

HETEROPTERUS MORPHEUS (PALLAS, 1771) (LEPIDOPTERA: PAPILIONOIDEA) – A NEW SPECIES IN THE FAUNA OF THE REPUBLIC OF MOLDOVA

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Summary. The paper presents *Heteropterus morpheus* (Pallas, 1771) (Lepidoptera, Papilionoidea) – a new species in the fauna of the Republic of Moldova, collected in the Natural Reserve “Prutul de Jos” (Cahul district). So, the number of species in the *Hesperiidae* family identified on the territory of the Republic of Moldova reached 20.

Keywords: Hesperiidae, Lepidoptera, Republic of Moldova, Prutul de Jos, new species.

Rezumat. *Heteropterus morpheus* (Pallas, 1771) (Lepidoptera, Papilionoidea) – specie nouă în fauna Republicii Moldova. Lucrarea prezintă specia *Heteropterus morpheus* (Pallas, 1771) (Lepidoptera, Papilionoidea) – nouă pentru fauna Republicii Moldova, semnalată în Rezervația Naturală „Prutul de Jos” (raionul Cahul). Astfel, numărul speciilor din familia Hesperiidae identificate pe teritoriul Republicii Moldova a ajuns la 20.

Cuvinte cheie: Hesperiidae, Lepidoptera, Republica Moldova, Prutul de Jos, specie nouă.

Introduction

In the Republic of Moldova there were recorded 19 species of diurnal butterflies from Hesperiidae family, taxonomically belonging to 9 genres: *Erynnis* (1 species), *Carcharodus* (4), *Muschampia* (1), *Pyrgus* (6), *Carterocephalus* (2), *Ochlodes* (1), *Hesperia* (1), *Thymelicus* (2), *Spialia* (1) [1].

The key characteristic of this family is that all of the veins on the forewing run unbranched from the cell to the wing margin. They are named for their quick, darting flight habits. Most have their antenna tips modified into narrow, hook-like projections. Moreover, skippers mostly have an absence of wing-coupling structure available in most moths. All of the Hesperiidae species are important pollinators. They are related to the grassland habitat, being threatened with intensification and abandonment of land use and habitat fragmentation [2, 3].

Materials and methods

The “Prutul de Jos” Natural Reserve was created on April 23, 1991 in order to protect the flora and fauna of Lake Beleu and the floodplains around it. Is located in the Down Prut River’s basin and includes Lake Beleu and its surroundings,

a network of ponds that, as a whole, form a unique ecosystem that is quite attractive for a large number of lepidopteran species. On a total area of 1691 hectares and almost two thirds of the territory occupied by the waters of Lake, the rest of the territory is presented by marshy vegetation and floodplain. The Reserve has an unique value due to the great number of birds, animals and flowers which a majority of are considered rare species. On 2008, the reserve was registered in the UNESCO World Network of Biosphere Reserves, becoming the first biosphere reserve established in the Republic of Moldova.

The research was carried out during the vegetation period of 2021. The entomological material were collected in different habitats of the “Prutul de Jos” Natural Reserve like the lake shore and its meadows, floodplain forest, forest edge etc.

Collecting of diurnal species of butterflies was done with entomological net, manually, or only photos were taken for rare specie. All photo presented in the paper are original.

Results and discussions

As a result of investigation nine specie from Hesperiidae family were indetified for the first time in the reserve. Among the identified species , *Heteropterus morpheus* (Pallas, 1771) is new for the fauna of the Republic of Moldova (Figure 1). *Heteropterus morpheus* it is an unmistakable species in the fauna of the Republic of Moldova. It is the single member of the monotypic genus *Heteropterus*.

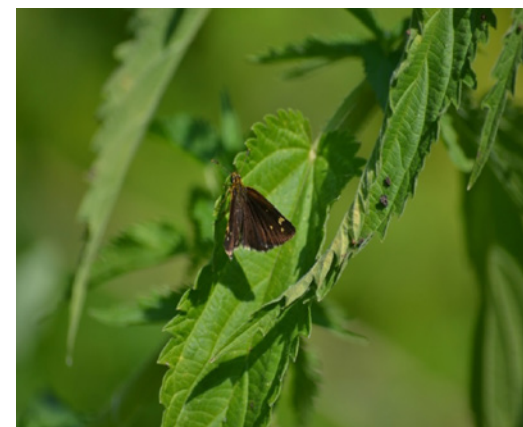


Fig. 1. Imago of *Heteropterus morpheus* in the Natural Reserve “Prutul de Jos”.

Biology and Ecology. The length of the forewings is 15–18 mm. The larvae feed on *Eriophorum*, *Poa annua*, *Calamagrostis canescens*, *Brachypodium* and

Molinia species. It is a univoltine species. The butterfly flies from May to June, depending on the location [2]. The butterfly has a very distinctive and attractive underside but a drab upperside (which is rarely seen, as it usually settles with wings closed). The flight is just as distinctive and indeed provides immediate identification of the species: it appears to bounce through the air with little sense of direction.

Habitat. Studies show that adults can be found at the edges of streams and grassy forest openings [2]. These studies were also confirmed for the Republic of Moldova. In the Prut de Jos Reserve, the species was observed in the meadow and the edges of streams (Figure 2).

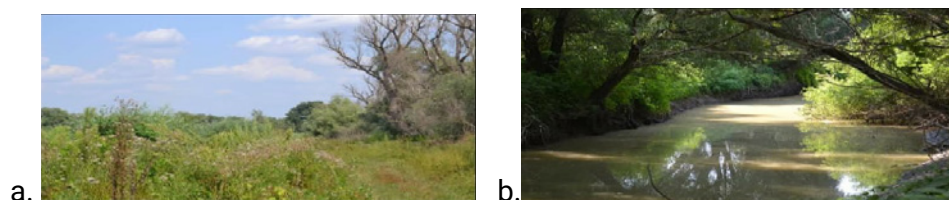


Fig. 2. Meadows (a) and edges of streams (b) in the “Prutul de Jos” Natural Reserve (the habitat of the species *Heteropterus morpheus*)

Distribution. It’s an Eurasiatic species, found from Spain to Mongolia, north of China and Korea [3].

Conservation. The IUCN European status of *Heteropterus morpheus* is least concern [5]. The worst threat is the habitat loss.

Conclusions

The species *Heteropterus morpheus* (Pallas, 1771) identified as a new species for the fauna of the Republic of Moldova, complements the existing data about the spread of *Hesperiidae* family in Europe. The number of *Hesperiidae* species identified on the territory of the Republic of Moldova reached 20.

The presence of the rare and protected at European and local level lepidopteran species indicate the importance and conservation value of a wide range of habitats that exist in the “Prutul de Jos” Natural Reserve.

Acknowledgments

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