

## ***Leonardesmus injucundus*, n. gen., n. sp., an aromatic, small-bodied milliped from Washington State, U. S. A., and a revised account of the family Nearctodesmidae (Polydesmida)**

ROWLAND M. SHELLEY<sup>1</sup> & WILLIAM A. SHEAR<sup>2</sup>

<sup>1</sup> Research Lab., North Carolina State Museum of Natural Sciences, 4301 Reedy Creek Rd., Raleigh, North Carolina 27607, U. S. A.; email rowland.shelley@ncmail.net

<sup>2</sup> Biology Department, Hampden-Sydney College, Hampden-Sydney, Virginia 23943, U. S. A.; email wshear@email.hsc.edu

### **Abstract**

*Leonardesmus injucundus*, the first small-bodied, "micro-nearctodesmid," from north of the southwestern states, is proposed for a litter and soil-dwelling milliped in Washington state that emits an unusually strong, pungent defensive secretion; the aroma is often detected before the milliped is actually seen. *Harpogonopus* Loomis, 1960, occurring along the coast of southern California and Baja California Norte, is confirmed for the Nearctodesmidae, and three southwestern "micro-nearctodesmid" genera—*Tidesmus* Chamberlin, 1943, and *Phreatodesmus* and *Oodedesmus*, both by Loomis, 1960—are placed here tentatively. The Nearctodesmidae is formally recorded from the area of *Harpogonopus* and scattered sites in the deserts and inselbergs of southern California, Arizona, and Nevada. SEM photos of somatic and gonopodal features are provided in addition to line drawings of the latter; the photos reveal details that are invisible under light microscopy, but they mask a translucent surface lamina that is revealed by the latter. The two techniques therefore complement each other, and diplopodologists are cautioned against exclusive reliance on SEM. Thin, closely appressed laminae exist in many diplopod families, and SEM may erroneously show them as a single structure.

**Key words.** *Leonardesmus injucundus*, Nearctodesmidae, "micro-nearctodesmid," Pacific Northwest (PNW), Washington, defensive secretion

### **Introduction**

The polydesmidan family Nearctodesmidae is a dominant component of the milliped fauna of northwestern North America. It comprises 6 species, three in *Nearctodesmus* Silvestri, 1910, and one each in *Kepolydesmus* Chamberlin, 1910, *Bistolodesmus* Shelley, 1994, and *Ergodesmus* Chamberlin, 1949, with a second species of the last genus inhab-