

**ADDITIONS TO THE LIST OF CICADELLIDAE (HOMOPTERA) OF
BRITISH COLUMBIA, WITH ONE GENUS AND FOUR SPECIES
NEW TO CANADA**

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In his excellent monograph on the Cicadellidae of Canada and Alaska, Beirne (1956) gives the general distribution of the various species including those known to occur in British Columbia. Too little collecting has been done to allow the exact distribution of the British Columbia species to be plotted so an annotated checklist for the family is premature.

However, it seems worthwhile to record the occurrence in the Province of eleven species not previously noted from British Columbia: four of these and one of the genera are not recorded in Canada by Beirne (*loc. cit.*).

Macropsis occidentalis (Van Duzee). Royal Oak, 7. viii. 1919 (W. Downes); Saanich District, 7. vii. 1919 (W.D.): new to Canada. Recorded from California and Nevada by Breakey (1932) and DeLong & Knull (1945). This is a pale yellow-green to brown species with a black spot on the epimera. Breakey (*loc. cit.*) who revised the Nearctic *Macropsis*, notes that Van Duzee reports this species from *Salix* sp. In Beirne (1956) it would run to the *virescens* and *viridis* couplets. Breakey notes that *occidentalis* is similar to *M. viridis* (Fitch) from which it differs by having the rugae and punctures more coarse, the epimera with a black spot and the length 5mm. or less. *M. occidentalis* has the pronotum parabolically right-angled anteriorly, but lacks the black spot at the base of the hind tibiae, typical of *M. virescens* (Gmel.).

Thatuna gilletti Oman. Erie, 6. vi. 1961 (G. G. E. S.): new to Canada. Originally described from Moscow, Idaho and hitherto known only from

that state and Washington. The genus has not been reported in Canada, and thus does not appear in Beirne (1956). It belongs to the tribe Errhomenellini of which to date only *Errhomus montanus* (Baker) is recorded in Canada from the southern part of British Columbia. *Errhomus* Oman can be separated from *Thatuna* Oman by the fact that the former lacks the numerous fine striae on the crown. In *Thatuna*, the head is short and broad and narrower than the pronotum, and the posterior margin of the pronotum is incised. A full description of the genus and species is to be found in Oman (1938).

Colladonus incertus (Gillette & Baker). Royal Oak, 30. viii. 1949 (W.D.); Saanich, 16. viii. 1952 (W.D.); Duncan, 22. ix. 1925 (W.D.): new to Canada. DeLong & Knull (1945) record this species from the following states—Colo., D.C., Fla., Mass., N.J., N.Y., N.C., N.D., Ohio and Tenn. Nielson (1957) has recently revised the genus *Colladonus* and notes that at the time of writing only female specimens of *C. incertus* were known. He remarks that it is at present placed in *Colladonus*, but states that this is presumably because the female has a spatulate process on the seventh sternum. He considered that since males were unknown, *incertus* should be treated as a species *incertae sedis*. All the British Columbia specimens examined are female. In Beirne (1956) *incertus* keys down with *C. flavocapitatus* (Van Duzee). Nielson (1957) states that *incertus* is similar to *C. waldanus* Ball which Beirne includes under *flavocapitatus*. From the latter *incertus* can be distinguished by having the hemielytra with the clavus brown and the corium with an oblique

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brown dash. Although these markings are distinct, they do not fuse to produce a *montanus*-like pattern. One should also note here that *C. egenus* Ball must be added to the British Columbia and Canada list. Nielson (1957) reports this from Utah north-westwardly to British Columbia, the type locality being Chilliwack, B.C. Recently I have come across a specimen of *C. egenus* with the data Penticton, 22. ix. 1919 (W.D.). This specimen, a male, was easily recognised by the unique falcate, serrate pygofer spine and the long bifurcate processes which are more than one-half as long as the aedeagal shaft. Other British Columbia species of *Colladonus* not considered in Beirne (1956) will be found in the paper by Nielson.

Paraphlepsius eburneolus (Osborn & Lathrop). Penticton, 16. viii. 1920 (W.D.). In Canada, previously recorded only in southern Saskatchewan and Manitoba.

Texananus extremus (Ball). Goldstream, 28. iv. 1926. (W.D.): new to Canada. Crowder (1952) reports this species from Utah, Arizona, Oregon, California and Colorado. The genitalic characters are distinctive in the male. *T. extremus* has the process of the connective as a single shaft (distinguishing it from *T. oregonus* [Ball]) and has the aedeagal shaft very short, the apical half not strongly tapering to apex, the inner margin of plate at apex constricted. In comparison, *T. decorus* (Osbn. & Ball), *T. marmor* (Sand & DeL.), *T. arctostaphylae* (Ball) and *T. proximus* Crowder have the aedeagal shaft tapering strongly to apex and sickle-shaped, and the inner margin of plate less constricted. *T. extremus* also characteristically has the ventral shaft of the connective tapering to apex from its base in lateral view. This smallish pale species is also here recorded from Idaho. In the Downes collection, now

at the University of British Columbia, are specimens taken by the late W. Downes at Boise, Idaho on 25 July, 1923: they were determined by P. W. Oman.

T. decorus (Osborn & Ball). Midday Valley, Merritt, 5. viii. 1925, 25. viii. 1925, 11. ix. 1925 (Wm. Mathers). In Canada, previously recorded only from southern Ontario.

Fieberiella florii (Stal). Penticton, 11. viii. 1957 (W.D.) — on Virginia Creeper. Beirne (1956) notes that this species occurs in southern Ontario and suggests that it was introduced from Europe, since this is a European species. A similar introduction in British Columbia is probable.

Driotura gammaroides (Van Duzee). Riske Creek, Chilcotin, 26. v. 1959, 30. v. 1959 (G.G.E.S.); 149 Mile Lake, Cariboo, 29. v. 1959 (G.G.E.S.): recorded as widely distributed and locally common in the grassland regions of Alberta, Saskatchewan and Manitoba. Dr. J. P. Kramer (*in litt.*) states that in the United States this species extends as far west as Montana.

Athysanella acuticauda Baker. Riske Creek, Chilcotin, 26. v. 1959 (G.G.E.S.); Westwick Lake, Cariboo, 14. vi. 1961; (G.G.E.S.); Pavilion, 30. vi. 1961; (G.G.E.S.); Wardner, 7. vi. 1961 (G.G.E.S.); 149 Mile Lake, Cariboo, 15. v. 1959, 22. vi. 1961 (G.G.E.S.): common on open range land. Beirne notes that in Canada it is widely distributed and locally abundant in the grassland regions of Alberta, Saskatchewan and Manitoba, being also found in southern Quebec.

A. robusta (Osborn). Fort St. John, Peace River, 11. vi. 1959 (G.G.E.S.): taken only on dry grassland slopes of the Peace River canyon. In Canada recorded as widely distributed and locally common in the grassland re-

gions of Alberta, Saskatchewan and Manitoba.

A. occidentalis Baker. Hedley, 4. vi. 1961 (G.G.E.S.): recorded from the grassland regions of Alberta and Saskatchewan.

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References

Beirne, B. P., 1956. Leafhoppers (Homoptera: Cicadellidae) of Canada and Alaska, **Canad. Ent. Suppl.** 2: 180 pp.

Breakey, E. P., 1932. A review of the Nearctic species of **Macropsis** (Homoptera, Cicadellidae), **Ann. Ent. Soc. Amer.** 25: 787-844.

Crowder, H. W., 1952. A revision of some Phlepsiuslike genera of the tribe Deltocephalini (Homoptera, Cicadellidae) in America North of Mexico, **Univ. Kansas Sci. Bull.** 35: 1(3): 309-542.

DeLong, D. M. & Knull, D. J., 1945. Check List of the Cicadellidae (Homoptera) of America, North of Mexico, **Ohio State Univ. Grad. School Stud.** (Biol. Sci. Ser.) 1: 102 pp.

Nielson, M. W., 1957. A revision of the genus **Colladonus** (Homoptera, Cicadellidae), **U.S. Dept. Agric. Tech. Bull.** 1156: 52 pp. + 13 Pl.

Oman, P. W., 1938. Revision of the Nearctic Leafhoppers of the tribe Errhomenellini (Homoptera: Cicadellidae), **Proc. U.S. Nat. Mus.** 85: 163-180.

BOOK NOTICE

The Cicindelidae of Canada, by J. B. Wallis. University of Toronto Press, Front Campus, University of Toronto, Toronto 5; 100 pages, 6 x 9 inches, 4 colour plates, halftones, maps, \$5.00.

The bright colours and fascinating ways of this small but important group of insects attract immediate attention. Cicindelidae, or tiger beetles, are frequently encountered, but they are difficult to capture, since they are alert and elusive, and still more difficult to identify. This intensive study of the distinguishing characteristics, geographical distribution and variation, and habits and habitats of tiger beetles in Canada—the culmination of the author's main interest for many years—will provide a

much-needed reference work. Studies of insect families are scarce, and professional and amateur entomologists alike will find this book a most useful aid in their investigations and a stimulus to further research.

J. B. Wallis, one of Canada's most distinguished amateur entomologists, is an honorary member of the Entomological Society of Manitoba and was one of the founders of the Natural History Society of Manitoba, which awarded him its medal for outstanding work in entomology.

The note above was received from the University of Toronto Press in September. We are pleased to draw the attention of our members to this important new Canadian work.