



## A new *Aphidius* Nees (Hymenoptera, Braconidae, Aphidiinae) of *Ericaphis fimbriata* (Richards) (Hemiptera, Aphididae) and key to parasitoids of blueberry aphid in the Pacific Northwest

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### Abstract

*Aphidius ericaphidis* Pike & Starý, **sp. nov.**, is described and illustrated. This aphidiine is a parasitoid of the blueberry aphid, *Ericaphis fimbriata* (Richards), widely found associated with the commercial highbush blueberries, *Vaccinium corymbosum* L., in southwestern British Columbia, Washington, and in northeastern Oregon. It is one of several species of aphidiines known to attack *E. fimbriata* in North America. A key is provided to distinguish it from other parasitoid species of *E. fimbriata*.

**Key words:** aphid, distribution, parasitoid, *Vaccinium*, taxonomy

### Introduction

Consumer demand for blueberries, especially fresh blueberries, has increased steadily in recent years due to a growing awareness of the crop's health benefits (U.S. Highbush Blueberry Council 2009). The blueberry aphid, *Ericaphis fimbriata* (Richards) (possibly synonymous with *E. scammelli* (Mason), see Remaudière & Remaudière 1997, Foottit *et al.* 2008) is a pest of commercial highbush blueberries, *Vaccinium corymbosum* L., and a vector of blueberry scorch virus in the Pacific Northwest. Safeguarding the crop from insect pests and disease pathogens is a common industry concern. Among the natural enemies that help regulate and hold blueberry aphid populations from reaching outbreak levels are certain parasitic wasps. Recently, Raworth *et al.* (2008) reported on the various species of aphidiine parasitoids associated with blueberry aphid in the Pacific Northwest, including one undescribed species. Herein we name, describe, and illustrate the new species, and provide a key to the full range of known parasitoids of blueberry aphid in the Pacific Northwest.

### Material and methods

Description of the new species is based on specimens reared from *Ericaphis fimbriata* sampled from *Vaccinium*, mainly *V. corymbosum*, in British Columbia at sites near Abbotsford, Cloverdale, Mission, Pitt Meadows, and Richmond; in Oregon, in Umatilla Co.; and in Washington in Clark, Columbia, King, Skagit, and Yakima Counties (see Raworth *et al.* 2008 for sampling and rearing approaches). Abbreviations used in collection records of the