

COMPARISON ON THE APPENDICULARIA FAUNE IN SEVERAL BAYS OF THE
EASTERN ADRIATIC

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A b s t r a c t

Qualitative and quantitative data are given on the appendicularian faune in 4 bays, along the Eastern Adriatic coast, based on the data from 4 seasonal cruises in the year 1973/74.

R é s u m é

On a présenté les données qualitatives-quantitatives de la faune des appendiculaires dans les 4 baies le long de la côte Adriatique orientale sur la base des données de croisières saisonnières 1973/74.

The appendicularian faune from the Eastern Adriatic coast, were studied in the bay of Gruž (Southern Adriatic), the bays of Kaštela and Marina (Middle Adriatic), and in the bay of Rijeka (Northern Adriatic). Plankton was collected by vertical hauls (diameter 1.13 mesh netting 250 μ , during 4 seasons 1973/74.

The appendicularians are relatively abundant in all of the studied bays with an increased number of individuals in each m^2 , in the bays of Kaštela and Marina, in the bay of Gruž and in the bay of Rijeka.

The same number of species (13) is present in all 4 bays, but the quantitative composition is different due to specific hydrographic conditions and the geographical position of the studied bays (Table 1). A small number of species prevails quantitatively in all of the bays: Gruž, Kaštela and Marina, Oikopleura dioica, Oikopleura fusiformis and Oikopleura longicauda. In the bay of Rijeka only two species prevail (Oikopleura dioica and Oikopleura longicauda).

Along the Eastern Adriatic coast, going from south to north, the smallest neritic characteristic is in the bay of Gruž. This is caused by the vicinity to the open sea waters of the Southern Adriatic. In this bay is the smallest quantity of neritic species, while some appear which are not typical neritic (Oikopleura cophocerca and Oikopleura rufescens). The bays of Kaštela

and Marina, which get larger quantities of fresh water from underground sources, are less influenced by deep waters of the South Adriatic so that the quantity of neritic species are larger than in the bay of Gruž. Finally in the bay of Rijeka, which is further from the open sea of the Southern Adriatic, the presence of neritic species and their number is the largest. The quantitative predominance of the two neritic species (Oikopleura dioica and Oikopleura longicauda) making 90.4 % of the total number of appendicularians, shows the largest degree of neritic characteristics in the bay of Rijeka along the coast of the eastern Adriatic.

Table 1.- Qualitative and quantitative appendicularians in the bays of the Eastern Adriatic (average No. ind/m²)

S P E C I E S	GRUŽ BAY	KAŠTELA AND MARINA BAY	RIJEKA BAY
	/SOUTHERN A. /	/ MIDDLE A. /	/NORHERN A. /
<i>O. cophocerca</i> Gegenbauer	1,5		
<i>O. dioica</i> Fol	632,4	1013,2	1586,0
<i>O. fusiformis</i> Fol	271,3	603,0	115,5
<i>O. graciloides</i> Lohmann et Buckman	21,0		15,4
<i>O. longicauda</i> Vogt	240,0	1533,2	1419,4
<i>O. rufescens</i> Fol	5,0		
<i>A. sricula</i> Fol		1,2	2,2
<i>F. borealis</i> Lohmann	18,6	76,0	122,5
<i>F. formica</i> Fol		8,0	8,0
<i>F. haplostoma</i> Fol	5,3	69,4	2,4
<i>F. megachile</i> Fol		3,2	
<i>F. pellucida</i>	19,3	1,3	52,2
<i>K. tenuis</i> Fol	41,5	1,2	2,0
	1256,4	3309,7	3325,6