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DESCRIPTIONS OF TWO NEW CICADAS FROM LOUISIANA.

HERBERT OSBORN.

The species of Cicadas described here have come to me from Louisiana and inasmuch as one of them appears to be of economic importance and the other to possess points of special biologic interest, it seems desirable that they should be described.

Cicada erratica n. sp.

Apparently closely related to Cicada nigriventris Walk but differing in details of opercula and in coloration. Sordid green with fuscous and blackish markings. Length to tip of abdomen 21 mm., to tip of folded wings, 36 mm., width of humeri, 9 mm.; width of eyes, 8 mm.

Head scarcely as wide as pronotum, vertex scarcely longer at middle than next to eye, pronotum with marginal keels slightly expanded posteriorly. Elytra reaching half their length beyond the tip of abdomen.

Color,—green, tinged with yellow; a transverse band from eye to eye the posterior projection including ocelli, upper surface of front its central portion between the transverse bars, tip of clypeus, a central divided stripe on pronotum, some lateral patches, marginal patch on posterior lobe, four cuneiform marks, base of scutellum at sides, terga of abdomen except cuneiform marks, base of scutellum at sides, terga of abdomen except hind margins, apex of rostrum, tarsal joints, basal segment of female, central patch on last ventral segment, ovipositor and tip of pygofer, dark fuscous or black. Elytra, transparent, veins green to about the middle, black on apical half, veins of wings black to a point somewhat nearer the base.

Genitalia,—Last ventral segment of female deeply emarginate, pygo-fer with sinuate borders the sides meeting a little in front of apex of ovi-positor, whole margin pallid, the surface and the tip of sheath hairy.

Male ventral segment narrowing posteriorly, subtruncate apically with about ten close ridges, anal plate about as long as broad, outer portion flattened, central stripe black, claspers strongly curved back, polished.

The male agrees closely with the female in size and coloration, the processed are broader than long curved posteriorly, inner adde not meet.

opercula are broader than long, curved posteriorly, inner edge not meeting the hind border, extending only to border of abdominal segment.

This species is reported by Mr. Newell as depositing eggs to such an extent as to cause serious injury to cotton, corn and some other plants. A detailed account of its habits is given in the report of the Association of Economic Entomologists for 1905. This species has been taken at Shreveport, June 19, '05, and Logtown, La., June 19, 1905.

I have also in my collection two specimens of males collected by Mr. F. W. Mally at Shreveport, La., July 2, 1891. specimens were determined as possible examples of Cicada nigriventris Walk. but with a larger series of individuals this reference seems impossible. Prof. Uhler has kindly compared with his sordidata and agrees with me that it cannot be referred to that species. Seven males and three females.

Cicada delicata n. sp.

Similar to pallida Listant, but differing in elytral marking and in coloration, length to tip of abdomen, 18 mm., to tip of elytra, 27 mm.,

width of head and eyes, 8 mm. Head including eyes nearly as wide as widest point on pronotum, head produced anteriorly, the front with about nine transverse ridges each side. Pronotum with narrow marginal carina expanding slightly into the posterior angle. Cross veins of elytra quite oblique and deeply infuscated.

Color,—Light green, especially pronounced on front; legs, except tarsi, hinder margin of pronotum, basal portion of elytral veins, vertex, hinder margin of pronotum, basal portion of elytral veins, vertex, hinder portion of pronotum and disc of meso-thorax, opercula and abdomen below ochery-yellow, dorsum of abdomen tinged with testaceous. A transverse irregular band produced backwardly to occiput and including the reddish ocelli and dorsal portion of front and eyes, black. The anterior portion of pronotum is marked with two spots extending from the black margins of the vertex. The anterior part of mesothorax in-cludes four cuneiform black spots, the outer portion is also infuscated becoming a fairly distinct black posteriorly and there are two distinct black points just in front of the elevated x of the scutellum. the rostrum and claws of tarsi and spines of hind tibiæ are blackened but otherwise under portion is rallid.

Genitalia,—Last ventral segment of female rather short, shallowly

emarginate behind with shallow rounded notch at centre and bare callous spot each side, pygofer short, borders barely meeting beneath, a short sharp spine dorsally. Male ventral segment narrowed abruptly behind, apex slightly convex, a few transverse furrows, anal plate narrowed, borders strongly reflexed, apex obtusely pointed, claspers short and blunt. Male is very similar to female in size and coloration, the opercles broad, sinuate laterally, reaching second abdominal segment

posteriorly, inner margins narrowly touching.

This is a very handsome little species collected at the Gulf Biologic Station; Cameron, La., by Prof. J. S. Hine and Mr. J. B. Garrett. It occurs among the growth of Iva frutescens which abounds in lowland or swampy areas near the coast and doubtless oviposits in this plant. While resembling pallida in size and to some extent in coloration, it differs distinctly from that species in sexual characters. The light green color, prominent smoky margin on the oblique veins of elytra and the testaceous upper surface of abdomen as well as shape of opercula, form distinctive characters. Described from five males, one female.