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FIRST RECORD OF THE SPIDER FAMILY SELENOPIDAE IN ITALY  
(*Araneae*)

SUMMARY

The finding of *Selenops radiatus* Latreille, 1819 on the island of Alicudi (Aeolian Archipelago, NE Sicily), and the observation of selenopids in the nearest island of Filicudi, represent the first record of the family Selenopidae known for the spider fauna of Italy.

RIASSUNTO

*Primo ritrovamento di un ragno della famiglia Selenopidae in Italia (Araneae).* Il ritrovamento di *Selenops radiatus* Latreille, 1819 nell'isola di Alicudi (Isole Eolie, Sicilia nord-orientale), insieme all'osservazione di Selenopidae probabilmente appartenenti alla stessa specie nella vicina isola di Filicudi, permettono di segnalare per la prima volta questa famiglia per la fauna italiana.

INTRODUCTION

The spider family Selenopidae Simon, 1897, also known as “flatters” or “wall spiders”, includes five genera and about two thousand species (PLATNICK, 2009). Despite its world-wide distribution almost exclusive of the tropical regions, the family type-species, *Selenops radiatus* Latreille, 1819, was described from a specimen collected in Spain, even if its occurrence there has never been successively confirmed (MELIC, 2003), and the Latreille's *typus* resulted to be lost (CORRONCA, 2002). *Selenops radiatus*, widely distributed in the Afrotropical and Oriental regions (CORRONCA, 2000, 2002), is the unique

Selenopidae also occurring in Europe; it was recorded from Greece in the late 19th century (PAVESI, 1878), while it has been recently quoted from Belgium on “Fauna Europaea version 2.1” (VAN HELSDINGEN, 2009), without details concerning collected and/or examined materials; on this latter country its occurrence is almost certainly due to human-mediated introduction, as well as the accidental introduction reported for England (ANDREW & EVANS, 1995), where a specimen was found in a load of bananas. During a naturalistic exploration of Alicudi, one of the smaller islands of the Aeolian Archipelago (NE Sicily), we found specimens of Selenopidae which are briefly described and illustrated (Fig. 1) as follows, and whose records represent the first known for the Italian spider fauna.

#### EXAMINED MATERIAL

##### *Selenops radiatus* Latreille, 1819

1 female, Alicudi Island (Aeolian Archipelago, NE Sicily), February 2010, leg. F. Fatatis; 1 female, same locality, March 2010, leg. P. Lo Cascio and F. Grita; both specimens are provisionally kept in the authors' collection.

#### REMARKS

The collected specimens belong to the genus *Selenops* Latreille, 1819, easily recognizable from other members of this family for the arrangement of the eyes, whose anterior row is disposed as a straight (or slightly curved) line, whereas the posterior median eyes are equal or subequal to the anterior median ones (Fig. 1c) (see BENOIT, 1968; CORRONCA, 2002). Further examinations, carried out using stereoscope and Dino-Lite digital microscope and following the keys of the genus given by CORRONCA (2002), allowed us to identify the specimens as *Selenops radiatus* Latreille, 1819. In particular, the collected females show the opisthosoma without tuft of hairs and characterized by a well-defined colour pattern (Figs. 1a, 1b), which corresponds to that figured by CORRONCA (2002, figs. 64 and 88B) and described by BENOIT (1968) and LESSERT (1936). Also, from an external view (Fig. 1d), the epigynum results longer than wide, and its lateral lobes appear to be closed to median line and not fused medially, situated close together only in the anterior half and wider than long; furthermore, the shape of the middle field of epigynum corresponds to the figure of this species from CORRONCA (2002, fig. 62). Although the procedure provides an accurate dissection for the examination of geni-

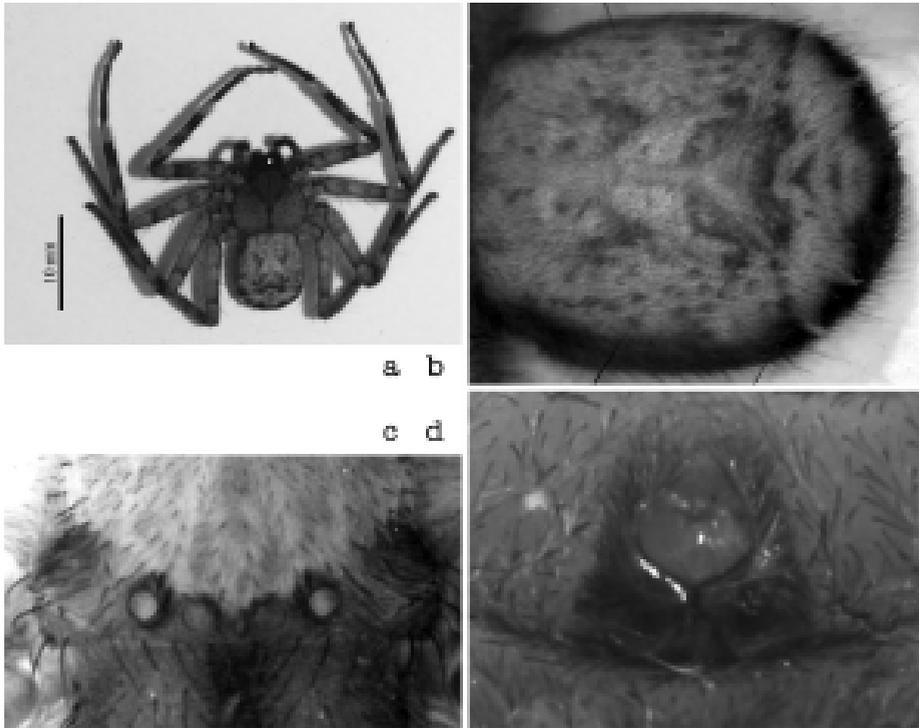


Figure 1 — Female of *Selenops radiatus* Latreille, 1819 from Alicudi Island: a) dorsal view; b) particular of the opisthosoma in dorsal view; c) eye arrangement in dorsal view; d) external view of the epigynum.

talia, the attribution to this species was temporarily confirmed to us by the group-specialist J.A. Corronca (pers. comm., April 2010), who kindly examined the photos of the external morphology and the epigynum details of a collected specimen.

## DISCUSSION

This finding represents the first record of Selenopidae for the Italian fauna (see PESARINI, 1995, 2000) and has interesting zoogeographical implications. On Alicudi, selenopids are extremely common and widespread in the houses of the village. Although Aeolian Islands have been adequately researched by arachnologists (e.g. ALICATA, 1973; ALICATA & CANTARELLA, 1986; DI FRANCO, 1986; also, further records given by the late P. Brignoli published in several papers not relating specifically to the archipelago),

selenopids may have not been hitherto found due to their secretive behaviour and their agility, which make them difficult to collect using standard methods. In fact, they are cryptozoic and nocturnal spiders, whose flattened bodies allow them to disappear into narrow crevices. From information given us by elder people, these spiders are well known and were seen since a long time, therefore a just recent introduction on the island can be excluded. Also, we have repeatedly observed the occurrence of selenopids in some houses of the nearest island of Filicudi, where however we have not yet been able to collect specimens, in order to verify, as highly probable, if they belong to the same species. Instead, during several years of exploration we have never seen members of this family in the other Aeolian islands, thus its presence seems to be limited to the two westernmost islands of the archipelago. It is still uncertain the origin of the local selenopid populations, whose unusual distribution could be interpreted as the probable result of an ancient human-mediated introduction. Several species of Selenopidae are synanthropic and, among them, *Selenops radiatus* is commonly found in sheds and store rooms (LAWRENCE, 1940; CORRONCA, 2002), coming to be considered in South Africa as a biological control agent against potato tuber moths and other insect pests (VISSER, 1993). Hence, the possibility of its introduction during ancient vessel traffic, e.g. from southern areas of Mediterranean basin (North Africa) where the species occurs, cannot be excluded, as shown by the previously mentioned finding in North Europe (ANDREW & EVANS, 1995). Anyway, the probability of repeated colonization events on two different islands seems less likely, although it cannot be excluded that the species could have reached first an island and after the other one, facilitated by the frequent inter-archipelago traffics; however, it is difficult to explain its absence on other islands, such as Lipari (the bigger of the archipelago), with which contacts were probably more frequent.

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