

New records of large neon flying squid (*Ommastrephes bartrami* Lesuer, 1821)
in Southern Tyrrhenian Sea

S. RAGONESE, G. RIVAS and P. JEREB

ITPP-CNR, MAZZARA (Italy)

The status of flying squid populations (Cephalopoda, Ommastrephinae) in the Mediterranean sea is still unclear and needs systematic revision (MANGOLD & BOLETZKY, 1988).

To date, the orangeback (*Ommastrephes pteropus* Steenstrup, 1855) and neon-webbed squid (*O. bartrami*) can be quoted in Mediterranean check list us (CLARKE, 1966; ROPER *et al.*, 1984; MANGOLD & BOLETZKY, 1988) following the general agreement that the other previously recognized species (*O. caroli*) represented just the adult form of the latter species (ZUEV *et al.*, 1975; BELLO, 1986; NESIS, 1987).

O. bartrami is an oceanic, active swimmer, fast growing (Tmax=1-3 years), large sized (ML max =700 mm) squid with a circumglobal antitropical distribution (ROELEVELD, 1982; DUNNING & BRANDT, 1985).

In the adult, the presence of the enlarged ventral protective membrane in arm III (which might be characteristic of females; ROPER, pers. comm.) allows an immediate identification.

The first documented record in the Mediterranean Sea seems to be the floating dead specimen, reported as *Stenoteuthis bartrami*, observed at Banyuls sur Mer, France (LOZANO REY, 1905 in MORALES, 1958). In Italian waters, even though the occurrence of neon webbed flying squid has been reported for a long time (ISSEL, 1922 in CLARKE, 1966; BELLO, 1986 and others), its presence has been considered implicitly, sporadic and rare and often as a consequence of stray specimens.

Interviews with sicilian fishermen (Central Mediterranean sea) who report about repeated occurrence of "huge" squid trawled or entangled, has led to the conviction that such a species could be more common than previously believed and the finding of a large landed specimen (RAGONESE & JEREB, 1990) has supported this assumption.

In this note, morphometric data and indexes (as a percentage of ML) relative to three new specimens (females) caught by "spadara" (ML= 597 mm), jigging (ML=525 mm) and coastal trammel net (ML=137 mm) respectively, in the Southern Tyrrhenian sea, are reported (Tab.).

The large females had spermatophoric residuals in the buccal pocket and showed scars on the antero-dorsal portion of the mantle which might be a consequence of mating (cf. MANGOLD, 1989).

The main difficulties in getting specimens of these large oceanic squid are due to the fact that no large scale jigging is operating in Italy (RAGONESE & BIANCHINI, 1990), no specific trammel net fishing is carried out in Italy up to date, and because swordfish and scomberoid drift nets (the so called "spadara") are characterized by relatively large mesh size. Moreover the misidentification of the young specimens of *O. bartrami* with the other, more common, *Todarodes sagittatus*, is very frequent.

In this context the records presented above together with other very recent reports (BIAGI, 1990) especially of young specimens (RELINI, 1990), support the opinion that a well established population does exist in the Tyrrhenian sea and, probably, in the whole Mediterranean Sea.

CODE	TL	Tw(gr)	ML	MWI	FLI	FWI	HLI	HWI	EDI	TtLI	I	ALI			
												II	III	IV	
A	1652	9412	613	39	44	77	21	22	9	146	50	64	60	61	
B1	1563	7540	597	32	42	74	20	26	9	137	50	62	68	72	
B2	1498	5260	525	37	43	71	27	22	8	165	59	71	74	70	
C	387	185	137	/	45	32	24	20	6	137	40	46	52	61	

Tab.- Morphometric data for the four specimens of *O. bartrami* (length in mm; indexes as percentage of ML according to ROPER & VOSS, 1983). "Code" indicates the source of specimens: squid caught by "spadara" (A); in RAGONESE & JEREB 1990), by jigging (B1-B2) and by a trammel net (C). Measurements on C made after fixation.

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