



The identity of *Agrilus impexus* Horn, a new species, and taxonomic notes and records for other *Agrilus* Curtis species (Coleoptera: Buprestidae)

HENRY A. HESPENHEIDE

Department of Ecology and Evolutionary Biology, University of California, Box 951606, Los Angeles, CA 90095-1606.
E-mail: hahiii@ucla.edu

Abstract

The name *Agrilus impexus* Horn has been found to belong to a Great Plains species and to be misapplied to a common southwestern *Agrilus*. *Agrilus impexus* is redescribed and *A. paraimpexus*, **new species**, is described from New Mexico, Arizona and California to Costa Rica. It is distinguished from both *Agrilus impexus* and the closely related *A. addendus* Crotch from Texas to Vera Cruz, México, and a lectotype is designated for *A. addendus*. *Agrilus frisoni* Fisher is synonymized with *A. addendus*, **new synonymy**. *Agrilus funestus* Chevrolat is recorded from the United States for the first time and figured.

Key words: Identity, *Agrilus impexus*

Introduction

During a visit to the California Academy of Sciences, San Francisco, I discovered a series of *Agrilus* specimens from New Mexico and a conspecific individual from Kansas that could not immediately be identified. I initially thought it was undescribed, but subsequent study of types has determined that the species is in fact *Agrilus impexus* Horn. That being so, the commonly collected southwestern species that has been called *A. impexus* (e.g., Hespeneide 1989, Westcott *et al.* 1990) now is considered to be undescribed. Although he had material of both species, Fisher (1928) did not distinguish them in his monograph of the genus. The undescribed form is similar in morphology and biology to *A. addendus* Crotch whose type was found to be incorrectly designated. This paper proposes a resolution of the confusion and reports another new record of a Mexican species from the United States. Measurements have been made to the nearest 0.05 mm.

The following collection codens are used throughout the text (Evenhuis & Samuelson 2004):

CASC, California Academy of Sciences, San Francisco, CA, U.S.A.; CHAH, Henry A. Hespeneide, University of California, Los Angeles, CA, U.S.A.; CEAM, Centro de Entomologica y Acarologia, Montecillo Mexico; CLBC, C.L. Bellamy, Sacramento, CA, U.S.A.; CMNC, Canadian Museum of Nature, Ottawa, Canada; CSCA, California State Collection of Arthropods, Sacramento, CA, U.S.A.; DSVC, D. S. Verity, Los Angeles, CA, U.S.A.; FMNH, Field Museum of Natural History, Chicago, IL, U.S.A.; MCZ, Museum of Comparative Zoology, Harvard University, Cambridge, MA, U.S.A.; RLWE, R.L. Westcott, Salem, OR, U.S.A.; SGWC, S.G. Wellso, Bastrop, TX, U.S.A.; TAMU, Texas A & M University, College Station, TX, U.S.A.; TCMC, T. C. MacRae, St. Louis, MO, U.S.A.; TSRS, Tennessee State University Nursery Crop Research Station, McMinnville, TN, U.S.A.; USNM: National Museum of Natural History, Smithsonian Institution, Washington, DC, U.S.A.; WFBM, W.F. Barr Entomological Collection, University of Idaho, Moscow, Idaho, U.S.A.