

Scientific note

The carnivorous semi-slug *Daudebardia brevipes*, a remarkable new greenhouse snail in the botanical garden of Ghent (Belgium)

(Gastropoda, Oxychilidae)

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In this note we report a find of *Daudebardia brevipes* (Draparnaud, 1805) in the botanical garden of Ghent, Belgium (51°02'06.0"N, 3°43'22.4"E). On February 6th 2018, a single specimen of *D. brevipes*, with a stretched body length of approximately 19 mm and a shell width of 4.1 mm (Fig. 1), was found under leaf litter on a window sill in the Victoria house. This constitutes the first record of *D. brevipes* outside its native range. Our find in a greenhouse environment suggests that the species has been introduced with foreign plant material.

Native populations of *D. brevipes* occur in parts of Central and southern Europe, Turkey, the Ukraine and Algeria. *D. brevipes* prefers undisturbed forests in mountainous regions and requires deep soils, because it has a largely subterranean lifestyle. The species is found in leaf litter and under stones in humid areas, where it feeds on other invertebrates (Welter-Schultes 2012).

Keppens & Dhondt (2007) did not detect *D. brevipes* during their mollusc survey of the botanical garden of Ghent. This suggests that *D. brevipes* has only recently been imported. Since we only found a single specimen, there is no evidence of a viable population in Ghent. Nonetheless, the Victoria house could provide suitable habitat. The humidity is kept constantly high, the loose soil is covered with leaf litter and potential prey (e.g., earthworms) are abundant.

It is unknown whether *D. brevipes* can become invasive in outdoor environments. Still, *D. brevipes* is a cold-resistant species (Irikov & Mollov 2015), which implies that it can survive cool temperate winters. Although the botanical garden of Ghent is rather isolated in an urbanized area, the adjacent city park may provide suitable habitat. The park harbours a large collection of old trees, has humid areas and several low maintenance areas where leaf litter can accumulate. Interestingly, a population of its closely resembling congener *D. rufa* (Draparnaud, 1805) has recently been found in the UK (Owen et al. 2016). Although the authors expressed uncertainty whether *D. rufa* is an overlooked native species or an



Fig. 1. *Daudebardia brevipes* found in the Victoria house of the botanical garden of Ghent (Belgium).

introduced species, our find of *D. brevipes* in Ghent shows that generally rare *Daudebardia* spp. (Welter-Schultes 2012) can in fact be imported with ornamental plants.

Acknowledgements. We thank two anonymous reviewers for improving the manuscript. Stijn Baeten (UA) photographed the *D. brevipes* specimen collected in Ghent.

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