NEW RECORDS OF LAND SNAILS INHABITING LEAF LITTER FROM THE MALTESE ISLANDS (MOLLUSCA: GASTROPODA: PULMONATA)

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ABSTRACT

Five species of land snails inhabiting leaf litter are recorded. Four of the five species are new records for the Maltese Islands while the fifth species has not previously been included in literature dealing with the Maltese malacofauna. Information about distribution and frequency is also given.

Leaf litter species are poorly represented in the Maltese terrestrial malacofauna. This microhabitat has hardly been investigated. Most past collectors having concentrated on the endemic Clausiliidae and Helicidae inhabiting more or less xeric habitats. A short study of the molluscan fauna of leaf litter revealed the occurrence of four previously unrecorded species. Their distribution and probable status form the subject matter of this contribution.

METHODS

Samples, consisting of approximately one kilogram quantities of leaf litter from maquis and/or garigue in each of the localities mentioned in Table 1, were dried and searched systematically for snails. The shells were washed clean of soil, dried and examined under various magnifications of a binocular microscope.

RESULTS

Truncatellina callicratis (Scacchi 1833): Frequent in leaf litter from both maquis and garigue. Its very small size makes it very easy to overlook. It is probably more widespread than my results indicate.

Lauria cylindracea (Da Costa 1778): Locally common in the more extensive tracts of maquis, especially in valley bottoms.

Discus rotundatus (Müller 1774): Only found in St. Anton Gardens where it is very common. This suggests that this species, as well as *Pomatias elegans* (Müller 1774), may have been introduced when the gardens were established (THAKE, 1973).

Vitrea subrimata (Reinhart 1871): The commonest Vitrea in Malta and and one of the commonest molluscs in maquis leaf litter.

Vitrea contracta (Westerlund 1876): Widespread but not as common as V. subrimata, and more difficult to find. This species occurs in both maquis and garigue leaf litter.

The relative frequency of these species in the collections is given in Table 1.

Locality		of leaf s taken	litter	snails	in the
	А	В	С	D	E
Buskett	1	7		24	1
Mgarr ix-Xini (Gozo)		2		14	
Msida				2	·
St. Anton Gardens		24	32		:
Wied il-Ghasel	4				
Wied Inčita	7	. 8		13	
Wied Qannotta	2			7	3
Wied Qirda				25	2
Wied ta' l-Isperanza				10	5
Xlendi (Gozo)		26		3	4

Table 1. Relative frequency of leaf litter snails in the samples investigated. A = $Truncatellina\ callicratis$, B = $Lauria\ cylindracea$, C = $Discus\ rotundatus$, D = $Vitrea\ sub\ rimata$, E = $Vitrea\ contracta$.

DISCUSSION

There is no previous mention of any of the above species in the literature dealing with local malacofauna. The only species of *Vitrea* recorded for Malta are *V. crystallina* (Müller 1774) recorded by ISSEL (1868) and *V. hydatina* (Rossmaessler 1838) recorded by BECHER (1884). Specimens of *V. subrimata* collected in Malta are deposited in the Senckenberg Museum (PINTER, 1972).

The occurrence of species typical of moist habitats (Lauria cylindracea and Vitrea subrimata) suggests that Malta has always possessed patches of humid habitat. The absence of any endemics which are characteristic of maquis or woodland suggests that such habitats have not occupied extensive tracts of the Islands for any length of time in the past. This situation contrasts with that of the more xeric garigue/steppe habitats where many of the species are endemic.

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