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Does *Rumina saharica* Pallary, 1901 occur in France?

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Abstract

Rumina saharica Pallary, 1901 is recorded here for the first time from a locality in France. Since this species has only recently been recognized as an independent species, different from the well known *Rumina decollata* (Linnaeus, 1758), students of terrestrial snails in France are advised to check their samples of *Rumina* for the possible presence of the slender decollated snail *R. saharica* among them.

Key words

Mollusca, gastropoda, Subulinidae, *Rumina*, distribution, France.

A revision of the genus *Rumina* (Risso, 1826), Fam. Subulinidae, present in the National Mollusc Collection of the Hebrew University of Jerusalem (HUJ) revealed the presence of a sample of *Rumina saharica* Pallary, 1901 from a locality in France. It had been collected by the late Arthur Blok in Menton (HUJ 51707 = Blok 617) and consists of three specimens. Unfortunately any additional information like precise locality and date of collection is missing; however, most likely they had been collected in one of the splendid gardens for which Menton is famous.

The localities mentioned on the labels of samples personally collected by Arthur Blok and present in his collection have turned out to be 100% reliable. The question reads therefore: does *Rumina saharica* occur in the south of France in general and in Menton in particular?

Until 17 years ago only a single species was recognized within the genus *Rumina*: *R. decollata* (Linnaeus, 1758), this in spite of the fact that especially in North Africa populations were known to occur with either much more slender or broader shells.

Bank & Gittenberger (1993) not only recognized on shell characters a second species, which until then had been considered either a local variety or a subspecies of *Rumina decollata*, but entangled also its complicated nomenclature. They reached the conclusion that the slender decollated snail had to be called *Rumina saharica* Pallary, 1901. The specific status of *Rumina saharica* has been confirmed not only by Carr (2002) by means of a study of the anatomy and morphometry of numerous specimens collected throughout the Mediterranean region, but also by Prévot, Jordaens & Bacheljau (2007) with the help of a molecular genetic analysis.

Rumina saharica is usually reported from North Africa and the Eastern Mediterranean. However, at many places in the latter area it was most probably introduced by human agents (Mienis 1976, 1991 & 2003, Singer & Mienis 1993, Hausdorf & Hennig 2005). In the National Mollusc Collections of the Hebrew University of Jerusalem (HUJ) and the Tel Aviv University (TAU) I could compare the shells from Menton with 57 samples of *R. saharica* from the following

countries: Italy (4), Greece (8), Turkey (2), Cyprus (4), Israel (32) and Lybia (7).

Less known is the fact that *Rumina saharica* has also been found on the Balearic Islands Mallorca and Menorca (Quintana 2006, Beckmann 2007). It is not clear whether we are dealing there with an autochthonous or with an introduced species.

Hardly known is a third species: the giant decollated snail *Rumina paviae* (Lowe, 1861), which is confined in its distribution to Morocco, Algeria and Tunis (Mienis 2002). Like *Rumina saharica* also *R. paviae* occurs often sympatric with *R. decollata* without showing any hybridization.

These three different species can be recognized by the following shell characters:

Rumina saharica has a slender shell, with rather flat whorls; the body-whorl is hardly wider than the penultimate whorl; width of adult shells 7.1-9.4 mm;

Rumina decollata has a broader shell, with more convex whorls; its aperture is distinctly wider than in *saharica*; width of the body-whorl 8.9-14.7 mm (Carr 2002 mentioned a width of up to 19.7 mm, but most probably his *decollata* included shells of *paviae*);

Rumina paviae has an extreme broad shell, with even more convex whorls than in *decollata*; width of the body-whorl 15.5-22.7 mm.



Figure 1 — *Rumina* species: from left to right adult specimens of *Rumina paviae* (R.T. Lowe 1861) from Algiers, Nemours, *Rumina decollata* (Linnaeus 1758) from France, Cannes and *Rumina saharica* Pallary 1901 from France, Menton. All specimens from the HUJ-collection. Photograph: Dr. E.L. Heiman (Rehovot). Bare scale = 10 mm.

At least also the exterior of the animals of *decollata* and *saharica* show some differences in colour. The back of *decollata* is of a very dark grey to almost black colour, while that of *saharica* has a pale grey colour.

I do not rule out the possibility that *Rumina saharica* has been introduced during historic times from North Africa not only in the Eastern Mediterranean but also in regions in the North-Western and Central Mediterranean in a similar way as *Papillifera bidens*

(Linnaeus, 1758) [= *papillaris* (Müller, 1774) s.l. has been dispersed by man from Italy to many ancient towns all around the Mediterranean (Mienis & Gümüs 2007).

A check of all samples of *Rumina* collected in the south of France in general and in the region of Menton in particular may reveal additional samples referable to *Rumina saharica*. In that case this species has to be added to the checklist of the continental land and freshwater molluscs published by Falkner *et al.* 2002.

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Pupilla muscorum and *Pupilla bigranata* also syntopic in Clermont (Oise, France)

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Abstract

Pupilla muscorum and *P. bigranata* are here reported from a second locality in France where they were collected syntopic.

Key words

Mollusca, gastropoda, pulmonata, Pupillidae, distribution, France.

Recently Falkner *et al.* (2002: 107) have separated at the species level *Pupilla muscorum* (Linnaeus, 1758) and *Pupilla bigranata* (Rossmäessler, 1839), Fam. Pupillidae. The same authors mentioned only a single locality in France where these species were found syntopic: Bourges.

In the Mollusc Collection of the Tel Aviv University (TAU MO) I came across a small litter sample taken more than fifty years ago near Clermont, Picardie, Oise. It contained six specimens belonging to the genus *Pupilla* Fleming, 1828, of which only the two largest specimens were referable to *Pupilla muscorum* (TAU MO 58080/2), while the remaining much smaller specimens showed all the characteristic shell characters of *Pupilla bigranata* (TAU MO 58081/4).

Most probably these two species occur syntopic elsewhere in France.

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