

Updated and corrected list of the inland molluscs of Samothraki Island (N Aegean, Greece)

DILIAN GEORGIEV

Department of Ecology and Environmental Conservation, University of Plovdiv, Tzar Assen Str. 24, BG-4000 Plovdiv, Bulgaria, email: diliangeorgiev@abv.bg

Abstract. A list of all valid and published species of freshwater and terrestrial molluscs from Samothraki Island (N Aegean, Greece) is provided. A total of 41 species of inland Mollusca are known from this island: Bivalvia – 1 species, freshwater snails – 6 species and terrestrial snails - 34 species. Some species remained with unclear taxonomic status and need future studies.

Key words: Gastropoda, Bivalvia, Samothraki, Greece.

Introduction

This is a revision of the paper we published in 2010 (Georgiev & Stoycheva 2010). The results of collections during my first visit to the island in 2008, and some new collection trips with data obtained between 08-14.07.2017 allowed me to provide an updated and corrected list of the inland malacofauna of Samothraki Island.

Material and Methods

Literature survey of all published data on terrestrial and freshwater molluscs for Samothraki Island was done (Fuchs & Käufel 1936, Reischütz 1986, 1988; Riedel & Reischütz 1988; Riedel 1992; Wiktor 2001; Nordsieck 2007; Georgiev & Stoycheva 2010; Bank *et al.* 2013; Neubert 2014). Some of my mistakes published in Georgiev & Stoycheva (2010) have been corrected. New materials (shells and living snails) were collected at the following localities on Samothraki Island:

1. Bush and grass areas around hotel Kastro near Paleopoli, N40 30 11.6 E25 31 18.3, 25 m a.s.l., 08-10.07.2017;
2. Grass and phrygana (*Sarcopoterium spinosum*) terrains near Kipos Beach, N40 25 22.9 E25 41 20.4, 10 m a.s.l., 09.07.2017;
3. Bush area and trees along small drying stream (mainly *Olea europaea*, *Platanus orientalis*, *Quercus coccifera* and *Nerium oleander*) near Pachia Ammos Beach, N40 23 42.1 E25 34 45.4, 11 m a.s.l., 09-13.07.2017;
4. Grass and bush (*Pyrus* sp., *Paliurus spina-christii*) terrains near the road Paleopoli-Kamariotissa, N40 30 05.9 E25 34 45.4, 11 m a.s.l., 10.07.2017;
5. A *Platanus orientalis* forest and stream above Therma, N40 29 40.5 E25 36 03.9, 84 m a.s.l., 10.07.2017;
6. A rocky limestone area near and around the cave of Chora, between N40 28 50.1 E25 31 40.3 and N40 28 46.8 E25 31 39.1, 216-245 m a.s.l., 10.07.2017;
7. A small stream and its surroundings below the fort of Chora occupied by *Mentha* sp., *Origanum* sp., *Satureja* sp., *Nerium oleander* and single *Platanus orientalis*, and *Pyrus* sp.

Results and Discussion

A total of 41 species of inland Mollusca are known from this island: Bivalvia – 1 species, freshwater snails – 6 species and terrestrial snails - 34 species (Tab. 1). Three snail species are new records to Samothraki: *Mastus etuberculatus*, *Rupestrella rhodia* and *Tandonia kusceri* (Fig. 1).

It was evident from previous publications and my recent visit on Samothraki that most species are accumulated at the limestone areas near village of Chora. The highest parts of Fengari Mts. are probably not inhabited by molluscs or they are extremely rare in this area. No snails were found in the cave of Chora. That habitat was completely destroyed by goats.

Vitrea schneideri reported from the bank of the stream of Therma village in Georgiev & Stoycheva (2010) refer to *V. contracta*.

The record of *Monacha subobstructa* (Bourguignat, 1855) was not correct. Anatomically only *M. cartusiana* was proved to occur on the island.

Mastus pupa (Linnaeus 1758) and *Lindholmiola girva* (Frivaldszky 1835), wrongly omitted by me, actually occur on Samothraki.

The taxonomy of the species of the genus *Mastus* on Samothraki is still not clear and has to be revised in future studies. Most problematic is the group *pupa/rossmaessleri/grandis*.



Fig. 1. *Tandonia kusceri* in its habitat on Samothraki: under a stone in a *Platanus orientalis* forest along the stream near Pachia Ammos Beach.

Tab. 1. Updated and corrected list of freshwater and terrestrial molluscs reported from Samothraki. The locality numbers correspond with those in Material and Methods. In grey – new records to the island, lit. – previous records.

| Species | Locality/record |
|---------------------------------------------------------|---------------------|
| <i>Acanthinula aculeata</i> (Müller, 1774) | lit. |
| <i>Ancylus fluviatilis</i> Müller, 1774 | lit. |
| <i>Balcanodiscus magnus</i> P. L. Reischütz, 1988 | lit., 6 |
| <i>Bulgarica mystica</i> (Westerlund, 1893) | lit., 6 |
| <i>Bythinella cabirius</i> (P. L. Reischütz, 1988) | lit. |
| <i>Carpathica wirthi</i> Forcart, 1971 | lit. |
| <i>Cecilioides acicula</i> (Müller, 1774) | lit. |
| <i>Cermeuella virgata</i> (Da Costa, 1778) | lit., 1 |
| <i>Cornu aspersum</i> (Müller, 1774) | lit. |
| <i>Deroceras oertzeni</i> Simroth, 1889 | lit. |
| <i>Eobania vermiculata</i> (Müller, 1774) | lit., 1 |
| <i>Ferrissia wautieri</i> (Mirolli, 1960) | lit. |
| <i>Galba truncatula</i> (Müller, 1774) | lit., 5 |
| <i>Helix figulina</i> Rossmässler, 1839 | lit., 1, 2, 3, 4, 6 |
| <i>Helix lucorum</i> Linnaeus, 1758 | lit., 1, 2, 3 |
| <i>Idyla bicristata</i> (Rossmässler, 1839) | lit., 6 |
| <i>Islamia bendidis</i> P. L. Reischütz, 1988 | lit. |
| <i>Lauria cylindracea</i> (Da Costa, 1778) | lit. |
| <i>Lindholmiola girva</i> (Frivaldszky, 1835) | lit., 1 |
| <i>Lindholmiola lens</i> (Férussac, 1832) | lit., 1, 6 |
| <i>Mastus etuberculatus</i> (Frauenfeld, 1867) | 6 |
| <i>Mastus pupa</i> (Linnaeus, 1758) | lit. |
| <i>Mastus rossmaessleri</i> (L. Pfeiffer, 1847) | lit., 1, 6 |
| <i>Metafruticicola noverca</i> (Pfeiffer, 1853) | lit., 1, 6 |
| <i>Monacha cartusiana</i> (Müller, 1774) | lit., 4 |
| <i>Oxychilus glaber</i> (Rossmässler, 1835) | lit. |
| <i>Paralaoma servilis</i> (Shuttleworth, 1852) | lit. |
| <i>Pisidium casertanum</i> (Poli, 1791) | lit. |
| <i>Punctum pygmaeum</i> (Draparnaud, 1801) | lit. |
| <i>Pupilla triplicata</i> (Studer, 1820) | lit. |
| <i>Pyramidula rupestris</i> (Draparnaud, 1801) | lit., 6 |
| <i>Rupestrella rhodia</i> (Roth, 1839) | 6 |
| <i>Sphyradium doliolum</i> (Bruguère, 1792) | lit. |
| <i>Tandonia kusceri</i> (Wagner, 1931) | 3 |
| <i>Tandonia sowerbyi</i> (Férussac, 1823) | lit. |
| <i>Theodoxus euxinus</i> (Clessin, 1886) | lit., 7 |
| <i>Trochoidea pyramidata</i> (Draparnaud, 1805) | lit., 1 |
| <i>Truncatellina rothi</i> (Reinhardt, 1916) | lit. |
| <i>Vitrea schneideri</i> Riedel & P. L. Reischütz, 1988 | lit., 6 |
| <i>Xerolenta obvia</i> (Menke, 1828) | lit., 1, 6 |
| <i>Xerotricha conspurcata</i> (Draparnaud, 1801) | lit., 1 |

Acknowledgements. I am grateful to my mother, wife and little son for the nice trip on this magic island.

References

- Bank, R., Gittenberger, E. & Neubert, E. (2013) Radiation of an eastern Mediterranean landsnail genus: revision of the taxa belonging to *Metafruticicola* von Ihering 1892. *Archiv für Molluskenkunde*, 142(1) : 67-136.
- Fuchs, A. & Käufel, F. (1936) Anatomische und systematische Untersuchungen an Land- und Süßwasserschnecken aus Griechenland und von den Inseln des Ägäischen Meeres. *Archiv für Naturgeschichte* N. F. 5(4): 541-662.
- Georgiev, D. & Stoycheva, S. (2010) Notes on the ecology and species diversity of the inland molluscs of Samothraki Island (North-Eastern Greece). *North-Western Journal of Zoology*, 6(1): 71-78.
- Neubert, E. (2014) Revision of *Helix* Linnaeus, 1758 in its eastern Mediterranean distribution area, and reassignment of *Helix godetiana* Kobelt, 1878 to *Maltzanella Hesse*, 1917 (Gastropoda, Pulmonata, Helicidae). *Contributions to Natural History*, 26: 1-200.
- Nordsieck, H. (2007) *Worldwide door snails (Clausiliidae), recent and fossil*. ConchBooks, Hackenheim, Germany, 214 pp.
- Reischütz, P. (1986) Beiträge zur Molluskenfauna der Ägäischen Inseln. *Malakologische Abhandlungen*, 11: 93-103.
- Reischütz, P. (1988) Beiträge zur Molluskenfauna Thrakiens und Ostmakedoniens, II. *Annalen des Naturhistorischen Museums in Wien*, 90B: 341-356.
- Riedel, A. (1992) *The Zonitidae (sensu lato) (Gastropoda, Pulmonata) of Greece*. Faunae Graeciae 5, Natural History Museum of Crete, University of Crete, Irakleio, 194 pp.
- Riedel, A. & Reischütz, P. (1988): Beiträge zur Molluskenfauna Thrakiens und Ostmakedoniens: I. *Vitrea schneideri* n. sp. von Samothrake. *Annalen des Naturhistorischen Museums in Wien*, 90B: 149-151.
- Wiktor A. (2001) *Fauna Graeciae VIII: The slugs of Greece (Arionidae, Milacidae, Limacidae, Agriolimacidae - Gastropoda, Stylommatophora)*. Natural History Museum of Crete, University of Crete, Irakleio, 241 pp.