

OBSERVATIONS ON *CROCIDURA HYDRUNTINA* COSTA,
1844 AND *CROCZDURA RUSSULA MIMULOIDES* CAVAZZA,
1912 (INSECTIVORA, SORICIDAE).

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The taxonomy of the genus *Crocidura* has always been controversial due to the objective difficulties in identifying its species. For example, Oronzio Gabriele Costa described *Crocidura hydruntina* (Sherborn, 1922) in 1844 on the basis of a specimen collected in Otranto (Lecce Province) by Giuseppe Costa in April 1843, near the seashore. Cavazza (1913) never observed this type of specimen but, by examining one of two specimens from Scafati (Salerno Province), he sustained that *C. hydruntinu* was equivalent to *C. russula mimuloides*, a subspecies he described (1912) on the basis of four specimens collected in the Ticino region. *C. russula mimuloides* was formerly considered to be limited to Northern Italy. However it was later also reported in Southern Italy after the study of the above cited specimen (Cavazza, 1913). This specimen is currently alcohol-preserved and kept at the Museo Zoologico dell'Università di Napoli Federico II and bears a label containing the indications: "*Crocidura russula* typ. - Scafati - Dr. Cavazza del A. M. Z. v. 4 n.2" and "*hydruntinu*?". Unfortunately the indication *hydruntina*? was erased after being extracted from the alcohol. There is no mention on the label of the fact that the specimen reported in the paper belongs to the *mimuloides* form.

The present study tries to determine which species this subject belongs to. It was identified by examining cranial and dental fea-

tures (Fig. 1). These characteristics include: the rostral profile in *norma lateralis* is very rectilinear compared to rostral profiles of *C. russula* or *C. suaveolens*, the shape of P⁴ is typical of *C. leucodon*, the profile of the zygomatic bones in *norma dorsalis* is more rounded than the zygomatic bones of *C. russula* or *C. suaveolens* and the infraorbital bridge is very broad. The main measurements of the skull is reported in Table 1. On the basis of these observations, according to various authors (Witte, 1964; Richter, 1970; Saint Girons *et al.*, 1979; Poitevin *et al.*, 1986; Vogel *et al.*, 1989); the shrew can be considered to be *Crocidura leucodon*.

Besides establishing the exact identity of *C. russula mimuloides* from Scafati, the results also lead to some indirect considerations about *C. hydruntina*. This species is currently considered to be equivalent to *C. russula* (Hutterer, 1993) but, although *C. russula* as been reported to be present in peninsular Italy by several mammalogists, more recently, both biochemical and morphological researches (Catzefflis, 1983; Contoli *et al.*, 1989; Niethammer and Krapp, 1990) have shown that only *C. leucodon* and *C. suaveolens* are present in the area. This statement can not therefore be regarded as being still valid and, despite the impossibility of examining the specimen described by Costa, not found so far. If what has been discussed here is taken into consideration, it seems more acceptable (but not certain) to consider *C. hydruntina* as a synonym of *C. leucodon*.

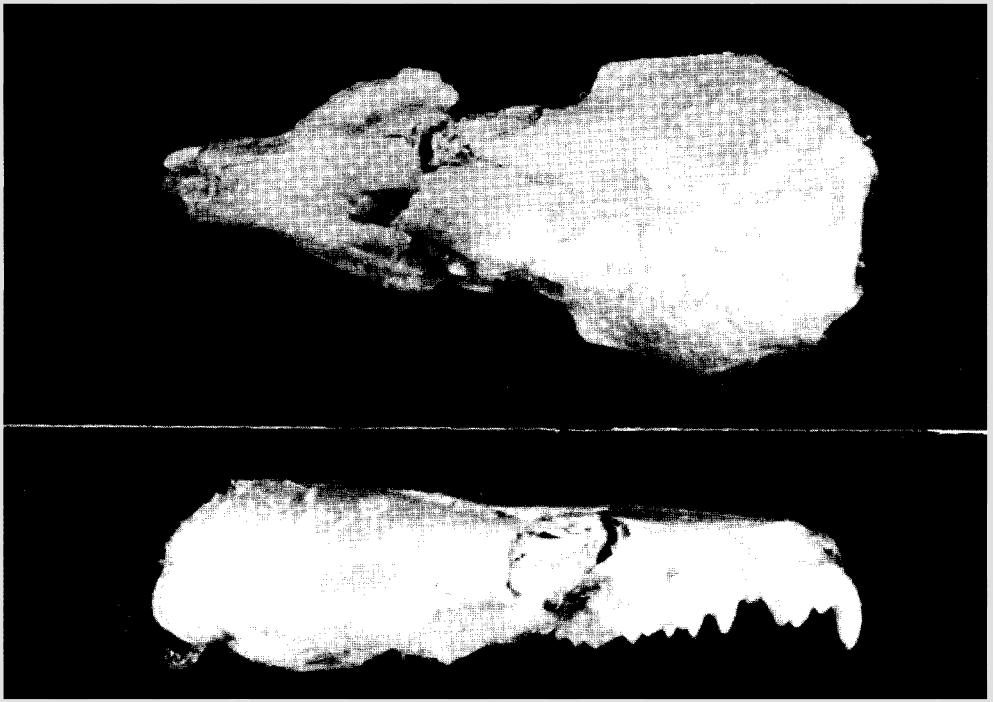


Figure 1 - Skull of "*Crocidura russula mimuloides*" from Scafati in *norma dorsalis* and in *norma lateralis*.

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Table 1 - Main skull measurements. Code and abbreviations according to Vesmanis (1976) except MH. CIL: condilo-incisiv length; CBL: condilo-basic length; SKB: skull width; ZB: zygomatic width; RL: rostrum length between I-alveolus and P⁴-alveolus; RH: rostrum height above P⁴; AI: length between angular process and incisiv; MH: mandible height.

measure	code	value (in mm)
CIL	1	20.6
CBL	2	19.7
SKB	5	9.3
ZB	7	6.5
RL	23	3.3
RH	24	2.2
AI	25	13.2
MH		5.8

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