



## A new species of *Xestocoris* Van Duzee, with comments on the genus (Hemiptera: Heteroptera: Rhyparochromidae: Rhyparochrominae)

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### Abstract

A new species of the rhyparochromine tribe Lethaeini, *Xestocoris tibialis*, from Arizona, is described and figured. The lectotype of *X. collinus* is redescribed. A lectotype of *X. nitens* is designated and redescribed. New distributional records for *X. nitens* are provided. A key to the species of *Xestocoris* and a discussion of phylogenetic relationships with other lethaeine genera are included.

**Key words:** Arizona, Lethaeini, sky islands, state records, generic phylogeny

### Introduction

Little has been written about *Xestocoris*, a genus widely distributed in North and Central America, since its original description (Van Duzee 1906). *Xestocoris* currently contains only 2 species: *X. collinus*, originally described by Distant (1893) from the mountains of Guatemala and placed in the genus *Rhaptus*; and *X. nitens*, the type species, described from New York, USA, by Van Duzee (1906). Bergroth (1916) transferred *Rhaptus collinus* and *R. uhleri* Distant to *Xestocoris* with no explanation or justification. Scudder (1957) placed the genus in the then composite Lethaeini; Ashlock (1964) included it in the Lethaeini *sensu stricto* when he redefined the tribe. Scudder (1967) designated a lectotype for *X. uhleri* and placed the species in *Bubaces*, where it remains today. Sweet (1960) elaborated on the basic biology of *X. nitens* that Blatchley (1926) had provided. Khan and Woodward (1979) described and figured the spermatheca of *X. nitens*, and O'Donnell (1991) described its sperm reservoir and discussed generic relationships.

This paper describes a new species; additional species are likely to be discovered in southwestern USA and adjacent Mexico.

*Xestocoris* has the following features, in addition to the features that characterize the Lethaeini: small body size; a shining dorsal surface covered with long hairs; head with two dorsal iridescent spots composed of overlapping pegs (O'Donnell 1986); and eyes with two long, forward-curving setae. None of these features is a synapomorphy of the genus, however. The shining dorsal surface is shared with *Bubaces* and *Esuris*. The double iridescent spot composed of pegs is found in many lethaeine genera, in both the New and the Old Worlds. The long hairs on the eye are also found in *Esuris* and *Valtissius* in the Western Hemisphere and *Lamproceps* and *Lampropunctus* in the Eastern Hemisphere. *Esuris* has a single iridescent spot on the head, but it may be independently derived from the remainder of the "one-spot clade" because the anterior margin is very different. If this is true, then the eye setae define a clade containing *Esuris*, *Valtissius*, *Lamproceps*, *Lampropunctus*, and *Xestocoris*. Sperm reservoir morphology also groups these genera together (O'Donnell 1991).

Woodward (1962) thought that *Austroxestus*, *Rhaptus*, and *Xestocoris* "undoubtedly belong to the same group of related genera," but based his assessment on overall resemblance rather than on character analysis;