THE DIET OF *SEPIA ELEGANS* (BLAINVILLE, 1827) DISCARDED FROM BOTTOM TRAWLS IN THERMAIKOS GULF

K. Fryganiotis [1] *, T. Chouvelon [1], P. Damianidis [1], D. Vafidis [2], C.-C. Chintiroglou [1]

[1] Dept. of Zoology, School of Biology, Aristotle University of Thessaloniki, P.O. Box 134, GR-541 24, Thessaloniki, Greece - damianidis@yahoo.com

[2] Department of Ichthyology and Aquatic Environment, School of Agricultural Sciences, University of Thessaly, Nea Ionia, Magnesia,Greece

Abstract

The diet of cuttlefish, *Sepia elegans,* discarded by trawls in Thermaikos Gulf, Greece, was examined during one fishing season. The main prey was crustaceans and fish. Its trophic level was estimated to be 3.53.

Keywords : Aegean Sea, Cephalopods, Diet, Fisheries.

The geographical distribution of *Sepia elegans* (Blainville, 1827) extends in the eastern Atlantic and throughout the Mediterranean Sea [1]. It is a demersal species that lives on diverse bottoms at depths from 2 to 430 m [1, 2]. The information on the diet of *S. elegans* is limited [2, 3], while there are no references on the diet of the species in the Aegean Sea, Greece.

The study of the diet of *S. elegans* was carried out by examining the stomach contents of 86 specimens caught with bottom trawls in the Thermaikos Gulf (North Aegean Sea) during one fishing season (October 2005 to April 2006). Sampling took place seasonally at 21 stations in conditions of commercial fishery. Each haul lasted 2 to 6 hours. Sampling took place at depths from 32 to 96 m. The cod-end mesh size was 40 mm (stretched).

In general, *S. elegans* was found to feed mainly on crustaceans and secondarily on fish (Table 1). The trophic level of the cuttlefish was calculated at *3.53 (S.E=0.53)* [4]. The percentage of crustaceans in the gut content increased with the size of cuttlefish, in contrast to the percentage of fish. Seasonal differences were also found, as the proportion of fish increased between autumn and spring, while the proportion of crustacean remained practically the same.

Similar results on the diet of the species were reported in NW Spain (Ría de Vigo) [2, 3]. The other *Sepia* species, *Sepia officinalis* was also reported to has the same diet, as reported in studies off the coast of Portugal [5], in Morbihan Bay, in France [6], and in NW Spain [2, 3].

Tab. 1. Ratio of stomach content of *Sepia elegans* by sex, season and size (N= total number of individuals, ML=mantle length of cuttlefish).

Stomach content	TN (%)	males (%)	Females (%)	Autumn (%)	Winter (%)	Spring (%)	ML<41,3 (%)	ML ≥ 41,3 (%)
Crustacean	74,4	42,1	57,9	32,1	40,6	27,3	39,1	60,9
Fish	44,2	20,9	79,1	23,2	25,0	51,8	57,9	42,1
Others	10,5	10,1	89,9	33,3	33,3	33,4	33,4	66,6
Empty	22,1	31,6	68,4	42,1	26,3	31,6	68,4	31,6

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