# TWO GENERA OF TETTIGELLIDAE PROPOSED BY MELICHAR

## Z. P. METCALF

#### North Carolina State College of Agriculture and Engineering, Raleigh

Melichar (1924a) commenced a revision of the Cicadellidae, now known as the Tettigellidae, and this was continued during 1925a, 1926a, and 1932a, but, unfortunately, was never completed. In his key to the tribe Cicadellini (1926a: 340) he proposed 65 new genera. Of this number only 13 were described and had species assigned to them. China (1927d and 1938d) straightened out these new genera and published a list of the new genera with the genotype designations based on Melichar's unpublished manuscript. Evans (1947a) cataloged these genera and cited types of the 80 genera established by Melichar. Seventeen genera were based on new species which have never been described. Since these new species have not been published and these new genera have not been fully described, and since a portion of Melichar's collection has fallen into my hands, I deem it advisable to describe the new genera and species as far as possible.

The two genera that I want to establish in the present paper are Luzoniella Melichar (1926a: 341) and Polisanella Melichar (1926a: 343).

#### Luzoniana nom. nov.

pro Luzoniella Melichar (1926) Ann. Mus. Nat. Hungarici, 23: 341

nec Luzoniella Karny (1926) Treubia, 9: 185

Logotype Luzoniella philippina Evans (1947a: 162)

Luzoniella Melichar (1926a: 341) [Key, sine sp.]

China (1938d: 183) [Listed]

Neave (1939b: 1011) [Catalogued]

Evans (1947a: 162) [Catalogued]

The specimen before me agrees fairly well with the characters given in Melichar's key except Couplet B: Melichar (1926a: 341), "Hinterrand des Scheitels ganz, oder nur an den Seiten gekielt, häufig = deutlich doppelt gebrochen." But since I have had trouble in determining other genera on the basis of this couplet, I assume that either the character is not a good one or my understanding of what Melichar intended to imply by these words is faulty.

Head broad, including the compound eyes, slightly broader than the pronotum; anterior margin of the crown broadly rounded, posterior margin deeply incised, the median third nearly straight; the whole posterior border distinctly and sharply carinate; muscular impressions of the postclypeus plainly visible on the crown; central area of the crown distinctly and broadly impressed, including the area of the ocelli; face large; with the postclypeus rather strongly inflated; no median impression, lateral muscular impressions short, not very deep; genae narrow; juga small, broadly rounded laterad; anteclypeus small. Pronotum large; anterior margin broadly curved; posterior lateral margins short; posterior margin broadly incised. Mesonotum with a distinct impressed line mediad with the usual impressed transverse line with two rather deeply impressed points anteriorly. Tegmina elongate, narrow; media connected with cubitus by three or more cross veins; the rest of the venation of the corium fairly regular; claval veins nearly parallel. Legs slender; hind tibiae elongate, slender with the inner anterior, the outer anterior, and the outer posterior margins set with heavy stout spines. Female genitalia elongate, strongly compressed.

## Luzoniana philippina n. sp.

Figures 1–5

The general color of this species is light ochraceous with a tinge of greenish, with the tegmina shading to tawny and conspicuous color markings of fuscous on the head, mesonotum, and abdomen.

THE OHIO JOURNAL OF SCIENCE 53(1): 47, January, 1953.

#### Z. P. METCALF

Crown about twice as broad as long; anterior margin broadly rounded; when viewed laterally, broadly rounded to the face; posterior margin broadly incised with a distinct sharp carina; deeply impressed just caudad of the ocelli; ocelli about twice as far from each other as from the compound eyes; postclypeus nearly as broad as long with the median area somewhat flattened, somewhat protuberant; antennae inserted in definite pits; margin of head above the antennal pits distinctly carinate; compound eyes rather large, protuberant; cheeks elongate, about twice as long as the dorsal margin, somewhat narrowed ventrally. Pronotum broad, flat; the anterior margin broadly curved, protruding anteriorally to about the middle of the compound eyes; lateral margins broadly incised; anterior lateral, posterior lateral, and posterior margins finely but distinctly carinate; posterior lateral margins nearly straight; posterior margin broadly, somewhat triangularly incised, with the posterior two-thirds fairly uniformly finely punctate, the anterior third deeply impressed without punctures. Mesonotum flat, transversely deeply incised just before the apical third, with two impressed points just anterior to the impressed line. Tegmina elongate, narrow, nearly parallel sided, with four apical and three ante-apical cells; cubital cell large, nearly twice as long as the apical cells and about twice as broad; four distinct cross veins between media and cubitus; claval veins not very distinct. Legs rather long and slender, the anterior tibiae with a row of setae on the posterior margin and a row of elongate slender spines on the anterior margin; posterior tibiae with the usual double row of stout spines on the lateral margins. Abdomen rather broad and short, lateral margins of the segments exposed beyond the tegmina. Female genitalia elongate, compressed. Pygofers more than four times as long as broad; last ventral segment twice as long as the penultimate, twice as broad as long, posterior margin broadly incised, broadly produced medianly.

General color of the head and pronotum ochraceous with a greenish tinge marked with fuscous as follows: lateral arcs on the crown and the face; a small elongate triangular spot at the anterior inner corners of the compound eyes; a small elongate oval spot at the anterior margin of the head on the median line; a small round spot on the median line of the face at about the level of the upper margin of the compound eyes; pronotum with three pairs of somewhat pustular spots behind the compound eyes; and mesonotum with three pairs of indistinct fuscous obconical marks on the anterior margin. Tegmina somewhat tawny. Abdomen dorsally with each segment with a broad basal fuscous fascia, separated from a narrower apical fuscous fascia by a narrow ochraceous fascia; extreme lateral margin, and the last dorsal segment ochraceous buff; ventrally the head, thorax, and legs chiefly ochraceous with some fuscous shading; abdomen ventrally chiefly fuscous with the genital segments greenish ochraceous.

Length to apex of tegmina 8.6 mm.

Holotype female, Northern Luzon.

# Polisanella Melichar

# Polisanella Melichar (1926a: 343) [Key, sine sp.]

#### Logotype Polisanella bakeri Evans (1947a: 164)

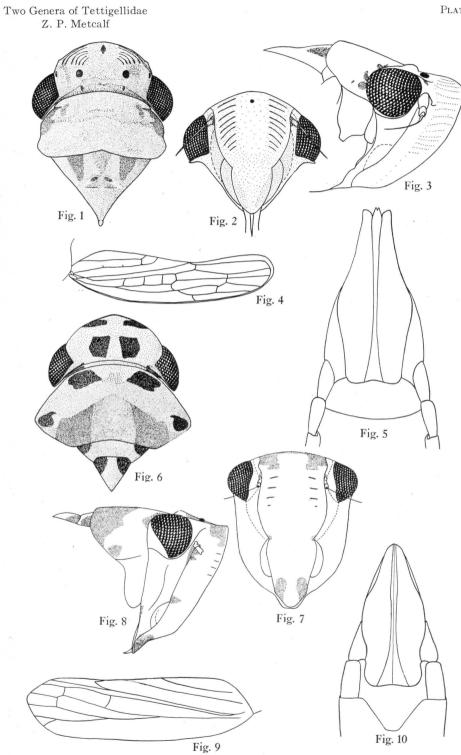
This genus may be characterized as having a rather narrow head with the crown somewhat protuberant, distinctly separated from the face by a sharp carina; pronotum broad, the anterior margin distinctly and continuously rounded from the shoulders; tegmina elongate with the venation fairly regular, fine and indistinct.

## EXPLANATION OF FIGURES IN PLATE

Luzoniana philippina n. sp., dorsal view of head and thorax. 1.

- Luzoniana philippina n. sp., frontal view of head. 2.
- Luzoniana philippina n. sp., lateral view of head and thorax.
  Luzoniana philippina n. sp., left tegmen.
- Luzoniana philippina n. sp., ventral view of female genitalia.
  Polisanella bakeri n. sp., dorsal view of head and thorax.
  Polisanella bakeri n. sp., frontal view of head.

- 8. Polisanella bakeri n. sp., lateral view of head and thorax.
- 9. Polisanella bakeri n. sp., left tegmen.
- 10. Polisanella bakeri n. sp., ventral view of female genitalia.
- Illustrations by Marjorie C. Hales.



49

PLATE I

Head narrow; crown flat, anterior and posterior margins broadly curved, sharply carinate; postclypeus elongate, nearly parallel sided on the dorsal two-thirds, then sharply narrowed. Pronotum broad; anterior margin broadly curved; the anterior lateral margins blending with the anterior margin; posterior lateral margins elongate, straight; posterior margin nearly straight; surface flat, the anterior third finely punctate; the posterior two-thirds finely rugulose. Mesonotum small with a distinct impressed line at the middle; general surface rugulose. Tegmina narrow, the margins nearly parallel; basal area finely punctate, coriaceous; venation regular, indistinct. Legs slender, anterior and intermediate legs short; posterior tibiae longer than the femora with two rows of stout spines on the outer margins.

# Polisanella bakeri n. sp.

# Figures 6-10

Crown nearly twice as broad as long; the whole surface smooth; anterior and posterior carinae fine but sharp; ocelli about equi-distant from each other and the eyes. Pronotum about twice as broad as long; the anterior third rather smooth; posterior two-thirds finely but rather uniformly rugulose; whole surface rather flat. Mesonotum about one and one-half times as broad as long; whole surface rather flat with a deep impressed line on the anterior third. Tegmina opaque, the basal third rather deeply but finely punctate. Female genitalia with the last ventral segment deeply and broadly incised; the anterior margin broadly v-shaped.

General color light ochraceous buff, shading to ochraceous buff and heavily marked with black as follows: two relatively large, elongate spots on the anterior margin of the crown, connected by a narrow fuscous fascia and continued onto the dorsal margin of the face as a pair of very irregular spots; two large quadrate spots on the crown near the posterior border and including the ocelli; two large irregular spots on the pronotum behind the eyes and on the posterior lateral margins of the pronotum near the shoulders; posterior half of the pronotum fuscous; mesonotum with the anterior lateral angles with large triangular black spots, and behind the impressed line two smaller triangular spots. Face marked with blackish below the dorsal margin, a continuation of the anterior spots on the crown; about four of the lateral arcs fuscous; a small blackish spot and elongate blackish stripe laterad of the postclypeus below the antennae; a small black spot laterad of the postclypeus where the suture separating the anteclypeus from the juga and the suture separating the juga from the cheeks meet the postclypeal suture; two pairs of small spots on the lateral margins of the cheeks, one just below the compound eyes and the other at about the level or the dorsal margin of the anteclypeus; anteclypeus with two large black spots laterad. Tegmina chiefly ochraceous buff, shading to paler apically; the claval vein, the claval suture, and the cubital vein margined more or less completely with fuscous. Legs chiefly ochraceous buff with some fuscous shadings; two rather large spots on the anterior femora, and the intermediate femora; one near the apex and the other near the base; posterior femora with a single spot near the apex; all the tarsi more or less clouded with fuscous; posterior tibiae with fuscous spots at the bases of the anterior lateral spines. Abdomen below chiefly blackish with the posterior margins narrowly ochraceous, with the genitalia ochraceous buff marked with blackish fuscous.

Length to apex of tegmina 7.2 mm.

Holotype, Mount Polis, Luzon, Philippine Islands.

#### LITERATURE CITED

Literature is cited in the text according to the designations given in the Bibliography (Metcalf 1944a, 1944b) listed below. The paper which has been published since the publication of the Bibliography is indicated below.

Evans, J. W. 1947a. A natural classification of leaf-hoppers (Jassoidea, Homoptera). Trans. Ent. Soc. London 98: 105–271.

Metcalf, Z. P. 1944a. Authors' List A-Z. A bibliography of the Homoptera (Auchenorhyncha) 1: 1-886.

1944b. List of journals and topical index. A bibliography of the Homoptera (Auchenorhyncha 2: 1-186.