#### FOUR UNDESCRIBED TINGITIDS FROM UNITED STATES

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# Corythucha nicholi, n. sp.

Pale tastaceous, the nervures on dorsal portion of hood and tumid elevations of elytra, a small spot on each paranota and median carina, two rows of nervures near base and some nervures near apex of elytra fuscous. Pronotum pale brown, becoming lighter on triangular portion, finely punctate, tricarinate; lateral carinae strongly raised anteriorly, not extending to the hood, each composed of three or four areolae; median carinae strongly raised, a little shorter than hood and more than one half as high, composed of one entire row of large areolae and a few extra areolae at its highest part. Rostral laminae testaceous, the rostrum extending a little beyond the middle of the mesosternum. Antennae slender, testaceous, clothed with bristly hairs. Elytra with the fuscous markings more or less prominent, the outer margin with short, sharp, black-tipped spines along the basal two-thirds. Body beneath black. Legs testaceous, the tips of tarsi fuscous. Wings developed.

Length, 3.53 mm.; width, 1.76 mm.

Holotype, male, and allotype, female, Santa Rita Mts., Ariz., June 20, 1926, collected by A. A. Nichol, in Drake collection. Paratypes, several specimens, collected with type, and also from Huachuca Mts., Ariz., July 17, 1905, by H. G. Barber, in the collections of Iowa State College, H. G. Barber, A. A. Nichol, and the writer. This species has been confused in collection with C. arcuata Say, but differs in having a larger and more strongly inflated hood and the larger and more globose tumid elevations on the elytra. In some specimens the general color is somewhat similar to C. pallida O. & D.

#### Melanorhopala balli, n. sp.

Color and general appearance similar to *M. clavata* Stal, but distinguishable by its much smaller size and shorter legs and antennae. Length, 3.23 mm.; width, 1.17 mm.

Antennae darker and stouter than in *M. clavata* Stal, the third segment slightly curved and slightly enlarged towards tip. Proportional lengths of antennae of female—(*M. balli*) I=17, II=14, III=104, IV=13; (*M. clavata*) I=30, II=16, III=160, IV=30. Legs short, about two-thirds as long as in *M. clavata*. Median spine on head greatly reduced. Discoidal area about three-fifths as long as in *M. clavata*, bounded by a prominent costate nervure.

Holotype, brachypterous female, Fort Collins, Colorado, July 28, 1899, E. D. Ball, in author's collection. In this species the elytra are scarcely longer than the abdomen and jointly rounded behind as in typical brachypterous forms of the genus Hes-

perotingis Parshley. Pterygopolymorphism and sexual dimorphism are marked characteristics of the genus *Melanorhopala* Stal, especially in *M. clavata* Stal.

# Hesperotingis floridana, n. sp.

Larger than *H. antennata* Parshley, the third antennal segment longer and considerably more swollen distally. Head ferrugineous, with five spines; median and posterior pair rather short, slender, contiguous with the head; anterior pair short, stout, curved inwardly. Antenniferous tubercles large, broad and prominent. Bucculae contiguous in front. Rostrum long, the apex concealed by "card point" behind intermediate coxae. Antennae very stout, ferrugineous, the distal half blackish; segments I short, slightly longer and stouter than two; III very long, strongly swollen towards apex; IV short, subconical, distinctly narrower at its base than the apex of the third.

Pronotum strongly swollen, shining, very coarsely pitted, ferrugineous, the collum and margin of triangular process testaceous. Paranota narrow, contiguous with sides of pronotum, uniseriate. Lateral carinae uniseriate, subparallel, a little more raised behind than in front, each composed of single row of very small areolae; median carina also more elevated behind, less elevated in front than lateral ones, areolate behind. Elytra considerably longer than the abdomen, rounded behind, brown, the nerves separating discoidal, sutural and subcostal areas, and some of the nervelets ferrugineous, the areolae pale; costal area uniseriate, some of the transverse nervures thickened and darkened; subcostal area almost entirely biseriate, with two or three extra cells opposite apex of discoidal area; discoidal area extending beyond middle of elytra, bounded by a prominent, strongly costate, irregular nervure, narrowed at apex, with four rows of cells at its widest part, the areolae of discoidal and sutural areas not arranged in very regular rows. Wings a little longer than the abdomen. Body beneath reddish brown. Legs reddish brown, moderately long. Length, 4.23 mm.; width 1.32 mm.

Holotype, macropterous female, East Florida, collected by Ashmead, in U. S. National museum. This species is very distinct from any of its congeners and is probably closely allied to H. antennata Parshley.

#### Hesperotingis mississippiensis, n. sp.

Brown, the antennae, lateral carinae and costate nervures separating discordal, subcostal and sutural areas brownish black. Length, 3.19 mm.; width, 1.13 mm.

Antennae moderately long and stout, dark brown, becoming blackish towards apex, densely clothed with short, recurved hairs; proportional length—I=13, II=18, III=95, IV=22. Rostral channel testaceous, deep, widening posteriorly, open behind, the rostrum extend onto the first venter. Bucculae dark brown, broad, contiguous in front, Orifice very large and prominent. Legs dark brown. Head, spines and antenniferous tubercles dark; anterior pair of spines stout, conical, strongly turned inwardly.

Pronotum coarsely pitted, areolate and testaceous behind; paranota uniseriate, almost contiguous with the dorsal surface of pronotum; collum distinct, slightly elevated in front of median carina; carinae terminating anteriorly at the calli, subparallel. Elytra a little longer than abdomen (brachypterous form), rounded behind, areolae slightly confused, opaque or subopaque; costal area uniseriate, a few of the transverse nervures thicker and blackish, subcostal area mostly biseriate, with a few extra areolae near apex of discoidal area; discoidal area bounded by a prominent dark nerve, widest near middle, there quadriseriate, somewhat narrowed at both apex and base, extending beyond middle of elytra. Wings greatly reduced. Claspers strongly curved in male.

Holotype, brachypterous male, Charleston, Miss., Sept. 10, 1925, collected by H. M. Harris, in author's collection. This species seems to belong to the genus Hesperotingis, the antennae are practically straight; the elytra are formed as in brachypterous form of this genus. It is most closely allied to H. duryi Drake from Texas, but the reticulations are much more regularly arranged and the antennae are quite different.

# MEETINGS OF THE SOCIETY

Nov. 4—The Society met in Science Hall. Prof. Gray spoke of his summer vacation visit to Germany and its educational institutions. His talk was illustrated by several pictures of various laboratories and some of the publications which the Germans use in the distribution of information among the farmers.

Dec. 2—The Society met at 4 P. M. in the rooms of the Department of Entomology of the College of Agriculture. The following men were elected to membership: Prof. C. F. Byers of the Department of Biology, R. A. Knight of the State Plant Board, Mr. Ralph Dickey, Assistant in Entomology in the College of Agriculture, Mr. Monte Moore, graduate student in Entomology, College of Agriculture, Mr. Jack Creighton and R. M. Jones, students in the same department and R. E. Enlow of the Experiment Station. Prof. C. F. Byers gave the paper of the evening on "The Taxonomic Tendencies Occurring in Odonata Nymphs."

H. E. Bratley, Sec'y.