



Check-list and distribution maps of the molluscs of the Czech and Slovak Republics

MICHAL HORSÁK, TOMÁŠ ČEJKA, LUCIE JUŘIČKOVÁ, LUBOŠ BERAN, JITKA HORÁČKOVÁ, LIBOR DVOŘÁK, RADOVAN COUFAL, MICHAL MAŇAS & VERONIKA HORSÁKOVÁ

Correspondence: horsak@sci.muni.cz

Suggested citation:

HORSÁK M., ČEJKA T., JUŘIČKOVÁ L., BERAN L., HORÁČKOVÁ J., DVOŘÁK L., COUFAL R., MAŇAS M. & HORSÁKOVÁ V., 2023: Check-list and distribution maps of the molluscs of the Czech and Slovak Republics. – Online at <http://mollusca.sav.sk/malacology/checklist.htm>, [checklist updated](#) at December 2, 2023, [maps updated](#) at April 18, 2023.



The current version of the check-list follows HORSÁK et al. (2013) with up-to-date modifications supplemented with a reference. Distribution map for each species was constructed based on published data and our knowledge based on unpublished records. So far 251 species of molluscs, including 223 species of gastropods (51 aquatic and 172 terrestrial) and 28 species of bivalves, have been found outdoors in the Czech Republic. The fauna of Slovakia comprises 260 species, including 231 gastropods (55 aquatic and 176 terrestrial) and 29 bivalves.

Abbreviations:

To the checklist: B – Bohemia; M – Moravia; S – Slovakia; () – probably extinct species for the territory; [] – an extinct species for the territory; * – a non-native species for the territory; ? – an occurrence is probable, but not reliably confirmed yet; ! – an endemic species of smaller area.

To the maps: M – past distribution; R – recent distribution; M<R – number of occurrences increased over the last few decades (e.g. for non-native species); M>R – number of occurrences declined over the last few decades (e.g. for seriously threatened species); M=R – no obvious changes in the species distribution.

Updates are marked by underlining and commented below the list of species.

GASTROPODA

subclass Neritimorpha

order Cycloneritida

Neritidae

Theodoxus Montfort, 1810

<i>T. danubialis</i> (C. Pfeiffer, 1828)	–	M	S	map	images
<i>T. fluviatilis</i> (Linnaeus, 1758)	[B]	–	S*	map	images
<i>T. transversalis</i> (C. Pfeiffer, 1828)	–	–	S	map	images

subclass Caenogastropoda

order Architaenioglossa

Viviparidae

Viviparus Montfort, 1810

<u><i>V. acerosus</i> Bourguignat, 1862</u>	B*	M	S	map	images
<i>V. contectus</i> (Millet, 1813)	B	M	S	map	images
<i>V. viviparus</i> (Linnaeus, 1758)	B	M*	–	map	images

Aciculidae

Acicula Hartmann, 1821

<i>A. parcelineata</i> (Clessin, 1911)	–	M	S	map	images
<i>Platyla</i> Moquin-Tandon, 1856					
<i>P. polita</i> (Hartmann, 1840)	B	M	S		images
unassigned order of Caenogastropoda					
Melanopsidae					
<i>Esperiana</i> Bourguignat, 1877					
<i>E. daudebartii acicularis</i> (A. Férussac, 1823)	–	–	S	map	images
<i>E. esperi</i> (A. Férussac, 1823)	–	–	S	map	images
order Littorinimorpha					
Bithyniidae					
<i>Bithynia</i> Leach, 1818					
<i>B. leachii</i> (Sheppard, 1823)	–	M	S	map	images
<i>B. tentaculata</i> (Linnaeus, 1758)	B	M	S	map	images
<i>B. transsilvanica</i> (Bielz, 1853)	B*	M	S	map	images
Bythinellidae					
<i>Bythinella</i> Moquin-Tandon, 1856					
<i>B. austriaca</i> (von Frauenfeld, 1857) – see comment	B	M	S	map	images
<i>B. pannonica</i> (von Frauenfeld, 1865)	–	–	!S	map	images
Hydrobiidae					
<u><i>Clathrocaspia</i> Lindholm, 1930</u>					
<u><i>C. knipowitschii</i> (Makarov, 1938)</u>	–	–	S*	map	images
<i>Alzoniella</i> Giusti & Bodon, 1984					
<i>A. slovenica</i> (Ložek & Brtek, 1964)	–	!M	!S	map	images
<i>Hauffenia</i> Pollonera, 1889					
<u><i>Hauffenia kissdalmæ</i> Erőss & Petrő, 2008</u>	–	–	!S	map	images
<u><i>Hauffenia lozekiana</i> Haase, Grego, Erőss, Farkas & Fehér, 2021</u>	–	–	!S	map	images
Lithoglyphidae					
<i>Lithoglyphus</i> Menke, 1830					
<i>L. naticoides</i> (C. Pfeiffer, 1828)	–	M	S	map	images
Tateidae					
<i>Potamopyrgus</i> Stimpson, 1865					
<i>P. antipodarum</i> (Gray, 1843)	B*	M*	S*	map	images
subclass Heterobranchia					
infraclass "Lower Heterobranchia"					
Valvatidae					
<i>Valvata</i> O. F. Müller, 1773					

<i>V. cristata</i> O. F. Müller, 1774	B	M	S	map	images
<i>V. macrostoma</i> Mörch, 1864	B	–	S	map	images
<i>V. piscinalis</i> (O. F. Müller, 1774)	B	M	S	map	images
<i>Borysthenia</i> Lindholm, 1914					
<i>B. naticina</i> (Menke, 1845)	–	–	S	map	images
superorder Hygrophila					
Acroloxiidae					
<i>Acroloxus</i> Beck, 1838					
<i>A. lacustris</i> (Linnaeus, 1758)	B	M	S	map	images
Lymnaeidae					
<i>Galba</i> Schrank, 1803					
<i>G. truncatula</i> (O. F. Müller, 1774)	B	M	S	map	images
<i>Stagnicola</i> Jeffreys, 1830					
<i>S. corvus</i> (Gmelin, 1791)	B	M	S	map	images
<i>S. fuscus</i> (C. Pfeiffer, 1821)	B	–	–	map	images
<i>S. palustris</i> (O. F. Müller, 1774)	B	–	–	map	images
<i>S. turricula</i> (Held, 1836)	B	M	S	map	images
<i>Ladislavella</i> Dybowski, 1913					
<i>L. occulta</i> (Jackiewicz, 1959)	B	M	S	map	images
<i>Radix</i> Montfort, 1810					
<i>R. ampla</i> (Hartmann, 1821)	B	M	S	map	images
<i>R. auricularia</i> (Linnaeus, 1758)	B	M	S	map	images
<i>R. balthica</i> (Linnaeus, 1758)	B	M	S	map	images
<i>R. labiata</i> (Rossmässler, 1835)	B	M	S	map	images
<i>R. lagotis</i> (Schrank, 1803)	B	M	S	map	images
<i>Myxas</i> J. Sowerby, 1822					
<i>M. glutinosa</i> (O. F. Müller, 1774)	[B]	–	–	map	images
<i>Lymnaea</i> Lamarck, 1799					
<i>L. stagnalis</i> (Linnaeus, 1758)	B	M	S	map	images
Physidae					
<i>Aplexa</i> Fleming, 1820					
<i>A. hypnorum</i> (Linnaeus, 1758)	B	M	S	map	images
<i>Physa</i> Draparnaud, 1801					
<i>P. acuta</i> Draparnaud, 1805	B*	M*	S*	map	images
<i>P. fontinalis</i> (Linnaeus, 1758)	B	M	S	map	images
Planorbidae					

Planorbis O. F. Müller, 1773

<i>P. carinatus</i> O. F. Müller, 1774	B	M	S	map	images
<i>P. planorbis</i> (Linnaeus, 1758)	B	M	S	map	images

Anisus Studer, 1820

<i>A. leucostoma</i> (Millet, 1813)	B	M	S	map	images
<i>A. septemgyratus</i> (Rossmässler, 1835)	–	M	S	map	images
<i>A. spirorbis</i> (Linnaeus, 1758)	B	M	S	map	images
<i>A. vortex</i> (Linnaeus, 1758)	B	M	S	map	images
<i>A. vorticulus</i> (Troschel, 1834)	B	M	S	map	images

Bathyomphalus Charpentier, 1837

<i>B. contortus</i> (Linnaeus, 1758)	B	M	S	map	images
--------------------------------------	---	---	---	---------------------	------------------------

Gyraulus Charpentier, 1837

<i>G. acronicus</i> (A. Férussac, 1807)	B	M	S	map	images
<i>G. albus</i> (O. F. Müller, 1774)	B	M	S	map	images
<i>G. crista</i> (Linnaeus, 1758)	B	M	S	map	images
<i>G. parvus</i> (Say, 1817)	B	M	S	map	images
<i>G. riparius</i> (Westerlund, 1865)	–	–	S	map	images
<i>G. rossmaessleri</i> (Schmidt, 1852)	B	M	S	map	images

Hippeutis Charpentier, 1837

<i>H. complanatus</i> (Linnaeus, 1758)	B	M	S	map	images
--	---	---	---	---------------------	------------------------

Segmentina Fleming, 1818

<i>S. nitida</i> (O. F. Müller, 1774)	B	M	S	map	images
---------------------------------------	---	---	---	---------------------	------------------------

Ancylus O. F. Müller, 1773

<i>A. fluviatilis</i> O. F. Müller, 1774	B	M	S	map	images
--	---	---	---	---------------------	------------------------

Planorbarius Duméril, 1806

<i>P. corneus</i> (Linnaeus, 1758)	B	M	S	map	images
------------------------------------	---	---	---	---------------------	------------------------

Menetus H. & A. Adams, 1855

<i>M. dilatatus</i> (Gould, 1841)	B*	–	–	map	images
-----------------------------------	----	---	---	---------------------	------------------------

Ferrissia Walker, 1903

<i>F. californica</i> (Rowell, 1863)	B*	M*	S*	map	images
--------------------------------------	----	----	----	---------------------	------------------------

superorder Eupulmonata

order Ellobiida

Ellobiidae

Carychium O. F. Müller, 1773

<i>C. minimum</i> O. F. Müller, 1774	B	M	S		images
<i>C. tridentatum</i> (Risso, 1826)	B	M	S		images

order Stylommatophora

Succineidae

Succinea Draparnaud, 1801

<i>S. putris</i> (Linnaeus, 1758)	B	M	S	images
-----------------------------------	---	---	---	------------------------

Oxyloma Westerlund, 1885

<i>O. elegans</i> (Risso, 1826)	B	M	S	images
---------------------------------	---	---	---	------------------------

Succinella Mabilie, 1871

<i>S. oblonga</i> (Draparnaud, 1801)	B	M	S	images
--------------------------------------	---	---	---	------------------------

Quickella C. Boettger, 1939

<i>Q. arenaria</i> (Potiez & Michaud, 1838)	–	–	S	map	images
---	---	---	---	---------------------	------------------------

Chondrinidae

Abida Turton, 1831

<i>A. secale</i> (Draparnaud, 1801)	–	–	S	map	images
-------------------------------------	---	---	---	---------------------	------------------------

Granaria Held, 1838

<i>G. frumentum</i> (Draparnaud, 1801)	B	M	S	images
--	---	---	---	------------------------

Chondrina Reichenbach, 1828

<i>C. avenacea</i> (Bruguière, 1792)	B	–	–	images
--------------------------------------	---	---	---	------------------------

<i>C. arcadica clienta</i> (Westerlund, 1883)	B	M	S	map	images
---	---	---	---	---------------------	------------------------

<i>C. tatrica</i> Ložek, 1948	–	–	!S	map	images
-------------------------------	---	---	----	---------------------	------------------------

Truncatellinidae

Columella Westerlund, 1878

<i>C. aspera</i> Waldén, 1966	B	M	S	map	images
-------------------------------	---	---	---	---------------------	------------------------

<i>C. columella</i> (G. von Martens, 1830)	–	–	S	map	images
--	---	---	---	---------------------	------------------------

<i>C. edentula</i> (Draparnaud, 1805)	B	M	S	images
---------------------------------------	---	---	---	------------------------

Truncatellina Lowe, 1852

<i>T. claustralis</i> (Gredler, 1856)	B	M	S	map	images
---------------------------------------	---	---	---	---------------------	------------------------

<i>T. costulata</i> (Nilsson, 1823)	B	M	S	map	images
-------------------------------------	---	---	---	---------------------	------------------------

<i>T. cylindrica</i> (A. Férussac, 1807)	B	M	S	images
--	---	---	---	------------------------

Argnidae

Argna Cossmann, 1889

<i>A. bielzi</i> (Rossmässler, 1859)	–	–	S	map	images
--------------------------------------	---	---	---	---------------------	------------------------

Cochlicopidae

Cochlicopa A. Férussac, 1821

<i>C. lubrica</i> (O. F. Müller, 1774)	B	M	S	images
--	---	---	---	------------------------

<i>C. lubricella</i> (Porro, 1838)	B	M	S	images
------------------------------------	---	---	---	------------------------

<i>C. nitens</i> (M. von Gallenstein, 1848)	B	M	S	map	images
---	---	---	---	---------------------	------------------------

Enidae

Chondrula Beck, 1837

C. tridens (O. F. Müller, 1774) B M S [images](#)

Ena Turton, 1831

E. montana (Draparnaud, 1801) B M S [images](#)

Merdigera Held, 1838

M. obscura (O. F. Müller, 1774) B M S [images](#)

Zebrina Held, 1838

Z. detrita (O. F. Müller, 1774) B M S [map](#) [images](#)

Orculidae

Orcula Held, 1838

O. dolium (Draparnaud, 1801) – M S [map](#) [images](#)

Sphyradium Charpentier, 1837

S. doliolum (Bruguière, 1792) B M S [images](#)

Pagodulinidae

Pagodulina Clessin, 1876

P. pagodula (Des Moulins, 1830) – M S [map](#) [images](#)

Pupillidae

Pupilla Fleming, 1828

P. alpicola (Charpentier, 1837) B M S [map](#) [images](#)

P. muscorum (Linnaeus, 1758) B M S [images](#)

P. sterrii (Forster, 1840) B M S [images](#)

P. triplicata (Studer, 1820) B M S [images](#)

Pyramidulidae

Pyramidula Fitzinger, 1833

P. pusilla Gittenberger & Bank, 1996 B M S [map](#) [images](#)

P. saxatilis (Hartmann, 1842) – – S [map](#) [images](#)

Spelaeodiscidae

Spelaeodiscus Brusina, 1886

S. triarius tatricus (Hazay, 1883) – – !S [map](#) [images](#)

Valloniidae

Vallonia Risso, 1826

V. costata (O. F. Müller, 1774) B M S [images](#)

V. declivis Sterki, 1893 B – S [map](#) [images](#)

V. enniensis (Gredler, 1856) B M S [map](#) [images](#)

V. excentrica Sterki, 1893 B M S [images](#)

<i>V. pulchella</i> (O. F. Müller, 1774)	B	M	S		images
<i>Acanthinula</i> Beck, 1847					
<i>A. aculeata</i> (O. F. Müller, 1774)	B	M	S		images
Vertiginidae					
<i>Vertigo</i> O. F. Müller, 1773					
<i>V. alpestris</i> Alder, 1838	B	M	S		images
<i>V. angustior</i> Jeffreys, 1830	B	M	S	map	images
<i>V. antivertigo</i> (Draparnaud, 1801)	B	M	S		images
<i>V. geyeri</i> Lindholm, 1925	B	M	S	map	images
<i>V. liljeborgi</i> (Westerlund, 1871)	B	M	–	map	images
<u><i>V. arctica</i> (Wallenberg, 1858)</u>	–	–	S	map	images
<i>V. moulinsiana</i> (Dupuy, 1849)	B	M	S	map	images
<i>V. pusilla</i> O. F. Müller, 1774	B	M	S		images
<i>V. pygmaea</i> (Draparnaud, 1801)	B	M	S		images
<i>V. ronnebyensis</i> (Westerlund, 1871)	B	–	–	map	images
<i>V. substriata</i> (Jeffreys, 1833)	B	M	S		images
Clausiliidae					
<i>Alopi</i> H. & A. Adams, 1855					
<i>A. bielzi clathrata</i> (E. A. Bielz, 1856)	–	–	!S	map	images
<i>Cochlodina</i> A. Férussac, 1821					
<i>C. cerata</i> (Rossmässler, 1836)	–	!M	S	map	images
<i>C. costata</i> (C. Pfeiffer, 1828)	B	M	–		images
<i>C. dubiosa corcontica</i> Brabenec, 1967	!B	–	–		images
<i>C. fimbriata</i> (Rossmässler, 1835)	–	–	S	map	images
<i>C. laminata</i> (Montagu, 1803)	B	M	S		images
<i>C. orthostoma</i> (Menke, 1828)	B	M	S		images
<i>Charpentieria</i> Stabile, 1864					
<i>C. ornata</i> (Rossmässler, 1836)	B	M	–		images
<i>Ruthenica</i> Lindholm, 1924					
<i>R. filograna</i> (Rossmässler, 1836)	B	M	S		images
<i>Pseudofusulus</i> H. Nordsieck, 1977					
<i>P. varians</i> (C. Pfeiffer, 1828)	B	[M]	S	map	images
<i>Macrogastra</i> Hartmann, 1841					
<i>M. badia</i> (C. Pfeiffer, 1828)	B	M	–	map	images
<u><i>M. borealis</i> (Boettger, 1878)</u>	–	M	S	map	images
<i>M. plicatula</i> (Draparnaud, 1801)	B	M	S		images

<i>M. tumida</i> (Rossmässler, 1835)	B	M	S		images
<i>M. ventricosa</i> (Draparnaud, 1801)	B	M	S		images
<i>Clausilia</i> Draparnaud, 1805					
<i>C. bidentata</i> (Ström, 1765)	B	–	–	map	images
<i>C. cruciata</i> (Studer, 1820)	B	M	S		images
<i>C. dubia</i> Draparnaud, 1805	B	M	S		images
<i>C. pumila</i> C. Pfeiffer, 1828	B	M	S		images
<i>C. rugosa</i> (Draparnaud, 1801)	B	M	S		images
<i>Laciniaria</i> Hartmann, 1842					
<i>L. plicata</i> (Draparnaud, 1801)	B	M	S		images
<i>Alinda</i> H. & A. Adams, 1855					
<i>A. biplicata</i> (Montagu, 1803)	B	M	S		images
<i>Balea</i> Gray, 1824					
<i>B. perversa</i> (Linnaeus, 1758)	B	M	S		images
<i>Pseudalinda</i> Boettger, 1877					
<i>P. stabilis</i> (L. Pfeiffer, 1847)	–	–	S	map	images
<i>Vestia</i> Hesse, 1916					
<i>V. elata</i> (Rossmässler, 1836)	–	–	S		images
<i>V. gulo</i> (E. A. Bielz, 1859)	–	M	S	map	images
<i>V. ranojevici moravica</i> (Brabenec, 1952)	–	!M	–	map	images
<i>V. turgida</i> (Rossmässler, 1836)	B	M	S		images
<i>Bulgarica</i> O. Boettger, 1877					
<i>B. cana</i> (Held, 1836)	B	M	S		images
<i>B. nitidosa</i> (Uličný, 1893)	!B	–	–		images
Ferussaciidae					
<i>Cecilioides</i> A. Férussac, 1814					
<i>C. acicula</i> (O. F. Müller, 1774)	B	M	S		images
<i>C. petitiana</i> (Benoit, 1862)	–	–	S*	map	images
Punctidae					
<i>Punctum</i> Morse, 1864					
<i>P. pygmaeum</i> (Draparnaud, 1801)	B	M	S	map	images
Helicodiscidae					
<i>Lucilla</i> R. T. Lowe, 1852					
<i>L. scintilla</i> (R. T. Lowe, 1852)	B*	?M*	S*	map	images
<i>L. singleyana</i> (Pilsbry, 1889)	?B*	?M*	S*	map	images
Discidae					

Discus Fitzinger, 1833

<i>D. perspectivus</i> (Megerle von Mühlfeld, 1816)	B	M	S		images
<i>D. rotundatus</i> (O. F. Müller, 1774)	B	M	S		images
<i>D. ruderatus</i> (Hartmann, 1821)	B	M	S		images

Gastrodontidae

Aegopinella Lindholm, 1927

<i>A. epipedostoma iuncta</i> Hudec, 1964	–	M	S		images
<i>A. minor</i> (Stabile, 1864)	B	M	S		images
<i>A. nitens</i> (Michaud, 1831)	B	M	S		images
<i>A. nitidula</i> (Draparnaud, 1805)	B	M	–		images
<i>A. pura</i> (Alder, 1830)	B	M	S		images
<i>A. ressmanni</i> (Westerlund, 1883)	B	–	–	map	images

Nesovitrea Cooke, 1921

<i>N. hammonis</i> (Ström, 1765)	B	M	S		images
<i>N. petronella</i> (L. Pfeiffer, 1853)	B	M	S		images

Zonitoides Lehmann, 1862

<i>Z. arboreus</i> (Say, 1817)	–	M*	–	map	images
<i>Z. nitidus</i> (O. F. Müller, 1774)	B	M	S		images

Oxychilidae

Oxychilus Fitzinger, 1833

<i>O. allarius</i> (Miller, 1822)	B	–	–	map	images
<i>O. cellarius</i> (O. F. Müller, 1774)	B	M	S		images
<i>O. depressus</i> (Sterki, 1880)	B	M	S		images
<i>O. deubeli</i> (A. J. Wagner, 1914)	–	–	S	map	images
<i>O. draparnaudi</i> (Beck, 1837)	B*	M*	S*		images
<i>O. glaber</i> (Rossmässler, 1835)	B	M	S		images
<i>O. hydatinus</i> (Rossmässler, 1838)	–	–	S*	map	images
<i>O. inopinatus</i> (Uličný, 1887)	B	M	S		images
<i>O. mortilleti</i> (L. Pfeiffer, 1859)	(B)	–	–	map	images

Carpathica A. J. Wagner, 1895

<i>C. calophana</i> (Westerlund, 1881)	–	–	S	map	images
--	---	---	---	---------------------	------------------------

Daudebardia Hartmann, 1821

<i>D. brevipes</i> (Draparnaud, 1805)	B	M	S		images
<i>D. rufa</i> (Draparnaud, 1805)	B	M	S	map	images

Pristilomatidae

Vitrea Fitzinger, 1833

<i>V. contracta</i> (Westerlund, 1871)	B	M	S		images
<i>V. crystallina</i> (O. F. Müller, 1774)	B	M	S		images
<i>V. diaphana</i> (Studer, 1820)	B	M	S		images
<i>V. subrimata</i> (Reinhardt, 1871)	B	M	S		images
<i>V. transsylvanica</i> (Clessin, 1877)	B	M	S	map	images
Euconulidae					
<i>Euconulus</i> Reinhardt, 1883					
<i>E. alderi</i> (Gray, 1840)	B	M	S		images
<i>E. fulvus</i> (O. F. Müller, 1774)	B	M	S		images
Zonitidae					
<i>Aegopis</i> Fitzinger, 1833					
<i>A. verticillus</i> (Lamarck, 1822)	B	M	–		images
Milacidae					
<i>Tandonia</i> Lessona & Pollonera, 1882					
<i>T. budapestensis</i> (Hazay, 1880)	B	M	S	map	images
<i>T. kusceri</i> (Wagner, 1931)	–	–	S*	map	images
<i>T. rustica</i> (Millet, 1843)	B	–	–	map	images
Agriolimacidae					
<i>Deroceras</i> Rafinesque, 1820					
<i>D. agreste</i> (Linnaeus, 1758)	B	M	S	map	images
<i>D. invadens</i> Reise, Hutchinson, Schunack & Schlitt, 2011	B*	M*	S*	map	images
<i>D. juranum</i> Wüthrich, 1993	B	–	–	map	images
<i>D. laeve</i> (O. F. Müller, 1774)	B	M	S	map	images
<i>D. praecox</i> Wiktor, 1966	B	M	S	map	images
<i>D. reticulatum</i> (O. F. Müller, 1774)	B	M	S	map	images
<i>D. rodnae</i> Grossu & Lupu, 1965	B	M	S	map	images
<i>D. sturanyi</i> (Simroth, 1894)	B	M	S	map	images
<i>D. turcicum</i> (Simroth, 1894)	B	M	S	map	images
<i>Krynockillus</i> Kaleniczenko, 1851					
<i>K. melanocephalus</i> (Kaleniczenko, 1851)	–	–	S*	map	images
Boettgerillidae					
<i>Boettgerilla</i> Simroth, 1910					
<i>B. pallens</i> Simroth, 1912	B*	M*	S*		images
Limacidae					
<i>Ambigolimax</i> Pollonera, 1887					
<i>A. valentianus</i> (A. Férussac, 1821)	–	–	S*	map	images

Bielzia Clessin, 1887

<i>B. coerulans</i> (M. Bielz, 1851)	–	M	S	map	images
--------------------------------------	---	---	---	---------------------	------------------------

Limax Linnaeus, 1758

<i>L. cinereoniger</i> Wolf, 1803	B	M	S		images
-----------------------------------	---	---	---	--	------------------------

<i>L. maximus</i> Linnaeus, 1758	B	M	S		images
----------------------------------	---	---	---	--	------------------------

Limacus Lehmann, 1864

<i>L. flavus</i> (Linnaeus, 1758)	B*	M*	S	map	images
-----------------------------------	----	----	---	---------------------	------------------------

<i>L. maculatus</i> (Kaleniczenko, 1851)	–	M*	–	map	images
--	---	----	---	---------------------	------------------------

Malacolimax Malm, 1868

<i>M. tenellus</i> (O. F. Müller, 1774)	B	M	S		images
---	---	---	---	--	------------------------

Lehmannia Heynemann, 1863

<i>L. carpatica</i> Hutchinson, Reise & Schlitt, 2022	–	M	S	map	images
---	---	---	---	---------------------	------------------------

<i>L. macroflagellata</i> Grossu & Lupu, 1962	B	M	S	map	images
---	---	---	---	---------------------	------------------------

<i>L. marginata</i> (O. F. Müller, 1774)	B	M	S		images
--	---	---	---	--	------------------------

Vitrinidae

Semilimax Gray, 1847

<i>S. kotulae</i> (Westerlund, 1883)	B	M	S		images
--------------------------------------	---	---	---	--	------------------------

<i>S. semilimax</i> (J. Férussac, 1802)	B	M	S		images
---	---	---	---	--	------------------------

Eucobresia H. B. Baker, 1929

<i>E. diaphana</i> (Draparnaud, 1805)	B	M	S		images
---------------------------------------	---	---	---	--	------------------------

<i>E. nivalis</i> (Dumont & Mortillet, 1854)	B	M	S		images
--	---	---	---	--	------------------------

Vitrina Draparnaud, 1801

<i>V. pellucida</i> (O. F. Müller, 1774)	B	M	S		images
--	---	---	---	--	------------------------

Arionidae

Arion A. Férussac, 1819

<i>A. circumscriptus</i> Johnston, 1828	B	M	?S		images
---	---	---	----	--	------------------------

<i>A. distinctus</i> Mabille, 1868	B	M	S		images
------------------------------------	---	---	---	--	------------------------

<i>A. fasciatus</i> (Nilsson, 1823)	B	M	S		images
-------------------------------------	---	---	---	--	------------------------

<i>A. fuscus</i> (O. F. Müller, 1774)	B	M	S		images
---------------------------------------	---	---	---	--	------------------------

<i>A. intermedius</i> Normand, 1852	B	M	S*	map	images
-------------------------------------	---	---	----	---------------------	------------------------

<i>A. obesoductus</i> Reischütz, 1973	B	M	S*	map	images
---------------------------------------	---	---	----	---------------------	------------------------

<i>A. rufus</i> (Linnaeus, 1758)	B	M	S		images
----------------------------------	---	---	---	--	------------------------

<i>A. silvaticus</i> Lohmander, 1937	B	M	S		images
--------------------------------------	---	---	---	--	------------------------

<i>A. vulgaris</i> Moquin-Tandon, 1855	B*	M*	S*		images
--	----	----	----	--	------------------------

Camaenidae

Fruticicola Held, 1838

<i>F. fruticum</i> (O. F. Müller, 1774)	B	M	S		images
Helicodontidae					
<i>Helicodonta</i> A. Férussac, 1821					
<i>H. obvoluta</i> (O. F. Müller, 1774)	B	M	S		images
Hygromiidae					
<i>Euomphalia</i> Westerlund, 1889					
<i>E. strigella</i> (Draparnaud, 1801)	B	M	S		images
<i>Monacha</i> Fitzinger, 1833					
<i>M. cartusiana</i> (O. F. Müller, 1774)	B*	M	S		images
<i>M. claustralis</i> (Rossmässler, 1834).	B*	–	–	map	images
<i>Trochulus</i> Chemnitz, 1786					
<i>T. hispidus</i> (Linnaeus, 1758).	B	M	S		images
<i>T. striolatus danubialis</i> (Clessin, 1874)	–	–	S	map	images
<i>T. villosulus</i> (Rossmässler, 1838)	–	M	S		images
<i>Petasina</i> Beck, 1847					
<i>P. bakowskii</i> (Poliński, 1924)	–	–	S	map	images
<i>P. bielzi</i> (E. A. Bielz, 1860)	–	–	S	map	images
<i>P. edentula</i> (Draparnaud, 1805)	B	–	–	map	images
<i>P. filicina</i> (L. Pfeiffer, 1841)	–	–	S	map	
<i>P. unidentata</i> (Draparnaud, 1805)	B	M	S		images
<i>Plicutera</i> Schileyko, 1978					
<i>P. lubomirski</i> (Ślósarski, 1881)	B	M	S		images
<i>Perforatella</i> Schlüter, 1838					
<i>P. bidentata</i> (Gmelin, 1791)	B	M	S		images
<i>P. dibotrion</i> (E. A. Bielz, 1860)	–	–	S	map	images
<i>Pseudotrichia</i> Schileyko, 1970					
<i>P. rubiginosa</i> (Rossmässler, 1838)	B	M	S		images
<i>Monachoides</i> Gude & Woodward, 1921					
<i>M. incarnatus</i> (O. F. Müller, 1774)	B	M	S		images
<i>M. vicinus</i> (Rossmässler, 1842)	B	M	S		images
<i>Urticicola</i> Lindholm, 1927					
<i>U. umbrosus</i> (C. Pfeiffer, 1828)	B	M	S		images
<i>Lozekia</i> Hudec, 1970					
<i>L. transsilvanica</i> (Westerlund, 1876)	–	–	S	map	images
<i>Hygromia</i> Risso, 1826					
<i>H. cinctella</i> (Draparnaud, 1801)	B*	–	S*	map	images

Geomitridae

Helicopsis Fitzinger, 1833

H. striata (O. F. Müller, 1774) (B) [M] S [map](#) [images](#)

Candidula Kobelt, 1871

C. unifasciata (Poiret, 1801) (B) M S [images](#)

Helicella A. Férussac, 1821

H. itala (Linnaeus, 1758) B M – [map](#) [images](#)

Xerolenta Monterosato, 1892

X. obvia (Menke, 1828) B M S [images](#)

Cernuella Schlüter, 1838

C. neglecta (Draparnaud, 1805) B* – – [images](#)

Helicidae

Arianta Turton, 1831

A. arbustorum (Linnaeus, 1758) B M S [images](#)

Helicigona A. Férussac, 1821

H. lapicida (Linnaeus, 1758) B M – [images](#)

Faustina Kobelt, 1904

F. cingulella (Rossmässler, 1837) – – S [map](#) [images](#)

F. faustina (Rossmässler, 1835) B M S [images](#)

F. rossmaessleri (L. Pfeiffer, 1848) – – S [map](#) [images](#)

Isognomostoma Fitzinger, 1833

I. isognomostomos (Schröter, 1784) B M S [images](#)

Causa Schileyko, 1971

C. holosericea (Studer, 1820) B M S [images](#)

Cepaea Held, 1838

C. hortensis (O. F. Müller, 1774) B M S [images](#)

C. nemoralis (Linnaeus, 1758) B* M* S* [map](#) [images](#)

Caucasotachea Boettger, 1909

C. vindobonensis (C. Pfeiffer, 1828) B M S [map](#) [images](#)

Cornu Born, 1778

C. aspersum (O. F. Müller, 1774) B* M* S* [map](#) [images](#)

Helix Linnaeus, 1758

H. lucorum Linnaeus, 1758 B* – S* [map](#) [images](#)

H. lutescens Rossmässler, 1837 – – S [map](#) [images](#)

H. pomatia Linnaeus, 1758 B M S [images](#)

H. thessalica Boettger, 1886 – M S [map](#) [images](#)

BIVALVIA	occurrence				
Heteroconchia					
Palaeoheterodonta					
Unionoida					
Margaritiferidae					
<i>Margaritifera</i> Schumacher, 1815					
<i>M. margaritifera</i> (Linnaeus, 1758)	B	[M]	–	map	images
Unionidae					
<i>Unio</i> Philipsson, 1788					
<i>U. crassus</i> Philipsson, 1788	B	M	S	map	images
<i>U. pictorum</i> (Linnaeus, 1758)	B	M	S	map	images
<i>U. tumidus</i> Philipsson, 1788	B	M	S	map	images
<i>Anodonta</i> Lamarck, 1799					
<i>A. anatina</i> (Linnaeus, 1758)	B	M	S	map	images
<i>A. cygnea</i> (Linnaeus, 1758)	B	M	S	map	images
<i>Pseudanodonta</i> Bourguignat, 1877					
<i>P. complanata</i> (Rossmässler, 1835)	B	M	S	map	images
<i>Sinanodonta</i> Modell, 1945					
<i>S. woodiana</i> (Lea, 1834)	B*	M*	S*	map	images
Heterodonta					
Veneroida					
Corbiculidae					
<i>Corbicula</i> Megerle von Mühlfeld, 1811					
<u><i>C. fluminea</i> (O. F. Müller, 1774).</u>	B*	M*	S*	map	images
Sphaeriidae					
<i>Sphaerium</i> Scopoli, 1777					
<i>S. corneum</i> (Linnaeus, 1758)	B	M	S		images
<u><i>S. lacustre</i> (O. F. Müller, 1774).</u>	B	M	S		images
<i>S. nucleus</i> (Studer, 1820)	B	M	S		images
<i>S. rivicola</i> (Lamarck, 1818)	B	M	S		images
<i>S. solidum</i> (Normand, 1844)	–	–	S*	map	images
<i>Pisidium</i> C. Pfeiffer, 1821					
<i>P. amnicum</i> (O. F. Müller, 1774)	B	M	S		images
<u><i>Euglesa</i> Jenyns, 1832</u>					
<u><i>E. casertana</i> (Poli, 1791).</u>	B	M	S		images

<u><i>E. globularis</i> (Clessin, 1873)</u>	B	M	S	images
<u><i>E. henslowana</i> (Sheppard, 1825)</u>	B	M	S	images
<u><i>E. hibernica</i> (Westerlund, 1894)</u>	B	M	S	images
<u><i>E. milium</i> (Held, 1836)</u>	B	M	S	images
<u><i>E. nitida</i> (Jenyns, 1832)</u>	B	M	S	images
<u><i>E. obtusalis</i> (Lamarck, 1818)</u>	B	M	S	images
<u><i>E. personata</i> (Malm, 1855)</u>	B	M	S	images
<u><i>E. pseudosphaerium</i> (J. Favre, 1927)</u>	B	M	S	images
<u><i>E. subtruncata</i> (Malm, 1855)</u>	B	M	S	images
<u><i>E. supina</i> (A. Schmidt, 1851)</u>	B	M	S	images
<i>Odhneripisidium</i> Kuiper, 1962				
<u><i>O. moitessierianum</i> (Paladilhe, 1866)</u>	B	M	S	images
<u><i>O. tenuilineatum</i> (Stelfox, 1918)</u>	B	M	S	images
Dreissenidae				
<i>Dreissena</i> Van Beneden, 1835				
<u><i>D. polymorpha</i> (Pallas, 1771)</u>	B*	M*	S*	images
<u><i>D. rostriformis</i> (Deshayes, 1838)</u>	–	–	S*	map images

Comment to *Bythinella* species

Bythinella austriaca (von Frauenfeld, 1857) – There are three more species, by their shell morphology similar to *B. austriaca*, reported from Slovakia: *B. hungarica* (Hazay, 1881), *B. metarubra* (Falniowski, 1987) and *B. steffeki* Grego & Glöer, 2019. The latter species has been described based on a single population in the Slovenský kras Mts., the area with frequent occurrence of *B. austriaca*, using only shell and genital morphology. It has been unshakeably proven (e.g. BICHAIN et al. 2007) that classical morphological descriptors may not constitute valid specific criteria within *Bythinella*. Without an integrative taxonomical study, delimiting these putative species based on both mitochondrial and nuclear gene fragments, and without the association of these species with shell morphology, we cannot accept these names as biologically valid taxa. There is no evidence to support an assumption that these species are not only extremes within (eco-)morphological plasticity of a single species, i.e. *B. austriaca*. GREGO & GLÖER (2019) stated: “The COI sequence in the GenBank under number MK673142 indicates a close relation of the new species to some of the *B. austriaca* clades.”, which in other words says that there is no genetic difference (at least based on COI gene) between *B. austriaca* and *B. steffeki*. The phylogenetic analysis published by BENKE et al. (2009) clearly showed that *B. austriaca* and *B. metarubra* are genetically the same.

Comments to species names and new records

Viviparus acerosus Bourguignat, 1862 – for the first time recorded in Bohemia in 2015, see BERAN et al. (2019).

Clathrocaspia knipowitschii (Makarov, 1938) – for the first time recorded in Slovakia in 2019, see SZEKERES et al. (2022).

Hauffenia kissdalmæ Erőss & Petró, 2008 – see HAASE et al. (2021).

Hauffenia lozekiana Haase, Grego, Erőss, Farkas & Fehér, 2021 – see HAASE et al. (2021).

Stagnicola palustris (O. F. Müller, 1774) and *Stagnicola turricula* (Held, 1836) – taxonomic status follows PIEŃKOWSKA et al. (2015a).

Ladislavella Dybowski, 1913 – originally as *Catascopia* Meier-Brook & Bargues, 2002. Nomenclature follows PIEŃKOWSKA et al. (2015a) and PIEŃKOWSKA & LESICKI (2018).

Ladislavella occulta (Jackiewicz, 1959) – European populations were for some time reported under the name *L. terebra* (Westerlund, 1885), see PIEŃKOWSKA & LESICKI (2018). The first record in Slovakia near the village of Senné (ČEJKA et al. 2020).

Radix lagotis (Schränk, 1803) – for the first records, see ČEJKA et al. (2021).

Physa acuta (Draparnaud, 1805) – see comments in WELTER-SCHULTES (2012), p. 56.

Gyraulus parvus (Say, 1817) – current genetic investigation revealed that *G. parvus* and *G. laevis* are in fact part of the same species-level clade, with the former having nomenclatural priority (LORENCOVÁ et al. 2021). However, the structure within the mitochondrial tree suggests a North American origin of the invasive populations, earlier reported as *G. parvus*. It also suggests that although the native race in Europe, i.e. *G. laevis*, tend to possess some differences in conchology and ecology, the degree of overlap between the races makes it impossible to accurately distinguish between them without the DNA barcode data.

Ferrissia californica (Rowell, 1863) – originally as *F. fragilis* (Tryon, 1863), see CHRISTENSEN (2016). Sometimes even a month matters in description of a new species.

Pupilla alpicola (Charpentier, 1837) – conspecific with *Pupilla pratensis* (Clessin, 1871), see NEKOLA et al. (2015).

Pyramidulla saxatilis (Hartmann, 1842) – species resurrected based on DNA from synonymy with *P. rupestris*, but it cannot be differentiated by shell morphology from *P. pusilla*. Only one site has been reported from Velká Fatra Mts. based on DNA analysis of specimens from that site, see KIRCHNER et al. (2016) and RAZKIN et al. (2016, 2017).

Vertigo arctica (Wallenberg, 1858) – NEKOLA et al. (2018) consider it as a separate species, phylogenetically not closely related to *V. modesta* (Say, 1824).

Macrogastra borealis (Boettger, 1878) – Due to some nomenclatorial issues (see <http://www.animalbase.uni-goettingen.de/zooweb/servlet/AnimalBase/home/speciestaxon?id=15626>) the well-known name *Macrogastra latestriata* (Schmidt, 1857) had to be substituted by *M. borealis* (Boettger, 1878).

Euconulus alderi (Gray, 1840) [syn. *E. praticola* (Reinhardt, 1883)] – taxonomy and nomenclature follow HORSÁKOVÁ et al. (2020).

Tandonia kusceri (Wagner, 1931) and *T. rustica* (Millet, 1843) – see KORÁBEK et al. (2016a).

Ambigolimax valentianus (Férussac, 1822) – for the first time recorded outdoors in Slovakia in 2020, see ČEJKA et al. (2021). Originally as *Lehmannia* Heynemann, 1863, for the current genus assignment see NITZ (2013) and ROWSON et al. (2014).

Limacus maculatus (Kaleniczenko, 1851) – for the first time recorded in Moravia in 2019, see ČEJKA et al. (2020).

Lehmannia carpatica Hutchinson, Reise & Schlitt, 2022 – originally reported as *L. nyctelia* (Bourguignat, 1861) and later also as *Ambigolimax nyctelius* (Bourguignat, 1861); see NITZ (2013) and ROWSON et al. (2014) for details. HUTCHINSON et al. (2022) noted that the name *L. nyctelia* (Bourguignat, 1861) was used for five different species and raised the new name for the Carpathian populations as *L. carpatica*, since the original name *Limax nyctelius*, based on the Algerian material, is now to be known as *Letourneuxia nyctelia* (Bourguignat, 1861).

Deroceras invadens Reise, Hutchinson, Schunack & Schlitt, 2011 – for the first time recorded in Bohemia in 2014, see HUTCHINSON et al. (2014); and in Slovakia in 2017, see ČEJKA (2018).

Deroceras juranum Wüthrich, 1993 – see HUTCHINSON & REISE (2009).

Krynickyllus melanocephalus Kaleniczenko, 1851 – for the first time recorded outdoors in Slovakia in 2020, see ČEJKA et al. (2021).

Arion intermedius Normand, 1852 – for the first time recorded outdoors in Slovakia in 2020, see ČEJKA et al. (2021).

Trochulus hispidus (Linnaeus, 1758) – *T. sericeus* (Draparnaud, 1801) was confirmed to be a part of phenotypic and genetic plasticity, now being recognized as a younger synonym of *T. hispidus*, see PROČKŮW et al. (2017).

Monacha claustralis (Rossmässler, 1834) – originally reported as *Monacha cantiana* (Montagu, 1803) by HLAVÁČ & PELTANOVÁ (2010); for further details see PIENKOWSKA et al. (2015b).

Hygromia cinctella (Draparnaud, 1801) – for the first time recorded in Slovakia in 2015, see ČEJKA (2015a) and KRUMPÁLOVÁ & HOLIENKOVÁ (2018).

Cepaea nemoralis (Linnaeus, 1758) – for the first time recorded in Slovakia in 2015, see ČEJKA (2015a) and KRUMPÁLOVÁ & HOLIENKOVÁ (2018).

Caucasotachea vindobonensis (C. Pfeiffer, 1828) – see NEIBER et al. (2016).

Cornu aspersum (O. F. Müller, 1774) – for the first time recorded in Slovakia in 2015, see ČEJKA (2015b). For the first time recorded in Moravia in 2020, see ČEJKA et al. (2021).

Helix thessalica Boettger, 1886 – see KORÁBEK et al. (2016b).

Corbicula fluminea (O. F. Müller, 1774) – for the first time recorded in Moravia in 2018, see KOMZÁK et al. (2018).

Sphaerium lacustre (O. F. Müller, 1774) – see BESPALAYA et al. (2023).

Euglesa casertana (Poli, 1791) – see BESPALAYA et al. (2023).

Euglesa globularis (Clessin, 1873) – see BESPALAYA et al. (2023).

Euglesa henslowana (Sheppard, 1825) – see BESPALAYA et al. (2023).

Euglesa hibernica (Westerlund, 1894) – see BESPALAYA et al. (2023).

Euglesa milium (Held, 1836) – see BESPALAYA et al. (2023).

Euglesa nitida (Jenyns, 1832) – see BESPALAYA et al. (2023).

Euglesa obtusalis (Lamarck, 1818) – see BESPALAYA et al. (2023).

Euglesa personata (Malm, 1855) – see BESPALAYA et al. (2023).

Euglesa pseudosphaerium (J. Favre, 1927) – the authorship should be ascribed to Favre, see BANK (2011). See BESPALAYA et al. (2023).

Euglesa subtruncata (Malm, 1855) – see BESPALAYA et al. (2023).

Euglesa supina (A. Schmidt, 1851) – see BESPALAYA et al. (2023).

Odhneripisidium moitessierianum (Paladilhe, 1866) – see BESPALAYA et al. (2023).

Odhneripisidium tenuilineatum (Stelfox, 1918) – see BESPALAYA et al. (2023).

Dreissena rostriformis (Deshayes, 1838) – for the first time recorded in Slovakia in 2013 (ČEJKA et al. 2020).

References

BANK R. A., 2011: [Authorships and Publication Dates in Malacology: some notes on the 2011 French Checklist of Welter-Schultes & al.](#) – Mitteilungen der Deutschen Malakozoologischen Gesellschaft, 86: 13–24.

BENKE M., BRÄNDLE M., ALBRECHT C. & WILKE T., 2009: Pleistocene phylogeography and phylogenetic concordance in cold-adapted spring snails (*Bythinella* spp.). – Molecular Ecology, 18: 890–903. <https://doi.org/10.1111/j.1365-294x.2008.04073.x>

BESPALAYA Y. V., VINARSKI M. V., AKSENOVA O. V., BABUSHKIN E. S., GOFAROV M. Y., KONDAKOV A. V., KONOPLEVA E. S., KROPOTIN A. V., MABROUKI Y., OVCHANKOVA N. B., PALATOV D. M., SOKOLOVA S. E., SHEVCHENKO A. R., TRAVINA O. V., TAYBI A. F., SOBOLEVA A. A., ZUBRII N. A. & BOLOTOV I. N., 2023: Phylogeny, taxonomy, and biogeography of the Sphaeriinae (Bivalvia: Sphaeriidae). – Zoological Journal of the Linnean Society, zlad139. <https://doi.org/10.1093/zoolinnean/zlad139>

BERAN L., HORSÁK M. & HOFMAN S., 2019: First records of *Viviparus acerosus* (Bourguignat, 1862) (Gastropoda: Viviparidae) from the Czech Republic outside its native range. – Folia Malacologica, 27(3): 223–229. <https://doi.org/10.12657/folmal.027.021>

BICHAIN J. M., GAUBERT P., SAMADI S. & BOISSELIER-DUBAYLE M. C., 2007: A gleam in the dark: Phylogenetic species delimitation in the confusing spring-snail genus *Bythinella* Moquin-Tandon, 1856 (Gastropoda: Rissooidea: Amnicolidae). – Molecular Phylogenetics and Evolution, 45(3): 927–941. <https://doi.org/10.1016/j.ympev.2007.07.018>

ČEJKA T., 2015a: Three new mollusc species for Slovakia - result of one visit of the garden centre. – Malacological Bulletin, August 7, 2015, <http://malbull.blogspot.com/2015/08/four-new-mollusc-species-for-slovakia.html>

ČEJKA T., 2015b: Brown garden snail - *Cornu aspersum* (O. F. Müller, 1774) in Slovakia. – Malacological Bulletin, August 4, 2015, <http://malbull.blogspot.sk/2015/08/first-record-of-cornu-aspersum-o-f.html>

ČEJKA T., 2018: First outdoor records of the slug *Deroceras invadens* from the Slovak Republic. – Malacological Bulletin, February 22, 2018, <https://malbull.blogspot.cz/2018/02/first-outdoor-records-of-slug-deroceras.html>

ČEJKA T., BERAN L., COUFAL R., DVOŘÁK L., HLAVÁČ J. Č., HORÁČKOVÁ J., HORSÁKOVÁ V., JUŘICKOVÁ L., KOSOVÁ T., ČAČANÝ J., SZABÓOVÁ D., ŘÍHOVÁ D., TEJ B. & HORSÁK M., 2021: [Malacological news from the Czech and Slovak Republics in 2020.](#) – Malacologica Bohemoslovaca, 20: 56–74. <https://doi.org/10.5817/MaB2021-20-56>

ČEJKA T., BERAN L., KORÁBEK O., HLAVÁČ J. Č., HORÁČKOVÁ J., COUFAL R., DRVOTOVÁ M., MAŇAS M., HORSÁKOVÁ V. & HORSÁK M., 2020: [Malacological news from the Czech and Slovak Republics in 2015–2019.](#) – Malacologica Bohemoslovaca, 19: 71–106. <https://doi.org/10.5817/MaB2020-19-71>

CHRISTENSEN C. C., 2016: [Change of status and name for a Hawaiian freshwater limpet: *Ancylus sharpi* Sykes, 1900 is the invasive North American *Ferrissia californica* \(Rowell, 1863\), formerly known as *Ferrissia fragilis* \(Tryon, 1863\) \(Gastropoda: Planorbidae: Ancyliinae\).](#) – Bishop Museum Occasional Papers, 118: 5–8.

GREGO J. & GLÖER P., 2019: A new *Bythinella* (Mollusca: Gastropoda: Rissooidea) in the Slovak Republic. – Ecologica Montenegrina, 21: 80–85. <https://doi.org/10.37828/em.2019.21.9>

HAASE M., GREGO J., ERŐSS Z. P., FARKAS R. & FEHÉR Z., 2021: [On the origin and diversification of the stygobiotic freshwater snail genus *Hauffenia* \(Caenogastropoda: Hydrobiidae\) with special focus on the northern species and the description of two new species.](#) – European Journal of Taxonomy, 775: 143–184. <https://doi.org/10.5852/ejt.2021.775.1555>

HLAVÁČ J. Č. & PELTANOVÁ A., 2010: [First occurrence of the Kentish Snail *Monacha cantiana* \(Mollusca: Gastropoda: Hygromiidae\) in the Czech Republic.](#) – Malacologica Bohemoslovaca, 9: 11–15. <https://doi.org/10.5817/MaB2010-9-11>

- HORSÁK M., JUŘIČKOVÁ L. & PICKA J., 2013: Měkkýši České a Slovenské republiky. Molluscs of the Czech and Slovak Republics. – Kabourek, Zlín, 264 pp. ISBN 978-80-86447-15-5 (in Czech and English)
- HORSÁKOVÁ V., NEKOLA J. C. & HORSÁK M., 2020: Integrative taxonomic consideration of the Holarctic *Euconulus fulvus* group of land snails (Gastropoda, Stylommatophora). – Systematics and Biodiversity, 18(2): 142–160. <https://doi.org/10.1080/14772000.2020.1725172>
- HUTCHINSON J. M. C. & REISE H., 2009: Mating behaviour clarifies the taxonomy of slug species defined by genital anatomy: the *Deroceras rodnae* complex in the Sächsische Schweiz and elsewhere. – Mollusca, 27: 183–200.
- HUTCHINSON J. M. C., REISE H. & ROBINSON D. G., 2014: A biography of an invasive terrestrial slug: the spread, distribution and habitat of *Deroceras invadens*. – Neobiota, 23: 17–64. <https://doi.org/10.3897/neobiota.23.7745>
- HUTCHINSON J. M. C., REISE H. & SCHLITT B., 2022: Will the real *Limax nyctelius* please step forward: *Lehmannia*, *Ambigolimax*, or *Malacolimax*? No, *Letourneuxia*! – Archiv für Molluskenkunde, 151(1): 19–41. <https://doi.org/10.1127/arch.moll/151/019-041>
- KIRCHNER S., HARL J., KRUCKENHAUSER L., DUDA M., SATTMANN H. & HARING E., 2016: Phylogeography and systematics of *Pyramidula* (Pulmonata: Pyramidulidae) in the eastern Alps: still a taxonomic challenge. – Journal of Molluscan Studies, 82: 110–121. <https://doi.org/10.1093/mollus/eyv047>
- KORÁBEK O., ČEJKA T. & JUŘIČKOVÁ L., 2016a: *Tandonia kusceri* (Pulmonata: Milacidae), a slug new for Slovakia. – Malacologica Bohemoslovaca, 15: 3–8. <https://doi.org/10.5817/MaB2016-15-3>
- KORÁBEK O., JUŘIČKOVÁ J. & PETRUSEK A., 2016b: Splitting the Roman snail *Helix pomatia* Linnaeus, 1758 (Stylommatophora: Helicidae) into two: redescription of the forgotten *Helix thessalica* Boettger, 1886. – Journal of Molluscan Studies, 82(1): 11–22. <https://doi.org/10.1093/mollus/eyv048>
- KOMZÁK P., BERAN L. & HORSÁK M., 2018: *The first record of Corbicula fluminea* (O. F. Müller, 1774) in Moravia (SE Czech Republic). – Malacologica Bohemoslovaca, 17: 28–30. <https://doi.org/10.5817/MaB2018-17-28>
- KRUMPÁLOVÁ Z. & HOLIENKOVÁ B., 2018: Land snails in the Slovak open-air garden centres. – Ekológia, Bratislava, 37(4): 369–379. <https://doi.org/10.2478/eko-2018-0028>
- LORENCOVÁ E., BERAN L., NOVÁKOVÁ M., HORSÁKOVÁ V., ROWSON B., HLAVÁČ J. Č., NEKOLA J. C. & HORSÁK M., 2021: Invasion at the population level: a story of the freshwater snails *Gyraulus parvus* and *G. laevis*. – Hydrobiologia, (2021) –. <https://doi.org/10.1007/s10750-021-04668-w>
- NEIBER M. T., SAGORNY C. & HAUSDORF B., 2016: Increasing the number of molecular markers resolves the phylogenetic relationship of ‘*Cepaea*’ *vindobonensis* (Pfeiffer 1828) with *Caucasotachea* Boettger 1909 (Gastropoda: Pulmonata: Helicidae). – Journal of Zoological Systematics and Evolutionary Research, 54(1): 40–45. <https://doi.org/10.1111/jzs.12116>
- NEKOLA J. C., CHIBA S., COLES B. F., DROST C. A., VON PROSCHWITZ T. & HORSÁK M., 2018: A phylogenetic overview of the genus *Vertigo* O. F. Müller, 1773 (Gastropoda: Pulmonata: Pupillidae: Vertigininae). – Malacologica, 62: 21–161. <https://doi.org/10.4002/040.062.0104>
- NEKOLA J. C., COLES F. B. & HORSÁK M., 2015: Species assignment in *Pupilla* (Gastropoda: Pulmonata: Pupillidae): integration of DNA-sequence data and conchology. – Journal of Molluscan Studies, 81(2): 196–216. <https://doi.org/10.1093/mollus/eyu083>
- NITZ B., 2013: *Integrative systematics and biogeography of Limax (Gastropoda: Stylommatophora)*. – Dissertation Thesis, Ludwig-Maximilians-Universität, München, 133 pp.
- PIEŃKOWSKA J. R. & LESICKI A., 2018: A note on the status of *Galba occulta* Jackiewicz, 1959 (Gastropoda: Hygrophila: Lymnaeidae). – Folia Malacologica, 26(4): 231–247. <https://doi.org/10.12657/folmal.026.029>
- PIEŃKOWSKA J. R., RYBSKA E., BANASIAK J., WESOŁOWSKA M. & LESICKI A., 2015a: Taxonomic status of *Stagnicola palustris* (O. F. Müller, 1774) and *S. turricula* (Held, 1836) (Gastropoda: Pulmonata: Lymnaeidae) in view of new molecular and chorological data. – Folia Malacologica, 23(1): 3–18. <https://doi.org/10.12657/folmal.023.003>
- PIEŃKOWSKA J. R., MANGANELLI G., GIUSTI F. & LESICKI A., 2015b: *Monacha claustralis* (Rossmässler 1834) new to Polish and Czech malacofauna (Gastropoda: Pulmonata: Hygromiidae). – Journal of Conchology, 42: 79–93.
- PROČKÓW M., KUŹNIK-KOWALSKA E., MACKIEWICZ P. 2017: Phenotypic plasticity can explain evolution of sympatric polymorphism in the hairy snail *Trochulus hispidus* (Linnaeus, 1758). – Current Zoology, 63(4): 389–402. <https://doi.org/10.1093/cz/zow082>
- RAZKIN O., SONET G., BREUGELMANS K., MADEIRA M. J., GÓMEZ-MOLINER B. J. & BACKELJAU T., 2016: Species limits, interspecific hybridization and phylogeny in the cryptic land snail complex *Pyramidula*: the power of RADseq data. – Molecular phylogenetics and evolution, 101: 267–278. <https://doi.org/10.1016/j.ympev.2016.05.002>
- RAZKIN O., GÓMEZ-MOLINER B. J., VARDINOYANNIS K., MARTÍNEZ-ORTÍ A. & MADEIRA M. J., 2017: Species delimitation for cryptic species complexes: case study of *Pyramidula* (Gastropoda, Pulmonata). – Zoologica Scripta, 46(1): 55–72. <https://doi.org/10.1111/zsc.12192>
- ROWSON B., ANDERSON R., TURNER J. A. & SYMONDSON W. O. C., 2014: The slugs of Britain and Ireland: undetected and undescribed species increase a well-studied, economically important fauna by more than 20%. – PLoS One. 9(3): e91907.

<https://doi.org/10.1371/journal.pone.0091907>

SZEKERES J., BEERMANN A., NEUBAUER T. A., OČADLIK M., PAUNOVIĆ M., RAKOVIĆ M., CSÁNYI B., VARGA A., WEIGAND A., WILKE T. & FEHÉR Z., 2022: Rapid spread of a new alien and potentially invasive species, *Clathrocaspia knipowitschii* (Makarov, 1938) (Gastropoda: Hydrobiidae), in the Danube River. – Archives of Biological Sciences, 6 pp.
<https://doi.org/10.2298/ABS220211006S>

WELTER-SCHULTES F. W., 2012: European non-marine molluscs, a guide for species identification. – Planet Poster Editions, Göttingen, pp. A1-A3, 1-679, Q1-Q78. ISBN 978-3-933922-75-5.