RESULTS OF THE YALE PERUVIAN EXPEDITION OF 1911. ORTHOPTERA (ADDENDA TO THE ACRIDIIDÆ— SHORT-HORNED LOCUSTS).

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Since writing the report on the Acridiidæ¹ a few additional specimens collected after the main expedition had started home have been received. These are of sufficient interest to merit an additional report.

Family LOCUSTIDÆ (OEDIPODINÆ).

TRIMEROTROPIS OCHRACEIPENNIS ? Blanchard.

A single female specimen doubtfully referred to this species from Coropuna, taken in October. The altitude given is 14,500 feet.

TRIMEROTROPIS SIGNATIPENNIS Blanchard.

One pair bearing same data as the preceding species.

Family CYRTACANTHACRIDÆ (ACRIDIIDÆ).

SCHISTOCERCA MACULATA, new species.

Of medium size, and with the tegmina regularly and coarsely maculate with fuscous, and the pronotum longitudinally lined with the same color.

Head rather narrow but fairly high, not prominent, the eyes also narrow, being fully twice as long as wide and plainly longer than the anterior margin of the cheeks below them, separated on the vertex by a space equal to the widest portion of the frontal costa; fastigium nearly twice as wide as long, very shallowly sulcate and with coarse antero-lateral carinæ; lateral ocelli large, pallid, touching the compound eyes; frontal costa moderately prominent, shallowly sulcate at the ocellus and below. Pronotum rugoso-punctate, narrow in front, the anterior lobe a little expanding caudad, the hind lobe much more rapidly so; the median carina fairly prominent and deeply

¹ Proceedings U. S. National Museum, Vol. 44, 1913, pp. 177-187.

severed by all three transverse sulci, the last plainly in advance of the middle, hind border gently obtusangulate, the apex rounded. Tegmina ample, tapering but little apically, extending beyond the tip of the abdomen and apex of the hind femora nearly double their width; wings broad. Anterior and middle legs rather slender, the hind femora short, robust at base, slender apically, the external carinæ prominent; hind tibiæ noticeably sinuose and also provided with prominent external carinæ, 9-spined externally, 11-spined internally, the inner ones decidedly larger than the outer. Prosternal spine moderately coarse, decidedly transverse, the sides parallel, the apex broadly rounded, gently directed caudad but not curved.

General color brunneo-cinereous, strongly maculate, mottled, streaked and flecked with fuscous. Tegmina coarsely maculate on disk, the maculæ on the apical half tending to form obliquely transverse bands, anterior and posterior areas also distinctly mottled with the same color. Pronotum plainly marked with alternate longitudinal pallid and fuscous bands, the middle of the lateral lobes provided with a quadrate pallid macula. Vertex and occiput showing traces of lateral fuscous lines, between and below these lines cinereous except for an inconspicuous fuscous line extending partly across the cheeks below each eye. Hind femora with a pallid external disk; upper margin showing traces of two transverse fuscous bands. lunules and base of tibiæ black, the genicular lobes dirty white, the carinæ very conspicuously black mottled; the tibiæ cinereo-purple, the spines pale, black-tipped. Hind margin of abdominal segments prominently dotted with fuscous. Wings pellucid, becoming yellowish basally, the principal veins and the transverse ones on apical portion infuscated.

Length of body, female, 42 mm.; of pronotum, 9.5 mm.; of tegmina, 43 mm.; of hind femora, 23.5 mm.

Habitat.—The only specimen at hand was taken at Chuquibamba, Peru, during October, 1911. The label bears the note "10,000 feet (Yale Peru expedition)."

Type.-Cat. No. 15598, U.S.N.M.

This insect is rather closely related to both S. columbina Thunberg and S. interrita Scudder, the former species coming from Colombia and the latter from Peru. It is also related to an insect found in the windward of the West India Islands and Trinidad, and that has been referred erroneously to Thunberg's species. It is likewise related to S. maculipennis Bruner, which latter locust will shortly be described in a forthcoming paper soon to be published in the current volume of the Annals of the Carnegie Museum.

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