

Biyolojik gözlem (Biological observation)

First record for Turkish fauna: *Liposcelis bostrychophila* Badonnel, 1931 (Psocoptera: Liposcelididae)

Tülin ÖZSİSLİ¹

Summary

A liposcelidid species, *Liposcelis bostrychophila* Badonnel, 1931 (Psocoptera: Liposcelididae) is recorded for the first time from Turkey.

Key Words: *Liposcelis bostrychophila*, Liposcelididae, Psocoptera, grain, Turkey

Anahtar sözcükler: *Liposcelis bostrychophila*, Liposcelididae, Psocoptera, tahıl, Turkey

Introduction

Only a few species of the genus *Liposcelis* Motschulsky, 1852 have previously been recorded in Turkey (Psocoptera: Liposcelididae, infraorder Nanopsocetae, suborder Troctomorpha). *Liposcelis entomophila* (Enderlein, 1907) (= *Troctes entomophilus*) was found for the first time in the silo of Trabzon Soil Products Office in 1959 (Alkan, 1961; referred by Lodos, 1986). It was also reported that the cosmopolitan species *Liposcelis divinatoria* (Müller, 1776) was found in almost every site of Turkey (Lodos, 1986). However, *L. divinatoria* has to be considered as a nomen dubium (Lienhard & Smithers, 2002) and probably most of these records correspond to the cosmopolitan species *L. bostrychophila* Badonnel. Lienhard (1990) also reported two additional species from Turkey, *Liposcelis decolor* (Pearman, 1925) and *Liposcelis tricolor* Badonnel, 1973. The present report of *Liposcelis bostrychophila* Badonnel, 1931 is the first explicit record of this species in Turkey.

¹ Kahramanmaraş Sütçü İmam University, Agriculture Faculty, Department of Plant Protection, Avşar Campus, 46100, Kahramanmaraş, Turkey

* Sorumlu yazar (Corresponding author) e-mail: tulin@ksu.edu.tr
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Material and Methods

Adults of Psocoptera were recovered from packages of flour and semolina in January 2006, in Kahramanmaraş, Turkey. Specimens of psocids were preserved in 75% alcohol. The samples were sent for identification to the specialist Dr. C. Lienhard in March 2006.

Results and Discussion

Liposcelis bostrychophila Badonnel, 1931

Material examined: Kahramanmaraş (Turkey); January 2006. A great number of females (Figure 1).



Figure 1. An adult female of *Liposcelis bostrychophila* Badonnel, 1931.

Distribution: *Liposcelis bostrychophila* is a cosmopolitan species found in Palaearctic Region including Africa, Atlantic Ocean Islands, Australia, Central America, Indian Ocean Islands, North America, Oriental Region and South America (Lienhard & Smithers, 2002).

Liposcelis bostrychophila is a parthenogenetic (thelytokous) species and one of the most common polyphagous pest psocids of stored food products particularly flours, cereals, semolina and rice (Turner, 1994). This species causes weight and quality losses which are positively correlated with progeny production on broken wheat kernels of grain stores (Kucerova, 2002) and in rice

(Rees & Walker, 1990). *Liposcelis bostrychophila* was also described as a herbarium pest (Retief et al., 1995). Infestations of *L. bostrychophila* were found on paper, books and insect collections (Turner, 1987). The infestations of *L. bostrychophila* are particularly invasive due to their preference for dark and damp areas, their small size and an ability to survive for long periods without food (Turner & Maude-Roxby, 1988). This species also can survive on fungi in living places or storage areas (Mills et al., 1992). Therefore it should be paid more attention to the presence of this species. To manage *L. bostrychophila* nontoxic methods such as sterile-entry techniques should be used.

Özet

**Türkiye faunası için ilk kayıt: *Liposcelis bostrychophila* Badonnel, 1931
(Psocoptera: Liposcelididae)**

Liposcelis bostrychophila Badonnel, 1931 (Psocoptera: Liposcelididae) Türkiye için yeni kayıttır.

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