On the occurrence of Crocidura Suaveolens Pallas (Mammalia, Insectivora) in the Maltese Islands with notes on other Maltese shrews.

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### ABSTRACT

Crocidura suaveolens Pallas, 1811 is recorded definitely for the first time from the Maltese Islands. Previous records of this species are reviewed and are shown to refer to other species or else to be unconfirmed. Besides C. suaveolens, two other shrews inhabit the Maltese Islands. Suncus erruscus (Savi) is distributed in both Malta and Gozo while both C. suaveolens Pallas and C. russula (Hermann) appear to be restricted to the island of Gozo. The latter species has not, however, been recorded in this study.

## INTRODUCTION

The first mention of the occurrence of Crocidura suaveolens in the Maltese islands was that of Gulia (1913) who reported that a male of this species was captured by G. Despott at Tal-Brolli, Ghaxaq (Malta). As pointed out by Lanfranco (1969), Gulia did not state whether he was referring to C. suaveolens Pallas or to C. suaveolens Blasius [= Suncus etruscus (Savi)]. Lanfranco (1969) is of the opinion that Gulia was referring to C. suaveolens Blasius since all the specimens of shrews examined by Lanfranco turned out to be S. etruscus (Savi). Lanfranco (1969) further states that in his opinion "It appears that there are no other shrews on our islands". Bate (1935) refers to Gulia's record as "Crocidura suaveolens (= Pachyura etrusca Savi)" indicating that she too believed that Gulia was referring to Suncus estrucus (Savi). Sultana (1971) reported that he had extracted the remains of two specimens of C. suaveolens from pellets of the Barn Owl Tyto alba collected at Xaghra, Gozo. However, this author does not give the authority's name, so, as in the case of Gulia's record, it cannot be decided whether the specimens were actually C. suaveolens Pallas or S. etruscus (Savi). Sultana's records are discussed further below. The present record of C. suaveolens Pallas is thus the first unequivocal record of the occurrence of this species in the Maltese islands.

Crocidura suaveolens Pallas, 1811

I male; Mgarr, Gozo 22/V/1973 leg. J.L. Schembri; det. P.D. Jenkins.

The specimen was found dead, but not decomposed, in a roadside ditch. The hairs on the superior part of the body are coloured in various shades of brown while those on the inferior part of the body are coloured grey, though occasional

yellowish-brown hairs also occur. There is a more or less distinct transition in the coloration of the superior and inferior parts of the body. The legs are of a yellowish-white colour while the tail is brownish-white.

The dentition of the upper jaw is shown in Fig. 1.



Fig. 1 Dentition of the upper jaw of C. suaveolens Pallas; Specimen from Mgarr, Gozo. Scale represents 2 mm.

The specimen has the dimensions given below.

Body	V
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	Length of head and body	50.3 mm
	Length of tail	27.5 mm
	Length of posterior leg	11.6 mm
Sku	dI	
	Condylobasal length	18.1 mm
	Maximum breadth	8.2 mm
ALL THE STREET	Maximum height of braincase	5.0 mm
	Superior dental file length	7.9 mm

This specimen of *C. suaveolens* cannot be referred to any of the forms or races attributed to this species without further studies on a larger number of individuals, and in any case, these races are of uncertain status (Toschi & Lanza, 1959).

## DISCUSSION

Besides S. etruscus (Savi) and the present record of C. suaveolens Pallas, other species of shrew have been recorded from the Maltese islands. Roberts (1954) mentions Sorex araneus (L.) from Malta, however, as correctly stated by Lanfranco (1969), the range of this species does not even include Sicily. Despott (in Vaufrey, 1929) records S. etruscus and Crocidura sp. from the Maltese islands. Two skulls, one from Malta and one from Gozo, examined by Bate (1935) turned out to belong to S. etruscus (Savi) and C. russula (Hermann) respectively. Particularly interesting is Sultana's record of C. suaveolens and C. russula from pellets of Tyto alba from Gozo (Sultana, 1971). As already mentioned, this author does not give the authority's name and, in an effort to confirm these records, we have

examined the correspondence between J. Sultana and T.B. Silcocks, to whom the mammalian remains had been sent for identification. It transpired that Mr. Silcocks had in turn sent the remains of the shrews to Dr. G.B. Corbet of the British Museum (Natural History) for identification. There is, however, no trace of any correspondence between T.B. Silcocks and Dr. G.B. Corbet relating to Maltese material at the British Museum (P.D. Jenkins, personal communication). On the other hand, T.B. Silcocks in personal communication to one of us (S.P.S.) asserts that the Maltese material sent to him by J. Sultana was definitely identified as C. russula (Hermann) and C. suaveolens Pallas by Dr. G.B. Corbet.

In view of our own record of *C. suaveolens* and Bate's record of *C. russula* (Bate, 1935) we are of the opinion that Sultana's records are valid. Unfortunately, however, the skulls on which these records are based are lost.

Two species of shrew have definitely been confirmed to inhabit the Maltese islands, while a third species, C. russula (Hermann) almost certainly also occurs. Of these species, two (C. suaveolens Pallas and C. russula (Hermann)) have only been recorded from Gozo, while the other (S. etruscus (Savi)) occurs in both Malta and Gozo.

Finally, it is interesting to note that fossils of *Crocidura cf. leucodon* (Bate, 1925) and *C. russula* (Storch, 1970) have been found in Ghar Dalam cave, Malta, while fossil *C. cf. russula* (Bate, 1935) have been found in pleistocene deposits of Tal-Gnien, Malta.

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