

Short communication

First report of three species of dark-winged fungus gnats (Diptera: Sciaridae), on *Pinus mugo* Turra, from Iran

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چکیده

اولین گزارش سه گونه پشه سیاه قارچ‌زی Sciaridae روی کاج *Pinus mugo* Turra از ایران

مینو حیدری لتیباری، غلامحسین مروج و حسین صادقی نامقی

طی بررسی‌های انجام شده در سال ۱۳۹۴ روی حشرات مرتبط با کاج *Pinus mugo* Turra در فضای سبز شهرستان

مشهد سه گونه پشه سیاه قارچ‌زی از روی درختان مشاهده و جمع‌آوری گردید که توسط Kai Heller از کشور آلمان به نام‌های

Scatopsciara atomaria Zetterstedt, 1851 و *Bradysia odoriphaga* Yang & Zhang, 1985, *Bradysia trivittata* Staeger, 1840

شناسایی شد. این پشه‌ها متعلق به خانواده‌ی Sciaridae می‌باشند. جنس *Scatopsciara* و سه گونه ذکر شده برای اولین بار از ایران گزارش

می‌شوند.

The dark-winged fungus gnats, Sciaridae, belong to the order Diptera and are similar to Mycetophilidae with the exception that their eyes meet above the bases of the antennae and r-m cross vein is in line with Rs and appears to be the basal extension of the vein. The Sciaridae species are small body gnats with black wings and commonly live in the humid and shady places. Most sciarid larvae live on fungi, and some of them are occasionally considered as important pests of mushroom cultures. The larvae of a few species attack the roots of plants (Borrer *et al.*, 1998). Members of Sciaridae are either phytosaprophagous or mycetophagous. Some are known as facultative phytophagous, facultative coprophagous or corticolous feeders (Steffan, 1974). In greenhouse-grown crops, they can be considered as a key pest due to the direct damage of their larvae feeding, and the ability of larvae in transferring particular soil-borne plant pathogens such as *Bradysia* spp (Cloyd, 2015). The family Sciaridae comprises 2600 species, with a worldwide distribution (Vilkamaa, 2014).

A field survey was carried out from March 2014 to May 2015 in urban green landscapes of Mashhad, Khorasan-e Razavi Province, Iran. The specimens were collected using sweep nets and by random cuttings of 20-cm terminals of pine trees (*Pinus mugo*). The specimens were stored in 70% ethanol and later identified by Dr Kai Heller

(Germany). Three sciarids, *Bradysia odoriphaga* Yang & Zhang, 1985, *B. trivittata* Staeger, 1840 and *Scatopsciara atomaria* Zetterstedt, 1851, are reported as new records for Iran. The species *B. odoriphaga* and *B. trivittata* belong to the subfamily Cratyninae, and *S. atomaria* belong to Sciarinae. All specimens, were collected from branches of the pine tree, *P. mugo*, and have been reported from many countries including Slovakia, Sweden, Norway, Czech republic, Taiwan, Spain, Germany, Australia, North Altai (Russia), Greenland (Denmark), Finland, Canada and USA (Rudzinski, 2004, Camaño Portela *et al.*, 2008, Heller *et al.*, 2009, Mohring *et al.*, 2012, Rudzinski *et al.*, 2012, Vilkamaa, 2014).

***Bradysia trivittata* Staeger, 1840.**

Material examined: Iran, Khorasan-e Razavi, Mashhad, 985 m a.s.l., 36°15'N, 59°38'E, 09. X. 2014, leg. Mino Heidari Latibari. 12 ♂♀.

***Scatopsciara atomaria* Zetterstedt, 1851.**

Material examined: Iran, Khorasan-e Razavi, Mashhad, 985 m a.s.l., 36°15'N, 59°38'E, 09. X. 2015, leg. Mino Heidari Latibari. 9 ♂♀.

***Bradysia odoriphaga* Yang & Zhang, 1985.**

Material examined: Iran, Khorasan-e Razavi, Mashhad, 985 m a.s.l., 36°15'N, 59°38'E, 09. X. 2015, leg. Mino Heidari Latibari. 2 ♂♀.

The species *Lycoriella auripila* on *Agricus* spp (Zamani, 2001), *Bradysia ocellaris* on *Lentinus tigrinus* Bull and *Corynoptera perpusilla* on *Agrosybe*

dura Bolton were previously known from Iran (Barzegar *et al.*, 2014). Further research is required to improve the taxonomical status of sciarids in Iran.

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