



***Dasytes plumbeus* (Müller) (Coleoptera: Melyridae: Dasytinae), a Palearctic soft-winged flower beetle new to North America**

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Abstract

Dasytes plumbeus (Müller), a dasytine melyrid beetle native to the Palearctic Region, is newly reported from North America. In 2010 and 2011, specimens from three locations were swept from vegetation and flowers in the greater Vancouver area of British Columbia, Canada. This is the first confirmed record of the species in the New World. Our collections, coupled with Internet images of *D. plumbeus* found in the Vancouver area, suggest the beetle is established in British Columbia.

Key words: Cleroidea, adventive species, British Columbia, description, diagnosis, distribution, new record

Introduction

Members of the melyrid subfamily Dasytinae are small, often black and hairy beetles, usually collected by sweeping weeds and flowers in meadows and by beating branches of trees and shrubs when blooming. Adults are found mostly on flowers, where they feed on pollen; however, with few exceptions their biology is poorly known (Liberti 2009). Mayor (2007) treated these beetles as a family (Dasytidae) in the Catalogue of Palearctic Coleoptera, as did Bocakova *et al.* (2012) based on a molecular phylogenetic analysis of the melyrid lineage. Others (Crowson 1955, 1964; Lawrence *et al.* 2011; Bouchard *et al.* 2012) have continued to provide support for subfamilial recognition of these beetles within the Melyridae.

During a recent detection survey for immigrant arthropods in the Pacific Northwest, we collected the Palearctic melyrid *Dasytes plumbeus* (Müller) in the greater Vancouver area of British Columbia, Canada. We provide the first records of this species for North America, give a diagnosis and description to facilitate its recognition in the Nearctic fauna, and review key literature on biology and habits in its native range.

The discovery of *D. plumbeus* in British Columbia represents the first Palearctic species of *Dasytes* to be added to the North American insect fauna. Three other Palearctic species of Melyridae have been previously recorded from North America. *Malachius aeneus* (L.), a native of Europe, western Asia, and the Middle East, occurs across southern Canada and the northern United States, and south to North Carolina in the East and Oregon in the West but is absent from the central United States and Canada (Mayor 2002). It first was recorded in New England in 1852 (LeConte 1852, Dow 1914) as a probable introduction at Boston or Quebec (Mayor 2002). *Anthocomus equestris* (F.), known in the North American literature as *A. bipunctatus* (Harrer), is native to Eurasia and is widely distributed in the eastern United States and Canada (Ontario and Quebec south to North Carolina) (Bright 1991). *Axinotarsus pulicarius* (F.), widely distributed in the western Palearctic Region, was recently reported from British Columbia and Ontario (Hoebeke & Wheeler 2012).