

short communication/kratko priopćenje

**HEMERODROMIA RAPTORIA (MEIGEN)
A NEWLY RECORDED SPECIES OF AQUATIC
DANCE FLIES (DIPTERA, EMPIDIDAE)
IN CROATIA AND ITS DISTRIBUTION ON
BALKAN PENINSULA**

MARIJA IVKOVIĆ¹ & BOGDAN HORVAT²

¹Department of Zoology, Faculty of Science, University of Zagreb,
Rooseveltov trg 6, HR-10000 Zagreb, Croatia

²Slovenian Museum of Natural History, Prešernova 20, POB 290,
SI-1001 Ljubljana, Slovenia

Ivković, M. & Horvat, B.: *Hemerodromia raptoria* (Meigen) a newly recorded species of aquatic dance flies (Diptera, Empididae) in Croatia and its distribution on Balkan Peninsula. Nat. Croat., Vol. 16, No. 1., 79–82, 2007, Zagreb.

During collection work on the Odra River, Turopolje, at the Selečki most site, in September 2005 and July, August and September 2006 a species of aquatic dance flies, *Hemerodromia raptoria* (Meigen), was recorded for the first time in Croatia. Altogether 10 specimens were collected (5 ♂, 5 ♀). This is the second record of this species for the Balkan Peninsula. The species area of distribution has been expanded.

Key words: aquatic Empididae, *Hemerodromia raptoria*, Croatia, Balkan Peninsula

Ivković, M. & Horvat, B.: *Hemerodromia raptoria* (Meigen), nova vrsta vodene muhe plesačice (Diptera, Empididae) u Hrvatskoj i njezina rasprostranjenost na Balkanskom poluotoku. Nat. Croat., Vol. 16, No. 1., 79–82, 2007, Zagreb.

Prilikom sakupljanja na rijeci Odri u Turopolju, na lokaciji Selečki most, u rujnu 2005. godine i srpnju, kolovozu i rujnu 2006. godine zabilježena je vrsta *Hemerodromia raptoria* (Meigen) kao nova vrsta u fauni Hrvatske. Sveukupno je prikupljeno 10 jedinki (5 ♂, 5 ♀). To je drugi nalaz za Balkanski poluotok. Areal rasprostranjenosti vrste je time proširen.

Ključne riječi: vodene Empididae, *Hemerodromia raptoria*, Hrvatska, Balkanski poluotok

INTRODUCTION

There has never been any systematic research into aquatic dance flies in Croatia. In consequence, there is very little faunistic information regarding aquatic empidids

(BECKER, 1889; HORVAT, 1990, 1993; SIVEC & HORVAT, 2002; WAGNER, 1981, 1995a, 1995b). As a result of collection work along the Odra River in Turopolje, at the Selečki most site (97 m a.s.l.) in September 2005 and July, August and September 2006, a new species of aquatic dance flies (Diptera, Empididae), *Hemerodromia raptoria*, was recorded for the first time in Croatia.

MATERIAL AND METHODS

Altogether 10 specimens were collected (5 ♂, 5 ♀), using the sweep method. The specimens were preserved in 80% alcohol, and for the purpose of determination the males were dissected and the abdomens with the genitalia were boiled in potassium hydroxide and then they were placed in acetic acid and clove oil and determined on Stemi-2000 C microscope. Determination was carried out according to COLLIN (1961).

RESULTS

Hemerodromia raptoria (Meigen, 1830)

Material examined: Selečki most, Odra River, Turopolje, 97 m a.s.l.: September 5th 2005 (1 ♂); July 30th 2006 (3 ♂, 2 ♀); August 26th 2006 (3 ♀); September 17th 2006 (1 ♂).



Fig. 1. Male hypopygium of *Hemerodromia raptoria* (Meigen), left lateral view.

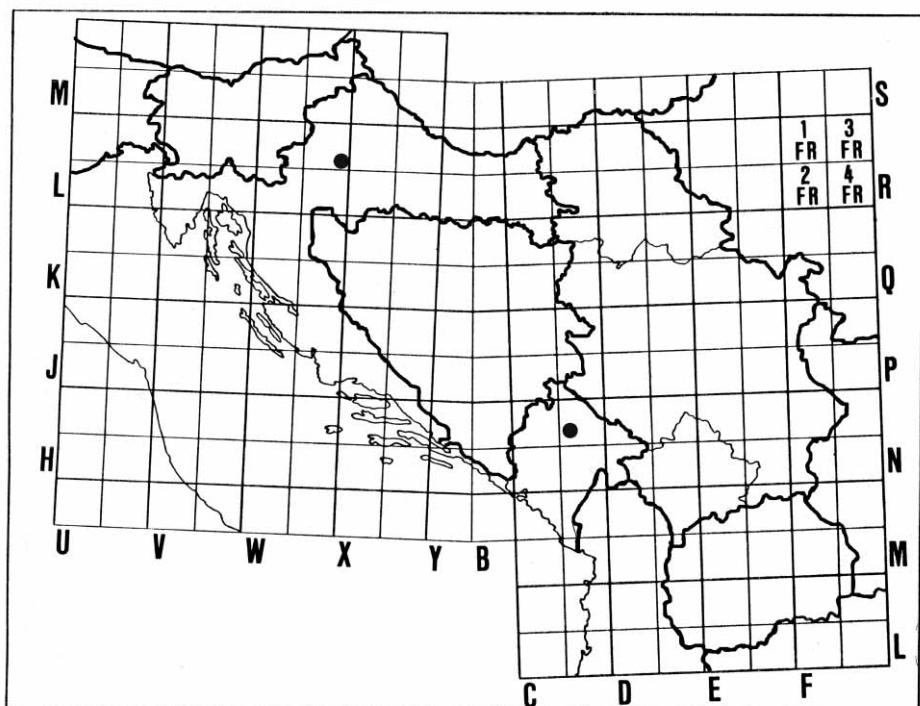


Fig. 2. Distribution of *Hemerodromia raptoria* (Meigen) on the Balkan Peninsula.

Differential characters of *H. raptoria*:

Genitalia ♂: dorsal lamellae widening out and convex, each ending in two finger-like processes the lower of which is longer than the upper, and both curving round to meet the corresponding processes of the other lamella; lateral lamellae curved round beneath dorsal lamellae and ending in a point there, but just above this point from the inner side of each lamella there projects upwards a flattened blunt-ended process which is denticulate on its inner margin; hypandrium long and rather densely clothed with whitish pile towards its end; Dorsal lamellae above, and lateral lamellae at end, with some long brown hairs (Fig. 1).

Remarks: *Hemerodromia raptoria* has been recorded in Sweden, Finland, Great Britain, Belgium, Germany, Bohemia, Slovakia, Austria and Spain (CHVÁLA & WAGNER, 1989) but was recorded only once on the Balkan peninsula, in Montenegro, on Durmitor mountain, Branovo, Riblje and Vražje jezero (1400 m a.s.l.) (WAGNER, 1995a). This new record of aquatic dance fly *Hemerodromia raptoria* on the Odra River in Turopolje (Selečki most) is not only a new record for the Croatian fauna, it is also the second record for the whole Balkan Peninsula (WAGNER, 1995a) (Fig. 2).

Received November 23, 2006

REFERENCES

- BECKER, T., 1889: Neue Dipteren aus Dalmatien. Berliner Entomologische Zeitschrift **33**, 335–346.
- CHVÁLA, M. & WAGNER, R., 1989: Empididae. In: SOOS, A. & PAPP, L. (eds.), Catalogue of Palaearctic Diptera, Bd 6. Akademiai Kiado and Elsevier Science publ., Budapest-Amsterdam, p. 313–314.
- COLLIN, J. E., 1961: British Flies: Empididae: Empidinae (Part) and Hemerodromiinae. Part III. At the University Press, Cambridge, p. 713–724.
- HORVAT, B., 1990: Aquatic Dance Flies of the Subfamily Hemerodromiinae (Diptera: Empididae) in Yugoslavia. Scopula **20**, 1–27.
- HORVAT, B., 1993: A New *Hemerodromia* Species from Submediterranean Slovenia and Croatia (Diptera, Empididae: Hemerodromiinae). Aquatic Insects **15**(4), 229–231.
- SIVEC, I. & HORVAT, B., 2002: Vrbnice (Plecoptera) in vodne muhe poplesovalke (Diptera, Empididae) reke Dragonje. Varstvo narave **19**, 53–58.
- WAGNER, R., 1981: Über einige Hemerodromiinae vom Balkan und aus der Ägäis. Spixiana **4**(3), 297–304.
- WAGNER, R., 1995a: Empididen aus dem Mittelmeerraum (Diptera, Empididae: Hemerodromiinae und Clinocerinae). Acta Entomologica Slovenica **3**(1), 5–23.
- WAGNER, R., 1995b: A Revision of the Genus *Heleodromia* (Diptera, Empididae) in Europe. Aquatic Insects **7**(1), 33–43.

S A Ž E T A K

***Hemerodromia raptoria* (Meigen), nova vrsta vodene muhe plesačice
(Diptera, Empididae) u Hrvatskoj i njezina rasprostranjenost na
Balkanskom poluotoku**

M. Ivković & B. Horvat

Prilikom sakupljanja na rijeci Odri u Turopolju, na lokaciji Selečki most, u rujnu 2005. godine, te srpnju, kolovozu i rujnu 2006. godine zabilježena je vrsta *Hemerodromia raptoria* (Meigen) kao nova vrsta vodenih muha plesačica (Diptera, Empididae) u fauni Hrvatske (BECKER, 1889; CHVÁLA & WAGNER, 1989; HORVAT, 1990, 1993; SIVEC & HORVAT, 2002; WAGNER, 1981, 1995a, 1995b). Uhvaćeno je 5 mužjaka i 5 ženki i to pomoću entomološke mrežice. Vrsta *Hemerodromia raptoria* je rasprostranjena diljem Europe, dok je na području Balkana zabilježena samo jednom u Crnoj Gori (WAGNER, 1995a) te joj je ovo drugi nalaz.