

# ***Hermaeophaga mercurialis* (Fabricius, 1792) – a new genus and species of flea beetle (Coleoptera: Chrysomelidae) in the Latvian fauna**

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The first record of the flea beetle, *Hermaeophaga mercurialis* (Fabricius, 1792) in the Latvian fauna is presented. Six specimens of this species were found in the Daugavpils district of Naujene (south-eastern Latvia). Information on the distribution and biology of this species are presented in this paper.

Key words: Coleoptera, Chrysomelidae, *Hermaeophaga mercurialis*, fauna, Latvia.

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## **INTRODUCTION**

Three species of the genus *Hermaeophaga* Foudras, 1860 have been reported from Europe (Gruev, Döberl 1997; Warchalowski 2003) and only one species from north-eastern Europe (Bieńkowski 2004; Silfverberg 2004). Amongst the northern European, species *Hermaeophaga mercurialis* (Fabricius, 1792) is distributed across Sweden, Denmark, Estonia and Lithuania, but has not been previously reported from Latvia (Silfverberg 2004).

The larvae of *Hermaeophaga* Foudr. develop on the roots of plant species of the genus *Mercurialis* (Bieńkowski 2004).

The Latvian leaf-beetle fauna of the subfamily Alticinae Newman, 1834 contains 134 species and

18 genera (Telnov 2004; Telnov *et al.* 2007; Bukejs 2008). 105 species and 17 genera of flea beetle have been reported from Lithuania (Silfverberg 2004), with 126 species and 19 genera for Byelarus (Lopatin, Nesterova 2005), 94 species and 17 genera for Estonia (Silfverberg 2004).

More than 15 scientific papers have been published on the flea beetle fauna of Latvia. The first records of species of the Alticinae Newman, 1834 subfamily from the Latvian fauna appeared in the following publications (Fischer 1784, 1791; Groschke 1805; Müthel 1889; Seidlitz 1887-1891; and others).

Some publications are specially devoted to study of a fauna of the flea beetles of Latvia (Palij 1958; Pūtele 1958, 1960, 1965, 1968, 1970a, 1970b, 1970c,



Fig. 1. Localition of *Hermaeophaga mercurialis* (F.) record from Naujene, Latvia.

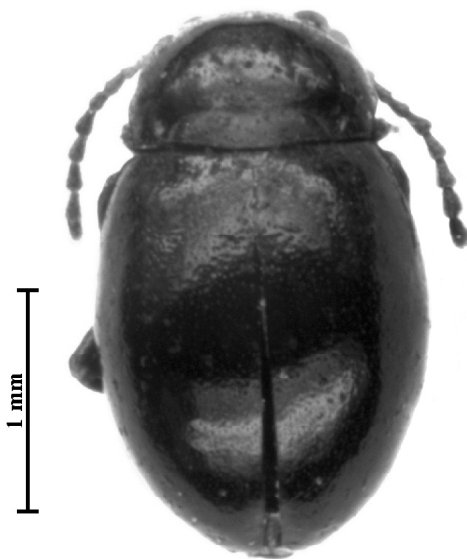


Fig. 2. *Hermaeophaga mercurialis* (F.) habitus.

1971a, 1971b). In 1993, A. Barðevskis (1993) published a monograph entitled “The beetles of Eastern Latvia,” which contained data on about 61 species from 15 genera of the Alticinae subfamily. Also some faunistic data on the flea beetle fauna of Latvia are contained in Šmits (1962), Pūtele (1974, 1981), Petrova *et al.* (2000), Petrova *et al.* (2006) and Bukejs and Telnov (2007).

## RESULTS AND DISCUSSION

During a study of the leaf-beetle fauna of Latvia, the genus and species of flea beetle *Hermaeophaga mercurialis* (Fabricius, 1792) was recorded for the first time.

The material and locality (Fig. 1): Latvia, Daugavpils district, Naujene, Juzefova park, 27.IV.2007 (6 specimens) leg. K.Aksjuta and M.Murd. The examined material is stored in Daugavpils University Institute of Systematic Biology (DUBC).

The species *Hermaeophaga mercurialis* (Fabricius, 1792) is distributed across Europe north of the Pyrenees, Central Italy and the



Fig. 3. *Hermaeophaga mercurialis* (F.) aedeagus in dorsal (A) and lateral (B) aspects.

Dinaric Alps, including Ukraine, England (south) and Asia Minor (Gruev, Döberl 1997; Warchalowski 2003). In the Baltic states and Fennoscandia, it is known from Lithuania, Estonia, Denmark and Sweden (Silfverberg 2004). It has also been recorded from Byelarus (Lopatin, Nesterova 2005), the Kaliningrad region (Alekseev 2003) and the Caucasus (Bieńkowski 2004), but not from St. Petersburg and the Leningrad province (Russia) (Romantsov 2007).

*Hermaeophaga mercurialis* (Fabricius, 1792) is a stenotopic, silvicol, herbicol and phyllophagous species (Koch 1992). It is a monophagous species and occurs on the host plant species, *Mercurialis perensis*. From Austria, it has also been recorded from the species *Mercurialis ovata* (Koch 1992). This species inhabits deciduous forests, and also parks and gardens.

The upper side of *Hermaeophaga mercurialis* (Fabricius, 1792) (Fig. 2, 3) is black with feeble bluish metallic reflection. The transverse impression of the pronotum is joined to the basal margin by two short, longitudinal furrows. Elytra with randomly scattered punctuation. Humeral calli are absent and the body is broadly-oval and convex. The frons and vertex are smooth and strongly shiny, with a few strong punctures between the eyes. Body length is 2.3 – 3.2 mm (Bieńkowski 2004; Warchalowski 2003).

*Hermaeophaga mercurialis* (Fabricius, 1792) is published as a new species to Latvia of the genus *Hermaeophaga*, which is also new to Latvia. After this record, the Latvian fauna of leaf-beetles of the subfamily Alticinae comprises a total of 19 genera and 135 species.

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# The Seventh Symposium of Baltic Coleopterologists

**The Seventh Symposium of Baltic Coleopterologists will be held at the Hyytiälä Forestry Research Station, in Central Finland. The dates of the Symposium will be wed. 3rd - sat 6th September 2008. The programme will include plenary presentations from prominent Finnish entomologists, poster and oral presentations, barbecue party, Symposium dinner, an excursion to a variety of regionally typical habitats and an opportunity to visit the SMEAR-II station (Measuring Forest Ecosystem - Atmosphere Relations). A book or abstracts will be provided for participants and all those who present papers (either oral or poster) will be invited to submit a paper for publication in the proceedings.**

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