Key words: Maculinea arion – spring and summer type – Carpathian Basin – Wolbachia

Socially parasitic and globally threatened Maculinea arion has been in the focus of intense conservation research. In the Carpathian Basin M. arion exists in two phenological forms (‘spring and summer arion’ according to their flight periods) which co-occur in certain habitats. Our previous studies reported on significant differentiation between these forms both in wing and genital traits. At the same time, they did not show any genetic differentiation on two mitochondrial loci and in allozymes. Additionally, we screened altogether 108 M. arion individuals from six geographic regions and all specimens proved to be infected by the intracellular bacteria from the genus Wolbachia (Ricketsiaceae). Since Wolbachia may play a great role in speciation of their hosts and the forming of their phylogenetic and phylogeographic patterns, we examined whether the differences between the two forms of M. arion are attributable to Wolbachia.

Distributional maps of the NATURA 2000 butterfly and moths species in Bulgaria

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Key words: butterflies and moths, Natura 2000, Habitat Directive, maps

Natura 2000 species are the species that are placed on Annex II of the Directive 92/43/EEC, Treaty of Accession 2003. In Bulgaria at present they are: Catopta thrips (Hübner, 1818), Eriogaster catax (Linnaeus, 1758), Lycaena dispar ([Haworth], 1802), Phengaris (Maculinea) nausithous (Bergsträsser, 1779), Polyommatus eroides (Frivaldszky, 1835), Nymphalis vanalhun ([Denis & Schiffermüller], 1775), Euphydryas maturna (Linnaeus, 1758), Euphydryas aurinia (Rottemburg, 1775), Desertobia (Eranis) ankeraria (Staudinger, 1861), Linyoptera jumidaria (Hübner, [1825]), Eniplaga quadripunctaria (Poda, 1761) and Dioszeghyana schmidii (Diószeghy 1935). The distribution of these species in Bulgaria is presented on maps. From these Catopta thrips (Hübner, 1818) is on the way to extinction, because all known localities are almost completely destroyed. The last time it was found in Bulgaria was 18 years ago. Coenonympha oedippus (Fabricius, 1787) and Colias myrmidone (Esper, [1781]) were reported from the country at the beginning of last century, but now they are extinct in Bulgaria. Gortyna borelii lunata (Freyer, 1838) was wrongly reported from Bulgaria as a result of mislabeling, Leptidea morsei (Fenton, 1881) needs to be confirmed for the country. Lycaena helle ([Denis & Schiffermüller], 1775) was surely proved for the country by foreign researchers from Netherland, but is not published yet. Lycaena helle and Pseudophilotes bavius are new addition to Natura 2000 and bulgarian fauna, not published yet.