

**ORMYRIDAE FAMILY (HYMENOPTERA: CHALCIDOIDEA)
IN BULGARIA**

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ABSTRACT. The data on species composition of chalcid wasps of Ormyridae family in Bulgaria is summarized in the article. Totally 10 species belonging to genus *Ormyrus* are reported. Five of them (*O. destefanii*, *O. diffinis*, *O. orientalis*, *O. rufimanus* and *O. speculifer*) are new to the fauna of Bulgaria.

KEY WORDS Ormyridae, Chalcidoidea, Hymenoptera, faunistic, Bulgaria.

INTRODUCTION

Ormyridae Förster, 1856, is a relatively minor chalcid family represented by about 126 species (Noyes, 2004) distributed on all continents. The species are attributed to three genera: *Ormyrus* Westwood, 1832, *Ormyrulus* Bouček, 1986 and *Eubeckerella* Narendran, 1999 (two latter are monotypic) (Noyes, 2004).

Ormyridae are parasitoids in insect galls, wherein their larvae are solitary and ectophagous (Askew, 1994). Palaeartic species are associated with gall-makers Hymenoptera (Cynipidae) and Diptera (Cecidomyiidae, Tephritidae, Agromizidae) (Askew, 1994; Zerova & Seregina, 1998).

The Ormyridae fauna of Bulgaria is little known. Only five species were reported to the present investigation: *Ormyrus gratiosus* (Pelov, 1975), *Ormyrus longicornis* (Bouček, 1970), *Ormyrus nitidulus* (Gospodinov, 1963; Vasileva-Samnalieva, 1974, 1985; Pelov, 1975), *Ormyrus pomaceus* (Pelov, 1975) and *Ormyrus wachtli* (Stojanova, in press).

The aim of this paper is to summarize the published data on Ormyridae and to present new faunistic material.

MATERIAL AND METHODS

The material for the present investigation was collected between 1967 and 2004, by sweeping in grass localities, rearing from cynipid (Hymenoptera, Cynipidae) galls on different plants and trapping by Malaise trap.

The list of the species includes the following data: the valid taxa name, published data for Bulgaria (if any), locality names and altitude in meters, date of collecting, number and sex of specimens, host (in case of rearing), name of the collector (when the material was not collected by the author).

The species new to the Bulgarian fauna are marked with an asterisk (*) in the faunistic list.

Faunistic results

****Ormyrus destefanii* Mayr, 1904**

Material: the Rhodope Mts.: m.h. Lednitsata, 1720 m, 24.07.2002, 1 female; the Black Sea coast: Arcutino, 5 m, 27.06.1986, 1 female (A. Donev).

****Ormyrus diffinis* (Fonscolombe, 1832)**

Material: the Rhodope Mts.: m.h. Lednitsata, 1720 m, 19.07.2001, 9 females, 3 males; 23.07.2002, 1 female, 2 males; 24.07.2002, 24 females, 12 males; Gela vill., 1420 m, 20.07.2001, 3 females, 1 male; 24.07.2002, 1 female, 1 male; 3 km S Ognyanovo vill., 300 m, 23.06.1996, 1 female; 3 km SW Novo selo vill., 350 m, 18.06.2000, 1 female, 1 male; m.h. Persenk, 1750 m, 13.08.1996, 2 females; Trigrad vill., 1200 m, 29.07.2000, 4 females; the Stara Planina ridge: the Schipchenska Mtn.: N Enina vill., 600 m, 23-29.07.2000 (Malaise trap), 1 female (M. Langurov).

***Ormyrus gratiosus* (Forster, 1860)**

Ormyrus gratiosus: Pelov (1975)

Material: the Rhodope Mts.: 3 km SW Novo selo vill., 350 m, 18.06.2000, 1 male; 24.05.2004, 2 males; Hrabrino vill., 400 m, 24.02.2002, 1 male emerged from flower head of *Centaurea* sp.; Dabovets vill., 200 m, 27.06.2001, 1 male; Assenovgrad, 350 m, 18.06.1996, 1 female; the Thacian lowland: Plovdiv, 165 m, Ddzhendem tepe loc., 15.11.1998, 1 female, 5 males emerged from flower heads of *Centaurea* sp.; 24.10.1999, 1 male emerged from flower head of *Centaurea* sp.; Sadovo, 140 m, 24.06.1990, 1 female (P. Boyadzhiev); the Strandzha Mtn.: Fakiya vill., 200 m, 09.06.1988, 1 male (A. Donev); Sinemorets vill., 25 m, 06.06.1988, 1 female (A. Donev); Tsarevo, 30 m, 05.06.1997, 1 female.

***Ormyrus longicornis* Bouček, 1970**

Ormyrus longicornis: Bouček (1970)

Material: the Rhodope Mts.: Dolni Voden vill., 250 m, 03.06.1999, 1 male.

***Ormyrus nitidulus* (Fabricius, 1804)**

Ormyrus tubulosus: Gospodinov (1963); Vasileva-Samnalieva, L. (1974, 1985); Pelov (1975)

Material: the Rhodope Mts.: Bukovo vill., 1000 m, 29.09.2000, 6 females emerged from Cynipid galls on *Quercus* sp.; Hrabrino vill., 400 m, 06.02.2000, 3 females, 1 male emerged from Cynipid galls on *Quercus* sp.; Topolovo vill., 450 m, 07.03.2000, 3 females, 1 male emerged from *Cynips tomentosa* (Hym., Cynipidae) galls on *Quercus* sp.; Daskalovo vill., 500 m, 04.06.1999, 1 female emerged from Cynipid gall on *Quercus* sp.; Panichkovo vill., 1000 m, 05.03.2002, 1 female emerged from Cynipid gall on *Quercus* sp. (P. Boyadzhiev); the Sredna Gora Mtn.: Vurben vill., 350 m, 1 female emerged from *Andricus quercuscalicis* (Hym., Cynipidae) gall on *Quercus* sp.; m.h. Moruley, 508 m, 26.01.1997, 1 female emerged from *Andricus caputmedusae* (Hym., Cynipidae) gall on *Quercus* sp.; NW Stara Zagora, 400 m, 13.12.2001, 1 female emerged from *Andricus quercustozae* (Hym., Cynipidae) gall on *Quercus* sp. (V. Parvanov); the Stara Planina ridge: Brusen vill., 500 m, 05.05.1967, 1 female (A. Germanov); the Thracian lowland: Plovdiv, 165 m, 07.07.1969, 1 female (A. Germanov); 09.09.1996, 1 female, 1 male emerged from seeds of *Amorpha fruticosa* (Fabaceae); the Strandzha Mtn.: Veleka river-outfall, 15 m, 07.06.1999, 2 males emerged from Cynipid galls on *Quercus* sp.; 07.06.1999, 2 males emerged from *Biorhiza pallida* (Hym., Cynipidae) galls on *Quercus* sp.; Varovnik vill., 350 m, 29.09.1999, 2 females, 1 male emerged from Cynipid galls on *Quercus* sp.; Lopushna reserve, 250 m, 30.09.1999, 1 female, 1 male emerged from Cynipid galls on *Quercus* sp.

****Ormyrus orientalis* Walker, 1871**

Material: the Rhodope Mts: m.h. Bryanovshtitsa, 930 m, 18.05.1997, 1 male; m.h. Persenk, 1750 m, 13.08.1996, 1 male; Hrabrino vill., 400 m, 15.08.1996, 1 male; 10.01.1999, 4 females, 1 male emerged from flower heads of *Centaurea* sp.; Zagrazhden vill., 1000 m, 02.07.1996, 1 female; 04.07.1996, 4 females; 05.07.1996, 1 female; Hvoyna vill., 800 m, 18.07.2001, 1 female, 1 male; 3 km SW Novo selo vill., 350 m, 01.07.2000, 1 female, 2 males; 24.05.2004, 1 female, 3 males; Ognyanovo vill., 350 m, 02.05.1998, 1 female (P. Boyadzhiev); Assenovgrad, 350 m, 14.06.1997, 1 male; Malko Gradishte vill., 300 m, 27.06.2001, 1 male; Trigrad vill., 1200 m, 29.07.2000, 2 males; m.h. Smolyanski ezera, 1526 m, 21.07.1999, 1 female; N Isperihovo vill., 300 m, 28.04.2001, 1 female; m.h. Akademika, 595 m, 16.05.1997, 1 female; Duzhdovnitsa vill., 450 m, 18.05.2002, 1 female (P. Boyadzhiev); Batak, 1040 m, 27.07.2000, 1 female, 1 male; Dolni Voden vill., 250 m, 03.06.1999, 2 females; Popsko vill., 700 m, 19.05.1998, 1 male; Kardzhali, 300 m, 09.05.1989, 1 male (A. Donev); Daskalovo vill, 500 m, 15.09.2004, 1 female (P. Boyadzhiev); NW Yundola locality, 1600 m, 01.07.2002, 2 females; 02.07.2002, 1 male; Plevun vill., 450 m, 17-29.06.2001 (Malaise trap), 1 female; the Strandzha Mtn.: Golyamo Bukovo vill., 200 m, 16.05.1980, 1 male (A. Donev); Izgrev vill., 150 m, 22.06.2002, 2 females; Kosti vill., 45 m, 07.06.1988, 1 female (A. Donev); 3 km W Tsarevo, 80 m, 04.06.1996, 1 male; 02.06.1997, 1 female 1 male; 05.06.1997, 1

female; 09.06.1997, 1 female, 3 males; 01.06.1998, 1 male; 04.06.2000, 1 male; 07.06.2004, 1 female, 1 male; Veleka river-outfall, 15 m, 22.06.2003, 1 male; the Black Sea coast: Kiten, 50 m, 05.06.1988, 1 male (A. Donev); the Thracian lowland: Rupkite vill., 200 m, 29.08.2004, 1 female, 1 male (M. Kechev).

***Ormyrus pomaceus* (Geoffroy, 1785)**

Ormyrus punctiger: Pelov (1975)

Material: the Rhodope Mts.: Daskalovo vill., 500 m, 05.03.2002, 2 female, 4 males emerged from Cynipid galls on *Quercus* sp.; 29.06.2002, 1 female (P. Boyadzhiev); 15.09.2004, 1 female, 6 males (P. Boyadzhiev); Bukovo vill., 1000 m, 29.09.2000, 3 females, 3 males emerged from Cynipid galls on *Quercus* sp.; Kardzhali, 300m, 09.07.1982, 1 female (A. Donev); Topolovo vill., 450 m, 07.03.2000, 1 female emerged from Cynipid gall on *Quercus* sp.; NE Madzharovo, 160 m, 28.05.-08.06.2001 (Malaise trap), 1 female (H. Eturska); S Hrabrino vill., 500 m, 04.12.2003, 1 female, 1 male emerged from *Andricus kollari* (Hym., Cynipidae) galls on *Quercus* sp.; 14.08.2004, 2 females emerged from *Andricus quercustozae* (Hym., Cynipidae) galls on *Quercus* sp.; Zhelezino vill., 400 m, 19.05.2000, 1 male; the Strandzha Mtn.: Veleka river-outfall, 15 m, 07.06.1999, 3 females emerged from *Biorhiza pallida* (Hym., Cynipidae) galls on *Quercus* sp.; Vitanovo reserve, 400 m, 15-29.09.2000 (Malaise trap), 1 male (St. Petrov); the Sredna Gora Mtn.: Strelcha, 600 m, 26.05.1970, 1 female (P. Angelov); Vurben vill., 350 m, 1 female emerged from *Andricus quercuscalicis* (Hym., Cynipidae) gall on *Quercus* sp.; the Danube river plane: Silistra, 50 m, 12.10.2000, 2 females emerged from *Andricus quercuscalicis* (Hym., Cynipidae) galls on *Quercus* sp.; the Maleshevska Mtn.: Nikudin vill., 800 m, 16.04.2003, 3 males emerged from Cynipid galls on *Quercus* sp.; SW Sedelets vill., 680 m, 16.04.2003, 1 female, 2 males emerged from Cynipid galls on *Quercus* sp.

****Ormyrus rufimanus* Mayr, 1904**

Material: the Rhodope Mts.: m.h. Persenk, 1750 m, 13.08.1996, 1 female.

****Ormyrus speculifer* Erdös, 1964**

Material: the Rhodope Mts.: Huhla vill., 350 m, 27.06.2001, 9 females, 1 male emerged from galls of *Aulacidea tragopoginis* (Hym., Cynipidae) on *Tragopogon* sp. (Asteraceae).

***Ormyrus wachtli* Mayr, 1904**

Ormyrus wachtli: Stojanova (in press).

Material: the Rhodope Mts.: 3 km SW Novo selo vill., 350 m, 17.06.2001, 1 female; 24.05.2004, 1 female, 1 male; Gela vill., 1420 m, 24.07.2002, 1 male; Daskalovo vill., 500 m, 19.06.2002, 1 male (P. Boyadzhiev).

CONCLUSION

As a result of faunistic study on Ormyridae, totally 10 species are recorded. Five species (*Ormyrus destefanii*, *Ormyrus diffinis*, *Ormyrus orientalis*, *Ormyrus rufimanus* and *Ormyrus speculifer*) are recorded for the first time to the fauna of Bulgaria.

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