Bulletin on Mediterranean plankton

Plankton around the Ionian Islands

1st -7th June 2014 – Route from Otranto to Zakynthos.

The analysis of samples collected off the Ionian Islands (Fig.1) allowed identifying the most characteristic species of plankton in this region during late-spring.

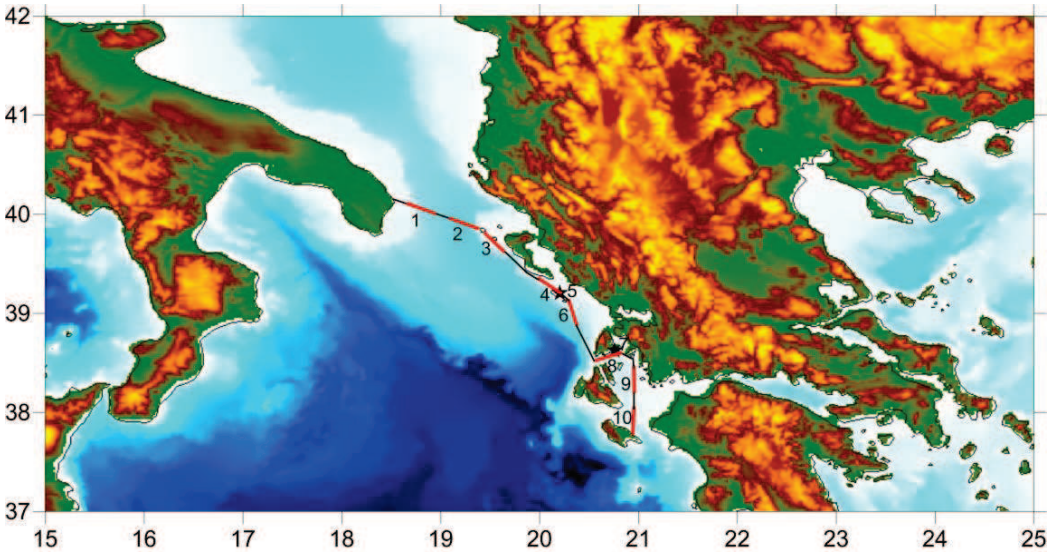

Figure 1. 1st June -7th June 2014, route Otranto- Zakynthos. The red segments and numbers identify the routes along which plankton was collected horizontally in the upper 5 m. Stars identify the stations where plankton samples were collected vertically between the bottom and the surface.

We found numerous species of phytoplankton (Tab.1, Fig.2), particularly diatoms of the genera *Pseudo-nitzschia*, *Thalassionema* and *Chaetoceros*, as well as different species of *Neoceratium* (dinoflagellate), indicating a typical situation of "spring bloom". This was associated with high abundance of zooplankton filter-feeders (i.e. herbivorous), such as the copepods *Clausocalanus*, *Temora* and *Centropages* spp. (Tab. 1, Fig. 2), that were actively reproducing at the moment of the sampling.

Clupeid larvae, likely anchovy, were found off the island of Lefkada, indicating that the shelf region west of Meganisi is a nursery area for the anchovy in the Ionian Sea.

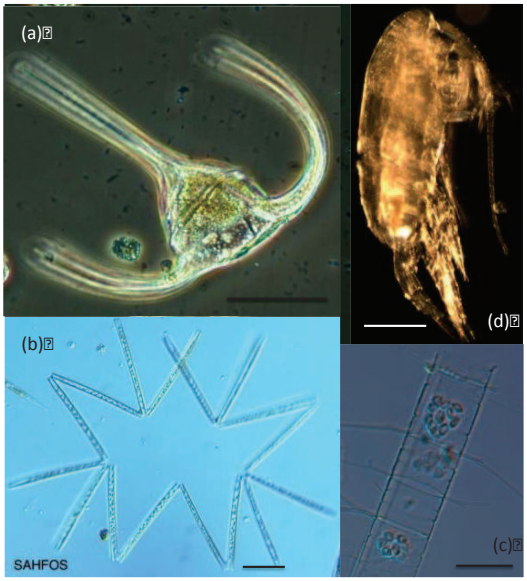

Figure 2. 1st -7th June 2014, route Otranto-Zakynthos. Phytoplankton: *Ceratium tripos* (a), *Thalassionema nitzschioides* (b) and *Chaetoceros* spp. (c), scale bar = 40 µm. Zooplankton: Copepod *Clausocalanus arcuicornis* (d), scale bar = 0.5 mm.

Table 1. 1st -7th June 2014, route Otranto- Zakynthos. Plankton species identified in some samples collected by Mediterranea.

PHYTOPLANKTON (Plant Kingdom)	ZOOPLANKTON (Animal Kingdom)	
MICROALGAE	**PROTISTA**	**METAZOANS**
PHYLUM OCHROPHYTA	PHYLUM FORAMINIFERA	PHYLUM CNIDARIA
BACILLARIOPHYCEAE	GLOBOTHALAMEA	HYDROZOA
Pseudo-nitzschia delicatissima	*Globigerina* spp.	Siphonophora spp.
Pseudo-nitzschia spp.		
	PHYLUM RADIOZOA	PHYLUM ARTHROPODA
COSCINODISCOPHYCEAE	ACANTHARIA	MAXILLOPODA (Copepoda)
Chaetoceros spp.	Acantharia spp.	*Acartia* spp.
Odontella regia	POLYCYSTINA	*Centropages hamatus*
Rhizosolenia imbricata	Spumellaria spp.	*Clausocalanus arcuicornis*
Thalassiosira spp.		*Clausocalanus lividus*
	PHYLUM CILIOPHORA	*Temora stylifera*
FRAGILARIOPHYCEAE	OLIGOTRICHEA	*Oithona similis*
Fragilaria spp.	*Tintinnopsis* spp.	*Agetus flaccus*
Thalassionema nitzschioides		*Farranula* spp.
		Clytemnestra spp.
PHYLUM DINOPHYTA		BRANCHIOPODA (Cladocera)
DINOPHYCEAE		*Evadne spinifera*
Neoceratium carnegiei		
Neoceratium fusus		PHYLUM MOLLUSCA
Neoceratium lineatum		GASTROPODA
Neoceratium massiliense		Gastropod larva
Neoceratium tripos		
Cladopyxis spp.		PHYLUM CORDATA
Gonyaulax cyst		APPENDICULARIA
Oxytoxum scolopax		*Oikopleura* spp.
		THALIACEA
PHYLUM HAPTOPHYTA		*Salpa fusiformis*
COCCOLITHOPHYCEAE		Order CLUPEIFORMES
Coccolithophores spp.		Clupeid larva
PHYLUM CHLOROPHYTA		
PYRAMIMONADOPHYCEAE		
Halosphaera spp.		

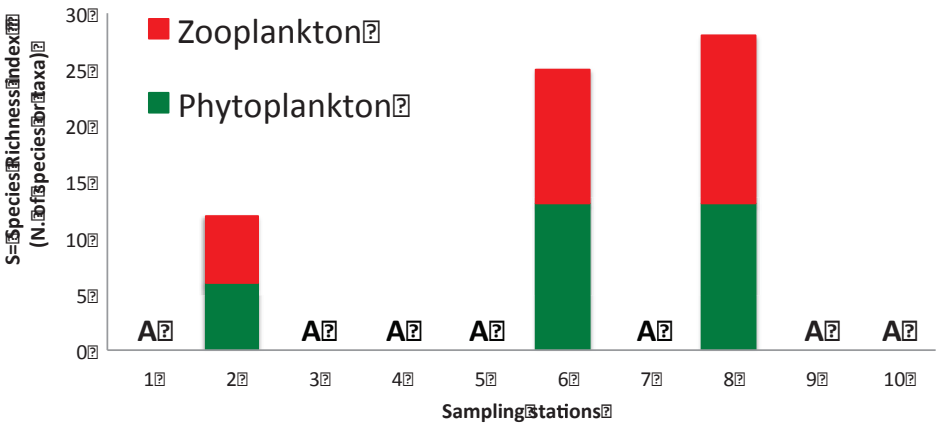

Figure 3. 1st-7th June 2014, route Otranto- Zakynthos. Species richness of plankton collected by Mediterranea off the Ionian islands. A= sample not yet analysed.