we find the following characters assigned to them : "Tête aussi large que le thorax" (p. 32). "Ce genre [Thlipsomyza], dont le caractère le plus apparent est l'abdomen comprimé et muni de soies sur les bords des segments, a pour le type le *T. compressa*, Wied., *Bombylius id.*, Fab., d'Alger. Nous y joignons deux espèces nouvelles, également du nord de l'Afrique, dont l'une, le *T. heteroptera*, diffère des autres par la première cellule postérieure ouverte. Ces Bombyliers se distinguent encore des autres par les soies qui bordent les segments de l'abdomen."

Of *T. castanea*, he says : "C'est peut-être une variété du *T. compressa*."

In his specific descriptions, Macquart gives a quite different type of coloration for his species, and in his figure of *T. heteroptera* the bristles of the abdo-

men are conspicuously indicated. Furthermore, the abdomen, like the whole body, is bare and elongated. All of these characters are so "himmelweit" from the *Bombylius* type, to use Wiedemann's own expression, that one is surprised that the identity of our forms should have occurred to Mr. Coquillett. It is interesting to observe that both Schiner and Loew refused to accept *Amictus* Wied. as being distinct from *Thlipsomyza*, based as it was chiefly on the open or narrowly closed first posterior cell, the sole character assigned to *Thlipsogaster* by Rondani. *Eurycaenus* Loew seems to be a nearly allied genus.

The moral of it is that Rondani's genera, like Walker's species, are to be accepted with fear and trembling.

ARKANSAS MELANOPLI — I.

BY JEROME MCNEILL, FAYETTEVILLE, ARK.

The recent publication of Scudder's excellent Revision of the Melanopli by making it possible to recognize with certainty those species which have already been described suggested the propriety of placing on record the species of this group which are known to occur in Arkansas. This seemed to be the more desirable because almost nothing is known of the Orthopteran fauna of this State. The list here given is undoubtedly very far from complete

as the collections upon which it is based have been made almost entirely in the seven or eight counties of Northwestern Arkansas. Altogether nineteen species representing six genera are known. *Melanoplus* includes fourteen of these species and two of these *Mel. baconii* and *Mel. sylvaticus* are apparently undescribed. Two others *Mel. impudicus* Scudd. and *Mel. impiger* Scudd. were described very recently in Scudder's monograph cited above.

Of the remaining five genera, it may be said that the occurrence of *Phoetaliotes*, *Hesperotettix* and *Dendrotettix* was quite to be expected. *Campylocantha*, however, has not been reported so far east before and *Paratylotropidia* has hitherto been known by a single pair of specimens from localities so widely separated as Texas and Dakota.

Paroxya may certainly be expected to

occur in the southern and eastern parts of the State. It is altogether probable too that a considerable number of Texas forms will be found in the valley of the Red River in Southwestern Arkansas.

The keys which follow have been based directly upon females, though they should apply nearly equally well to males.

KEY TO GENERA OF MELANOPLI FOUND IN ARKANSAS.

A¹ Frontal costa not twice as wide below the ocellus as between the antennae.

B¹. Shoulders of the pronotum well rounded, disk subtectiform; frontal costa percurrent, and sulcate to the clypeus.

C¹ Eyes separated by a space several times as wide as the basal joint of the antennae; tegmina less than half the length of the abdomen; median carina of the pronotum cut by the first and second sulcus. *Campylacantha*.

C² Eyes separated by a space but little wider than the basal joint of the antennae; tegmina much more than half the length of the abdomen; median carina of the pronotum not cut by either the first or the second sulcus. *Hesperotettix*.

B² Shoulders of the pronotum decidedly angulate, at least on the metazone, frontal costa rarely percurrent and never sulcate to the clypeus.

C¹ Space between the eyes nearly as broad as the transverse diameter of the eye, posterior margin of the pronotum scarcely more distinctly angulate than the anterior.

D¹ Transverse sulci of the pronotum very deep, the first two as distinct as the last, all cutting the median carina; shoulders of the prozone well rounded. *Dendrotettix*.

D² Transverse sulci of the pronotum not especially deep, the first two much less distinct than the third, shoulders of the prozone not less plainly angulate than those of the metazone. *Paratylotropidia*.

C² Space between the eyes narrower than the transverse diameter of the eyes; posterior margin of the pronotum usually much more angulate than the anterior. *Melanoplus*.

A² Frontal costa twice as wide below the ocellus as between the antennae, head very large in proportion to the body. *Phoetaliotes*.

Campylacantha olivacea Scudd.—I have specimens from Fort Smith and Fayetteville as well as from Mackey, I. T. The earliest recorded date for its capture is August second, the latest October eighth, though doubtless some specimens survive until settled cold weather which generally does not come until after Christmas. It is a rather rare species so far as my observation goes, though it is sometimes abundant locally. It occurs in dry pastures.

Hesperotettix pratensis Scudd.—A single female was found in the summer of 1897 near Buffalo City, Marion County which I refer to this species with some hesitation. It was found in the mouth of a gully at the foot of the divide between Big Buffalo and White Rivers. Timber occurred sparsely here but vegetation was abundant. A long search in this vicinity failed to reveal any more specimens.

Dendrotettix quercus Riley.—This species is represented in my collections by one male and six females, all except one female captured near Clifty, Carroll Co., June twenty-ninth. The female referred to was taken near Elkins, Madison Co., July thirty-first.

Paratylotropidia brunneri Scudd.—This very interesting and apparently very rare species is found in Arkansas. It is represented in my collection by a single pair, male and female, captured near Clifty, Carroll Co., June twenty-ninth. I refer these specimens unwillingly to the same species as they are remarkably different in the distinctness of the lateral carinae which are obsolete in the female and very distinct in the male, and in the fastigium of the vertex, which is not perceptibly declivent in male and exceedingly prominent, while in the female it is moderately declivent and distinctly less prominent. In other respects they agree as well as male and female of the same species usually do. The single pair, male and female, known to Scudder were from Dakota and Texas respectively. As the male was an imperfect specimen, the structure of the furcula could not be given.

The Arkansas male shows not the faintest trace of furcula and the last dorsal segment is not interrupted in the median line. The female at first glance has very much the appearance of a short winged *Melanoplus bivittatus* Say.

A NEW VARIETY OF CHIONASPIS FURFURUS FITCH, AND NOTES ON OTHER SPECIES.

BY GEO. B. KING, LAWRENCE, MASS.

Chionaspis furfurus Fitch. var. *fulvus*. n. var.—Scale of female.—Shape variable, some pyriform and flat, others quite elon-

gated ovoidal and convex. Length also variable; length including exuviae 3, 2½ and 2 mm. The width of these are quite constant,