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## MYCETOPHILIC SPECIES OF HYDROPHILIDAE FROM BELARUS

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The terrestrial hydrophilid beetles are not typically mycetobiont. These beetles are rarely observed on fungi and myxomycetes and are mycetophilic species (Smetana, 1978, 1988; Nikitsky, 1996; Ryndevich, 1991; 2004, 2007; Ryndevich, Prokin, 2017; Ryndevich, Shatrovsky, 1995; Ryndevich et al., 2017, 2021; Tsinkevich & Lukashenya, 2017). They are saprobiont species and live mainly in the excrement of vertebrates and decaying plant remains. Currently 59 species of water scavenger beetles are noted in Belarus (Ryndevich 2005; Ryndevich et al. 2014). Nine species in the Belarusian fauna have been found on rotten mushrooms and are listed below.

### Sphaeridiinae Latreille

*Cercyon haemorrhoidalis* (Fab.) – Listed for Belovezhskaya Pushcha National park from rotting fruiting bodies of xylotrophic fungi (Tsinkevich & Lukashenya 2017).

*Cercyon impressus* (Sturm) – Listed for Belovezhskaya Pushcha National park from rotting fruiting bodies of *Laetiporus sulphureus* (Bull.) Murrill (Tsinkevich & Lukashenya 2017).

*Cercyon lateralis* (Marsham) – 2 km YuV Vitebska [SE Vitebsk], griby veshenki [oyster mushrooms *Pleurotus ostreatus* (Jacq.) Kumm.], 31.VII.1990, leg. Solodovnikov I.A. [in Russian], 1 specimen.

Listed for Belovezhskaya Pushcha National park from rotting fruiting bodies of *Laetiporus sulphureus* and *Piptoporus betulinus* (Bull.) Karsten (Tsinkevich & Lukashenya 2017).

*Cercyon melanocephalus* (L.) – Listed for Belovezhskaya Pushcha National park from rotting fruiting bodies of *Laetiporus sulphureus* and *Piptoporus betulinus* (Tsinkevich & Lukashenya 2017).

*Cercyon quisquilius* (L.) – Listed for Belovezhskaya Pushcha National park from rotting fruiting bodies of *Laetiporus sulphureus* (Tsinkevich & Lukashenya 2017).

*Cryptopleurum minutum* (Fab.) – Listed for Belovezhskaya Pushcha National park from rotting fruiting bodies of *Laetiporus sulphureus* (Tsinkevich & Lukashenya 2017).

*Megasternum concinnum* (Marsham) – [Brest reg., Belovezhskaya Pushcha National Park], kv. 264, kislichnaya dubrava [oxalis oak forest], 27.IV.2016, leg. O.V. Prishchepchik [in Russian], 1 specimen; Brest reg., Baranovich district, Stronga reserve, near v. Vershok, on rotten *Paxillus involutus* Batsch) Fr. 14.VIII.2023, leg. Ryndevich S.K., 1 specimen (Fig. 1). Minsk reg., Nesvizh district, 3 km E Gorodeya, forest, on rotten bolete (*Leccinum* sp.), 16.VIII.1994, leg. Ryndevich S.K., 1 specimen; 2 km N Gorodeya, afforestation along the railroad, on rotten *Pleurotus ostreatus*, 15.VIII.2001, leg. Ryndevich S.K., 1 specimen. Vitebskaya obl. [Vitebsk region], Rossonskiy r-n [Rossony district], Yukhovichi, bliz reki Nishchi [near river Nischa], na gribakh [on mushrooms], 10.08.89, leg. Saluk S.V. [in Russian], 1 specimen. Vitebsk reg., Lepel district, Berezinsky reserve., near v. Kraytsy, on fungi, 2.VI.1994, leg. Ryndevich S.K., 1 specimen. Listed for Belovezhskaya Pushcha National park from rotting fruiting bodies of *Laetiporus*



**Figure 1** *Megasternum concinnum* on lower side of the mushroom body of *Paxillus involutus*

*sulphureus* (Tsinkevich & Lukashenya 2017; Ryndevich 2017) and for Vitebsk region from fungi (Ryndevich 1991).

***Sphaeridium bipustulatum* Fab.** – Minsk reg., Nesvizh district, 2 km NW Gorodeya, forest, on rotten myxomycetes in rotting poplar wood (*Populus x canadensis* Moench, 1785), 9.V.1985, leg. Ryndevich S.K., 3 specimens. Listed for Belovezhskaya Pushcha National park from rotting fruiting bodies of *Laetiporus sulphureus* (Tsinkevich & Lukashenya 2017).

***Sphaeridium scarabaeoides* (L.)** – Minsk reg., Nesvizh district, 2 km NW Gorodeya, forest, on rotten myxomycetes in rotting poplar wood (*Populus x canadensis*), 9.V.1985, leg. Ryndevich S.K., 1 specimen. Listed for Belovezhskaya Pushcha National park from rotting fruiting bodies of *Laetiporus sulphureus* (Tsinkevich & Lukashenya 2017).

Most species of water scavenger beetles (eight) have been found on rotting bodies of crab-of-the-woods *Laetiporus sulphureus*, also known as chicken-of-the-woods. Two species are recorded from the birch polypore *Piptoporus betulinus* and oyster mushroom *Pleurotus ostreatus*. Only one species of beetle is known from boletus (*Leccinum* sp.) and brown roll-rim *Paxillus involutus* (Batsch) Fries. All nine species of mycetophilic water scavenger beetles known from the territory of Belarus live on rotting fruiting bodies of xylotrophic fungi. Two species of *Sphaeridium* have been collected on myxogastrids (Myxogastria).

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NIKITSKY N B, OSIPOV I N, CHEMERIS M V, SEMENOV V B & GUSAKOV A A 1996: [The beetles of Prioksko-terrasny biosphere reserve – xylobiontes, mycetobiontes, and Scarabaeidae (with review of the Moscow region fauna of the groups)]. *Archives of Zoological Museum of Moscow State University* **36**: 1–197 [in Russian].

RYNDEVICH S K 1991 [New for fauna of Byelorussia water scavenger beetles (Coleoptera, Hydrophilidae)] In I.K. Lopatin & E.I. Khotko (eds) *Fauna i ekologiya zhestkokrylykh Byelorussia* 212–214. Minsk: Navuka i tekhnika [in Russian].

RYNDEVICH S K 2004. [*Fauna and ecology of water beetles of Belarus*]. Monograph in two parts. I. Minsk: Technoprint. 272 pp [in Russian].

RYNDEVICH S K 2005. A Checklist of Haliplidae, Noteridae, Dytiscidae, Gyrinidae, Hydraenidae, Helophoridae, Georissidae, Hydrochidae, Spercheidae, Hydrophilidae, Elmidae, Dryopidae & Limnichidae (Coleoptera) of Belarusian. In Konstantinov, Tishechkin, Penev (eds) *Fauna. Contributions to Systematics and Biology of Beetles. Papers Celebrating the 80<sup>th</sup> birthday of Igor Konstantinovich Lopatin*: 315–326. Sofia-Moscow: Pensoft Publishers.

RYNDEVICH S K 2007: Ecological classification on the basis of ecological preferences for the genus *Cercyon* Leach, 1817 (Coleoptera: Hydrophilidae) of the Palaearctic region. In: *Materials of the third All-Russian Symposium on Amphibiotic and aquatic Insects, Voronezh, 2007*. 281–284. Voronezh, Publishing and Printing Center of Voronezh State University.



- RYNDEVICH S K 2017: [Family Hydrophilidae] In *Catalogue of Insects of the National park "Belovezhskaya Pushcha"* 76-79. Minsk: Belarusskiy dom pechaty [in Russian].
- RYNDEVICH S K, FOSTER G N, BILTON D T, AQUILINA R, TURNER C R, SHAVERDO H & PROKIN A A 2014. Additions to Belarusian fauna of water beetles *Latissimus* **33** 32–42.
- RYNDEVICH S K, JIA F & FIKÁČEK M 2017. A review of the Asian species of the *Cercyon unipunctatus* group (Coleoptera: Hydrophilidae: Sphaeridiinae). *Acta Entomologica Musei Nationalis Pragae* **57** 535–576.
- RYNDEVICH S K & PROKIN A A 2017 Two new species of *Cercyon* (*Clinocercyon*) from Russian Far East (Coleoptera: Hydrophilidae) *Zootaxa*. **4300** 125–134.
- RYNDEVICH S K, PROKIN A A, MAKAROV K V & SUNDUKOV YU N 2021. The beetles of the families Helophoridae, Georissidae, Hydrophilidae, Hydraenidae and Elmidae (Insecta: Coleoptera) of Kunashir Island and the Lesser Kuriles. *Journal of Asia-Pacific Biodiversity* **14** 461–491.
- RYNDEVICH S K & SHATROVSKY A G 1995 Water scavenger beetles (Coleoptera, Hydrophilidae) of fauna of Belarus. *Trudy zoologicheskogo muzeya BGU* **1** 77-90 [in Russian].
- SMETANA A 1978. Revision of the subfamily Sphaeridiinae of America north of Mexico (Coleoptera: Hydrophilidae). *Memoirs of Entomological Society of Canada* **105** 1–292.
- SMETANA A 1988. Review of the family Hydrophilidae of Canada and Alaska (Coleoptera). *Memoirs of the Entomological Society of Canada* **142** 1–316.
- TSINKEVICH V A & LUKASHENYA M A 2017. [Xylophilous beetles (Coleoptera) of National Park "Belovezhskaya Pushcha"]. Minsk: Riftur print. 240 pp [in Russian].

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## NEW SICILIAN ROCKPOOL *OCHTHEBIUS*

*O. senczuki* joins *O. biltoni* Jäch & Delgado as Sicilian endemic *Ochthebius* (*Cobalius*) species, and it seems that some *Ochthebius* near *adriaticus* Reitter could be yet another one (see Sabatelli *et al.* 2021, noted in *Latissimus* **50** 35). The 18 known species of *Cobalius* are listed and discussed.

SABATELLI S, BARTOCCI S, D'AMICI C & AUDISIO P 2023. A new species of *Ochthebius* (*Cobalius*) (Coleoptera: Hydraenidae: Ochthebiinae) inhabiting marine rockpools in NW Sicily. *European Zoological Journal* **90** 790-799.

SABATELLI S, RUSPANTINI P, CARDOLI P & AUDISIO P 2021. Underestimated diversity: cryptic species and phylogenetic relationships in the subgenus *Cobalius* (Coleoptera: Hydraenidae) from marine rockpools. *Molecular Phylogenetic and Evolution* **163** doi.org/10.1016/j.mpev.2021.107243 pp 14.

## KENTISH FINDS IN LINED PONDS

*Hydrovatus cuspidatus* remains a rare species in England, confined (mapped here) to the east coast of East Anglia, Kent and Sussex. Other species reported include *Graptodytes bilineatus* (Sturm) and *Pelenomus canaliculatus* (Fåhræus). It is noted a layer of substrate over the pond lining is important to provide pupation sites.

DENTON J 2023. *Hydrovatus cuspidatus* (Kunze) (Coleoptera: Dytiscidae) in West Kent, with notes on other uncommon water beetle species occupying artificially lined ponds. *British Journal of Entomology and Natural History* **36** 213.

