

***DASYHELEA OPPRESSA* (CERATOPOGONIDAE) AND *MYCETOBIA DIVERGENS* (ANISOPODIDAE): TWO DIPTERA NEW TO BRITISH COLUMBIA**

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ABSTRACT

Larvae and pupae of *Dasyhelea oppressa* Thomsen and *Mycetobia divergens* Walker were found in the sap on the ulcerated trunk of a horse-chestnut tree in Vancouver, B.C. Adults of both species were reared from these collections. This record is the first for *D. oppressa* west of Manitoba in Canada and Iowa in the United States and for *M. divergens* the first record west of Alberta and Arizona.

The Diptera fauna associated with trees is, for the most part, poorly known (Teskey, 1976). This is especially true for the British Columbia fauna. A sap-covered wound on a horse-chestnut tree (*Aesculus hippocastaneum* L.) in Vancouver, B.C. yielded the larvae and pupae of *Dasyhelea oppressa* Thomsen and *Mycetobia divergens* Walker, two nematoceros species previously unknown in British Columbia. The tree, growing beside a city street, was about 10 m high and 45 cm dbh. On the well-shaded northern side of the trunk a 0.1 m² mass of sap and organic material oozed over and under an area of broken bark 2 m from the ground. The larvae and pupae of both species were heavily concentrated in this sap.

On 15 May 1979, final instar larvae and pupae of *D. oppressa* and *M. divergens* were collected and brought into the laboratory. Adults of *D. oppressa* emerged 10 days later and continued to do so for several days, but no adult *M. divergens* appeared. Another collection made on 25 July 1979 from the same tree yielded a single adult of *M. divergens*, and on 26 July a number of pupae and adults were obtained from the surface of the sap. Additional adults emerged from this collection on 29 July.

Dasyhelea oppressa is considered a common eastern North American species ranging from Wisconsin to Quebec and south to Florida

(Waugh and Wirth, 1976). Stone *et al.* (1965) include Iowa and Forster (*in litt.*) notes that the species has recently been found in New Brunswick and at Churchill, Manitoba. Within this range *D. oppressa* has been reared from tree holes and from the sap oozing from wounded trees, especially American Elm (*Ulmus americana* L.) and various oaks (*Quercus* sp.) (Waugh and Wirth, 1976). The larvae are saprophagous (Thomsen, 1937). The adults, as far as is known, are not among those ceratopogonid species that suck blood, but rather feed on honeydew or visit flowers for nectar (Waugh and Wirth, 1976).

Mycetobia divergens is the only North American member of the genus and has been collected in the United States from Maine to Colorado and south to Arizona and Florida (Stone *et al.*, 1965). Teskey (1976 and *in litt.*) states that in Alberta the larva has been found inhabiting the larval galleries of the weevil *Hylobius* in lodgepole pine (*Pinus contorta* Dougl.). Evidently it has similar feeding habits to those of *D. oppressa*.

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REFERENCES

- Stone, A., C. W. Sabrosky, W. W. Wirth, R. H. Foote and J. R. Coulson. 1965. A catalogue of the Diptera of North America north of Mexico. U. S. Dept. Agriculture, Washington.
- Teskey, H. J. 1976. Diptera larvae associated with trees in North America. Mem. Entomol. Soc. Can. 100:1-53.
- Thomsen, L. C. 1937. Aquatic Diptera. Part V. Ceratopogonidae. Mem. Cornell Univ. agric. Exp. Stn. 210:57-80.
- Waugh, W. T. and W. W. Wirth. 1976. A revision of the genus *Dasyhelea* Kieffer of the eastern United States north of Florida (Diptera: Ceratopogonidae). Ann. Entomol. Soc. Amer. 69(2):219-247.