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New records of Psocoptera from Egypt

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ABSTRACT

A total of six species of Psocoptera were collected from Egypt (Cairo city – 5 species, Hurghada city – 1 species). Three of them were new records for Egypt.

Key words: North Africa, barkflies, distribution

Introduction

The barkfly (Insecta, Psocoptera) fauna of North Africa is poorly studied with an exception of Morocco. From Egypt only 14 species were known (Ahmed, 1992, Lienhard, 1998, 2016). *Liposcelis divinatoria* (Müller, 1776) was also reported for this area but this name is considered a *nomen dubium* (Lienhard, 1990). In this short note some new records of barkflies from Egypt are reported.

Materials and Methods

The study was carried out in two areas of Egypt (Cairo and Hurghada cities) during the period 04-06.04.2021 (Figure 1). The material was collected by beating the vegetation, sieving, or by hand and a brush. Specimens were then stored in ethanol and after processing, deposited in the collection of the author. Species identifications and distribution data followed Lienhard (1998). The taxonomical order and nomenclature were according to Lienhard & Smithers (2002). Photographs were made by a digital microscope Levenhuk DTX 90.

Results

A small sample of Psocoptera specimens collected during only three days revealed a total of six species from four families. Three species were new records for Egypt.

Liposcelididae

Liposcelis decolor (Pearman, 1925)

Material examined: 6.4.2021, Egypt, Eastern Desert, South of Hurghada, near hotel Jasmine Palace, bushes at a wastewater station, among dry *Poaceae* grass, N27 04 53.6 E33 51 11.7, 19 m a.s.l., 2 ♀, collected by sieving. This is a species of almost cosmopolitan distribution. A new record for Egypt.

Lachesillidae

Lachesilla pedicularia (Linnaeus, 1758)

Material examined: 4.4.2021, Egypt, Western Desert, Cairo, hotel Movenpick, on a hotel terrace, N29 57 46.2 E31 01 17.8, 95 m a.s.l., 3 ♀, 2 ♂, found dead, collected by brush. The species was reported from all continents without the arctic regions. It was reported from Egypt by Ahmed (1994).

Lachesilla quercus (Kolbe, 1880)

Material examined: 4.4.2021, Egypt, Western Desert, Cairo, hotel Movenpick, on a hotel terrace, N29 57 46.2 E31 01 17.8, 95 m a.s.l., 1 ♀, found dead, collected by brush; 5.5.2021, same area, at the yard of the hotel, from dry leaf of living Sago palm (*Cycas* sp.), N29 57 47.2 E31 01 18.3, 90 m a.s.l., 1 ♀, collected by beating the vegetation (Figure 2c). The species is known from most of Europe, North America, Asia, Australia and North Africa (Algeria and Tunisia). A new record for Egypt.

Lachesilla bernardi Badonnel, 1938

Material examined: 4.4.2021, Egypt, Western Desert, Cairo, hotel Movenpick, on a hotel terrace, N29 57 46.2 E31



Figure 1. Views from the habitats surveyed: a - locality of *Lachesilla pedicularia*, *L. quercus*, *L. bernardi* and *Ectopsocus vachoni*; b - locality of *L. quercus*; c - locality of *Trichopsocus dali*, d - locality of *Liposcelis decolor*.

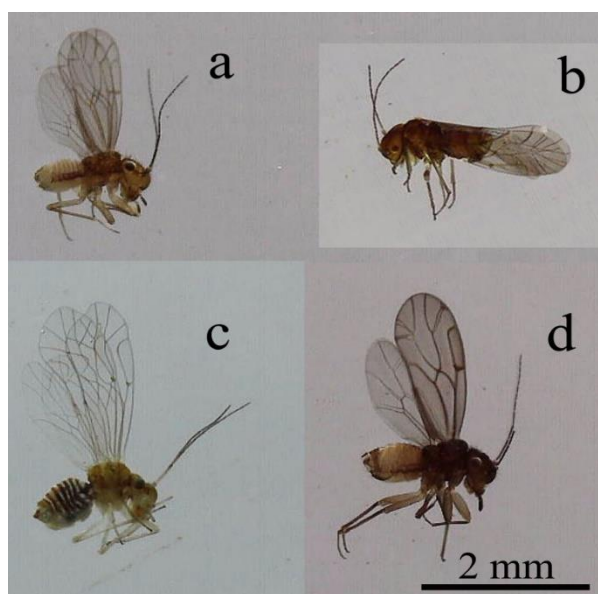


Figure 2. Some of the specimens collected during present survey: a, d - *Ectopsocus vachoni*, b - *Lachesilla bernardi*, c - *Lachesilla quercus*.

01 17.8, 95 m a.s.l., 1 ♀, collected by brush (Fig. 2b). The species is known from most of Europe, North Africa and West Asia. It was reported for Egypt by Ahmed (1994).

Ectopsocus vachoni Badonnel, 1945

Material examined: 4.4.2021, Egypt, Western Desert, Cairo, hotel Movenpick, on a hotel terrace, N29 57 46.2 E31 01 17.8, 95 m a.s.l., 3 ♀ (macropterous form), collected by brush (Figure 2a). The species is known from all continents without Antarctica. From Africa, it was known from Morocco and Algeria. A new record for Egypt.

Trichopsocidae

Trichopsocus dali (McLachlan, 1867)

Material examined: 4.4.2021, Egypt, Western Desert, Cairo, hotel Movenpick, yard of a hotel, bushes of *Ficus benjamina*, among dry leaves of *F. benjamina* on the ground, N29 57 43.9 E31 01 15.2, 95 m a.s.l., 1 ♀, collected by sieving. The species is known from North and Latin America, Africa, Europe and Asia. It was reported for Egypt by Ahmed (1992).

Discussion

Being a part of the Palearctic, North Africa is still with unexplored fauna of Psocoptera. Most of the species identified in the present study are widespread in the temperate and subtropical regions of the Earth. Many others like those are likely to be found in this area too. In addition to Palearctic species, those adapted to desert climates can be expected also, for example those reported from the nearby Arabian Peninsula.

As can be seen from the present study, the species are clearly concentrated in the gardens of the hotel complexes in the desert. They provide favorable living conditions - moisture, vegetation and detritus. Despite the author's efforts, no any Psocoptera of the true desert areas were collected. Numerous plant remains, stones and abandoned buildings in the Hurghada area were examined, but no specimens were found.

Further detailed studies on the Psocoptera fauna of Egypt are in need to clarify the species composition, their ecology and distribution routes in this vast desert environment. They can be focused mainly on the vegetated areas along the Nile

River and the artificial and natural green patches in the desert.

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