

THE PTEROMALIDS SPECIES (HYMENOPTERA: PTEROMALIDAE) OF THE *Norbanus* (WALKER, 1843) GENUS, COLLECTED IN STEPPE VEGETATION (REPUBLIC OF MOLDOVA)

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Abstract. On the base of the collections gathered with the entomological fillet within Bugeac steppe on various biotopes between 2005 and 2009, there were registered 4 species of pteromalids *Norbanus* genus. Two species (*Norbanus meridionalis* MASI and *Norbanus brevicornis* SZELENYI) are new for the fauna of the Republic of Moldova.

Keywords: Hymenoptera, Pteromalidae, *Norbanus*, Bugeac steppe, new species, Republic of Moldova.

Rezumat. Speciile de pteromalide (Hymenoptera: Pteromalidae) din genul *Norbanus* (WALKER, 1843), colectate pe vegetație de stepă (Republica Moldova). Pe baza colectărilor efectuate în perioada anilor 2005-2009, în stepa Bugeacului prin vegetație caracteristică zonei de stepă cu fileul entomologic, au fost evidențiate 4 specii de pteromalide (*Hymenoptera, Pteromalidae*) din genul *Norbanus* WALKER, dintre care speciile: *Norbanus meridionalis* MASI și *Norbanus brevicornis* SZELENYI colectate doar în această zonă, sunt noi pentru fauna Republicii Moldova.

Cuvinte cheie: Hymenoptera, Pteromalidae, *Norbanus*, stepa Bugeacului, specii noi, Republica Moldova.

INTRODUCTION

Pteromalids (Hymenoptera, Pteromalidae) represent the parasitoid hymenoptera, which have an important role in maintaining the biological balance; therefore detailed study of their biology and ecology can highlight a number of parasitoid complex to many phytophagous insects. Previous investigations were mainly conducted in the districts located in the northern and central areas of the country and very little research has been conducted in the southern districts. Thus, the collections made in the localities situated within Bugeac steppe contributed to highlighting many pteromalids species, which are characteristic only to steppe vegetation and they are attached to phytophagous insects that develop in these plants. The proof is represented by the species of *Norbanus* genus that were collected only in this area during July-August (2005-2009) and are rendered in the present paper.

MATERIAL AND METHODS

The materials were collected during the years 2005-2009 with the entomological fillets in 12 localities situated within Bugeac steppe in various biotopes. We took photos (the forewing and antennae) of the new species of the fauna of Republic of Moldova based on microscopic preparations (previously prepared) by electronic microscope Olympus (Fig. 1).

RESULTS

Family PTEROMALIDAE

Subfamily Pteromalinae

Genus *Norbanus* WALKER, 1843

1. *Norbanus scabriculus* NEES, 1834

Previous citation: Chișinău (BOUCEK, 1961, 1965).

Material examined: 1♀, July 8, 1994, Lozova (District Strășeni), orchard; 2♀♀, July 12, 2008, Ciurmai (District Vulcănești), steppe vegetation (Manic leg.).

Geographical distribution: Caucasus, West Europe, Ukraine, Romania (BOUCEK & RASPLUS, 1991; DZHANOKMEN, 1987).

Biology: obtained from *Cephus pygmaeus* L., *Trachelus tabidus* F. (Hymenoptera, Tenthredinoidea), *Lixus junci* BOH. (Coleoptera, Curculionidae) (BOUCEK & RASPLUS, 1991; DZHANOKMEN, 1987; GRAHAM, 1969; RIZZO & MITROIU, 2010).

2. *Norbanus meridionalis* MASI, 1922

Material examined: 1♀, July 12, 2008, Slobozia Mare (District Vulcănești), steppe vegetation (Manic leg.).

Geographical distribution: Western Europe (BOUCEK & RASPLUS, 1991).

Biology: the species was recorded from *Cephus pygmeus* (L.) (Hymenoptera: Cephidae) (ZHASAVOV, 1986) and from some unknown Mordellidae (Coleoptera) on *Silene odoratissima* BGE. DZHANOKMEN (RIZZO & MITROIU, 2010).

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3. *Norbanus (Picrosctyoides) cerasiops* MASI, 1922

Material examined: 1♀, July 24, 2009, Cășlița Prut; 1♀ 3♂♂, July 25, 2009, Slobozia Mare (District Vulcănești), steppe vegetation (Manic leg.).

Geographical distribution: Croatia, Cyprus, Czech Republic, France, Hungary, Italy, Kazakhtan, Maroco, China, Romania, Serbia, Slovakia, Spain, Turkey (NOYES, 2003) previously unrecorded from Green and Madeira (RIZZO & MITROIU, 2010).

Biology: This species is known to be a primary parasitoid of various Curculionidae (Coleoptera): *Larinus planus* (F.), *L. turbinatus* GYLLENHAL, *Lixus brevisrostris* BOHEAM, *L. cardui* OLIVER, *L. juncii* BOHEMAN, *L. scabricollis* Boheman (NOYES, 2003) (RIZZO & MITROIU, 2010).

4. *Norbanus brevicornis* SZELENYI, 1974







Material examined: 1♀, July 16, 2007, Ciurmai (District Vulcănești), steppe vegetation (Manic leg.).

Geographical distribution: Western Europe (BOUCEK & RASPLUS, 1991; DZHANOKMEN, 1987).

Biology: unknown BOUCEK & RASPLUS, 1991; RIZZO & MITROIU, 2010).

New species for the fauna of Republic of Moldova.

Figure 1. New species of the genus *Norbanus* WALKER for the fauna of the Republic of Moldova.
Figura 1. Noi specii ale genului *Norbanus* WALKER pentru fauna Republicii Moldova.

| | Forewing | Antenna |
|--|---|--|
| <i>Norbanus brevicornis</i> Szelenyi ♀ |  |  |
| <i>Norbanus cerasiops</i> Masi ♀ |  |  |
| <i>Norbanus meridionalis</i> Masi ♀ |  |  |

CONCLUSIONS

The species of the genus *Norbanus* WALKER (*N. meridionalis* MASI, *N. cerasiops* MASI, *N. brevicornis* SZELENYI) were collected only during the years 2007-2009 within Bugeac steppe with entomological fillet.

The species *Norbanus scabriculus* NEES was collected in the steppe zone and in the central part of Codrii region (1♀, July 8, 1994, Lozova, District Strășeni, orchard), whose hosts are known: *Cephus pygmaeus* L., *Trachelus tabidus* F. (Hymenoptera, Tenthredinoidea), *Lixus junci* BOH. (Coleoptera, Curculionidae).

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