Some results on Echinoderms and Crustacea Decapoda studies of the Albanian Coast

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1. The Albanian coast amounts to 470 km long. It is washed by the Ionian Sea and Adriatic Sea (Southern Adriatic). The Adriatic part spreads in a N-S direction and from a geomorphological point of view it is shallow, generally accumulative, with a lot of sandy beaches, wetlands, and lagoons. Almost all the Albanian rivers, carrying a large amont of silt and gravel, end up in it. The Ionian part which spreads in a NW-SE direction is a high rocky coast, generally abrasive. It is known for its great depth (HIDROLOGJIA E SHQIPERISE, 1984).

From a zoogeographycal point of view, the Albanian coast represents a special interest since it is situated in the border of two subregions: the Western and Eastern Mediterranean (STEVCIC, 1983).

It results that the Albanian coast is one of the less investigated in the Mediterranean basin (STEVCIC, 1990; TORTONESE, 1965; ZARIQUIEY ALVAREZ, 1968).

A small team of albanian scientists has been involved in the faunistic study of some benthonic graups during the last 20 years (Echinoderms, Crustacea Decapoda, Molluscs, Benthonic Fishes). Some of results obtained up to now on Echinoderms and Crustacea Decapoda will be presented below (GJIKNURI, 1985, 1986; GJIKNURI and VASO, 1991; VASO, 1991).

2. The area investigated is located mainly in the continental platform. The material was collected depending on the depht and the type of bottom. In the shallow water it was collected by hand and by diving, in the open sea it was collected with a commercial trawler of 400 HP and with a bottom-trawl net. Rocky bottoms deeper than 40 m and the meadows with *Posidonia oceanica* have not been explored. The collected material has been deposited at the Museum of Natural Sciences in Tirana.

3. The presence of 46 species of Echinoderms belonging to the classes of Crinoidea (2), Asteroida (17), Ophiuroidea (6), Echinoidea (12), Holothuroidea (9) and 104 species of Crustacea Decapoda belonging to the sections Penaeidea (11), Caridea (19), Macrura Reptantia (13), Anomura (20) and Brachyura (41) has been recorded up to now in the Albanian coast.

About 63% of Echinoderms and 58% of Crustacea Decapoda belong to soft bottoms, respectively about 15% and 18% to hard bottoms and about 22% and 23% to soft - hard bottoms.

The dominating element from a zoogeographical point of view results the atlantic - mediterranean one, to wich belong 65% of Echinoderms and 63% of Crustacea Decapoda. Then follow the mediterranean endemic element respectively 13% and 12%, the thermophyl one with 13% and 12%, the boreal one with 7% and 9% and the widely spread one with respectively 2% and 4%.

Especially interesting from a faunistic point of view is the presence in all the Ionian coast of the thermophyl starfish *Ophidiaster ophidianus* and also the presence of the sea cucumber *Holothuria helleri* (Fig.1), data which contribute in the general distribution of the species in the Mediterranean Sea.

These data do not mean that the study of Echinoderms and Crustacea Decapoda in the Albanian coast is accomplished. These studies are still in progress.

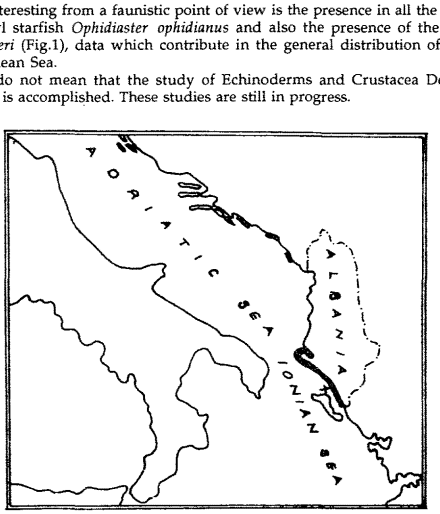

Fig.1. Distribution of Ophidiaster ophidianus(—) and Holothuria helleri (+)

REFERENCES

AKADEMIA E SHKENCAVE, 1984.- Hidrologjia e Shqipërisë. Instituti i Hidrologjisë, Tiranë : 5-12.

GJIKNURI L., 1985.- Contribution à l'étude des Echinodermes (Crinoidea et Asteroidea) du littoral albanais. *Biologia Gallo - Hellenica*, vol X : 61 -70.

GJIKNURI L., 1986.- Rezultate të studimit te Ekinidëve në vendin tonë. *Buletini i Shkencave Natyrore*, Tiranë, 2 : 113 - 116.

GJIKNURI L. & VASO A., 1990.- Contribution to the knowledge of Brachyuran crabs of the Albanian coast of the Southern Adriatic Sea. *Biologia Gallo - Hellenica*, (in press).

VASO A., 1991.- Disa të dhëna mbi gaforret Anomura në detin Adriatik (Crustacea, Decapoda, Anomura).*Buletini i Shkencave Natyrore*, Tiranë, (in press).

STEVCIC Z., 1983.- Geographic distribution of the Adriatic decapod crustacea. *Thalassia Jugoslavia*, 19 (1-4) : 369-375.

STEVCIC Z., 1990.- Check-list of the Adriatic Decapod Crustacea. *Acta Adriatica*, 31 (1/2): 183/274.

TORTONESE E., 1965.- Fauna d'Italia - Echinodermata. *Ed. Calderini.*

ZARIQUIEY ALVAREZ R., 1968.- Crustaceos Decapodos Ibericos. *Investigacion pesquera*, 32. 510 pp.