

NOTES ON THE SUBSPECIES OF *RONISIA BARBARA*
(HYMENOPTERA: MUTILLIDAE) IN THE MALTESE ISLANDS

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ABSTRACT

Ronisia barbara occurs as two distinct subspecies in the Maltese Islands. *R. b. barbara*, previously thought to occur only in Gozo and Comino, is here reported for the first time from Malta where it has been found at the northern tip of Marfa Ridge. The second subspecies, *R. b. brutia* occurs south of this locality. Males of *R. barbara* identical to the subspecies *R. b. torosa* were observed in close proximity with female *R. b. brutia* and possibly courting them. On this and other evidence it is suggested that *R. b. torosa* is actually the male of *R. b. brutia*. The latter name has precedence.

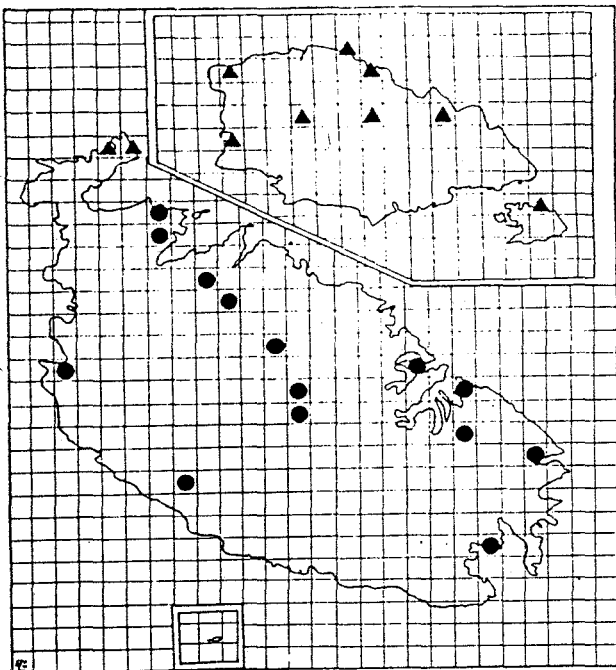


Fig. 1. Map showing distribution of *Ronisia barbara barbara* (▲) and *Ronisia barbara brutia* (●) in the Maltese Islands.

The Mutillidae of the Maltese Islands have recently been reviewed by SCHEMBRI (1983) who recorded 15 species including a species of *Smyceromyrme* new to science and as yet undescribed. Previous works on Maltese Mutillidae are few. INVREA (1966) mentioned four species and gave some taxonomic notes; other workers (VALLETTA, 1971 & 1978; BORDONI, 1980) only gave species lists with very little additional data.

This note reports some recent information on the interesting distribution of *Ronisia barbara* within the Maltese Islands and gives further taxonomic and ecological data for this species.

RONISIA BARBARA (Linnaeus, 1758)

Ronisia barbara (L.) is represented in the Maltese Archipelago by two morphologically distinct (in the female sex) subspecies: the nominal form *Ronisia barbara barbara* (L.)

and *Ronisia barbara brutia* (Petagna, 1787). The two subspecies can be easily separated on the basis of coloration. *R. b. barbara* is predominantly black with silvery-white bands and spots. *R. b. brutia* has the more typical mutillid coloration of ferruginous red with silvery-white ornamentation. Both forms are large and robust insects.

The presence of the nominal subspecies together with the subspecies *brutia* in the same region is very interesting. *R. b. barbara* has a South Palaearctic distribution and is known from the Iberian Peninsula, Lampedusa Island, Caucasus, Egypt, Libya, Tunisia, Algeria, Morocco, Spanish Sahara, and the Maltese Islands. The species is included in the Italian fauna on the basis of a few specimens collected from the island of Lampedusa (Missione Zavattari: INVREA, 1958) and from the females collected from the Maltese Islands.

Ronisia barbara brutia has a predominantly South European distribution and occurs along all the Mediterranean coasts of Asia and Africa. In Italy this subspecies is frequent in nearly all the regions.

In the Maltese Archipelago the two subspecies were previously thought to be geographically separated on the different islands: *R. b. barbara* on Gozo and Comino and *R. b. brutia* on Malta. More recent investigations have revealed this reported geographical isolation not to be so clear cut, as records of *R. b. barbara* now exist from mainland Malta. These records, from Rđum tal-Madonna and Ramla tat-Torri (see Table 1 and Fig. 1 for distribution), are both from the northern tip of Marfa Ridge, where the habitat types approach those of southern and south-eastern Gozo and Comino more closely than they do those south of Marfa ridge.

<i>Ronisia Barbara barbara</i> (L.)	
MALTA:	Ramla tat-Torri; Rđum tal-Madonna.
GOZO:	Dwejra; Għasri; Marsalforn; Qbajjar; Wied ir-Raġeb; Wied San Blas; Xagħira.
COMINO:	Santa Marija.
<i>Ronisia barbara brutia</i> (Pet.)	
MALTA:	Attard; Baġrija; Buskett; Dañlet il-Fekruna; Fort. St. Lucian (Marsaxlokk); Kalkara; Manoel Island; Mġiebañ; Marsascala; Naxxar; Wied il-Għasel; Wied is-Sewda; Wied Qannotta; Żabbar.

Table 1. Distribution of *Ronisia barbara* populations in the Maltese Islands.

MALES OF *RONISIA BARBARA BRUTIA* (Pet.)

The male of *Ronisia barbara brutia* is not known to science. All male specimens of *Ronisia barbara* (sensu lato) from Malta correspond well with the male of *R. barbara torosa* Costa, 1858 (SUAREZ, pers. comm.), the latter subspecies is only known from the male sex.

It has long been suspected that *R. b. torosa* is in fact the male of *R. b. brutia*, explaining why no males of *R. b. brutia* have been found. No definite proposal to this effect has however been put forward, most probably because the distributional range of female *R. b. brutia* is much more vast than that of male *R. b. torosa* (INVREA, 1964). The simultaneous presence of *R. b. brutia* (females) together with *R. b. torosa* (males) in the same region (Malta) supports the hypothesis that *R. b. torosa* and *R. b. brutia* are actually the same subspecies.

Further evidence for this hypothesis comes from observations carried out at Manoel Island (Malta). Here, *R. b. brutia* (females) together with *R. b. torosa* (males) were noted on various occasions in very close proximity. Males were seen flying inside a derelict room in which nested *Anthophora* bees and often alighted near a female *R. b. brutia*. At times, males followed the females on the ground, often touching them and crawling over them. Occasionally a male would follow another male but would abandon the chase after touching the other individual. Although actual copulation between male *R. b. torosa* and female *R. b. brutia* was not observed; given the observations reported above, it seems likely that *R. b. torosa* are *R. b. brutia* are but the two sexes of the same subspecies. It is therefore proposed that the taxon *torosa* Costa, 1858, be abandoned and all material referred to this now be included in *R. b. brutia* (Petagna, 1787).

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received August 1984