

Occurrence of the unihorn octopus *Scaergus unicolorrhus* in the Sicilian Channel.
I: Spatial distribution and abundance

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The unihorn octopus *Scaergus unicolorrhus* Orbigny 1840, a by catch of the bottom trawl fishery in the Mediterranean, is much appreciated for its flesh quality and is regularly sold in the fish markets of Greece, Italy and Spain (MANGOLD & BOLETZKY, 1987).

At Mazara (one of the most important landing places of the Mediterranean) this octopus is well known as the so-called "polpo riccio" (curly octopus) and it is widely commercialized either alone or mixed with other valuable octopus species, namely *Octopus vulgaris*, *Eledone cirrhosa* and *E. moschata* (JEREB & RAGONESE, 1990; RAGONESE & JEREB, 1990).

Up to date species has been considered rather uncommon all through its main distributional area (MANGOLD & BOLETZKY, 1987, 1988; SANCHEZ & ALVAREZ, 1988) and little information is available for the central Mediterranean.

Data collected during two years (Spring 1985 to Winter 1987) of seasonal, randomly stratified trawl survey carried out within the Sicilian Channel (daily hauls of 1 hour duration; cod-end mesh size of 20 mm/side; see LEVI, 1990, research program TRAWL, for further details), were analyzed to give a description of the distribution of this species and information on its abundance.

The unihorn octopus occurred all over the area investigated (about 51000 square km; see fig.), showing a major concentration over the wide platform or "Banks" (the "Adventure" the "Terrible" and western side, respectively). The central portion of the area, characterized by a reduced continental shelf and sedimentation basin with canyons and valleys more than 800 m deep was poorly inhabited.

Caught between 46 and 776 m depth, the curly octopus seems to prefer a more restricted bathymetric range, being most abundant between 50 and 500 m. The only specimen caught above 50 m and the other 6 (in 4 hauls) caught beyond 500 m in fact, are likely to represent occasional captures, in agreement with that reported for the species in other Mediterranean areas (MANGOLD & BOLETZKY, 1987).

Catches were rather exiguous, considered both individually and as a whole (Tab.), with males dominant over females. Nevertheless it should be pointed out that the bottom trawl used is not selective for octopuses and that during the above mentioned TRAWL (a multispecific research program) daily hauls were taken, when octopuses are likely to be less vulnerable to fishery.

Moreover, a greater abundance was detected on some particularly rough bottoms, characterized by madreporian and barnacles formations, where the hauls were never repeated in order to save the net. Besides, local fishermen consider this species quite common within the range of exploitation of the near shore trawl fishery.

Taking into account these considerations, our data indicate that *Scaergus unicolorrhus* seems to be more common in the Sicilian Channel than previously believed and that its potential for a fishery seems greater than suspected.

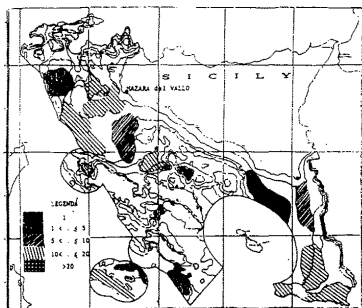


Fig.- Distribution (relative abundance in number) of *S. unicolorrhus*.

TRAWL	SEASON	TH	HS.U.	TYm	TCm	MBWm	TYf	TCf	MBWf	
1	- SPRING	85	55	23	11.6	123	95	3.3	41	80
2	- SUMMER	85	53	14	2.4	31	77	1.5	28	55
3	- FALL	85	57	17	2.9	45	64	1.2	29	40
4	- WINTER	86	58	15	3.3	52	63	2.1	32	65
5	- SPRING	86	63	18	4.0	48	83	1.4	29	47
6	- SUMMER	86	64	21	2.8	39	72	2.0	37	54
7	- FALL	86	71	23	7.1	91	78	2.7	46	59
8	- WINTER	87	69	22	4.7	73	64	2.8	49	58

Tab.- Total catch in weight (TY, kg) and number (TC) and mean body weight (MBW; gr) for sex (m = males; f = females), and trawl season of *Scaergus unicolorrhus* in the Sicilian Channel. TH = total number of valid hauls (1-800 m depth range), HS.U. = number of hauls where the species was caught.

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