Contribution to the knowledge of the accompaning fauna of Aristeus antennatus (Risso, 1816) on the bathyal bottoms in the S.E. of Spain P. MARTINEZ BANO* , F. VIZUETE* , J. MAS** and F. FARACO*

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On the epibathyal and mesobathyal bottoms of the continental talus of the S.E. of Spain, there are some fishing areas relatively abounding in <u>Aris-teus antennatus</u> (Risso, 1816). Some samplings of the captures of <u>A. antennatus</u> have been achieved from 1.987 in these areas subjected to fishing exploitation, noting down the accompaning species which came up during the different trawling.

Later some experimental fisheries have been carried out in the same areas, with the usual mesh used in this fishery, joining firmly at the cod-end another thicker net, separating and identifying the different species. This has allowed to work out some faunistic lists indicating the abundance of each species

The relations between <u>A. antennatus</u> and its possible predators and preys have been studied in several areas of the western Mediterranean: in the Li-guarian Sea, RELINI ORSI AND WURTZ (1.377), RELINI AND ORSI RELINI (1987) and in the Catalan Coast CARTES AND SARDA (1989).

The first results obtained in the Spanish South-east are shown in this work, pointing out that in all the sampling areas the main species which show up on the thicker net are the following: <u>Symphurus ligulatus</u> and <u>Symphurus</u> <u>nigrescens</u> which mean between 5,5-9,5 cm., with a maximum of 6,5 cm. (28%). Seve-ral species of Mictophidae show up also, although in a slight proportion. The main crustaceans dominating are: <u>Pasiphaes sivado</u>, depending on the area it varies between 1,6% and 12% of the whole capture, being the cephalothorax length (Lc) of 9 and 21 mm. classes and a maximum of 15% in individuals of Lc= 19 mm., there are also some egged-females (Lc= 18 mm.) and <u>Plesionika heterocarpus</u>.

On the cod-end the main predators are: Scyliorhinus canicula and Galeus melastomus, the former was very abundant in the sampling area of less depth (275-400 mts.) representing 24% of the whole capture, the latter has a s dier presence, the size has a wide range 10,5-61,5 cm., the higher percentages are in 13 and 14 cm. (17%). a stea

Among the species of fishing interest <u>A. antennatus</u> stands out, its abundance in all the cases was over 50% of the whole capture of commercial spe cies. Among the fish <u>Micromesistius poutassou</u> is very abundant in the epibathyal area, the captured individuals are of 7-37 cm., although more than 50% of the whole of the sampling ones are between 16,5-19,5 cm. classes. On the mesobathyal bottoms <u>Phycis</u> blennoides has a steady presence, its capture has varied being sometimes 12%, these individuals fluctuate between 11-41 cm., corresponding those with a higher size to the deep areas (650 mts.), 52% of the sampling individuals are between 14-16, 5 cm.. Another characteristic species is <u>Helicolenus dactylop-</u> terus, being 85% of the examined individuals between 9,5-16,5 cm., corresponding the higher percentages (9,3%) to a whole length equal to 10,5 cm.

In this Table we show some species captured in the fishing areas of Aristeus antennatus:

FISH Fam. Macrouridae - Coelorhynchus coelorhynchus (Risso, 1810)
- Nezumia sclerorhynchus (Valenciennes, 1838)
- Trachyrhynchus trachyrhynchus (Risso, 1810) Fam. Squalidae - <u>Etm opterus spinax</u> (Linnaeus, 1758) Scyliorhinidae <u>Galeus melastomus</u> (Rafinesque, 1810)
<u>Scyliorhinus canicula</u> (Linnaeus, 1758) Congridae Conger conger (Linnaeus, 1758) Gadidae , Galque Micromesistius <u>poutassou</u> (Risso, 1826) <u>Phycis blennoides</u> (Brünich, 1768) <u>Antonogadus megalokynodon</u> (Kolombatovic, 1894) Fam. Stomiidae - <u>Stomias boa</u> (Risso, 1810) Fam. Alepocephalidae - <u>Alepocephalus</u> <u>rostratus</u> (Risso, 1820) Fam. Trachichthvidae - Hoplostethus mediterraneus (Cuvier, 1829) CRUSTACEANS Fam. Pandalidae - <u>Plesionika martia</u> (A. Milne Edwards, 1883) - <u>Plesionika edwardsii</u> (Brant, 1851) - <u>Plesionika gigliolii</u> (Senna, 1903) Fam. Polychelidae - <u>Polycheles</u> typhlops Heller, 1862 Fam. Xanthidae - <u>Geryon</u> <u>longipes</u> A. Milne Edwards, 1881 Fam. Homolidae - <u>Paramola cuvieri</u> (Risso, 1816)

REFERENCES.

CARTES, J.E. and F. SARDA.- 1989. Feeding ecology of the deep-water <u>Aristeus</u> <u>ante-</u> <u>nnatus</u>. <u>Mar. Ecol. Prog. Ser.</u>, 54: 229-238. RELINI, G. and L. ORSI RELINI.- 1987. The decline of red shrimps stocks in the gulf of Genoa. <u>Inv. Pesq.</u>, 51 (Suppl. 1): 245-260.

RELINI ORSI; L. e M. WURTZ.- 1977. Aspetti della rete trofica batiale reguardanti <u>Aristeus</u> antennatus (Risso, 1816) (Crrustacea, Penaeidae), <u>Atti IX Congr. Soc.</u> <u>Ital. Biol. Mar.</u> Ischia, 389-398.

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