

Article



Agrilus Curtis (Coleoptera: Buprestidae) of the Baja California peninsula, México

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Abstract

The genus *Agrilus* Curtis 1825 is reviewed for the Baja California peninsula of Mexico. Of the 25 species included, 11 are recorded here for the first time and four are previously unknown to science and described as new: *Agrilus barri* new species, *A. interstitialis* new species, *A. vescivittatus* new species, and *A. argythamniae* new species. Four additional species may be expected based on their occurrence just north of the border in the United States. Upon further study *Agrilus auroguttatus* Schaeffer 1905, revalidated status, is judged to be a separate species from *A. coxalis* Waterhouse 1889. Figures and a key to known and expected species are given, as well as a summary checklist.

Key words: Coleoptera, Agrilinae, *Agrilus*, Baja California, Buprestidae, key, Mexico, new species, North America, revalidated status, systematics

The history of knowledge of the genus *Agrilus* Curtis 1825 in Baja California is relatively short. Horn (1894) described the first species from there, and a second species was described by Fall (1906). Van Dyke (1942) listed eight species, including one described as new. Hespenheide (1996) reported 18 species from Baja California but did not give names or collection data for the species. One of us (RLW) has been collecting material and distributional data from the peninsula for many years, and our interests have converged in this paper, which more than triples the number of species reported by Van Dyke (1942) and describes four new species. Five additional species or subspecies occur in immediately adjacent portions of the United States and may reasonably be expected to be found in Baja California. Of the species that are known to occur on the Baja California peninsula, five appear to be endemic, 18 also occur to the north in California, Arizona and/or northern Sonora, and two occur in both the Cape region and western Mexico, suggesting a complex evolutionary history of the genus on the peninsula. To aid in identifying future collections of *Agrilus* from the peninsula, we present a key to known and likely species, and illustrate them.

The Baja California peninsula is divided into the Mexican states of Baja California and Baja California Sur, although the state of Baja California is frequently referred to as "Baja California Norte" (Clark & Westcott 1992). In this paper, following U. S. Customs Directive No. 5610-002A, dated April 10, 2002 (reviewed April 2005), we will refer to Baja California as BCN and Baja California Sur as BCS.

Plant names are taken from the U.S. Department of Agriculture Natural Resources Conservation Service Plants Database (http://plants.usda.gov), or in a few cases from the Missouri Botanical Garden's Tropicos site (http://www.tropicos.org). Measurements have been made to the nearest 0.05 mm. In some cases specimens are identified as male (M) or female (F). Dates of collections are in several formats because most were transcribed from the specimen labels.

The following collection abbreviations are used throughout the text: BMNH, The Natural History Museum, London, England; BYU, Monte L. Bean Life Science Museum, Brigham Young University, Provo, UT, U.S.A.;