

**Polypogon plumigeralis (Hübner, [1825])
new for the Hungarian fauna
(Lepidoptera, Noctuidae: Herminiinae)**

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Abstract – *Polypogon plumigeralis* (HÜBNER, [1825]) is a Mediterranean species with a documented vagrant inclination. Confirming a record by a not properly labelled old specimen it was observed in Hungary in August 2007, on Csepel Island, Budapest followed by 15 other observations at altogether 8 different localities. This led the authors to speculate that this species might be regarded as being established in Hungary, as a result of climatic change. With three figures.

Key words – First records, *Polypogon plumigeralis*, Hungary.

INTRODUCTION

The last checklist of the Macroheterocera fauna of Hungary (VARGA *et al.* 2004) mentions three species of the genus *Polypogon* SCHRANK, 1802 known to occur in Hungary: *P. tentacularia* (LINNAEUS, 1758), *P. gryphalis* (HERRICH-SCHÄFFER, 1851) and *P. strigilata* (s. l.) (LINNAEUS, 1758). *Polypogon plumigeralis* (HÜBNER, [1825]) is easy to distinguish from the other three congeners by the bipectinate antennae of the males and features of the upper forewing of both sexes: the sharply represented orbicular and reniform stigmata and a sub-terminal line are much lighter than the ground colour (Figs 1–2).

Polypogon plumigeralis is a Holo-Ponto-Mediterranean species (KRAVCHENKO *et al.* 2006) characterised by a vagrant inclination. Although its northernmost known population is located around Herkulesfürdő (Băile Herculane, Romania), migratory specimens were recorded far off its contiguous distribution area, in Great Britain, Belgium (Prov. West-Wlaanderen, Oost-Wlaanderen and Hainaut), 2007 (DE PRINS & STEEMAN 2010), Poland (Prov. Swietokrzyskie, before 1960) (BUSZKO & NOWACKI 2000) and Austria (MALICKY *et al.* 2000). As described in the relevant literature, preferred habitat types include dry slopes, hillsides, forest edges and xerotherm bushy areas. Overwintering in larval stage, its caterpillar is polyphagous, feeding e.g. on Common Ivy (*Hedera helix*), Common Broom (*Cytisus scoparius*) or Rose species (*Rosa* spp.) (HACKER 1989). The first author found a single male specimen in the Lepidoptera Collection of the Hungarian Natural History Museum, collected – as stated on its locality label – in Budapest, but unfortunately lacking any information on the date of collecting.

The first documented Hungarian specimen of the species was caught by the first author in 2007, in a suburban area of the 21st district of Budapest (Csepel, Királyerdő), feeding on sugar bait. Later on the species was observed several times and in greater numbers at this locality, and was also recorded at eight other localities listed below (Fig. 3).



Figs 1–2. *Polypogon plumigeralis* (HÜBNER, [1825]), 1 = adult female (wingspan: 27 mm), 2 = adult male (wingspan: 26 mm), Hungary, Budapest, Csepel, Soroksár Ferry Port, 10.VIII.2008, leg. G. PETRÁNYI & F. RÓTH

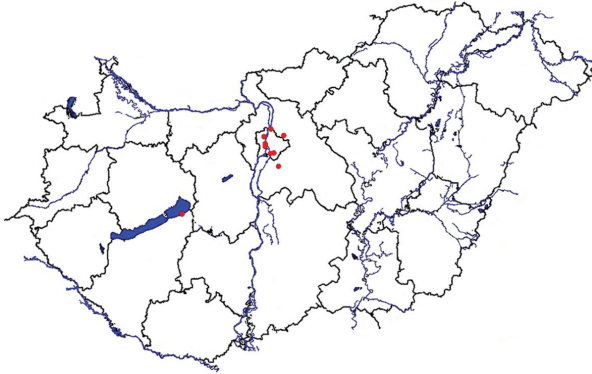


Fig. 3. Distribution of *Polypon plumigeralis* (HÜBNER, [1825]) in Hungary

RECORDS OF *POLYPOGON PLUMIGERALIS* FROM HUNGARY

1. Budapest: Csepel, 18.VIII.2007, leg. B. TÓTH, det. L. RONKAY (1 male).
2. Budapest: Csepel, Királyerdő, bank of Soroksári-Duna, 25.VII.2008, leg. B. TÓTH, det. L. RONKAY (1 male).
3. Budapest: Csepel, Királyerdő, bank of Soroksári-Duna, 26.VII.2008, leg. B. TÓTH, det. L. RONKAY (3 males).
4. Budapest: Csepel, Királyerdő, bank of Soroksári-Duna, 6.VIII.2008, leg. B. TÓTH (11 males, 9 females).
5. Budapest: Csepel, Soroksár Ferry Port, 7.VIII.2008, leg. G. PETRÁNYI (1 male).
6. Budapest: 11th district, Andor u., 7.VIII.2008, leg. T. SZABÓ, det. Cs. SZABÓKY (1 female).
7. Budapest: Csepel, Soroksár Ferry Port, 10.VIII.2008, leg. G. PETRÁNYI & F. RÓTH (9 males, 11 females).
8. Somogy county: Siófok-Sóstó, near the shores of Balaton, 12.VIII.2008, leg. B. TÓTH (1 male).
9. Budapest: Káposztásmegyer, 16.VIII.2008, leg. L. RONKAY (1 male).
10. Budapest: Gellért-hegy, Botanical Garden of Corvinus University of Budapest, 26.IX.2008, leg. Cs. SZABÓKY (1 female).
11. Budapest: Káposztásmegyer, 9.V.2009, leg. L. RONKAY (1 female).
12. Budapest: Csepel, Királyerdő, bank of Soroksári-Duna, 25.V.2009, leg. B. TÓTH (4 males, 4 females).
13. Budapest: Soroksár, Botanical Garden, 7.VIII.2009, leg. Cs. SZABÓKY (1 female).
14. Pest county: Kistarcsa, Zsófia-liget, 12.IX.2009, leg. Cs. SZABÓKY (1 female).
15. Pest county: Ócsa, Madárvárta, 24.IX.2009, leg. D. KARSAI & G. PETRÁNYI (1 female).
16. Budapest: Mátyás-hegy, 7.X.2009, leg. Cs. SZABÓKY (1 female).

The specimens are deposited in the Lepidoptera Collection of the Hungarian Natural History Museum, Budapest (1, 2, 3, 4, 9, 12) the collection of the Zephyr Blue Foundation (Fóti Boglárka Alapítvány), Budapest (5, 7, 15.), the private collection of CSABA SZABÓKY (10, 13, 14, 16) and the private collection of TIBOR SZABÓ (6). Two specimens were destroyed (8, 11). Methods of collecting include the use of sugar baits (1, 2, 3, 4, 5, 7, 8, 12), which proved to be the most effective in the case of this species, but single specimens were also observed while collecting by 125W HgLI lamp (10, 13, 14, 15, 16) or at the light from apartment windows (6, 9, 11). Automatic light traps working with PHILIPS TL 8W UV light tubes did not catch the species, even when sugar baits were collecting successfully at the same time (4, 5, 7, 8), so we might suggest that the species is only weakly attracted by UV light.

The presence of the species in Hungary in three consecutive years and in high specimen numbers leads to the assumption that stable populations are breeding in Hungary, though this should be confirmed by an observation of the early stages. The species is obviously not disturbed by anthropogenic activity, as most of the records come from suburban areas. In most cases there are wet biotopes (lakes, rivers, marshes) near of the places of our observations, so we might suggest that these biotopes are also preferred by the species. Further investigation is needed to establish the ecological reasons in the background of the appearance of the species in Hungary and to decide, whether it might be regarded as a positive example of a northward distribution area shifting due to climate change (PARMESAN 1996).

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