



## A new species of *Tephritis* Latreille (Diptera: Tephritidae) with an unusual wing pattern from Iran and its taxonomic implications

SAMAD KHAGHANINIA<sup>1</sup>, EBRAHIM ZARGHANI<sup>1</sup>, SAEED MOHAMADZADE NAMIN<sup>2</sup>  
& VALERY A. KORNEYEV<sup>3,4</sup>

<sup>1</sup>Department of Plant Protection, Faculty of Agriculture, University of Tabriz, Iran. E-mail: skhaghaninia@gmail.com

<sup>2</sup>Department of Plant Protection, College of Agriculture, Islamic Azad University, Varamin branch, Varamin, Iran.  
E-mail: saeedmn2005@gmail.com

<sup>3</sup>I.I.Schmalhausen Institute of Zoology, NAS of Ukraine, Bogdan Chmielnicki St. 15, 01601 Kiev, Ukraine.  
E-mail: valery.korneyev@gmail.com

<sup>4</sup>Corresponding author

### Abstract

*Tephritis sahandi* new species from Iran (type locality: Sahand chain mountains, East Azerbaijan Province) with an uncommon banded wing pattern is described and shown to be related to *Pangasella volkovitshi* Richter from Tadjikistan. Both species fit the diagnosis of the genus *Tephritis* Latreille 1804, and possess its key characters; as the result, *Pangasella* Richter 1995 (type species: *Pangasella volkovitshi* Richter 1995) is shown to be a new junior synonym of *Tephritis*, and its type species is transferred to the genus as *Tephritis volkovitshi* (Richter 1995) new combination. A key to the Palearctic species of banded-winged *Tephritis* is provided.

**Key words:** Diptera, Tephritidae, new species, new synonymy, Iran

### Introduction

The genus *Tephritis* Latreille 1804 includes near 170 species occurring predominantly in the Holarctics and to the lesser degree in the Oriental, Afrotropical and Australasian Regions (Norrbom *et al.* 1999; Merz 2000). As far as known larvae of *Tephritis* feed in flower heads of a wide range of asteraceous plants of the tribes Cichorieae, Cardueae, Astereae, Senecioneae and Anthemideae, occasionally inducing soft galls in flower heads, shoots and rosettes. They inhabit almost all the climatic zones and altitudes, from dry and hot semideserts to the circumpolar tundra and subnival belt in the mountains. North American, European and Far East Asian *Tephritis* species have been recently revised and keyed (Foote *et al.* 1993; Merz 1994; Korneyev & Ovchinnikova 2004), but the Near East and Central Asian species remain poorly known, with almost 50 undescribed species recognized in entomological collections and no comprehensive keys available (V. Korneyev, unpublished data). The only key to all species of the genus by Hering (1944) does not include many of the most important diagnostic characters and is out of date.

The Middle East species of *Tephritis* were studied in the last ten years by different authors (Korneyev & Dirlbek 2001; Kütük 2005, 2008 a, 2008 b). As a result of these investigations several new species were described and many distributional records of species previously known from this and adjacent areas were provided. Recently, over 10 species were collected in Iran and subsequently described (Mohamadzade Namin *et al.* 2010; Zarghani *et al.* 2010 a, 2010 b). In addition, several apparently undescribed species were discovered. One of them, represented by few small specimens with an unusual banded wing pattern (uncommon in the tribe Tephritini) was collected by SK on the southern foothills of Sahand mountain massif and, simultaneously, by SMN on the northern foothills of it (Iran: East Azerbaijan Province); additional specimens were reared from its host plant in 2011 by SK. It is described below, its generic position is discussed, and some taxonomic implications are proposed.