

Excerpt from The Canadian Entomologist, March, 1946.

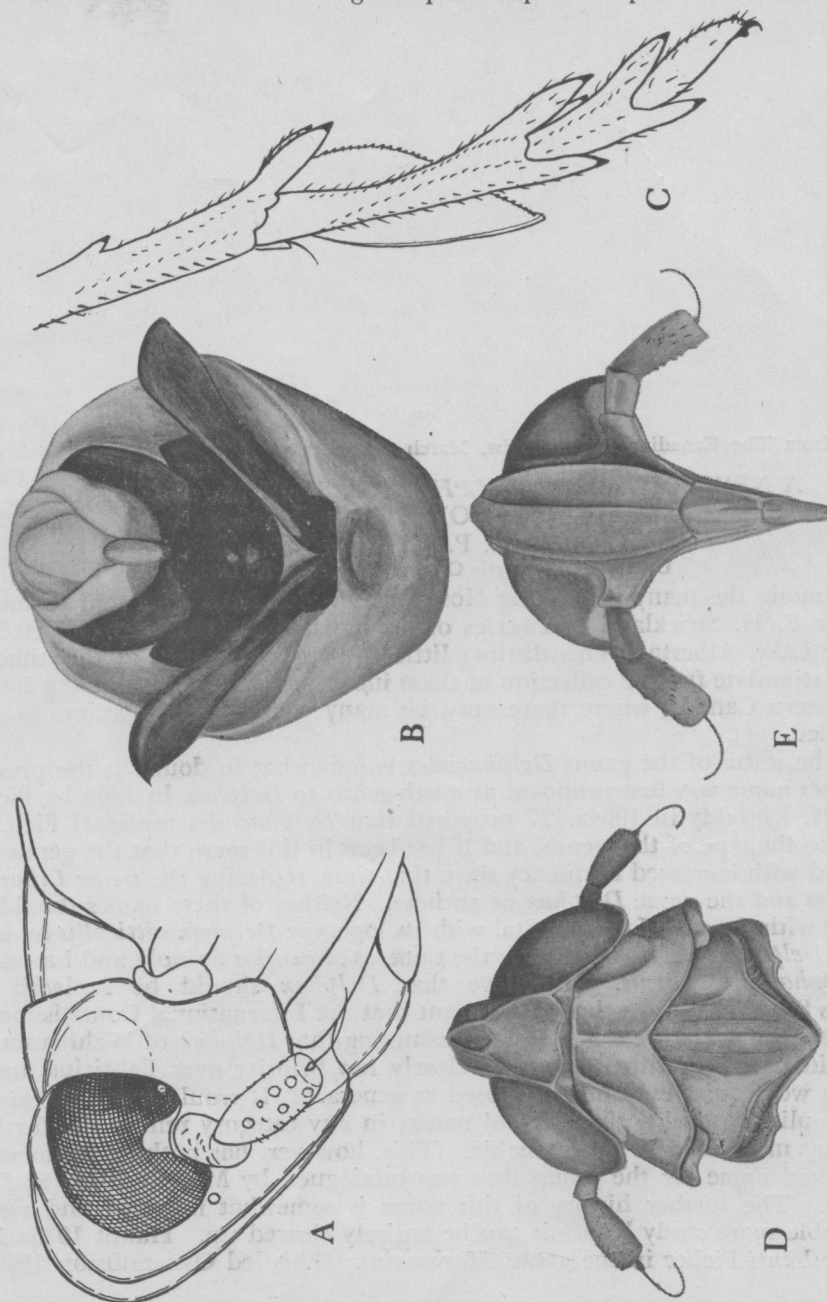
A NEW SPECIES OF *DELPHACODES* FROM ALBERTA
(FULGOROIDEA)
By Z. P. METCALF

University of North Carolina, Raleigh, N. C.

Among the many interesting Homoptera which have been sent to me by Professor E. H. Strickland is a series of an unusual *Delphacodes* collected at Cooking Lake, Alberta. This distinct little species is described at this time in order to stimulate further collection of these inconspicuous but interesting insects from western Canada, where there must be many more new species as yet unrecorded.

The status of the genus *Delphacodes* is somewhat in doubt at the present time. This name was first proposed as a sub-genus to *Delphax* in 1866 by Fieber 1866a:524. Kirkaldy in 1901a:177 proposed that *Delphacodes mulsanti* Fieb. be selected as the type of this genus, and it has been in this sense that the genus has been used with increased frequency since that time, replacing the name *Liburnia* of authors and the name *Delphax* of authors. Neither of these names should be confused with the true *Liburnia* Stal with its logotype *Delphax vitticollis* or with the true *Delphax* Fabricius which is the same as *Araeopus* Spinola and has as its type *Delphax crassicornis*. I believe that *Delphax* should be replaced by *Araeopus* Spinola. Even though we grant that the International Commission of Zoological Nomenclature was correct in assuming that *Delphax* of Wahlbaum is an invalid name; Wahlbaum's name clearly has priority over Fabricius' name and both were quite evidently proposed as genera. It would seem, therefore, much simpler to decide that invalid names in any category render the further use of that name invalid or untenable. This, however, has nothing to do with the accepted name for the group that was catalogued by Metcalf 1943a as *Delphacodes*. The further history of this name is somewhat involved and needs considerable more study before it can be entirely cleared up. Haupt 1935a:134 places *mulsanti* Fieber in the genus *Megamelus*. This led Ossiannilsson 1942b:

113 to suggest that the name *Delphacodes* was, therefore, a synonym of *Megamelus* Fieber, and that *Delphacodes* Fieber will have to be replaced by *Caligypona* Sahlberg 187a:408. *Caligypona* Sahlberg has as its haplotype *Caligypona albicollis*, which is according to Haupt 1935a:141 a synonym of *Liburnia reyi* Fieber. First of all it needs to be determined whether *multisanti* Fieber really belongs to the genus *Megamelus* Fieber as exemplified by its type *Megamelus notula* Gemar. In the second place it should be determined whether *Caligypona albicollis* Sahlberg is truly a synonym of *Delphax reyi* Fieber. There has been so much confusion in this group in the past because students have placed too much reliance on the so-called chrotic or superficial characters and not enough emphasis upon the phallic characters, not



Delphacodes stricklandi. Fig. A. Lateral view of head and thorax. Fig. B. Male genitalia, posterior view. Fig. C. Tarsi with calcar. Fig. D. Dorsal view of head and thorax. Fig. E. Facial view of head.

only for the delimitation of species but also for the limitation of genera. Unfortunately I do not possess at the present time typical specimens of all these species, and I cannot, therefore, settle these points. But judging by the descriptions and illustrations which are available, I do not believe that this synonymy is correct. I will, therefore, continue to consider the genus *Delphacodes* Fieber valid until the whole matter can be studied and verified or denied.

***Delphacodes stricklandi* n. sp. (Figs. A—E)**

This is a pale ochraceous buff species with the basal area of the dorsal segments of the male abdomen blackish or blackish fuscous and the diaphragm and genital styles fuscous to blackish, the tarsal claws blackish, and the compound eyes clouded with fuscous. The female is nearly uniformly pale ochraceous buff, with the compound eyes clouded with fuscous.

Carinae of head and thorax conspicuous; the median carina of the face forked slightly below the anterior margin of the crown. The forks of the median carina not strongly divergent on the crown to the middle where they are suddenly curved outward and join the lateral margin of the crown just before the apex. The median carina strongly developed, the lateral carinae strongly developed and divergent, not reaching the posterior margin. Carinae on the mesonotum not strongly developed. Antennae moderately long for this genus; the first segment terete, more than half as long as the second segment which is more robust and somewhat flattened. Both segments studded with numerous short spines. The flagellum at the base is rather stout and elongate, nearly as long as the basal segment of the antennae.

Male pygofer short and broad; the lateral margin nearly circular, with a shallow median ventral sinus; the outer chamber shallow, the inner chamber deep; diaphragm apparently thick; with a strong medium triangular genital spine. Genital styles flat, elongate, exceeding the lateral margins of the pygofer, diverging at an angle of about forty-five degrees from the ventral margin, slightly widened apically, and then suddenly narrowed to an acute recurved tooth at the apex. The anal segment short; anal spines wanting. Anal style almost included within the anal segment.

Holotype ♂: Cooking Lake, Alberta. June 6, 1937, F. C. Morrison.

Allotype ♀: Cooking Lake, Alberta. June 6, 1937, F. C. Morrison.

Collected on *Amaranthus elapsus*, family Amaranthaceae.

Paratypes, 4 ♂♂ and 8 ♀♀: Cooking Lake, Alberta. June 13 and June 20, 1937, F. C. Morrison.

LITERATURE CITED

- Fieber, F. X. 1866a. Neue Gattungen und Arten in Homoptern. (Cicadina Bur.) Verh. Zool. Bot. Ges. Wien. 16: 497-516; Pl. 7.
- Haupt, H. 1935a. Unterordnung: Gleichflügler, Homoptera. Die Tierwelt Mitteleuropas. Ein Handbuch zu ihrer Bestimmung als Grundlage für faunistisch-zoogeographische Arbeiten. Unter Mitwirkung hervorragender Fachleute herausgegeben von P. Brohmer, P. Ehrmann und G. Ulmer 4 (3):115-221, figs. 182-422.
- Kirkaldy G. W. 1904a. Some new Oahuan (Hawaiian) Hemiptera. Entomologist 37:174-179.
- Metcalf, Z. P. 1943a. Fascicle IV Fulgoroidea. Part 3 Araeopidae (Delphacidae) General catalogue of the Hemiptera 4 (3):1-552.
- Ossiannilsson, F. 1942b. Contributions to the knowledge of Swedish Cicadina. With description of a new species. Opuscula Entomologica. Lund 7:113-114; figs. 1-4.
- Sahlberg, J. R. 1871a. Öfversigt af Finlands och den Skandinaviska hälffons Cicadariae. I. Not Fennica (n.s.) 9(12):1-506; pls. 1-2.