First Report Of Ectopsocus briggsi and Trichopsocus dalii (Psocoptera: Psocomorpha: Ectopsocidae and Trichopsocidae) from Iran

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FIRST REPORT OF ECTOPSOCUS BRIGGSI AND TRICHOPSOCUS DALII (PSOCOPtera: PSOCOMORPHA: ECTOPSOCIDAE AND TRICHOPSOCIDAE) FROM IRAN

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Two species of Pscoptera, Ectopsocus briggsi McLachlan 1899, and Trichopsocus dalii (McLachlan 1867) have been found for the first time on citrus leaves in 2 agricultural regions of Iran: Gonbad-e Kavous of Golesthan Province and Sari of Mazandaran Province. The biology of psocid insects is poorly known, but in the year 2000, 4408 described species belonging to 371 genera and 41 families were known worldwide (Lienhard & Smithers 2002), and by the end of 2005, 103 new genera and 1149 new species were added (García Aldrete 2006). Only 5 species have been previously recorded in Iran, all belonging to the genus Liposcelis Motschulsky 1852, from Liposcelididae, infraorder Nanopsocetae and suborder Troctomorpha. Shah Hosseini & Kamali (1989) reported only 1 species, L. divinatorius (Müller) sensu Pearman 1946, on flour, seeds of kanaf, maize, corn flake, and cereals from Uromieh (in West Azarbaijan Province), Ahwaz (in Khuzestan Province), Bandar Anzali (in Gilan Province) and Karaj (in Tehran Province). Modarres Awal (2001) mentioned this species in his insect checklist of Iran. Ahadiyat (2004) found L. keleri Günther 1974 as a new record for the insect fauna of Iran from the galleries of the almond bark beetle, Scolytus amygdali Guerin-Meneville 1847. It also was found under bark of some rosaceous fruit trees, including cherry, apricot, and plum, in Kamaal-shahr region of Karaj, Tehran Province. Jalalizand et al. (2005) reported 4 psocid species including L. bostrychophila Badonnel 1931 and L. corrodens (Heymons 1909), respectively, on 10-IV- and 3-VI-2003 in holes of undetermined elm bark beetles, and L. decolor (Pearman 1925) and L. keleri, respectively, on 16-VI- and 5-IX-2003 in holes of undetermined elm bark beetles and also from holes of an economically importance long-horned beetle, Aeolesthes sp., all from Isfahan city, Isfahan Province. Recently, Ahadiyat et al. (unpublished data) found another new psocid family of the suborder Psocomorpha for the insect fauna of Iran.

Two species were collected by 2 collectors, mentioned below, and thereafter identified by Charles Lienhard, Museum of Natural History, Geneva, Switzerland, as Ectopsocus briggsi from Ectopsocidae, and Trichopsocus dalii from Tri-
Trichopsocus dalii (McLachlan 1867)

Caecilius dalii McLachlan 1867

Caecilius hirtellus McLachlan 1877

Trichopsocus hirtellus var. angulata Navás 1916

Trichopsocus hirtellus (McLachlan) Badonnel 1938

Trichopsocus dalii (McLachlan) Badonnel 1943

Wings membranous with distinct venation, fore wing large and long with vein Cu1a; subgenital plate with two distal processes; tarsi 2-segmented; ovipositor valvulae complete.

Distribution: This is a cosmopolitan species and is found in western Palaearctic (Algeria, Austria, Belgium, Cyprus, former Czechoslovakia, Egypt, England, France, Germany, Greece, Hungary, Israel, Italy, Luxemburg, Morocco, the Netherlands, Poland, Portugal, Spain, Switzerland, Tunisia, former USSR and former Yugoslavia), Atlantic Ocean Islands (Canary Islands), North America (USA), Central America (Mexico), and it doesn’t exist in Australia, New Zealand, South America, Africa, Indian Ocean and Pacific Ocean Islands, eastern Palaearctic and Oriental (Lienhard & Smithers 2002). The species is associated with bay leaves and citrus leaves (Mockford 1993).

Material Examined: 1 5 6 9; on tangerine leaves; Sari, Mazandaran Province, north of Iran; early May 2006; Golsa Abbaskhani.

We are not sure that these two psocid species are, or could be, agricultural pests on Citrus trees in Iran and we did not particularly study their role on their hosts, but we have observed them, specifically E. briggsi, in relatively high densities on Citrus leaves, so more studies are needed to determine the biology, ecology, and food habits of them and also reveal their role in agricultural ecosystems.

Individuals of E. briggsi are partly deposited in the ICDE (Insect Collection of the Department of Entomology, College of Agriculture and Natural Resources, Science and Research Branch, Islamic Azad University, Tehran, Iran), partly in the senior author’s personal collection and at the Museum of Natural History, Geneva, Switzerland. Individuals of T. dalii are partly deposited in the ICDE and partly in the senior author’s collection.

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Summary

In 2006 investigations of psocid species in the north of Iran revealed 2 species identified as Ectopsocus briggsi McLachlan from Ectopsocidae and Trichopsocus dalii (McLachlan) from Trichopsocidae both in the suborder Psocomorpha. This is the first record of the suborder, these 2 families, genera, and species for the insect fauna of Iran. Also, this is the first report of winged psocids from Iran.

References Cited


