



## A new species of *Acantothereva* Séguéy, 1935, from Tunisia (Diptera: Therevidae: Therevinae): taxonomic consequences and phylogenetic implications

KEVIN C. HOLSTON

Department of Entomology, Swedish Museum of Natural History, P.O. Box 50007, S-104 05 Stockholm, Sweden.  
E-mail: kevin.holston@nrm.se

### Abstract

A new Tunisian species of *Acantothereva* Séguéy is described, reducing several diagnostic characters for this North African genus to interspecific differences among the three included species. An expanded vertex and frons were formerly considered diagnostic for the genus, but the new species, *A. oblata*, **sp. nov.**, has a vertex lower than the dorsal eye margin and a non-dilated ocellar tubercle. Previously recognized male genitalic characters, however, support the hypothesis that *Acantothereva* is a monophyletic group. The ability to recognize *Acantothereva* using external characters is marginally reduced with respect to therevine genera due to the inclusion of the new species, notably relative to *Neotherevella* Lyneborg. The apparent close phylogenetic relationship among *Acantothereva*, *Acrosathe* Irwin & Lyneborg, *Irwiniella* Lyneborg, and *Neotherevella* Lyneborg species are discussed herein, based on recent molecular phylogenetic analyses and the morphology of the Tunisian *Acantothereva* species. A key to the North African therevine genera is included; head and genitalia illustrations and a key to the three *Acantothereva* species are also presented.

### Key words:

### Introduction

Recent taxonomic studies of Therevidae have led to the reassessment of higher-level taxonomic characters and an increase in the total number of stiletto fly genera particularly within the subfamily Therevinae. An emphasis on defining genera as putatively monophyletic groups substantially reduced the taxonomic heterogeneity and the number of species in nomenclaturally important therevine genera, primarily *Psilocephala* Zetterstedt and *Thereva* Latreille (Metz *et al.* 2003, Holston 2004a). This also increased the number of therevine genera with fewer than ten species, making monophyly of the resulting genera more likely but offering limited data for an improved understanding of morphological evolution within the subfamily. Increased taxonomic resolution for therevine genera has facilitated, however, the first attempts to place the diversity of this subfamily into a more informative evolutionary context (Gaimari & Irwin 2000, Holston *et al.* 2007, Lambkin *et al.* 2009). The current status of Therevinae as a diverse monophyletic group that includes over 60 genera has been supported by morphological studies and recent phylogenetic analyses (Lyneborg 1976, Irwin & Lyneborg 1981, Lyneborg 1983, Yang *et al.* 2000, Holston *et al.* 2007). Over 25% of the described therevine genera have less than five species, which are geographically restricted and are often poorly characterized with respect to modern character systems. These morphologically distinct genera have particular relevance to further studies of therevine character systems and biogeography. This includes the only three genera endemic to the West Palaearctic region: *Acantothereva* Séguéy (northwest Africa), *Chrysanthemymia* Becker (Spain and northwest Africa), and *Iberotelus* Lyneborg (Spain) (Lyneborg 1968, 1983a, 1989a).

*Acantothereva* is the only stiletto fly genus restricted to North Africa and includes two species associated with sand dunes in Algeria and Morocco (Lyneborg 1968). *Acantothereva rungsi* Séguéy, the type species, has