

NEW WATERBOATMAN RECORD FOR ALBERTA, *CORISELLA INSCRIPTA* (HEMIPTERA: CORIXIDAE)¹

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The water boatman *Corisella inscripta* (Uhler, 1894) has a broad, well known distribution across the western and southern regions of the United States (Hanson et al., 2007), with some collection localities ranging as far east as Ohio (Chordas and Armitage, 1998) and Michigan (Chordas et al., 2002). The Canadian distribution of *C. inscripta* is comparatively limited (Maw et al., 2000), with confirmed collection localities in the provinces of British Columbia (Scudder, 1987), Ontario (University of Guelph, DEBU) and Québec (Roch, 2017). However, during the 2017 summer sampling period of the Alberta Biodiversity Monitoring Institute (ABMI), two males and two possible female *C. inscripta* specimens were collected from a wetland near Alberta's eastern border.

These specimens were collected on July 4, 2017, by ABMI field technicians in an aquatic net sample from a shallow open waterbody (49°57' 37.9"N, 111°13' 07.2"W) southwest of Medicine Hat, Alberta. The waterbody was located in an open pasture of mixed grasses, presumably used as a cattle pond due to its small size and barren shoreline. At the time of collection, water temperature and specific conductivity was measured to be 20°C and 773 $\mu\text{S cm}^{-1}$, respectively. Submerged vegetation consisted of the cosmopolitan horned pondweed (*Zannichellia palustris*) and sago pondweed (*Stuckenia pectinata*), which is indicative that the waterbody is either permanent or at least semi-permanent (Kantrud, 1990). These habitat conditions are consistent with Scudder (1987), who found that *C. inscripta* was not limited to any one kind of aquatic environment.

Corisella inscripta is easily distinguishable from *C. tarsalis* (Fieber, 1851), which is the only other species in this genus known to occur in Alberta (Brooks and Kelton, 1967). *Corisella tarsalis* males are described to be no greater than 6.5 mm in length, with dark brown hind tarsi and singular spines protruding from both the apex of the pala and tibia (Hungerford, 1948; Brooks and Kelton, 1967). The newly collected *C. inscripta* males exceed 7.0 mm in length (Figure 1), lack pigmentation on the hind tarsi and have no spines on the pala or tibia (Figure 2). Instead, the pala bears two complete peg rows: the central, short dorsal peg row and the elongate, widely spaced ventral peg row. The pegs of the ventral row are medially separated by a gap, whereby the proximal pegs are short and rounded, and the distal pegs are long and spine-like. The female specimens collected at the same locality are likely to be *C. inscripta* due to their unpigmented hind tarsi and

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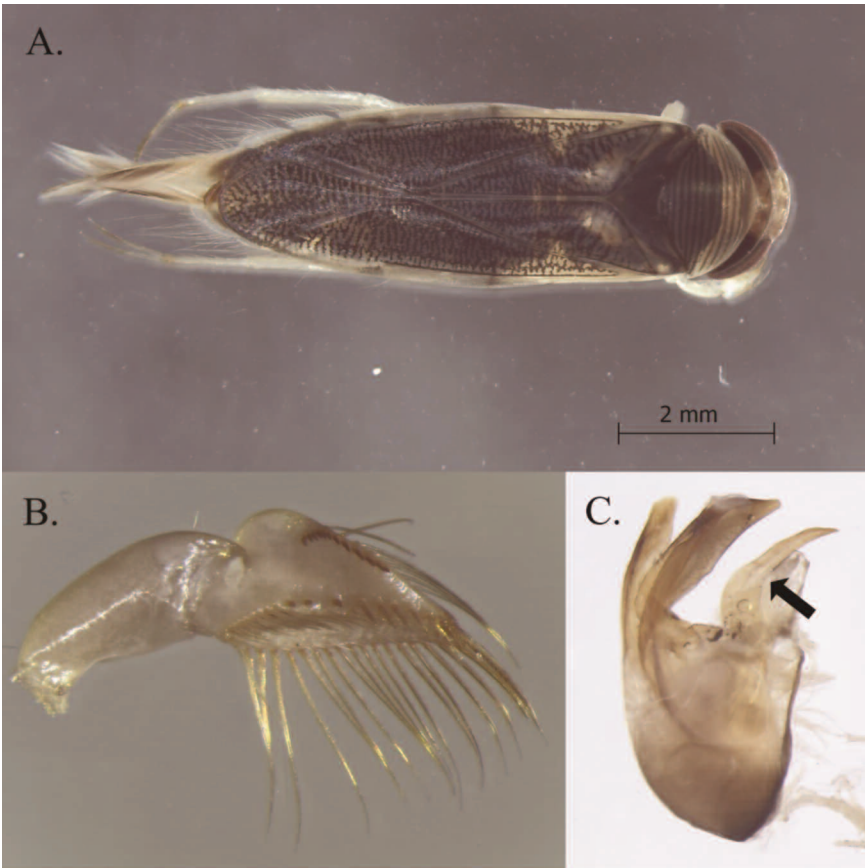


Fig. 1. Adult male *Corisella inscripta*, A.: dorsal view of hemelytra; B.: tibia and pala peg rows, C.: genital capsule. Note the right paramere in foreground (indicated by arrow).

lengths exceeding 8.0 mm. However, since *C. inscripta* is notably varied in size (Hungerford, 1948) a definite female species identification is uncertain.

The documentation of *Corisella inscripta* in Alberta is not only Canada's fourth provincial record of this corixid, but also Alberta's second species of this genus. Considering its broad range in the United States and nonspecific habitat preferences, it is likely that systematic sampling of southern wetlands in adjacent provinces would yield additional Canadian records of this species. All specimens reported herein have been deposited in the aquatic invertebrate collection at the Royal Alberta Museum in Edmonton, Alberta.

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