First record of the landsnail *Ferussacia folliculum* (Schröter, 1784) in Belgium (Mollusca: Gastropoda: Ferussaciidae)

Rose Sablon¹*, Marc Hansen¹,² & Thierry Backeljau¹,³

¹Royal Belgian Institute of Natural Sciences, Vautierstraat 29, B-1000 Brussels, Belgium.
²Royal Belgian Society for Conchology, Kabienstraat 1 bus D2, B-2290 Vorselaar, Belgium.
³Evolutionary Ecology Group, University of Antwerp, Universiteitsplein 1, B-2610 Antwerp, Belgium

*Corresponding author: rose.sablon@naturalsciences.be

KEYWORDS. Mollusca, *Ferussacia folliculum*, alien species, Belgium.


*Ferussacia folliculum* (Schröter, 1784), currently also known as *Ferussacia folliculus* or *Ferussacia follicula*, two very common, but incorrect, spellings (1), is a small herbivorous landsnail with a variable fusiform-ovate, very glossy yellowish to pale brown shell. It has 5–6 almost flat whorls and adult shells measure 6–9 x 2.5–3.5 mm. The apertural margin is sharp and connected, at the parietal side, by a transparent callus. The animal is pale with a greenish hue. It has a dark head with rather long upper tentacles. It thrives in natural and disturbed habitats, under stones, litter, and in moist grassy places;

Figure 1 – Map of Belgium showing Niel (51.10138 N, 4.33747 E) marked with a red dot.
mostly in coastal areas and lowlands. It can withstand long dry periods by retreating into the shell behind a calcareous epiphragm (2).

*Ferussacia folliculum* is native in the Western Mediterranean region (1), where its natural range extends from Portugal, Spain, the French Mediterranean coast (3), the Balearic Islands (4), Corsica (5,6), Sardinia (7) Malta (8) and Sicily, to the South of continental Italy and Greece (1,2). It is also present along the North African coast, from Morocco to Tunisia (9). The species has been recorded as a probable introduction in Madeira (10) and the Canary Islands (Tenerife, La Palma and Gran Canaria) (11). Outside Europe, the species has been introduced into North America (12), Australia (13–15), Réunion and Mauritius (16).

In continental Europe, a single historical (1879) sample has been reported from Parco Ciano, Lugano (Switzerland, Prealpine zone), which was attributed to an occasional introduction via imported Mediterranean plants (17). Yet, more recently, in 2014, the species was found in the ‘Jardin botanique alpin du Lauterat’ (département Les Hautes-Alpes, France), at an altitude of 2100 m, so far the northernmost and highest-altitude recent record in Europe (9). During a new visit to this locality in summer 2016,

![Image of Ferussacia folliculum](image-url)

**Figure 2** – *Ferussacia folliculum*. Left and middle: adult and subadult specimens from Malta, Malta, Hal-Ferh, Ghajn Tuffieha (1983), coll. RBINS/Subcoll. Poppe, IG.28671, Nr. 177. Right: subadult specimen from Belgium, Niel, 2015, coll. RBINS (Project SPEEDY), IG.32643.
again some live specimens were found (Christophe Perrier, 2016 pers. comm. 11 September). Hence it seems that the species has managed to survive at this site, i.e., further north and at higher altitudes than elsewhere in its natural European range.

On the 18th of June 2015, while collecting landsnails in Niel, Belgium (51.10138 N, 4.33747 E) (Fig. 1), one living subadult specimen (Fig. 2) of Ferussacia folliculum was found in a litter sample. Since both shell and aperture are of nearly adult size, in view of the developing callus in the aperture, which is an adult characteristic, we assume it to be a subadult specimen.

The sampling site was an outdoor storage depot of pipes for construction works, adjacent to a wasteland and the nature reserve Walenbos. The litter sample was taken near the moist grassy border along the nature reserve. At about 20 m from the sampling spot, on the wasteland, there were remains of potted plants and a few piles of woodcuttings.

The shell (the animal was unfortunately lost) has been deposited in the collections of the Royal Belgian Institute of Natural Sciences under the collection catalogue number IG.32643 (coll. SPEEDY). On the 16th of July 2016, we went back for another search for more specimens, but without success. Nevertheless, this is, to our knowledge, the first, and so far only, record of Ferussacia folliculum in Belgium (and adjacent regions). It may be the result of a one-time, unintentional introduction, probably via importation of plants or construction materials. Still, this sort of observation may be important as in the long term they may represent early warning data for future, more persistent, species introductions. Therefore, this record will be included in the list of alien species compiled and maintained by the European Alien Species Information Network (EASIN)(18).

Acknowledgements

We are indebted to “Lauwers J Plastics BVBA - Niel” for kindly giving us permission to take litter samples on their premises, to Yves Barette (RBINS) who took the pictures of Ferussacia folliculum, to Wouter Dekoninck (RBINS) for providing the map, and to Mathilde Delacoux (RBINS volunteer), who joined us and helped picking out samples. Very special thanks to Christophe Perrier for keeping us informed on the recent finds at the Lauterat site. This work was executed in the context of (1) IAP project SPEEDY financed by the Belgian Science Policy Office (BELSPO) and (2) the European Alien Species Information Network (EASIN: http://easin.jrc.ec.europa.eu/?AspxAutoDetectCookieSupport=1).

References


Manuscript received: 21 November 2016
Manuscript accepted: 5 April 2017
Published on: 27 July 2017
Branch editor: Isa Schön