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THE THIRD SPECIES OF NEOANTHYLLA KORMILEV, 1951, FROM PERU

(Hemiptera: Phymatidae)

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I wish to express my sincere gratitude to Dr. Jon L. Herring of the United States National Museum, Washington, D. C., by whose kind offices I have had the privilege to study the third species of the genus

Neoanthylla Kormilev, 1951.

Neoanthylla was first established as a subgenus of Phymata Latreille, 1802, for the reception of a single species, Phymata (Neoanthylla) bucki Kormilev, 1951, from Rio Grande do Sul, Brazil (1951:56). Later, Neoanthylla was elevated to generic rank, and to it I transferred the second species, Phymata horvathi Handlirsch, 1898, from Minas Geraes, Brazil (1960:307). Now I am able to describe the third species, from Peru, as Neoanthylla peruviana n. sp.

The genus Neoanthylla Kormilev, 1951, may be separated at once from other genera of the subfamily Phymatinae by elongately ovate, shiny, and sometimes translucent, fore femora, with unarmed upper edge, and smooth, flat, or slightly concave, exterior surface. It is closely allied to the genus Anthylla Stal, 1876, in having the middle and hind tibiae with convex, rounded upper surfaces, and without lateral rims, which are characteristics of the genera Phymata Latreille, 1802, and Paranhymata Kormilev, 1960 (1962)

Paraphymata Kormilev, 1960 (1962).
All three species of Neoanthylla have sexual dimorphism, best seen in

All three species of *Neoanthylla* have sexual dimorphism, best seen in the differentiation of the antennae: the male has abbreviated antennal segment III, shorter than II, and very long, cylindrical segment IV, whereas the female has segment III longer than II, and segment IV nuch shorter, and fusiform.

KEY TO THE SPECIES OF Neoanthylla KORMILEV

 Frontal processes of the head directed upward, and slightly displaced backward from the tip of the frontal plate, so that the latter is seen in front of them. Fore femora narrow and concave on the exterior surface, more than three times as long as wide _____ peruviana r. sp., Peru Frontal processes terminal, and slightly inclined forward; the tip of the frontal plate not visible. Fore femora wider and flat on the exterior surface, only two and a half times as long as wide

Postero-lateral-anterior borders of the pronotum deeply and almost angularly cut out; postero-lateral angles of the same dentiform and acute; postero-exterior angles of the connexiva II to IV provided with a blunt knob; connexivum is bicolor; vellow brown and reddish brown_ horvathi (Handlirsch), 1898, Brazil (Minas Geraes). Postero-lateral-anterior borders of the pronotum shallowly sinuate; posterolateral angles form a right angle; PE-angles II to IV slightly protruding, but do not form a knob; connexivum also bicolor, but yellow brown and

Neoanthylla Kormilev, 1951

black bucki (Kormiley), 1951, Brazil (Rio Grande do Sul).

Neoanthylla peruviana n. sp.

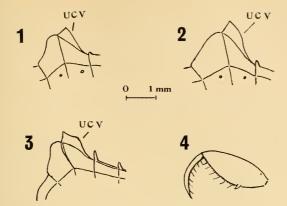
Male. Head slightly longer than wide through the eyes (12:10); anterior processes dentiform and directed upward, slightly displaced backward so that the tip of the frontal plate is seen in front of them as two (1 + 1) small tubercles. Preocellar processes do not rise above the level of the frontal plate; ocellar processes dentiform, directed up—and slightly forward. Ocelly lateral and slightly visible from above. Eyes large, semiglobose, exerted. Antennal groove wide and smooth, open from above, Antennae very long, with cylindrical segment IV; proportions of the antennal segments, I to IV, are: 3:4.5:2.5:25. Granulation sparse, more limited to the borders and genae.

Pronotum shorter than wide across the lateral angles (21:27.5); antero-lateral borders (anterior and posterior together) three times sinuate, covered with sparse, semiobliterated granulation; lateral notch (the middle sinuation) shallow; lateral angles dentiform, acute, directed up—and slightly sideways; postero-lateral-anterior borders very short, and shallowly sinuate; postero-lateral angles angular, form a right angle, with slightly protruding tip; postero-lateral-posterior borders twice as long as PLA-borders, and almost straight; posterior border also straight. Fore disc smooth, with a row of fine granules only along its lateral borders. Hind disc moderately convex; median depression reaching to 4/5 of its length; carinae clearly marked from the base to the tip, and slightly divergent, more divergent posteriorly, covered with a few, spaced granules. Hind disc finely and deeply punctured, and slightly rugose between the carinae posteriorly.

Scutellum shorter than wide at the base (7.5:10); lateral borders finely carinate, very slightly sinuate, and almost without granulation; median carina linear, with one large granule at the base, and a few smaller at the tip.

Hemelutra reaching to the tip of the abdomen; venation simple: two basal closed cells, and ramificated veins.

Abdomen almost as long as wide (43:42); PE-angles of the connexiva dentiform, increasing in length from II to IV; connexiva II to IV long and narrow, their exterior borders straight (II and III), or very slightly sinuate (IV); connexivum V provided with an ultraconnexivum, its exterior border in the shape of an "S", first sinuate



Neoanthylla bucki (Kormilev). Fig. 1, lateral angles of the \varnothing abdomen seen from below. Neoanthylla horvathi (Handlirsch). Fig. 2, lateral angles of the ? abdomen seen from below. Neoanthylla peruviana n. sp. Fig. 3, lateral angles of the \varnothing abdomen seen from above. Neoanthylla peruviana n. sp. Fig. 4, fore femur and tibia of \varnothing . Note: UCV—ultraconnexivum of segm. V.

then strongly convex; PE-V dentiform, acute; connexivum VI firstly strongly convex, then slightly sinuate; posterior border convex in the middle, and slightly sinuate laterally. Venter without granulation.

Propleura long; antennal groove wide and deep reaching to the lateral angles of the pronotum; fore border sinuate and finely denticulate; antero-inferior angles with slightly larger teeth.

Mesosternal cross has fore branch slightly convex and granulate.

Legs: fore coxae long and naked, with only one small tooth near the base; trochanters free; fore femora elongately ovate, more than three times as long as wide (25:7.5), translucent; exterior surface concave, smooth, and shiny; lower edge with a small tooth; fore tarsi present.

Color: yellow brown mottled with red brown; exterior borders of connexiva bicolor: yellow brown and red brown; fore disc of the pronotum, the middle depression of the hind disc, median carina of the scutellum, and corium, are dark red brown.

Total length 8.4 mm.; width of the pronotum 2.75 mm.; width of the abdomen 4.2 mm.

Holotype: ♂ Peru, Satipo—P. Paprzycki coll. VIII. 24, 1941; in the U. S. National Museum, (Type No. 67555).

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A REVIEW OF THE GENUS XANTHOMYIA PHILLIPS

(DIPTERA: TEPHRITIDAE)

The Nearctic genus Xanthomyia was established by Phillips (1923, Jour. New York Ent. Soc. 31: 140) for Trypeta platyptera Loew (1873, Smiths. Misc. Collect. 256, Pt. III: 306), a species with 2 pairs of lower fronto-orbitals; 2 pairs of upper fronto-orbitals (the anterior pair of which is dark and very strongly developed, the posterior pair, like the outer verticals, white); a short, pointed third antennal segment; a very wide frons clothed with very minute setae; pale postoculars; the dorsocentral at the level of the anterior supra-alar; 2 pairs of scutellars; and a very broad, dark wing with vein r-m distinctly apicad of the middle of cell 1st M₂. Curran (1934, Families and Genera of No. Amer. Diptera, p. 288, fig. 18; p. 289) keys the genus and illustrates the wing pattern of platyptera. The genus is closely related by many morphological features to Eurosta Loew, Eutrela Loew, Xenochaeta Snow, and Jamesomvia Quisenberry, all but one of which are included in Curran's key.

A long-overlooked name in the Tephritidae, Eutreta nora Doane (1899, Jour. New York Ent. Soc. 7: 184) was synonymized with platyptera (then known as a Tephritis) by Coquillett (1899, Jour. New York Ent. Soc. 7: 264), and although Doane (1900, Jour. New York Ent. Soc. 8: 48) and Aldrich (1907, Jour. New York Ent. Soc. 15: 6) argued that the two names represented distinct species, nora has nowhere appeared in the North American tephritid literature since 1907 either as a distinct species or as a synonym.

To resolve the element of doubt residing in the literature cited above, I recently examined the type of nora through the kindness of Maurice James, Washington State University, Pullman, and found it to be, in fact, the representative of a species of Nanthomyia distinct from platyptera. Differences in the wing patterns of platyptera (see Curran, 1934, p. 288, fig. 18) and nora (see Doane, 1899, Pl. III, fig. 9) are evident upon comparing the excellent illustrations of these two authors. The wing disk is darker in nora than in platyptera, the round hyaline spots in all cells are less numerous, the marginal hyaline areas tend to be rounded rather than open to the wing margin, and the hyaline spots in cell R_1 are separated by more extensive dark areas. In addition, the anterior margin of the third antennal segment of nora is more deeply emarginate than that of platyptera, and the scutellum of the former does not exhibit the dorsal mark so prominent in platyptera.

I have seen specimens of platyptera from an area bounded by Michigan, Vermont, Indiana, and Virginia; but nora is known to me only from Science Lodge (Boulder Co.), Grand Mesa, and Spring Creek Pass, all in Colorado, and from Moscow Mt., Idaho, the type locality. Nothing is known about the hosts or biology of these two rare species.

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