

**NEW RECORDS OF THE SPECIES OF THE GENUS *VELIA* LATREILLE 1804,
TAMANINI 1947 (GERROMORPHA: VELIIDAE) IN ROMANIA**

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Rezumat

**Noi semnalări ale speciilor genului *Velia* Latreille 1804, Tamanini 1947
(Gerromorpha: Veliidae) în România**

În această lucrare prezentăm noi date referitoare la răspândirea speciilor din genul *Velia* în România, considerate rare în fauna țării noastre. În probele prelevate din pârâul Sărata am identificat 15 exemplare masculine aparținând speciei *Velia rivulorum* și 7 exemplare feminine din specia *Velia (Plesiovelia) caprai*. Este prima semnalare a speciilor din genul *Velia* în bazinul Oltului.

Lucrarea conține și o scurtă descriere a genului și caractere de identificare a celor două specii colectate de noi.

Key words : *Velia* Genus, new records, Romania

The species of the family Veliidae live on the water surface. They have their body covered with a thick pubescence, especially on the ventral side and on the legs. The head is shorter than the thorax including the scutellum. Both the antennae and the rostrum are made up of four segments. The intermediary legs are placed at an approximately equal length from both the fore and hinder legs. The hemi elytra present a short clavus and the corium and the membrane are not clearly separated.

The family Veliidae is represented on the territory of our country by two genera: *Microvelia* (with two species) and *Velia* (with six species).

The species of genus *Velia* are longer than those from genus *Microvelia*, having the length between 6-9 cm. They have two sensorial organs pseudocellar having the shape of a comb like the letter Y. These insects use, in their fast shifting on the water, only the intermediary legs. The fore legs are used for catching the prey. The tarsi have three segments.

At the males, the fore tibias have brushes for toilet and combs; the hinder thighbones are thicker and have two or three strong and sharp teeth (generally two), associated with other teeth on the ventral edge. These teeth are distributed on two rows, the strongest ones being in the external row. The hinder tibias are long and curved to the inside part otherwise the intermediary ones. As well as the hinder thighbone, the hinder tibias of the males have a row of sharp asperities situated on the inner edge. Mesonotum is almost all covered by pronotum at the wingless specimens. There are macropterous, brachypterous and wingless individuals.

The morphology of the 8th and 9th tergites, of the male's parameres and the sclerites of the aedeagus are among the best characters for identification (Fig. 1 and Fig. 2).

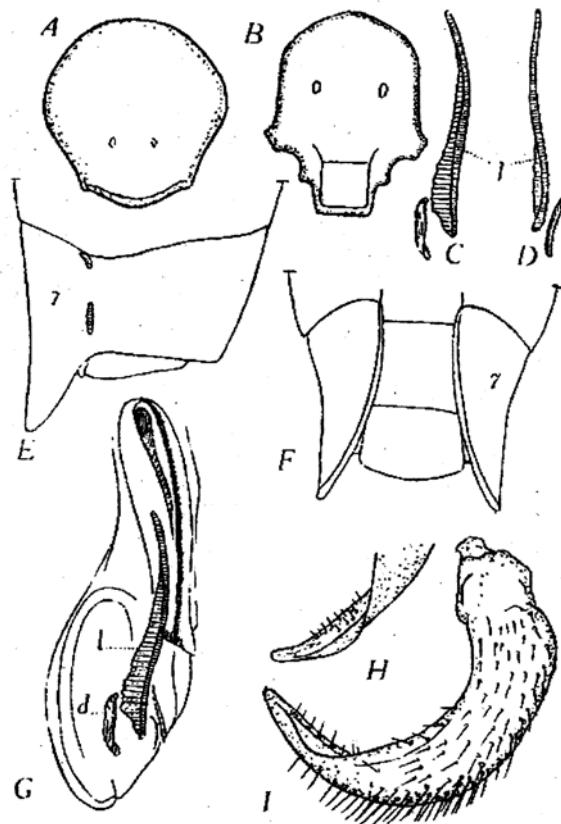


Fig. 1: *Velia caprai*

- A: the 9th abdominal tergite at female;
- B: the 9th abdominal tergite at male;
- C–D: sclerites of the aedeagus;
- E: the 7th abdominal segment of female – on a side;
- F: female abdomen extremity - dorsal;
- G: the aedeagus fitting of a male – profile; H: paramere extremity;
- I: paramere (after Poisson R., 1957).

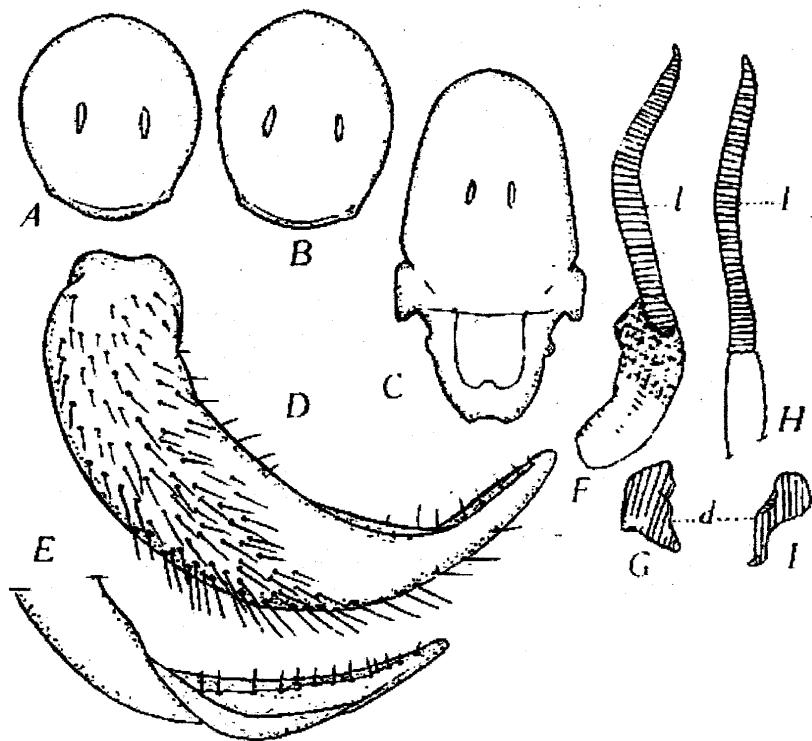


Fig. 2: *Velia rivulorum*

A–B: two aspects of 9th abdominal tergite at female;
 C : the 9th abdominal tergite at male;
 D–E: parameres;
 F–G: sclerites of the aedeagus – profile;
 H –I: sclerites of the aedeagus – front side;
 (after Poisson R., 1957).

Ecology: the species of genus *Velia* are to be found on still waters of lakes and ponds or along the shady rivers. They are gregarious and predatory insects.

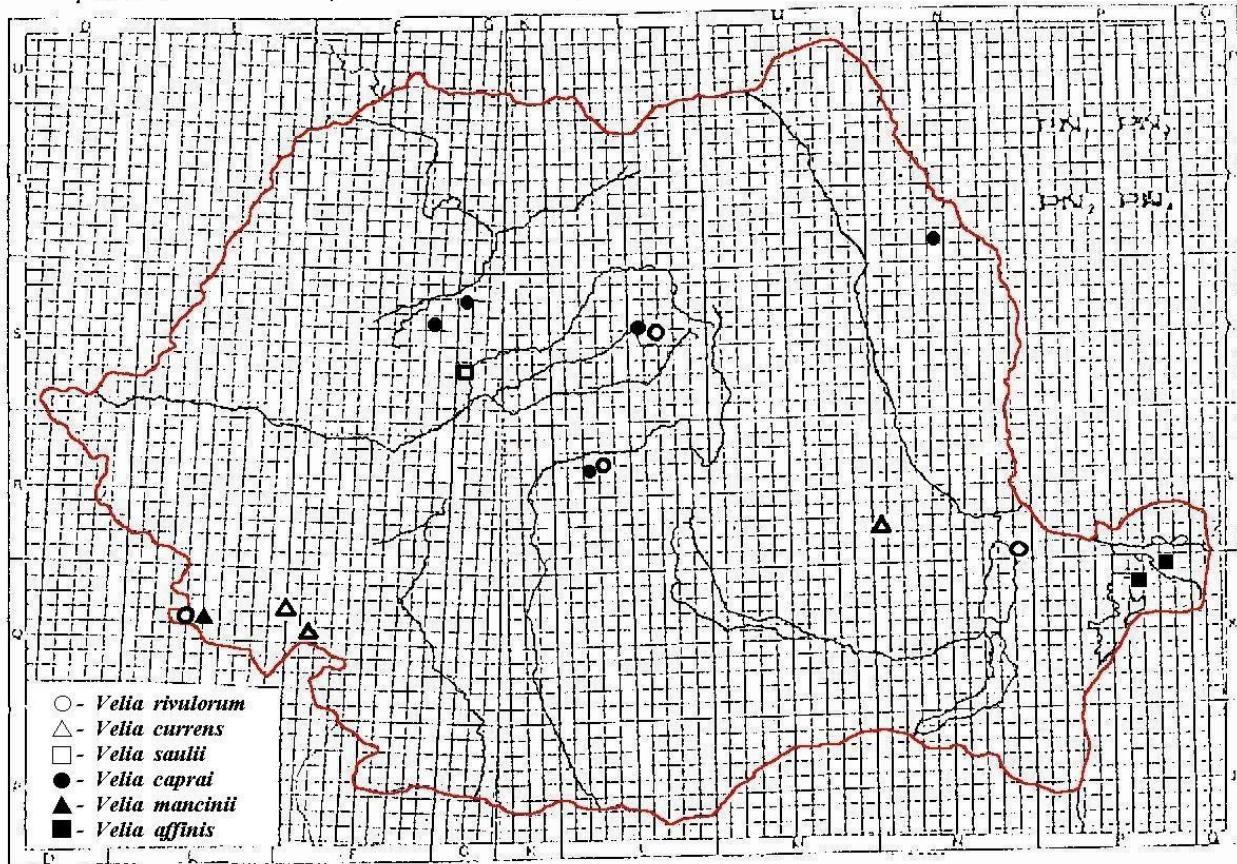
Spreading: the species of genus *Velia* are considered to be rare in Romania (the records are very few). They have been recorded in the following places in Romania (Map 1):

- *Velia rivulorum*: Caraș-Severin county: Baziaș 1873 (Horváth G.), Sfânta Elena (Horváth G.); Harghita county: Praid 10.09.2001 (Ilie Daniela); Sibiu county: Sărata 4.05.2002 (Ilie Daniela); Tulcea county: Măcin (Sienkiewicy I.).
- *Velia currens*: Buzău county: Râmnicu Sărat (Montandon A.); Caraș-Severin county: Mehadia (Lörincz A.); Mehedinți county: Orșova (Horváth G.); Sălaj county: Ungurului Valley (Horváth G.); Cernei Valley (Botoșaneanu L.); Arieșurilor basin 1950-1952 (Botoșaneanu L.); Dobrogea (Horváth G.), Plopișului Mountains (Horváth G.).
- *Velia saulii*: Alba county: Aiud IV !970 (Kis B., Davideanu Ana).

- *Velia caprai*: Cluj county: Cluj IV 1976, Băișoara VII 1978; Iași county: Bârnova VI 1997; Zarandului Mountains VIII 1968 (all the records belong to the authors Kis B., Davideanu Ana); Harghita county: Prajd 10.09.2001 (Ilie Daniela); Sibiu county: Sărata 4.05.2002 (Ilie Daniela).
- *Velia mancinii*: Caraș-Severin county: Baziaș 1873 (Benedek P.).
- *Velia affinis*: Tulcea county: Murighiol VIII 1972 (Kis B., Davideanu Ana), Caraorman VIII 1995 (idem).

We collected individuals from species *Velia rivulorum* and *Velia (Plesiovelia) caprai* from Sărata rivulet, a tributary of the Olt River from Făgăraș Mountains. The sampling stations are situated on the superior course of the rivulet upstream the locality, in the forest zone. The individuals are to be found on the banks of the rivulet, in quiet and shady places. On the 4th of May 2002 we collected 15 male individuals from *Velia rivulorum* species and 7 female individuals from *Velia (Plesiovelia) caprai* species, all being wingless.

Having the chance of the first record of these two species in the Olt basin, we believe that the further investigations that we intend to make on the other tributary of Olt River from Făgăraș Mountains will get to positive results.



Map 1: The spreading of the species of genus *Velia* in Romania.

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