth, or spine. Claws without arolia.

Type species: Aradiolus paradoxus, new species

In addition to the above description, further characters pertaining to the type specimen are as follows:

Aradiolus paradoxus, new species

Figures 1 through 3

Male: Ovate, flat. Piceous; central meso-metanotal plate, bases of meso-metanotal lateral expansions, the whole abdomen from above, and the ventral surface of the body reddish brown, with exception of genital cap and hypopygium which are black; round callous spots on terga II to VII reddish. Tibiae with three black rings (basal, mesal, and apical).

Measurements: Head proportions 45:40 (= length:width of measured part); proportions of antennal segments, I to IV, are 11:37:24:11. Pronotum 17:62.5; mesonotum, with exception of meso-metanotal median plate, which is 30 units long, 20:81; metanotum 10:84. Abdomen 120:104, at segment V.

Total length, 8.4 mm.; width of pronotum, 2.5 mm.; width of abdomen, 4.16 mm.

Holotype: Male, MEXICO, Oaxaca, 12 mi. so. of Chivela, A. S. Menke and L. A. Stange coll., VIII. 18, 1959. Deposited in the Los Angeles County Museum of Natural History.