



Beetle (Coleoptera) species new for Estonia found in Saaremaa island 2

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Six species of Coleoptera are reported as new for Estonia. *Agonum hypocrita* (Apfelbeck, 1904) (Carabidae), *Bledius tibialis* Heer, 1839 (Staphylinidae), *Agrilus olivicolor* Kiesenwetter, 1857 (Buprestidae), *Scymnus jakowlewi* Weise, 1892 (Coccinellidae), *Omophlus pubescens* (Linnaeus, 1758) (Tenebrionidae) and *Altica carinthiaca* Weise, 1888 (Chrysomelidae) were found in Saaremaa Island, western Estonia, in summers 2012 to 2014.

Tässä tiedonannossa ilmoitamme kuusi Virolle uutta kovakuoriaislajia. Kurekiittäjäislaji *Agonum hypocrita* (Apfelbeck, 1904) (Carabidae), pikkumerimyryriäinen *Bledius tibialis* Heer, 1839 (Staphylinidae), pähkinänjalosoukko *Agrilus olivicolor* Kiesenwetter, 1857 (Buprestidae), pikkupirkkolaji *Scymnus jakowlewi* Weise, 1892, pimikkökuoriaislaji *Omophlus pubescens* (Linnaeus, 1758) (Tenebrionidae) ja kirppalaji *Altica carinthiaca* Weise, 1888 (Chrysomelidae) löytyivät Saarenmaalta vuosina 2012–2014.

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In a previous note, three beetle species found in Saaremaa Island were reported as new for Estonia (Siitonen 2013). In this short communication we report further six beetle species (Coleoptera), collected in Saaremaa during 2012 to 2014, as new for Estonia. Coordinates for the records are given in the WGS84 coordinate system.

Agonum hypocrita (Apfelbeck, 1904)

One individual of this species was caught by pitfall trapping between a small eutrophic fen (luhtaletto in the Finnish mire type classification, Laine et al. 2012) and a marshy deciduous forest in Nasva (Saare county, Kaarma Parish, N58.231, E22.416) in 11 May – 10 July, 2013

(J. Siitonen leg.). The species occurred with tens of *Agonum emarginatum* (Gyllenhal) individuals and about ten *A. lugens* (Duftschmidt) individuals.

A. hypocrita is a medium-sized, black *Agonum* species (Fig. 1) resembling the common species *Agonum viduum* (Panzer). In the key by Lindroth (1986), *A. viduum* which has a metallic hue is coupled with an unmetallic black species called as *A. moestum* (Duftschmidt). However, *A. moestum* has later turned out to consist of three very similar species (Schmidt 1994): *A. emarginatum* (Gyllenhal) [= *afrum* (Duftschmidt)], *A. hypocrita* (Apfelbeck) and *A. duftschmidti* (Schmidt). A thorough account on the morphological differences and identification of these species was given by Ljungberg

(1996). *A. hypocrita* differs from the two closely related species by the slightly more elongated and narrow elytra, by the more rounded base of pronotum (in the two other species the base is straight in the middle), and by the shoulder angles that clearly protrude forwards. These relative characters are well illustrated in Ljungberg (1996) but, nevertheless, difficult to appreciate without having reference individuals at hand. However, as shown by Ljungberg (1996), the form of the male genital segment (the plate in which the aedeagus is attached) seems to constantly differ between the species.

A. hypocrita has previously been recorded in Latvia in the Baltic countries, as well as in Finland, Sweden and Denmark (Telnov 2004, Silfverberg 2010). While *A. emarginatum* occurs among vegetation on muddy or clayey shores, *A. hypocrita* seems to prefer different types of fens (Ljungberg 1996). In southern Sweden, *A. hypocrita* has so far only been found in three provinces (see <http://beetlebase.com/>). However, the species frequently occurs on open eutrophic fens where it can be caught in numbers by pitfall trapping (Wallin et al. 2000, Jonsell et al. 2011)

Bledius tibialis Heer, 1839

Three individuals of this species were found in a coastal dune area in Mändjala – Keskranna beach (Saare county, Kaarma Parish, N58.231, E22.309; for a photo of the habitat see Siitonen 2013) in 21st April, 2014 (J. Siitonen leg.). The individuals were caught in flight by netting. The 21st of April was one of the first summerly warm spring days, and the temperature was about 20°C degrees still at 7 PM in the evening. Thousands of *Bledius fergussoni* Joy individuals were swarming above the sandy shoreline and the *B. tibialis* individuals were found among these.

B. tibialis is a relatively small, black *Bledius* species which can be recognized by the very fine and dense punctures on both pronotum and elytra, and by the widely rounded inner corners of the elytral suture (Fig. 2).



Figure 1. *Agonum hypocrita* (Apfelbeck, 1904), 8 mm.



Figure 2. *Bledius tibialis* Heer, 1839, 2.5 mm.



Figure 3. *Agrilus olivicolor* Kiesenwetter, 1857, 5 mm.



Figure 4. *Scymnus jakowlewi* Weise, 1892, 2.5 mm.

B. tibialis has previously been recorded in Latvia in the Baltic countries, as well as in all the Nordic countries (Telnov 2004, Silfverberg 2010). In Finland, there is only one old record from Åland islands (Eckerö, Degersand), and the species was classified as regionally extinct in the latest Finnish red list (Rassi et al. 2010). In southern Sweden, there are scattered records from several counties, both from coastal areas and sandy river shores inland (Palm 1961, Berglind et al. 1997), the closest records being from the Baltic islands Gotland and Gotska Sandön (see: <http://beetlebase.com/>).

Agrilus olivicolor Kiesenwetter, 1857

One individual of this species was found by sweep-netting hazel bushes in a clear-cut area in Metsaküla (Saare county, Pihla parish, N58.348, E22.794) in 7th June, 2014 (J. Siitonen leg.).

A. olivicolor is a rather small and slender *Agrilus* species, with a dark, olive green or bronze color (Fig. 3). The species can be best distinguished from other *Agrilus* species by the fine white pubescence on the elytra, and by having a three-pointed prosternal process (similar to *A. laticornis*).

A. olivicolor is known from Latvia, Sweden, Norway and Russian Karelia (Silfverberg 2010). The species has a wide distribution in the western parts of southern Sweden from Skåne to Uppland (see: <http://beetlebase.com/>). However, in the Baltic area, the species was only recently found in Latvia (Telnov et al. 2007). Mr. Jaakko Mattila informed us that he found one individual of *A. olivicolor* in Estonia, Pärnu county, Pärnu N58.369, E24.558 in 8th July, 2012.

The main host species of *A. olivicolor* is obviously hazel (*Corylus avellana*) in the northern parts of its distribution area (Fennoscandia and Baltic region) though in central Europe several other host tree species are known, and hornbeam (*Carpinus betulae*) seems to be the preferred host (Ehnström 1999, Bílý 2002, Brechtel and Kostenbader 2002).

Scymnus jakowlewi Weise, 1892

One individual of this species was caught on a sun-exposed sandy heath near the Tehumardi memorial (Saare county, Salme parish, N58.176, E22.255) by pitfall trapping in 18th May – 13th June, 2012 (J. Salokannel leg.).

S. jakowlewi belongs to the group of black *Scymnus* species with two red spots on the elytra. These spots are located on the rear part of the elytra in *S. jakowlewi* (Fig. 4). In the neighboring countries, *S. jakowlewi* is known from Latvia, Finland, Sweden and Norway (Silfverberg 2010). The species is generally rare and has a northeastern distribution in Europe (Freude et al. 1967).

Omophlus pubescens (Linnaeus, 1758)

Three specimens of this species were found on a sun-exposed sandy heath near the Tehumardi memorial (Saare county, Salme parish, N58.176, E22.255) (Fig. 7). Two of the specimens were caught by pitfall trapping in 18th May – 13th June and one by sweep-netting 13th of June 2012 (J. Salokannel leg.).

O. pubescens (Fig. 5) is previously known from Latvia, Lithuania, Russian Karelia and Sweden (Silfverberg 2010). This characteristic species is considered rare in northern Europe. In the Latvian check-list of beetles, the species is described as being very rare and insufficiently known (Telnov et al. 2004). In Sweden, *O. pubescens* is only known from the Öland island, and the species is classified as endangered. The larvae live in soil feeding on dead roots. The species occurs in dry, warm places, such as edges of pine forest on sandy soils. The adult beetles can be found on vegetation, for instance on flowering pines and grasses, in June (Lundberg and Ehnström 2000).

Jaakko Mattila informed us that he discovered an earlier Estonian record of the species from the collection of Zoological Museum of Helsinki: one specimen from Saaremaa, Torgu parish, Mäebe 31st of May 1990 (M. Koponen leg.).



Figure 5. *Omophlus pubescens* (Linnaeus, 1758), 10 mm.



Figure 6. *Altica carinthiaca* Weise, 1888, 3.5 mm.



Figure 7. Dry, sandy heathland close to Tehumardi memorial in Salme parish, the habitat where *Omophlus pubescens* and *Scymnus jakowlewi* were found.

Altica carinthiaca Weise, 1888

One female specimen (Fig. 6) was found in Pilguse (Saare county, Lümända parish, N58.265, E21.974) on a road embankment in the middle of an alvar habitat. The specimen was caught by pitfall trapping in 17th May – 11th June, 2012 (J. Salokannel leg.), together with e.g. *Brachinus crepitans* (Linnaeus, 1758).

In general, the identification of females of the flea beetle genus *Altica* is difficult. However, as shown by Kangas and Rutanen (1993), the identification of females is possible and should be based on both external characteristics and on the secondary genitalia, styles and spiculum ventrale. Kangas and Rutanen (1993) give an identification key for the 12 *Altica* species found in Finland (including *A. carinthiaca*) and illustrate their secondary genitalia. Photos of the styles of the 14 *Altica* species occurring in Latvia (including *A. carinthiaca*) can be found in Bukejs (2011). Good photos of the habitus and male genitalia of *A. carinthiaca* can be found in Borowiec and Ścibior (2008).

A. carinthiaca is previously known from Latvia, Finland and Norway (Silfverberg 2010). In both southwestern Finland and Latvia, the species is widely distributed, and the main host plant is *Lathyrus pratensis* (Kangas & Rutanen 1993, Bukejs 2011).

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