



## Blattisociidae of China: a review, with a checklist\*

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### Abstract

This paper reviews the taxonomy and biology of the family Blattisociidae in China, with a special focus on faunistics and their role as predators of pests in biological control. A checklist of 56 species in three genera and two subfamilies is provided.

**Key words:** mainland China, Taiwan, Blattisociidae, Blattisociinae, Platyseiiinae, predators, biological control, stored products

### Introduction

The family Blattisociidae, as recently revised, is placed in the superfamily Phytoseioidea along with the Phytoseiidae, Otopheidomenidae and Podocinidae (Lindquist *et al.*, 2009). It includes two subfamilies and 12 genera (Lindquist & Moraza, 2010). Members of this family were in the past included in the Ascidae *s.l.* (Lindquist & Evans, 1965; Evans & Baker, 1991; Walter & Lindquist, 1997; Halliday *et al.*, 1998). Most authors in China, however, described species of this family in the Aceosejidae (e.g. Gu & Guo, 1996; Ma, 1996a,b,c, 2000a,b).

Mites of the Blattisociidae feed on nematodes, small arthropods, pollens and fungi in a variety of habitats (Lindquist *et al.*, 2009) and are potential biological control agents of a variety of pest species (see reviews by Xin *et al.*, 1998 and Gerson *et al.*, 2003). In this paper, we provide a historical review of the research on the systematics and biology of the Blattisociidae in China, with a checklist of 56 species. We hope that this review will help stimulate further studies of this family in China and also facilitate access to Chinese literature on the family for researchers outside China.

### Historical review

#### *Taxonomy and faunistics*

Tseng (1971) described *Lasioseius martini* recovered from shallots in Taiwan. Later he synonymized this species with *L. allii* Chant, 1958 and described five new species and another new record from Taiwan (Tseng, 1978). Lo & Ho (1979) reported *Lasioseius parberlesei* as a predator of