



A review of *Physiphora* Fallén (Diptera: Ulidiidae) from China

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Abstract

Five species of the genus *Physiphora* Fallén are found to occur in China: *P. alceae* Preyssler, *P. chalybea* Hendel, *P. clausa* (Macquart), *P. hainanensis* Chen n. sp. and *P. longicornis* Hendel. Among them, *P. alceae* Preyssler, *P. chalybea* Hendel and *P. clausa* (Macquart) are newly reported from Mainland China; *P. hainanensis* n. sp. is described and figured. A key to the species, diagnoses, description and illustrations are also provided.

Key words: Diptera, Ulidiidae, *Physiphora* Fallén, key, new species, China

Introduction

The genus *Physiphora* Fallén, 1810 belongs to the tribe Ulidiini of the subfamily Ulidiinae (Kameneva & Korneyev, 2006). It includes 16 species widespread in the Old World tropical, subtropical and temperate areas, with most species occurring in the Afrotropical Region, but two species have been introduced into the New World, Australia and Oceania (Séguy, 1941; Steyskal, 1977, 1980; Zaitzev, 1984; Krivosheina & Krivosheina, 1997; Kameneva, 2000, 2001).

Biology of *Physiphora* species is poorly known. Hennig (1940) summarized the larval habitats of *P. alceae* Preyssler (as *P. demandata* Fabricius), which include horse and cow dung, rotting clover and daffodil bulbs, corn silage, wounds on date palms, etc. Krivosheina & Krivosheina (1997) found larvae of *P. chalybea* under the bark of dead poplars feeding mostly as necro- and saprophloeophages. They also reported that *P. euphorbiae* Krivosheina & Krivosheina was reared from the tissues of *Euphorbia* sp., but without indicating further details. An unpublished key to species compiled by George C. Steyskal (USNM) contains a further note on the biology of *P. clausa* Macquart which shows that its larvae are associated with wood mushrooms.

So far, no comprehensive revision of *Physiphora* has been made. Only Séguy (1941) provided a key to 15 species of this genus. Chinese *Physiphora* are poorly known except that two species, *P. longicornis* Hendel and *P. clausa* Macquart (as *Chrysomyza aenea* Fabricius) have been recorded from Taiwan by Hendel (1909, 1913a). In the present study, we found that there are at least five *Physiphora* species occurring in China. Among them, one is new to science and three are reported from the mainland China for the first time. Here, we provide species diagnoses, descriptions, illustrations and a key to the included species.

Material and methods

Morphological terminology generally follows McAlpine (1981) and Foote *et al.* (1993). Measurements are given in millimeters.