

## Three beetle (Coleoptera) species new for Estonia found in Saaremaa Island

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Three Coleoptera species are reported as new for Estonia. *Harpalus melancholicus* Dejean, 1829 (Carabidae), *Falagrioma thoracica* (Stephens, 1832) (Staphylinidae), and *Tetrops starkii* Chevrolat, 1859 (Cerambycidae) were all found in Saaremaa Island, western Estonia, in summer 2012.

Tässä tiedonannossa ilmoitan kolme Virolle uutta kovakuoriaislajia. Maakiitäjäislaji *Harpalus melancholicus* Dejean, 1829 (Carabidae), lyhytsiipislaji *Falagrioma thoracica* (Stephens, 1832) (Staphylinidae) ja jäärlaji *Tetrops starkii* Chevrolat, 1859 (Cerambycidae) löytyivät kaikki Saarenmaalta kesällä 2012.

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During the past five years, from 2009 to 2013, I have frequently collected beetles in Saaremaa Island, Estonia. Among the several hundreds of species ascertained so far, there are also some species that have not been recorded in Estonia previously. In this short communication I report three beetle species (Coleoptera) as new for the country.

### *Harpalus melancholicus* Dejean, 1829

I caught three individuals of this species by pit-fall trapping in a coastal dune area in Mändjala – Keskranna beach (Saare county, Kaarma Parish, about 58°12'N 22°18'E; Fig. 1) in 19–27 July, 2012. *H. melancholicus* has not been recorded in the Baltic countries or eastern Fennoscandia before (Silfverberg 2010; Telnov 2004, 2011; Tamutis et al. 2011). There are scattered records from Denmark and southern Sweden, closest records being from the Baltic islands Öland and Gotland (Lindroth 1986; Ljungberg 2005a). In Sweden, the species is restricted to open, dry quicksand areas close to the coast (Ljungberg 2005a). It has strongly declined both in Northern and Central Europe and is currently classified as vulnerable in Swe-

den and endangered in Denmark (Ljungberg 2005a).

*H. melancholicus* is a medium-sized, black *Harpalus* with rufous, slightly infuscated legs and antennae (Fig. 2). The species can be rather easily separated from all other north European *Harpalus* spp. by having a short row of punctures near the apex of the eight elytral interval.

### *Falagrioma thoracica* (Stephens, 1832)

I found about twenty individuals of this species in a coastal dune area in Mändjala – Keskranna beach (Saare county, Kaarma Parish, about 58°12'N 22°18'E; Fig. 1) in 27th July, 2012. The individuals were found walking on the sand between *Elymus* tussocks and other vegetation, close to a small brook flowing to the sea. *F. thoracica* has not been recorded in the Baltic countries before (Silfverberg 2010; Telnov 2004, 2011; Tamutis et al. 2011). There are scattered records from Denmark, southern Sweden and Norway, and southern Finland, the closest records being from the Baltic island Gotland (Palm 1968; Ljungberg 2005b; Solevåg 2006). Most records are from dry,



**Fig 1.** Mändjala-Keskranna dune area, the habitat for *Harpalus melancholicus* Dejean and *Falagrioma thoracica* (Stephens).

sandy soils, including coastal fine-sand cliffs in Sweden (Ljungberg 2005b).

*F. thoracica* is a readily recognizable rove beetle species: it has a large, convex head with a very narrow neck, and the pronotum has a sharp medial groove (like *Falagria* species); pronotum and elytra are reddish brown, head and abdomen are dark brown (Fig. 3).

### ***Tetrops starkii* Chevrolat, 1859**

I found one individual of this species by sweep-netting lower branches of some large spruce trees growing in the churchyard of Kaarma church (Saare County, Kaarma Parish, about 58°21'N 22°30'E) in 17th of July 2012. The specimen was easy to identify as a *Tetrops* sp., but there were no deciduous trees suitable as host trees for the common species *T. praeusta* nearby. Instead, there were tens of old individuals of European ash in the churchyard, which immediately made me suspect that the specimen could actually belong to *T. starkii*. Later examination verified the identity of the female specimen.

In the Baltic countries, *T. starkii* has earlier been recorded in Lithuania (Tamutis et al. 2011)

but not in Latvia (Telnov 2004, 2011). Hence, the present record extends the known distribution of the species over 200 km northwards. Within the Fennoscandian area, the species is missing from Finland (Silfverberg 2010), and is distributed from southernmost Norway to southeastern Sweden, the northernmost records being from Uppland province, about 60°30'N (Bílý and Mehl 1989; Ehnström and Holmer 2007; Lindhe et al. 2010).

*T. starkii* has been mixed with *T. praeusta*, and the true distribution and commonness of *T. starkii* are still insufficiently known. This is evidenced by the fact that the species was found for the first time as late as 1968 in Norway (Strand 1968), 1973 in Sweden (Lundberg 1974), and 1992 in Denmark (Mehl and Jorum 1992). *T. starkii* lives exclusively on European ash (*Fraxinus excelsior* L.). Larvae tunnel under bark of recently dead shoots and small branches, both on logging residues of small ash bushes and in the crowns of large trees (Ehnström and Holmer 2007). *T. starkii* (Fig. 4) differs from *T. praeusta* on the basis of several characteristics: The outer margins of elytra are usually infuscated; the sides of pronotum have only long, erect hairs (in *T. praeusta* both long and short hairs); the apices of elytra have slightly angulate outer corners (in *T. praeusta* evenly rounded outer corners); the last abdominal segment in female has a distinct transverse depression (lacks in *T. praeusta*) (Ehnström and Holmer 2007). Furthermore, the anterior tibiae of male are enlarged apically in *T. starkii* (simple in *T. praeusta*) (Bílý and Mehl 1989), and also the shapes of male genitalia differ between these two species (Strand 1968). Mehl and Jorum (1992) give a good overview (supplemented with drawings) on the distinguishing characters.

Mr. Mikko Pentinsaari has told me afterwards that he found one female individual of *T. starkii* in Helme castle (Valga County, Helme parish,

coordinates 58,0168N 25,8792E) in 26th of May 2011. This record indicates that *T. starkii* indeed has a wide distribution in Estonia.

## Acknowledgements

The identifications of the three species reported here were checked by the Finnish Beetle Expert Groups Rarity Committee (kovakuoriaistyöryhmän tarkistustyöryhmä). I thank Mikko Pentinsaari for the additional information on *T. starkii*.

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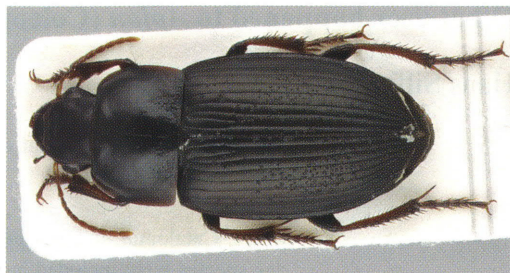


Fig 2. *Harpalus melancholicus* Dejean, 10 mm.

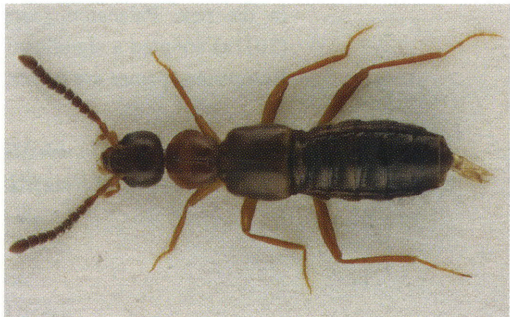


Fig 3. *Falagrioma thoracica* (Stephens, 1832), 2.5 mm.



Fig 4. *Tetrops starkii* Chevrolat, 4 mm.