Short communication

New records of two grass fly species (Dip.: Chloropidae) from Iran

Y. Karimpour

Department of Plant Protection, Faculty of Agriculture, Urmia University, P.O. Box 165, Urmia, Iran. E-mail: y.karimpour@urmia.ac.ir

چکیده

دو گونه از مگسهای خانواده Chloropidae به نامهای و Lipara lucens (Meigen) به نامهای به نامهای برای اولین بار از ایران گزارش می شوند. حشرات کامل مگس ایدادشده در جوانه انتهایی گیاه نی، برای اولین بار از ایران گزارش می شوند. حشرات کامل مگس Phragmites australis (Cav.) Trin. Ex Steudel به دست آمدند. حشرات کامل مگس Palaearctic نیز از درون گالهای ایجاد شده به وسیله مگس L lucens انتشار دارد.

The common reed, Phragmites australis (Cav.) Trin. Ex Steudel, is a cosmopolitan reed, widely distributed in Europe, Asia, Africa, America and Australia (Holm et al., 1977). Common reed grows in a wide range of habitats and displays high phenotypic and genotypic plasticity (Haslam, 1972; van der Putten, 1997). Phytophagous insects associated with common reed in Urmia region, were collected from the gallbearing terminal buds of common reed in their natural habitats in September 2009. The infested buds along with their larvae were sent to Dr. M. Skuhrava (Czech Republic) for identification. The overwintering infested buds were collected in March 2010 and March 2011, and brought to the laboratory, and placed in glass boxes which were covered by fine mesh screen to obtain the adult insects.

Voucher specimens are deposited in the Natural History Museum of Urmia University and in the Hyke Mirzayans Insect Museum (Iranian Research Institute of Plant Protection).

The chloropid fly, which was responsible for bud abortion and gall induction in common reed, was identified as:

- Lipara lucens (Meigen) (Dip.: Chloropidae: Oscinellinae)

 of Kelïsä Kandï village, N 37° 29′, E, 45° 01′, 1600 m., 1-15.iv.2011, ex: *P. australis*.

Eleven species of *Lipara* Meigen are known from the Holarctic region (Nartshuk, 1996). The species *L. lucens* (fig. 1) is a specialist gall inducer on common reed throughout the Palaearctic (Beschovski, 1984).

- Cryptonevra flavitarsis (Meigen) (Dip.: Chloropidae: Chloropinae)

The species of *Cryptonevra* Lioy are mostly found in *Lipara* galls at upper parts of common reed stems (Grochowska, 2007). In *Lipara* galls, *C. flavitarsis* lives as inquiline (Grochowska, 2008). There are 12 species of this genus in the Palaearctic region (Anderson, 1977; Nartshuk, 1996).

Members of grass flies (Dip.: Chloropidae), with 2456 described species in 177 genera, are distributed throughout the world. The family includes minute to small (usually 1-7 mm), smooth, rather bristleless flies, usually predominantly black or basically yellow with black to brown stripes and maculate. Grass flies occur in a variety of habitats and are fairly common in grasslands, marshes and low vegetation in forests, and are frequently collected in great numbers in fields of

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gramineous plants. The larvae of most species are mainly phytophagous and saprophagous, sometimes carnivorous. Some of phytophagous species are economically important as pests of cereals (Oosterbroek, 1998; Karpa, 2001).

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Fig. 1. Lipara lucens: (A) a fully grown larva inside the gall on the apical bud of *Phragmites australis*, (B) adult. (Original).

References

Anderson, H. (1977) Taxonomic and phylogenetic studies on Chloropidae (Diptera) with special reference to Old World genera. *Entomologica Scandinavica*, Supplment 8, 1-200.

Beschovski, V. L. (1984) A zoogeographic review of Palaearctic genera of Chloropidae (Diptera) in view of origin and formation. *Acta Zoologica Bulgarica* 24, 3-26.

Grochowska, M. (2007) The morphology of adults of *Cryptonevra* Lioy, 1864 species (Diptera: Chloropidae) occurring on the common reed *Phragmites australis. Acta Zoologica Academiae Scientiarum Hungaricae* 53(2), 97-106.

Grochowska, **M.** (2008) Morphology of preimaginal stages of *Cryptonevra flavitarsis* (Diptera: Chloropidae): an inquiline in galls formed by *Lipara* flies in common reed. *Entomologica Fennica* 19(1), 18-24.

Haslam, S. M. (1972) Biological flora of the British Isles, no. 128, *Phragmites communis. Trinidad Journal of Ecology* 60, 585-610.

Holm, L. G., Plucknett, D. L., Pancho, J. V. & Herberger, J. P. (1977) The world's worst weeds: distribution and biology. 609 pp. University of Hawaii Press, Honolulu.

Karpa, A. (2001) Revision of Chloropidae of the collection of B.A. Gimmerthal and a check-list of Latvian Chloropidae (Diptera). *Latvijas Entomologs* 38, 21-26.

Nartshuk, E. P. (1996) Sistema rastenie – fitofag na primere trostnika i ego konsumentov. *Zhurnal Obshchei Biologii* 57(5), 628-641.

Oosterbroek, P. (1998) *The families of Diptera of the Malay Archipelago*; *fauna Malesiana handbooks*. Vol. 1, 227 pp. Brill, Leiden, Boston, Köln.

van der Putten, W. (1997) Die-back of *Phragmites australis* in European wetlands: an overview of the European research program on reed die-back and progression (1993 1994). *Aquatic Botany* 59, 263-275.

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