



***Tingupa tlingitorum*, n. sp., a new milliped from Haines, Alaska, USA, with notes on the generic distribution and a revised key to species (Chordeumatida: Tingupidae)**

WILLIAM A. SHEAR¹ & ROWLAND M. SHELLEY²

¹Department of Biology, Hampden-Sydney College, Hampden-Sydney, Virginia, 23901 USA; email: wshear@mail.hsc.edu

²Research Lab., North Carolina State Museum of Natural History, 4301 Reedy Creek Rd., Raleigh, North Carolina 27607 USA; email: rowland.shelley@ncmail.net

Abstract

Tingupa tlingitorum n. sp. (Diplopoda: Chordeumatida: Tingupidae) is proposed for male and female millipeds from Haines, Alaska, USA. It constitutes the first Alaskan record of the family and third of the order, and represents generic and familial range extensions of ca. 1,050 mi (1,680 km) from the previous northern limit in Oregon. *Tingupa* sp. is also reported from Idaho, the first generic and familial records from this state, and the Queen Charlotte Islands, the first records for both Canada and British Columbia. A revised key to species and a new familial distribution map are presented.

Key words: Tingupidae, *Tingupa*, *T. tlingitorum*, *T. intergerina*, Alaska, British Columbia, Idaho

Introduction

Less is known about the millipeds occurring in Alaska than those of any other American state. Even the Hawaiian fauna, comprising exclusively introduced forms except for the 13 endemic species of *Nannolene* Bollman, 1887 (Spirostreptida: Cambalidae), has been addressed in a number of publications (e. g. Silvestri 1904; Shelley 1998a, b, c, d; Shelley & Swift 1998; Shelley *et al.* 1998; Shelley & Golovatch 2000; Nishida 2002), but the only work that even partly considers Alaska is that of Shelley (1990), which focuses primarily on western Canadian diplopods. Otherwise, the only published mentions of Alaskan millipeds are generalized statements, locality records, and/or symbols on maps of taxa occurring to the south and east in Canada and the "lower 48 states" (Cook 1904; Chamberlin 1911; Buckett & Gardner 1968; Causey 1974; Kevan 1983; Hoffman 1999; Shelley 1993a, b, 2002).

Before 2006 only around 20 milliped samples had been taken in Alaska, all incidentally by researchers pursuing other organisms; however, in August 2006 the second author (RMS) collected in the southern coastal region, the warmest and wettest part of the state, on an expedition sponsored by the National Geographic Society. The area sampled extended from the Matanuska Valley, around Wasilla and Palmer, and the Kenai Peninsula to the Panhandle and Wrangell Island in the Alexander Archipelago. Panhandle forests, most of which comprise the Tongass National Forest and are true temperate rainforests, were the most productive environments, and several publications are anticipated. While searching for introduced, synanthropic millipeds in Haines, on the mainland some 31.5 mi (50.4 km) south of the northwestern corner of British Columbia (BC), RMS investigated a ditch in Tlingit Park, in the center of the town, and discovered two minute, yellowish-white millipeds that appeared to be polydesmids because of the visible paranota, the only anatomical feature discernible to the unaided eye. Microscopic examination subsequently showed them to be an adult male