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# A CONTRIBUTE TO WILD BEE FAUNA IN SICILY

*Un contributo alla fauna di apoidei selvatici della Sicilia (Isole di Lampedusa e Pantelleria)*

Lampedusa (Pelagie archipelago, including also Linosa and Lampione) and Pantelleria are two islands of the Sicilian Channel. Lampedusa (35°30'05" N – 12°36'34" E), 20.2 km$^2$ is the biggest island of Pelagie Archipelago, the most common rock outcrops are limestones and marls, the mean annual rainfall is 300 mm with extremely irregular yearly rain events, usually concentrated between October-March. The mean annual temperature is 19 °C. The whole island was subject to intense degradation due to human colonisation, causing during the last century a severe depletion of animal and plant species. Pantelleria Island (Italy) (83 km$^2$; 36°47'27"N, 11°59'38"E) is a volcanic island with a typical Mediterranean climate, most of the precipitation between October and February, a mean annual rainfall of 531 mm, and monthly average temperatures ranging from 13.7 °C. In the last centuries, a large part of the island (up to 80%) have been intensively cultivated, being grape the main culture for many decades; however, nowadays, cultivated surfaces has fallen to less than 20%, with caper monocultures being the main crop. Nevertheless, thanks to its extension, altitude and volcanic origin, a variety of peculiar habitats characterize the island of Pantelleria, leading in 2016 to the establishment of the National Park "Isola di Pantelleria".

With regard to the insect fauna of Lampedusa and Pantelleria, a comprehensive checklist is reported in the massive volume on the Arthropoda of Lampedusa, Linosa e Pantelleria (Massa, 1995). Nevertheless, in the last two decades, the bee fauna of Lampedusa and Pantelleria received poor

attention, and only few papers reported new records for the two islands (PAGLIANO, 2003, 2011, 2017). Differently, recent studies allowed increasing the knowledge on bees occurring in other Italian islands, like the Aeolian Archipelago, Sicily (TURRISI *et al*., 2020) and Sardinia (NOBILE *et al*., 2021). Currently, 57 species of bees are known in Lampedusa and 38 species in Pantelleria

In recent years, European or national projects have promoted further studies on bee fauna of Lampedusa and Pantelleria, and bee samplings have been carried out in some different habitat of the two islands. Here, we report as first records for the island of Lampedusa: *Anthophora senescens*, *Anthidium florentinum, Eucera algira, Osmia cornuta, Osmia mustelina,* whereas the two genera *Anthidium* and *Dasypoda* are new records for Pantelleria island.

Species identification of the bees collected in the two islands is still ongoing, and other interesting findings are expected, allowing to give a further contribute to the regional and national check lists, and in general to improve our knowledge on pollinator diversity and the threats in such different insular conditions.

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