

## Scientific Note

### First North American records of *Conocephalus dorsalis* (Latreille 1804) (Orthoptera, Tettigoniidae)

The genus *Conocephalus* comprises 158 species and occurs in all temperate and tropical regions of the world (Eades et al. 2011). There are 18 native species in North America north of Mexico (Walker 2011) and 6 native species in Canada (Vickery & Kevan 1985). Vickery & Kevan (1985) provide a key to the species found in Canada and the northern United States of America. In fall 2008, I received a specimen collected near Vancouver, British Columbia, that I could not identify using North American guides. After collecting more specimens in 2009 I identified the species as *Conocephalus dorsalis* (Latreille 1804) by comparison with figures in Chopard (1922). Both sexes are illustrated in Figs. 1 and 2. This species may be readily differentiated from all other North American members of the genus without reference to dichotomous keys. The male cerci (Fig. 3) are unlike any other species in North America. The inner tooth of the cercus is both long and unusually stout in relation to the distal end of the cercus. The females are distinctive in that the ovipositor is relatively short (shorter than the hind femur) and curves upwards. In North America, this ovipositor morphology is shared only with *C. nemoralis* (Scudder 1875) (Rehn & Hebard 1915). The ranges of the two species do not overlap at present. A recording of the calling song of *C. dorsalis* can be found at the Orthoptera Species File Online (Eades et al. 2011). An oecillogram of the calling song is illustrated in Ragge & Reynolds (1998).

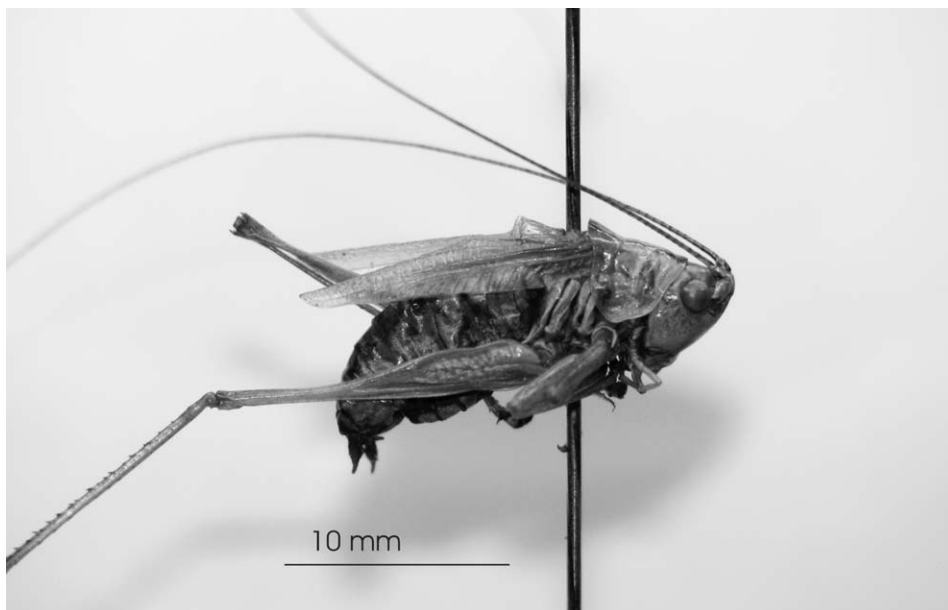


Figure 1. *Conocephalus dorsalis*; male.

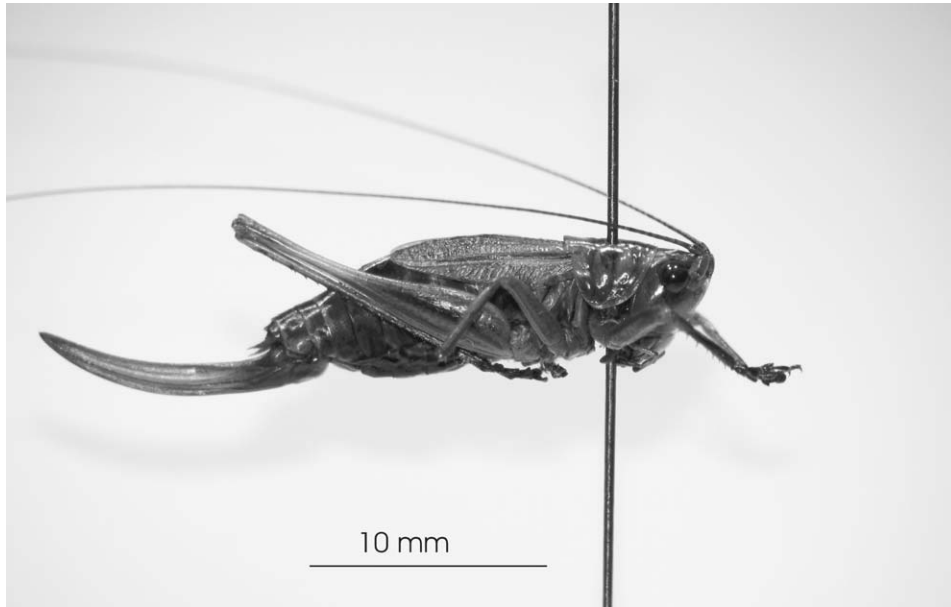


Figure 2. *Conocephalus dorsalis*; female.

*Conocephalus dorsalis* is native from Western Europe to Central Asia and Siberia (Eades et al. 2011) and is apparently introduced in southwestern British Columbia. To date, one immature male, seven adult males, and nine adult females have been collected in British Columbia, all between mid-August and late September. All

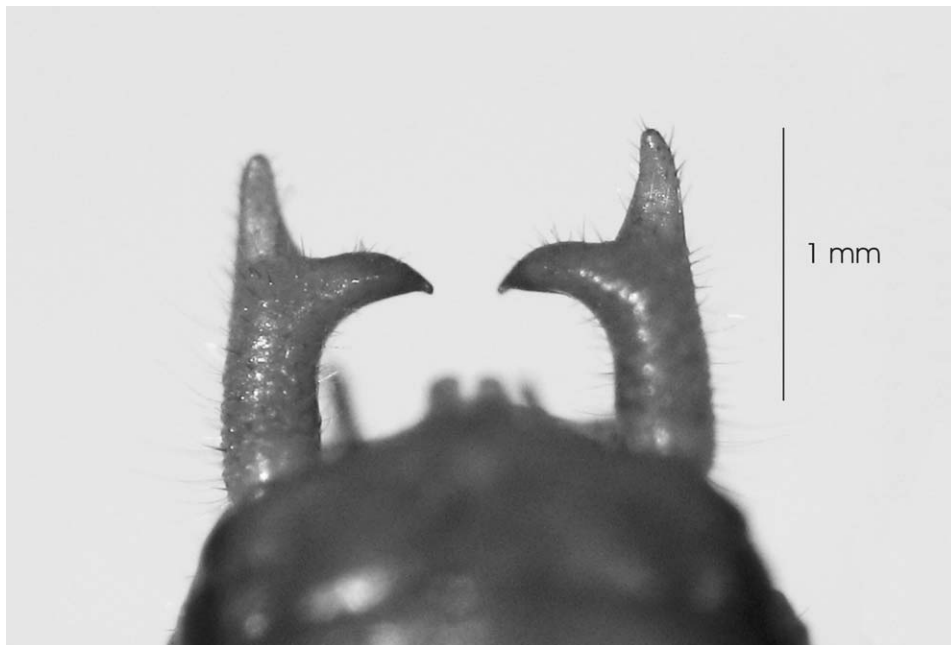


Figure 3. *Conocephalus dorsalis*; male cerci.

specimens collected so far have come from two islands in the delta of the Fraser River, Westham Island and Deas Island. Voucher specimens have been deposited at the Royal British Columbia Museum in Victoria, BC and at the Beaty Biodiversity Museum in Vancouver, BC.

Westham and Deas Islands are 6.5 km apart at their closest point. All specimens have been collected in seasonally wet fields dominated by non-native grasses (Poaceae), including *Agrostis stolonifera* Linnaeus, *Elymus repens* (Linnaeus), and *Holcus lanatus* Linnaeus. Similar habitat is common in the Fraser Valley and adjacent Washington State, though little recent collecting effort has been devoted to such habitat. Therefore, *C. dorsalis* is likely more widespread than present records indicate. Specimens have proven difficult to collect in BC, as they are greatly outnumbered by the native *Conocephalus fasciatus* (DeGeer 1773). The collection of a single individual of *C. dorsalis* often requires examination of hundreds of individuals of *C. fasciatus*.

The English common name for *Conocephalus dorsalis* in its native range is short-winged conehead. In North America, however, *Conocephalus* species are called meadow katydids and conehead refers to the genus *Neoconocephalus*. Short-winged meadow katydid cannot be used for *C. dorsalis*, as it is already the common name of *C. brevipennis* (Scudder 1862). The North American common name proposed here for *C. dorsalis* is Eurasian meadow katydid.

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