INTRODUCTION

The isopod *Sphaeroma serratum* (Fabricius, 1787) (Flabellifera, Sphaeromatidae) lives in the midlittoral zone along part of the Atlantic coasts of Europe and Africa as well as along those of the Mediterranean. It is characterized by a marked polymorphism by having chromatophores containing different pigments arranged in different ways: as a result we have various forms classified as pattern forms and as colour forms. Bocquet et al., in their investigations, have given a fairly complete picture of the polymorphism of this species on the Atlantic coasts; we have undertaken an analogous research within the Mediterranean, aiming to establish a valid basis for a dynamic explanation of the phenomenon.

In one of our previous works (Consiglio & Argano, 1966), where the different forms in this species have been reviewed, we have also discussed the continuous variation within each single form. We pointed out why it is likely that the two forms "albicans" and "discretum", previously considered to be distinct entities, are but two extreme aspects of a continuous variation within a single form ("discretum"). According to this point of view, when the only pattern form "discretum" is present in a population, both in the speckled and in the "albicans" appearance, this population should be considered monomorphic as far as the pattern is concerned.

DISTRIBUTION AND CHARACTERS OF THE MONOMORPHIC POPULATIONS

In the available literature there is a large number of cases concerned with populations, among whose pattern forms only "discretum" and "albicans" have been reported (fig. 1). These populations, on the basis of the above mentioned arguments, are considered to be monomorphic as far as the pattern is concerned.

Some of these have been found near the northern borderline of the species range: on the west coast of Ireland, in the most open sites between Donegal Bay and Galway Bay as well as between Dingle Bay and Kenmare River (Hoestlandt, 1952, 1954); and at the most northern site so far known in England of the species range: Tre Arddur Bay on Holyhead Island near Anglesey (Hoestlandt, 1955). Other populations have been found on islands near the western borderline of the
species range. They are the whole totality of the known populations of Madeira Archipelago, on the islands of Madeira and Porto Santo; and the most western populations of the Canary Islands: those of La Palma and Tenerife, and the most western one of the island of Gran Canaria, in the locality called Puerto de Sardina (Hoestlandt, 1957). Among the populations of the Azores also the most western one found at Madalena on Pico Island is monomorphic for the pattern, but not for the colour, since a very high percentage of "rubrum" colour form individuals occurs in this locality.

Some other populations have been found during our investigations in the Mediterranean. Most of them occur on islands (fig. 1).

![Fig. 1. Distribution of the investigated populations of *Sphaeroma serratum* (Fabr.) and of the monomorphic ones.](image)

In the course of the researches in the Ponziane Islands, carried out by this Institute and sponsored by C.N.R. within the program of study on Italian insular populations, we had the opportunity of observing two populations of *Sphaeroma serratum*: one on the island of Ponza, at the southern end of Bagno Vecchio Bay, west of Calzone Muto rocks; the other one on the island of Zannone, on the north-eastern coast east of Capo Negro. Both the populations seem to be rather small in number, inhabiting a very limited area; both are monomorphic, "discreatum" in the speckled appearance being the only form observed.