

A new species of *Aphodius* Illiger (Coleoptera: Scarabaeidae: Aphodiinae) from the central United States

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Abstract

A new species of *Aphodius* Illiger, *A. matiganae* n.sp., is described from the central United States. The species is compared with *A. rusicola* Melsheimer and *A. rubeolus* Palisot de Beauvois, with which it has previously been confused.

Key words: *Aphodius*, new species, Coleoptera, Scarabaeidae, Aphodiinae, United States

Introduction

Traditionally, North American *Aphodius* species are collected by targeting surface dung, especially that of deer or cattle. While adequate for sampling some *Aphodius* species, particularly introduced European species, such techniques fail to locate many native taxa. This is especially true for species that are detritivores or that utilize rodent dung, which account for more than half of our native species of *Aphodius* (Robert Gordon, personal communication). More recently, specialized collecting methods have resulted in the discovery of previously unknown species, even in ostensibly well-sampled localities. Several new species of North American *Aphodius* have been described from direct sampling of rodent burrows (Skelley & Woodruff 1991, Skelley & Gordon 1995, Skelley & Gordon 2001). In addition, rarely collected species may be taken with aerial nets, usually flying a few feet off the ground in late afternoon on warm, calm fall and winter days (Gordon & Salsbury 1999, personal observation).

In 2004 in western Nebraska, I collected a series of an *Aphodius* species that was flying over shortgrass prairie before sunset. At the time of collection, I believed the series to be *A. rubeolus* Palisot de Beauvois due to their red color, but upon further examination the specimens appeared to be more similar to the highly variable *A. rusicola* Melsheimer.