

New land snails from Montenegro and Albania

(Mollusca: Gastropoda)

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Abstract

Four land snail species from Montenegro and Northern Albania are characterised conchologically and described as new: *Acicula miaphene* n. sp., *Platyla corpulenta* n. sp., *Platyla feheri* n. sp. and *Hiltrudia (?) globulosa* n. sp. New records for species of land snails from Montenegro are submitted.

Key words: Taxonomy, Anatomy, *Acicula*, *Platyla*, *Hiltrudia*, Albania, Montenegro, new species, new records.

Kurzfassung

Es werden 4 Landschneckenarten aus Montenegro und aus Nord-Albanien anhand des Gehäuses neu beschrieben: *Acicula miaphene* n. sp., *Platyla corpulenta* n. sp., *Platyla feheri* n. sp. und *Hiltrudia (?) globulosa* n. sp. Es wird über weitere für Montenegro neue Vorkommen von Landschnecken berichtet.

Schlüsselwörter: Taxonomie, Anatomie, *Acicula*, *Platyla*, *Hiltrudia*, Albanien, Montenegro, neue Arten, Neunachweise.

Introduction

The majority of the molluscan specimens mentioned here was collected during vacation trips of 1–2 weeks in the years 2004–2006 in Montenegro. The specimens of the new taxon *Platyla corpulenta* n. sp. originate partly from collections of the Hungarian malacologists in northern Albania¹. These areas often been visited by malacologists in the past, have been inaccessible for collec-

tors during the past century. The increasing activities of malacologists in the past years yielded a various number of species new for science which four of them will be described in the present work.

The spelling of Albanian localities follows FEHÉR et al. (2004).

All measurements in millimetres.

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Abbreviations:

E	private collection Z. ERÖSS, Budapest	S	private collection P. SUBAI, Aachen
H	private collection A. HUNYADI, Budapest	SMF	Naturmuseum Senckenberg, Frankfurt a. M.
HNHM	Hungarian Natural History Museum, Budapest	alk.	specimen preserved in alcohol
Maa	private collection J.M. W. MAASEN, Duivendrecht	AD	diameter of aperture
MMMB	Munkácsy Mihály Museum, Békéscsaba	D	shell diameter
NMW	Natural History Museum, Wien	H	height of the shell
NNM	Nationaal Natuurhistorisch Museum, Leiden	AH	height of the aperture
		juv.	juvenile specimen
		W	number of whorls
		UTM	UTM-Code for the inventory of the European Invertebrates

Systematic account

Caenogastropoda Cox 1960

Aciculidae J.E. GRAY 1850

Acicula miaphene n. sp.

Figs 1, 4

Diagnosis: Shell large, broad, with narrow shallow bulge of the neck, densely and irregularly striped with longitudinal furrows, angularis almost reduced, without sinulus.

Description: Shell large, low conical; fresh specimens are red- to yellowish-brown; apex (the first 2–2.25 whorls) smooth, the teleoconch whorls with dense, irregularly arranged longitudinal furrows; penultimate whorl with 55–75 furrows; 6.75–7.25 whorls, the last whorl occupies 48–52 % of the total height; sutural ridge reduced.

The aperture slightly ascends at the penultimate whorl, and is acutely oval in frontal view (Fig. 4); apertural rim blunt, slightly reinforced at the palatal side, more strongly calloused at the basal and columellar side, where it is enlarged to form a small triangle. The parietal callus well developed, covering the periomphalum with a faint stripe, a columellar callus is missing; angularis reduced. The apertural rim is slightly curved in lateral view, a sinulus is missing.

The bulge of the neck is moderately developed. It starts with a small channel behind the apertural rim.

Measurements (n = 171): H = 5.25–6.12; D = 1.93–2.18; AH = 1.56–1.81; AD = 1.18–1.37; measurements of the holotype: H = 6; D = 2.06; AH = 1.75; AD = 1.31; W = 7.25.

Differential diagnosis: Due to its size and its dense pattern of furrows on the teleoconch, *A. miaphene* is easily separated from all related species. *Acicula disjuncta* BOETERS et al. 1989 has the same shell height, but it is considerably more slender and has a much lesser number of furrows (13–20 on the penultimate whorl). Additionally, the bulge of its neck is weaker. Both, *A. hausdorfi* BOETERS et al. 1989 and *A. mul-*

tilineata BOETERS et al. 1989 are similar in their overall shell shape, but considerably smaller. Their apertures are more rounded at the base, they have a more strongly developed bulge of the neck, and the pattern of furrows on the teleoconch is more regular and denser.

Locus typicus: Montenegro, at NW-rim of Mokrine (= NNW from Herceg Novi), at limestone rocks, 575 m alt., UTM BN 90.

Type material: holotype SMF 329430, paratypes from the type locality: leg. SUBAI 13.10.2004, S 20787/5+5 (juv.); leg. SUBAI 19.9.2005, S 20679/52+35 (juv./damaged); leg. SUBAI 17.9.2006, E/5, Maa/5, HNHM 96781/5, NMW/5, NNM/5, SMF 330757/5, S 20966/83+37 (juv./damaged); leg. SUBAI 14.4.2009, S 22256/3+4 (juv./damaged).

Etymology: *miaphene* is a fantasy name.

Distribution patterns: This species is only known from the type locality in the Kotor Bay in Montenegro (= NNW of Herceg Novi).

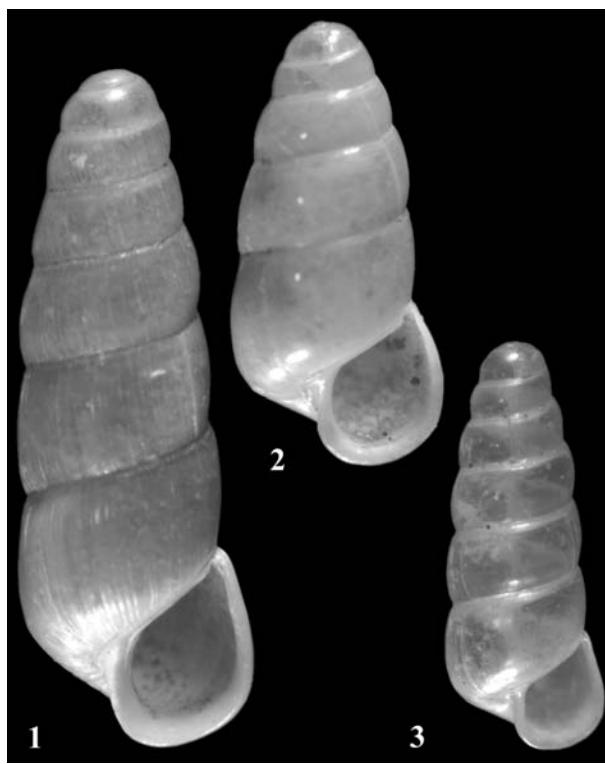
Platyla corpulenta n. sp.

Figs 2, 5

Diagnosis: shell medium-sized shell, very broad, white; angularis and sinulus reduced, bulge of the neck missing; subterranean mode of life.

Description: shell medium-sized, broad, conical, colour white (fresh specimens translucent); surface of the teleoconch smooth, the few furrows mark interruption of shell growth; whorls 5.5–6.25, regularly increasing, sutural ridge weak or completely reduced; last whorl occupies 56–60 % of the total shell height.

The aperture slightly ascends at the penultimate whorl, and is acutely oval in frontal view; apertural rim blunt, slightly reinforced at the palatal side, more strongly calloused at the basis and strong at the columellar side. The parietal callus is thin, and covers the periomphalum with a narrow stripe; the angularis is reduced or missing, the sinulus is always missing. The apertural rim is slightly curved in lateral view. The bulge of the neck is always lacking.



Figs 1–3: New species of Aciculidae. — Fig. 1: *Acicula miaphene* n. sp., Montenegro, at NW-rim of Mokrine (= NNW of Herceg Novi), at limestone rock and in a rock cavity, 575 m alt., UTM BN 90. (holotype SMF 329430, H= 6, D= 2.06 mm). Fig. 2: *Platyla corpulenta* n. sp., Montenegro, Koništar Mountain, southern slope, approx. 10 km E of Đuravci (= in direction to Ostros, S of Lake Skadar), at limestone rocks, approx. 350 m alt., UTM CM 56. (holotype SMF 329428, H= 3.93, D= 1.8 mm). Fig. 3: *Platyla feheri* n. sp., Montenegro, Koništar Mountain, southern slope, approx. 10 km E of Đuravci (= in direction to Ostros, S of Lake Skadar), at limestone rocks, approx. 350 m alt., UTM CM 56. (holotype SMF 329429, H= 3.62, D= 1.37 mm); all phot. E. NEUBERT, $\times 15$.

Measurements (n = 8): H = 3.68–4.3; D = 1.68–1.93; AH = 1.31–1.5; AD = 1–1.25; measurements of the holotype: H = 3.93; D = 1.8; AH = 1.43; AD = 1.12; W = 5.75.

Differential diagnosis: *Platyla procax* BOETERS et al. 1989 is very similar in its overall shape, but it has a smaller and also less broad shell. Its aperture is smaller, and the apertural rim is not so strongly curved. Moreover, *P. procax* has a bulge on the neck, which is missing completely in *P. corpulenta*. The new species cannot be confused with other species of Aciculidae because of its medium-sized though very broad shell.

Locus typicus: Montenegro, approx. 10 km from Đuravci on the road to Ostros (= towards East), Koništar Mountain S-side, in crevices of limestone rock and in rock cavities approx. at 350 m alt., UTM CM 56.

Type material (besides the holotype, all specimens mentioned are paratypes): holotype SMF 329428, paratypes

from locus typicus: leg. SUBAI, 21.9.2005, S 20495/1 (damaged); leg. SUBAI, 16.9.2006, S 21050/4+6 (juv./damaged).

Montenegro, Rumija Mountains, 4 km from Arbneš/Arbneshi following the road to the south (= approx. 2 km S of pass), in crevices in limestone rocks, approx. 350 m alt., UTM CM 65, leg. SUBAI 21.9.2005, S 20522/1+1 (damaged); leg. SUBAI 16.9.2006, HNM 96782/1, S 21013/1+4 (juv./damaged).

Albania, Periferi Kukës, Gurri i Arrënit E of Arrën (= 35 km S of the Shkodër–Kukës road), limestone rocks, degraded beech forest, 1600 m alt., UTM DM 44, leg. DELI, ERÖSS, FEHÉR & MURÁNYI 8.10.2005, E/1 (juv.), HNM 96803/1 (juv.), MMMB/1 (juv.).

Note: The locus typicus of *P. corpulenta* and hitherto only record of its closest relative *P. procax* is approx. 26 km apart.

Etymology: The name *corpulenta* describes the very broad shell which is characteristic for this species.

Distribution patterns: This species is only known from three localities in Montenegro, in the northern part of the Rumija-Mountains and from the Koništar Mountain, (both localities are south of Lake Skadar) as well as in Northern Albania, approx. 35 km SSW of Kukës. The Montenegrin and Albanian localities are located in a distance of approx. 130–135 km. The species lives subterraneanous.

Platyla feheri n. sp.

Figs 3, 6

Diagnosis: shell medium-sized, white, smooth, aperture subquadrate without sinulus, bulge of the neck narrow, slightly upraised; subterranean mode of life.

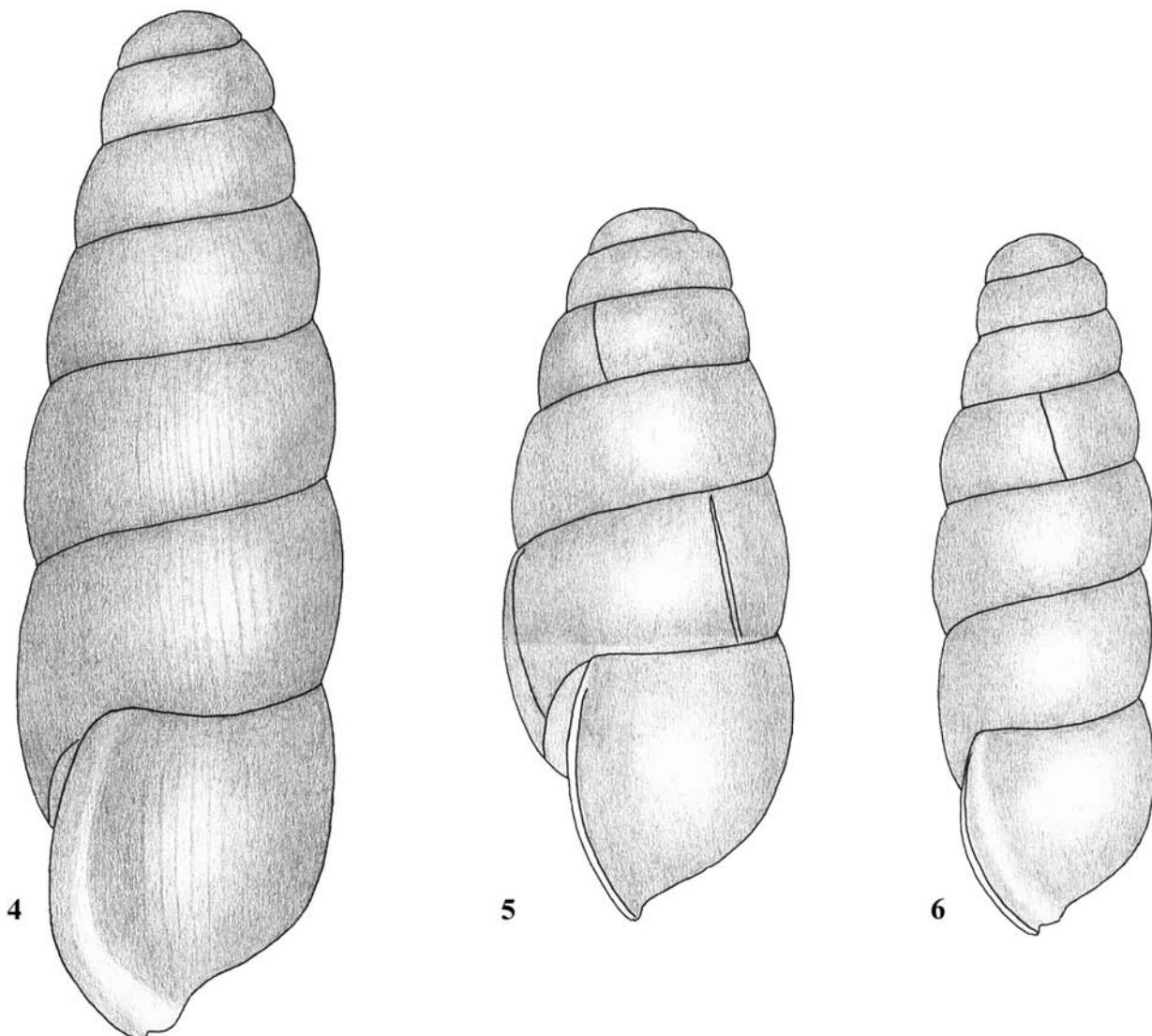
Description: shell medium-sized, slender conical, colour white (fresh specimens translucent); surface of the teleoconch smooth, the few furrows mark interruption of shell growth; whorls 6.5–7.25, regularly increasing, sutural ridge distinct; last whorl occupies 44–49 % of the total shell height.

The aperture slightly ascends at the penultimate whorl, somewhat subquadrate and conically oval; apertural rim blunt, slightly reinforced at the palatal side, more strongly calloused at the basis and at the columellar side, where it is enlarged to form a small triangle. The parietal callus is very thin covering the periomphalum in a narrow stripe; angularis reduced, a sinulus always missing. The apertural rim is slightly curved in lateral view.

The bulge of the neck is hardly developed. It starts with a narrow channel behind the apertural rim.

Measurements (n = 272): H = 3.43–4; D = 1.31–1.43; AH = 1.06–1.12; AD = 0.75–0.81; measurements of the holotype: H = 3.62; D = 1.37; AH = 1.06; AD = 0.81; W = 7.

Differential diagnosis: *Platyla polita polita* (HARTMANN 1840) is smaller and more slender than *P. feheri* and has one whorl less on average. Its shell



Figs 4–6: New species of Aciculidae, lateral views to show characteristics of the aperture. — Fig. 4: *Acicula miaphene* n. sp., paratype, H= 5.75, D= 2.06 mm. Fig. 5: *Platyla corpulenta* n. sp., paratype H= 4.06, D= 1.89 mm. Fig. 6: *Platyla feheri* n. sp., paratype H= 4, D= 1.43 mm; all drawings P. SUBAI.

is yellowish to red brown, and its shell shape is rather fusiform than conical. Its bulge of the neck is narrower and higher with a sharp decrease in size which is in contrasted with *P. feheri*, where it decreases regularly. *Platyla banatica* (ROSSMÄSSLER 1842) is considerably larger, and its whorls increase more rapidly. Its aperture is regularly rounded basally, and the bulge of its neck is more strongly developed. Specimens of *P. wilhelmi* (A.J. WAGNER 1910) of the same shell height are more slender than *P. feheri*. It is usually yellowish-brown to red brown and not white. Its shell has fewer, which increase much faster in height. The aperture of *P. wilhelmi* has a sinulus and is regularly rounded on the basis. Its bulge of the neck is considerably broader than it is in *P. feheri*.

The shell of the sympatric *P. corpulenta* n. sp. is as twice as broad at the same shell height. It has a larger aperture, and the bulge of the neck is missing.

Locus typicus: Montenegro, approx. 10 km from Duravci on the road in the direction to Ostros (= eastwards), Koništar Mountain, S-side, in crevices of limestone rocks and rock cavities, approx. 350 m alt., UTM CM 56.

Type material (besides the holotype, all specimens mentioned are paratypes): holotype SMF 329429, paratypes from locus typicus: leg. SUBAI 21.9.2005, S 20494/73+5 (juv.); leg. SUBAI 16.9.2006, E/5, HNHM 96783/5, Maa/5, NMW/5, NNM/5, SMF 330756/10, S 21049/220+57 (juv./damaged); leg. ERÖSS & HUNYADI 21.7.2006, coll. H/12+3 (juv./damaged); leg. SUBAI 16.4.2009, S 22258/44+5 (juv./damaged); same locality but western side of the mountain, leg. SUBAI & SZEKERES 26.9.2006, S 20882/6.

Etymology: This new species is named in honour of Dr. ZOLTÁN FEHÉR (Budapest).

Distribution patterns: Only known from Koništar mountain, south of the Lake Skadar in Montenegro. This species lives subterraneanous.

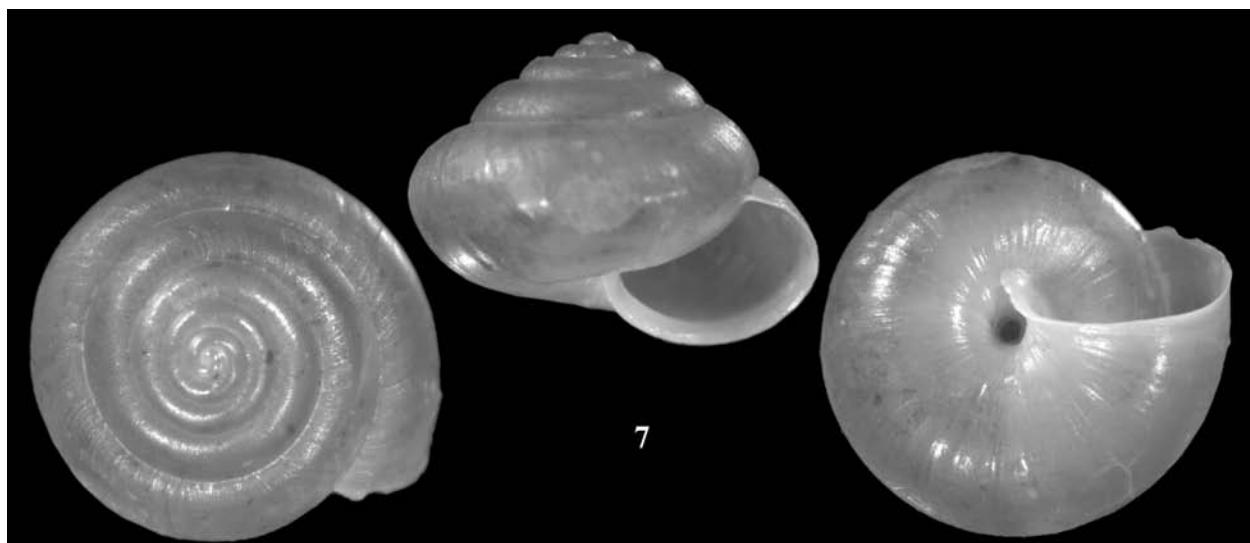


Fig. 7. *Hiltrudia* (?) *globulosa* n. sp., Montenegro, at NW-rim of Mokrine (= NNW of Herceg Novi), at limestone rock and in a rock cavity, 575 m alt., UTM BN 90. (holotype SMF 329432, H= 5.8, D= 7.8 mm); phot. E. NEUBERT, $\times 7$.

Pulmonata CUVIER in BLAINVILLE 1814

Stylommatophora A. SCHMIDT 1855

Hygromiidae TRYON 1866

***Hiltrudia* (?) *globulosa* n. sp.**

Figs 7, 8

D i a g n o s i s : shell small sized, spherical, of brownish colour; surface of teleoconch covered by a dense network of scales; umbilicus narrow, apertural rim slightly flared.

D e s c r i p t i o n : shell small, of spherical conical shape; colour yellowish to opaque brownish; protoconch of 1.5–1.75 whorls, initial whorl smooth, later with fine irregular radial stripes; teleoconch with a fine network of small, longitudinal scales arranged in a radial pattern; on the lower whorls, the scales become increasingly stronger; 5–5.75 whorls, slightly curved and regularly increasing; last whorl only slightly broader than the penultimate whorl, slightly descending before reaching the aperture; suture moderately deep. Umbilicus narrow, 0.5–0.8 mm wide, almost not increasing in diameter from the initial whorls; slightly covered by a reflection of the apertural rim.

The aperture is spherical, slightly transverse elliptical; the insertions are 2.3–3.1 mm apart from each others; apertural rim sharp, somewhat flared at the palatal and basal part, and slightly broadened towards the umbilicus.

M e a s u r e m e n t s (n= 86): H = 4.4–6.4; D = 6–8.43; AH = 2.5–3.6; AD = 3–4.5; measurements of the holotype: H = 5.8; D = 7.8; AH = 3.3; AD = 4.2; W = 5.5.

M o r p h o l o g y o f t h e g e n i t a l o r g a n s : unknown.

D i f f e r e n t i a l d i a g n o s i s : The new species differs from the other hitherto known species of *Hiltrudia*

(i.e. *H. mathildae* (WESTERLUND 1881) und *H. kusmici* (CLESSIN 1887)) by its spherical shell, which is more depressed in the other species. Moreover, the shell of *Hiltrudia* (?) *globulosa* n. sp. is generally smaller, the umbilicus considerably narrower, and the aperture is more rounded. The scales on the surface of the shell are shorter and more densely arranged than in the other two species.

L o c u s t y p i c u s : Montenegro, at NW-rim of Mokrine (= NNW from Herceg Novi), at limestone rocks, 575 m alt., UTM BN 90.

T y p e m a t e r i a l (besides the holotype, all specimens mentioned are paratypes): from locus typicus, leg. SUBAI 19.9.2005, holotype: SMF 329432, paratypes: S 20678/12+12 (juv.); leg. SUBAI 13.10.2004, S 20786/4+6 (juv.); leg. SUBAI 17.9.2006, HNHM 96785/1, S 20965/7+4 (juv./damaged); leg. SUBAI 14.4.2009, S 22257/60+42 (juv./damaged); 2 km NW of Mokrine (= at the cross roads to Trebinje), 590 m alt., UTM BN 90, leg. ERÖSS & HUNYADI 18.7.2006, E/1, H/1; above Kameno (= NW of Herceg Novi), at limestone rocks, 620 m alt., UTM BN 90, leg. SUBAI 13.10.2004, S 20509/1.

E t y m o l o g y : The name *globulosa* was selected to address the spherical shape of the shell.

D i s t r i b u t i o n p a t t e r n s : This species is only known from a small area north of Herceg Novi at the beginning of the Kotor Bay at three localities which are ca. 6 Km apart from each other.

R e m a r k s : This new species is here provisionally affiliated to the genus *Hiltrudia* H. Nordsieck 1993 because of its relative similarity in shell characters, the similar form of the scales on the teleoconch and its occurrence within the distribution area of the *Hiltrudia* species. The correct generic position of the new species can only be ascertained following an analysis of the

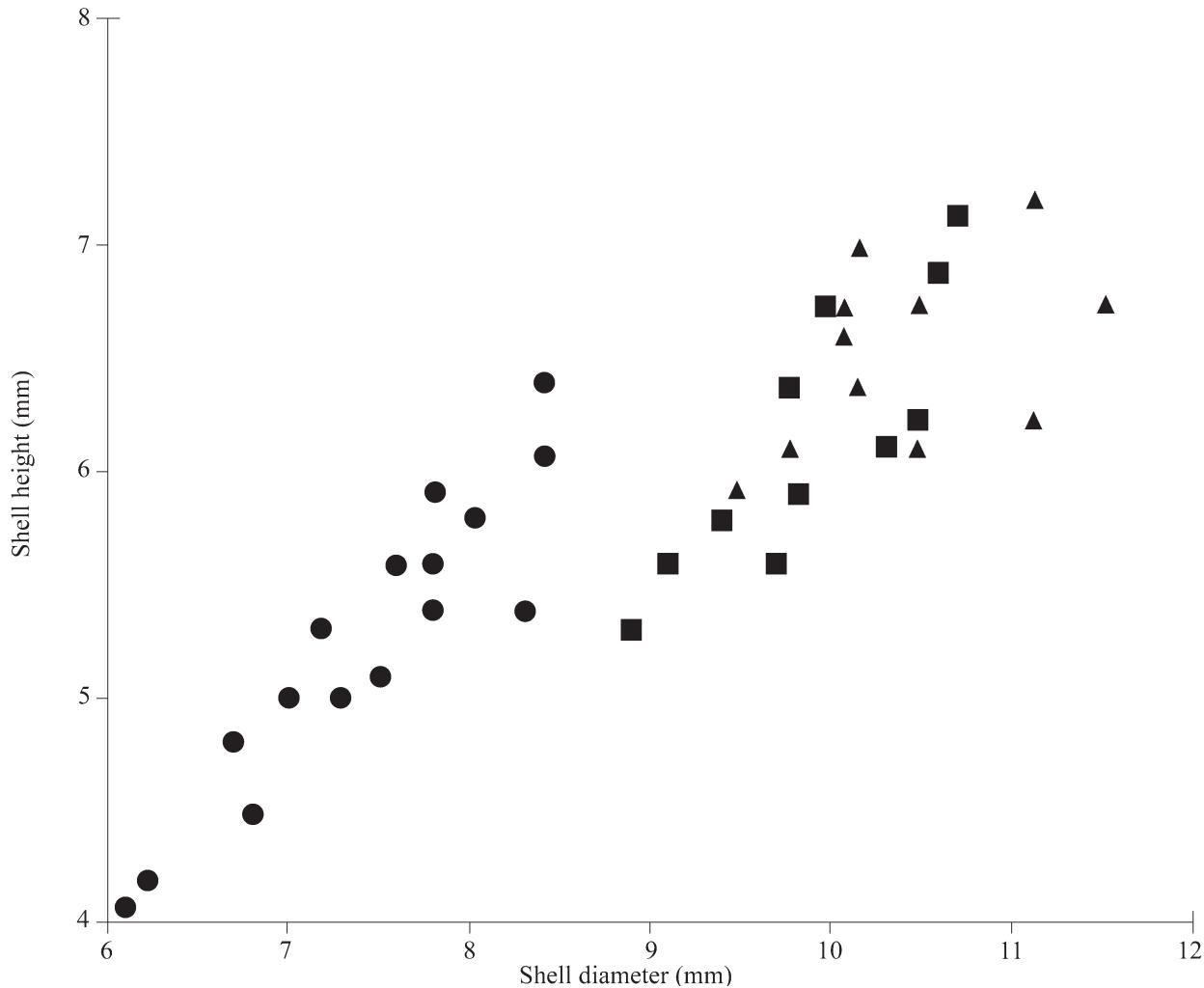


Fig. 8. Biometric analysis of shell characteristics of *Hiltrudia*-species. ● = *H. (?) globulosa* n. sp., n = 16; ■ = *H. kusmici* (CLESSIN 1887), n = 11; ▲ = *H. mathildae* (WESTERGAARD 1881), n = 11.

characters of the genital organs. However, the author visited the type locality twice, but unfortunately was not able to find living specimens, and thus, a final decision on this question has to be postponed. Winter & Maassen (1992) described two species in Hygromiidae (*kosovensis* and *taraensis*) attributing them to *Monachoides* despite considerable differences in genital morphology if compared to *Monachoides incarnatus* (O.F. MÜLLER 1774). The relationship of *Hiltrudia* (?) *globulosa* n. sp. to this group also needs clarification.

Spelaeodiscidae STEENBERG 1925

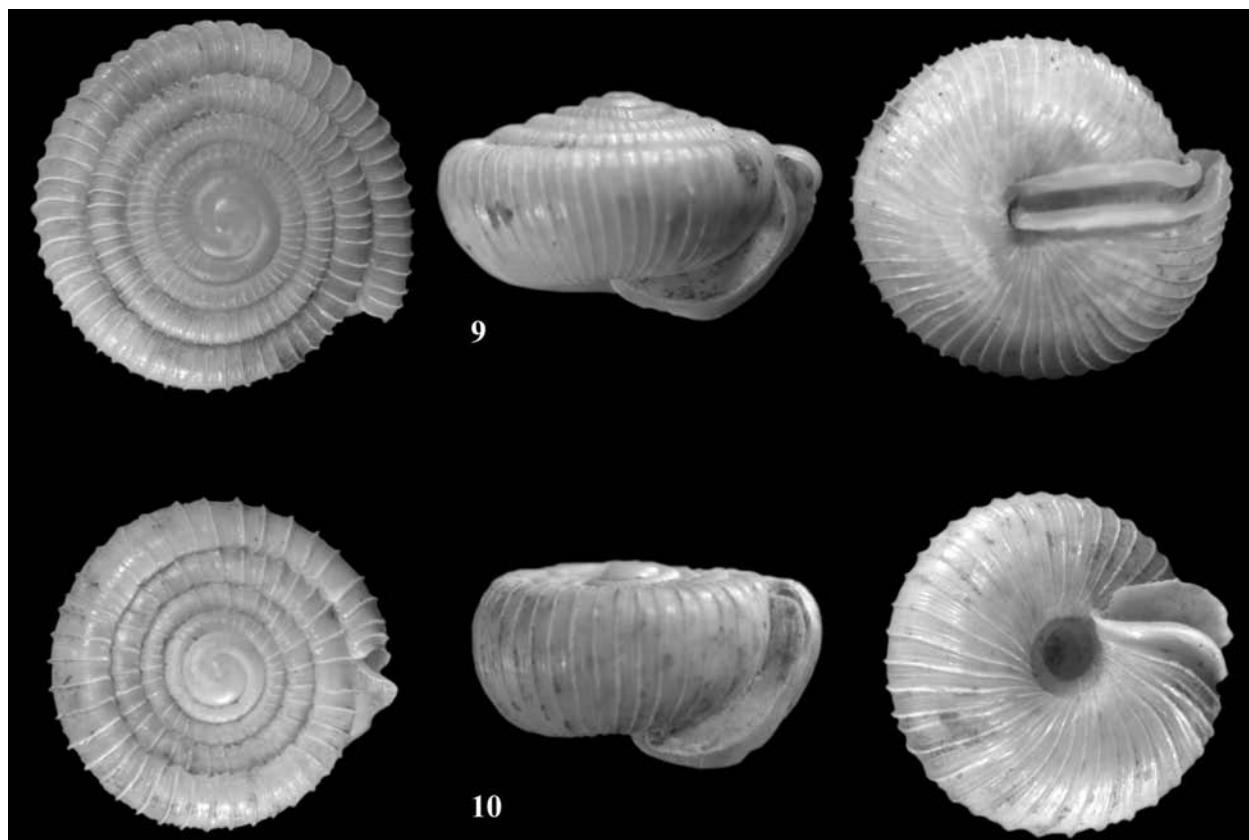
Virpazaria E. GITTINGER 1969

Quite recently, I co-authored the publication of two new species of *Virpazaria* from Montenegro (REISCHÜTZ & REISCHÜTZ 2009), and deposited paratype specimens in the collection of the Research Institute Senckenberg. To facilitate further recognition of these enigmatic species, the respective paratypes are here also illustrated. (Figs 9–10).

Discussion

In the course of the intensive collections, numerous other species of land snails so far unknown to live in Montenegro have been found. The following compilation

includes the accompanying fauna of some Montenegrin localities with a high malacodiversity. However, it is beyond the scope of this publication to record all hitherto



Figs 9–10. Species of Spelaeodiscidae. — Fig. 10: *Virpazaria (Virpazaria) aspectulabeatidis* A. & P. L. REISCHÜTZ & SUBAI 2009, Montenegro, Koništar Mountain, southern slope, approx. 10 km E of Đuravci (= in direction to Ostros, S of Lake Skadar), at limestone rocks, approx. 350 m alt., UTM CM 56. (paratype SMF 333501, H= 2.18, D= 3.5 mm). Fig. 11: *Virpazaria (Virpazaria) stojaspali* A. & P. L. REISCHÜTZ & SUBAI 2009, Montenegro, Koništar Mountain, southern slope, approx. 10 km E of Đuravci (= in direction to Ostros, S of Lake Skadar), at limestone rocks, approx. 350 m alt., UTM CM 56. (paratype SMF 333502 H= 1.93, D= 3.25 mm); all phot. E. NEUBERT, $\times 15$.

sampled localities. So for example, *Platyla minutissima* BOETERS, GITTEMBERGER & SUBAI 1989 were also found in large numbers in rock duff at the Ljuta-source near Dobrota in the Kotor Bay. The newly described or newly recorded species for Montenegro are listed in bold. The numbers of the localities refer to the numbers on the distribution map (Fig. 11) Some of the newly recorded species are here illustrated (Figs 12–14).

1) N-exposed mountainside south of crossroads Sutorina-Njivice-Igalo (= W from Herceg Novi), in a rock cavity and limestone rocks, UTM BN 90.

Cochlostoma auritum auritum (ROSSMÄSSLER 1837)

Pomatias elegans (O.F. MÜLLER 1774)

Platyla minutissima BOETERS, GITTEMBERGER & SUBAI 1989 (Fig. 12)

Platyla wilhelmi (A.J. WAGNER 1910)

Renea kobelti kobelti (A.J. WAGNER 1910)

Galba truncatula (O.F. MÜLLER 1774)

Hypnophila pupaeformis (CANTRALINE 1835)

Virpazaria pageti GITTEMBERGER 1969

Agardhiella formosa (PFEIFFER, L. 1848)

Pagodulina subdola gracilior PILSBRY 1926

Chondrina spelta spelta (H. BECK 1837)

Rupestrilla rhodia (ROTH 1839)

Acanthinula aculeata (O.F. MÜLLER 1774)

Ena subtilis subtilis (ROSSMÄSSLER 1837)

Charpentieria stigmatica stigmatica (ROSSMÄSSLER 1836)

Delima bilabiata bilabiata (A.J. WAGNER 1829)

Cecilioides acicula (O.F. MÜLLER 1774)

Cecilioides veneta (STROBEL 1855)

Poiretia cornea (BRUMATI 1838)

Punctum pygmaeum (DRAPARNAUD 1801)

Paraegopis albanicus (ROSSMÄSSLER 1836)

Vitrella illyrica (A.J. WAGNER 1907)

Mediterranea hydatina hydatina (ROSSMÄSSLER 1838)

Mediterranea planorbis (MOELLENDORFF 1899)

Hiltrudia kusmici (CLESSIN 1887)

Monacha frequens (MOUSSON 1859)

Cernuella virgata (DA COSTA)

Dinarica sp.

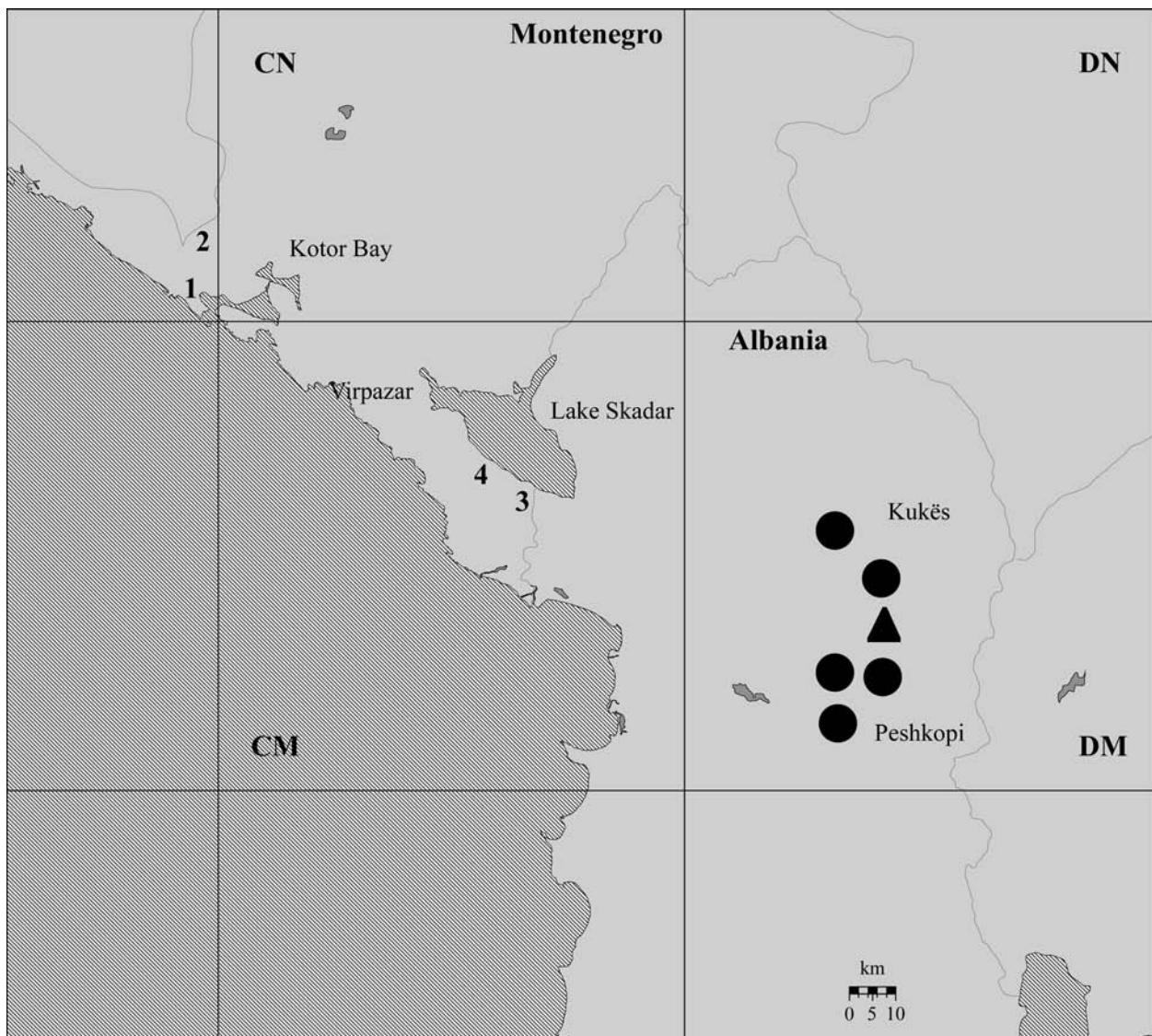


Fig. 11: Distribution map. 1 = Montenegro, N-exposed mountainside south of crossroad Sutorina-Njivice-Igalo (= W of Herceg Novi), in a rock cavity and limestone rocks, UTM BN 90. 2 = Montenegro, at NW-rim of Mokrine (= NNW of Herceg Novi), in a rock cavity and limestone rocks, 575 m alt., UTM BN 90. 3 = Montenegro, Rumija Mountain, 4 km S of Arbneš/Arbneshi following the road (= approx. 2 km S of mountain pass), at limestone rocks, approx. 350 m alt., UTM CM 65. 4 = Montenegro, Koništar Mountain, southern slope, approx. 10 km E of Đuravci (= in direction to Ostros, S of Lake Skadar), at limestone rocks, approx. 350 m alt., UTM CM 56.

2) at the NW-rim of Mokrine (= NNW from Herceg Novi), at limestone rock and in rock cavities, 575 m alt., UTM BN 90.

Cochlostoma auritum auritum (ROSSMÄSSLER 1837)
Cochlostoma scalarinum scalarinum (A. & J.B. VILLA 1841)

Pomatias elegans (O.F. MÜLLER 1774)

Acicula miaphene n. sp.

Pholeoteras euthrix STURANY 1904 (Fig. 13)

Agardhiella biarmata (O. BOETTGER 1880) (Fig. 14)

Agardhiella formosa (PFEIFFER 1848)

Pagodulina subdola gracilior PILSBRY 1926

Chondrina spelta spelta (H. BECK 1837)

Rupestrilla rhodia (ROTH 1839)

Pyramidula cephalonica (WESTERLUND)

Acanthinula aculeata (O.F. MÜLLER 1774)

Truncatellina claustralis (GREDLER 1856)

Ena subtilis subtilis (ROSSMÄSSLER 1837)

Charpentieria stigmatica stigmatica (ROSSMÄSSLER 1836)

Delima binotata gastrolepta (ROSSMÄSSLER 1836)

Medora sp.

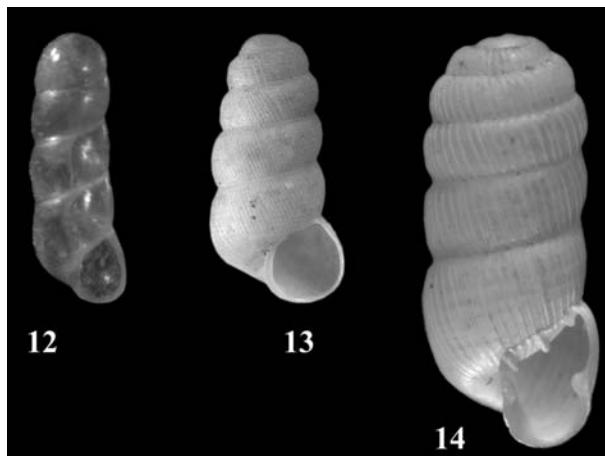
Cecilioides acicula (O.F. MÜLLER 1774)

Poiretia cornea (BRUMATI 1838)

Punctum pygmaeum (DRAPARNAUD 1801)

Paraegopis albanicus (ROSSMÄSSLER 1836)

Vitrella contracta (WESTERLUND 1871)



Figs 12–14: Illustrations of species newly recorded for Montenegro. — Fig. 12: *Platyla minutissima* BOETERS, GITTINGER & SUBAI 1989, Montenegro, N-exposed mountainside south of crossroad Sutorina-Njivice-Igalo (= W of Herceg Novi), in a rock cavity and limestone rocks, UTM BN 90. (SMF 333499, H= 1.25, D= 0.44 mm); $\times 30$. Fig. 13: *Pholeoteras euthrix* STURANY 1904, Montenegro, at NW-rim of Mokrine (= NNW of Herceg Novi), at limestone rock and in a rock cavity, 575 m alt., UTM BN 90. (SMF 333500, H= 2.37, D= 1.25 mm); $\times 15$. Fig. 14: *Agardhiella biarmata* (BOETTGER, O. 1880), Montenegro, at NW-rim of Mokrine (= NNW of Herceg Novi), at limestone rocks and in a rock cavity, 575 m alt., UTM BN 90. (SMF 329427, H= 3.68, D= 1.56 mm); $\times 15$; all phot. E. NEUBERT.,

Mediterranea hydatina hydatina (ROSSMÄSSLER 1838)
Mediterranea planorbis (MOELLENDORFF 1899)
Hiltrudia kusmici (CLESSIN 1887)
Monacha cartusiana (O.F. MÜLLER 1774)
Hiltrudia (?) *globulosa* n. sp.
Dinarica sp.
Liburnica insolita costulata (BRUSINA 1869)
Helix secerndenda ROSSMÄSSLER 1837

3) Rumija Mountains, 4 km S of Arbneš/Arbneshi following the road (= approx. 2 Km S from mountain pass), at limestone rocks, approx. 350 m alt., UTM CM 65.

Cochlostoma sp.
Pomatias elegans (O.F. MÜLLER 1774)
Platyla corpulenta n. sp.
Spelaeodiscus sp. (juv.)
Virpazaria stojaspali A. & P. L. REISCHÜTZ & SUBAI 2009
Pagodulina kaeufeli KLEMM 1939
Chondrina spelta spelta (H. BECK 1837)
Ena subtilis subtilis (ROSSMÄSSLER 1837)
Charpentieria stigmatica stigmatica (ROSSMÄSSLER 1836)
Delima montenegrina muralis (KÜSTER 1860)
Montenegrina subcristata subcristata (KÜSTER 1847)

- Cecilioides acicula* (O.F. MÜLLER 1774)
- Cecilioides veneta* (STROBEL 1855)
- Poiretia cornea* (BRUMATI 1838)
- Paraegopis albanicus* (ROSSMÄSSLER 1836)
- Gyralina* sp. (juv.)
- Gyralina circumlineata* (L. PFEIFFER 1846)
- Vitrella contracta* (WESTERLUND 1871)
- Vitrella subrimata* (REINHARDT 1871)
- Lindholmiola corcyrensis* (ROSSMÄSSLER 1838)
- Hiltrudia kusmici* (CLESSIN 1887)
- Monacha frequens* (MOUSSON 1859)
- Dinarica* sp.
- Liburnica hoffmanni walteri* (O. BOETTGER 1886)
- Helix secerndenda* ROSSMÄSSLER 1837

4) Kroništar Mountain, southern slope, approx. 10 km E from Đuravci (= in direction to Ostros, S of Lake Skadar), at limestone rocks, approx. 350 m alt., UTM CM 56.

- Cochlostoma auritum meridionalis* (WAGNER, A.J. 1897)
- Pomatias elegans* (O.F. MÜLLER 1774)
- Platyla corpulenta* n. sp.
- Platyla feheri* n. sp.
- Spelaeodiscus dejongi* GITTINGER 1969
- Virpazaria aspectulabeatidis* A. & P. L. REISCHÜTZ & SUBAI 2009
- Pagodulina kaeufeli* KLEMM 1939
- Chondrina spelta spelta* (H. BECK 1837)
- Acanthinula aculeata* (O.F. MÜLLER 1774)
- Ena subtilis subtilis* (ROSSMÄSSLER 1837)
- Delima montenegrina muralis* (KÜSTER 1860)
- Montenegrina subcristata subcristata* (KÜSTER 1847)
- Cecilioides veneta* (STROBEL 1855)
- Poiretia cornea* (BRUMATI 1838)
- Punctum pygmaeum* (DRAPARNAUD 1801)
- Paraegopis albanicus* (ROSSMÄSSLER 1836)
- Gyralina circumlineata* (L. PFEIFFER 1846)
- Vitrella botterii* (L. PFEIFFER 1853)
- Vitrella subrimata* (REINHARDT 1871)
- Daudebardia rufa* (DRAPARNAUD 1805)
- Mediterranea planospiroides* (RIEDEL 1969)
- Lindholmiola corcyrensis* (ROSSMÄSSLER 1838)
- Hiltrudia kusmici* (CLESSIN 1887)
- Monacha cartusiana* (O.F. MÜLLER 1774)
- Dinarica* sp.
- Liburnica hoffmanni walteri* (O. BOETTGER 1886)
- Helix secerndenda* ROSSMÄSSLER 1837

It is an interesting (and encouraging) fact that new, unknown species, can still be discovered and our knowledge of the malacofauna of Europe is permanently increasing. But unfortunately it has to be noted that in general, snail populations are declining. In the inland of the Balkans, various species of Clausiliidae could not be found back in places, where they used to be abundant.

For example, *Agathylla regularis* (L. PFEIFFER 1861), which 30–35 years ago could be found in large quantities on the rock slopes in the Bay of Kotor, is almost extinguished, and only isolated specimens could be found deeply hidden in rock crevices. Also in other species, which previously were known to be distributed over larger areas and occurred in large numbers such as *Pyramidula* spp. and *Rupestrella* spp., only shells isolated in rock duff could be found. No living specimens of *Lindholmiola corycensis* (ROSSMÄSSLER 1838) could be found back, although the western border of its distribution was known to be Southern Montenegro. Despite great search-

ing efforts, many of the well known *Montenegrin* species could not be found back alive. Even during days of persistent rain during September–October, hardly any living snail could be observed.

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