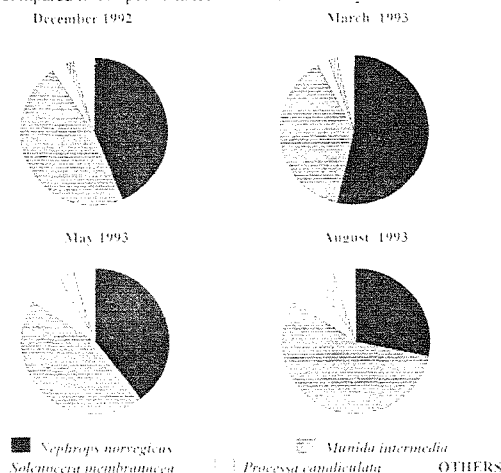


CRUSTACEA DECAPODA ASSEMBLAGE OF THE WESTERN POMO PIT. I - SPECIES COMPOSITION

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The IRPEM, in the last twenty years, has extensively studied fishery resources and oceanography of the Western basin of the Pomo pit, a depression with a maximum depth of 256 m. The Pomo (Jabuka) pit is the main Nephrops ground in the Central Adriatic; moreover it is a nursery ground for hake (*Merluccius merluccius*). From December 1992 to April 1994, during a comparative study of different Mediterranean and Scottish Nephrops grounds, the area was sampled with an experimental unimesh prawn trawl with cod-end meshes of 12 mm stretch. Fish and decapod crustaceans made the bulk of the trawl catch. At least once per season catches obtained around noon and midnight were sorted on the deck for commercial species and the residual bycatch was frozen at sea and subsequently sorted in the laboratory. The seasonal quantitative composition of the Decapod assemblage has been estimated from the highest value of biomass per swept area obtained for each species, either in day time or night time. Diel change in vulnerability of different species has been estimated according to FROGLIA & GRAMITTO (1986). A total of 26 species of Decapod crustaceans have been identified, compared to 17 species listed for the same area by FROGLIA in 1976.



In the following table species are listed in systematic order and classified according to their habitat.

(P = pelagic, EB = epibenthic, BB = benthic making its own burrow, DB = benthic dwelling into sediments at least in some day period) and their diel vulnerability to trawl gear (N = highest catches at night, D = highest catches at day, I = without a clear diel pattern in catches). Species marked with an * were found only once with one or few individuals.

SPECIES	RANK number	RANK weight	Habitat	Vulnerab
<i>Parapenaeus longirostris</i>	15	11	FB	I
<i>Solenocera membranacea</i>	4	3	DB	N
* <i>Sergestes arcticus</i>	25	25	P	
* <i>Pisiphaea sivadoi</i>	22	20	P	
<i>Alpheus glaber</i>	11	14	BB	N
<i>Processa canaliculata</i>	5	4	DB	N
<i>Processa nouveli</i>	9	12	DB	N
<i>Chlorotoeus crassicornis</i>	8	7	FB	N
<i>Pandalina profunda</i>	2	6	DB	N
<i>Plesionika antigna</i>	10	15	EB	
<i>Plesionika heterocarpus</i>	10	8	FB	D
* <i>Plesionika marina</i>	23	24	EB	
<i>Aegaeon lacazei</i>	17	17	DB	
<i>Philocheirus echinulatus</i>	6	9	DB	N
<i>Pontophilus spinosus</i>	7	5	DB	I
<i>Nephrops norvegicus</i>	3	2	BB	D
<i>Calocaris macandreae</i>	14	16	BB	N
* <i>Callinassa subterranea</i>	26	26	BB	
<i>Iaxea nocturna</i>	21	21	BB	
* <i>Pagurus excavatus</i>	24	23	FB	
<i>Munida intermedia</i>	1	1	FB	I
<i>Macropodia longipes</i>	20	20	LB	
<i>Liocarcinus depurator</i>	12	19	DB	I
<i>Macropipus tuberculatus</i>	13	13	DB	N
<i>Gonoplax rhomboides</i>	18	18	BB	
<i>Menodius cf. caudii</i>	19	19	DB*	

The decapod assemblage was dominated all the year round by *Nephrops norvegicus* and *Munida intermedia*, accompanied by *Solenocera membranacea* and *Processa canaliculata*. The latter two species being vulnerable mostly at night. All the other species never made more than 5% by weight of the total decapod catch. The assemblage includes species characteristic of muddy bottoms of the circalittoral and epibathyal levels. Several of them are known to make burrows in sediments (ATKINSON, 1986) and their importance may be somewhat underestimated from trawl sampling. Thus *Calocaris macandreae* was observed only with single specimens in the trawl catches, but its density, estimated from 90 grab samples taken in the area in 1992 and 1993 (FROGLIA unpublished), had to be around 1 individual / 1.5 square metre.

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