

VERTICAL DISTRIBUTION OF ANIMALS ON CYSTOSEIRA
THALLUS IN THE BLACK SEA

V.E.Zaika, E.A.Kolesnikova and L.V.Tretyakova
Institute of Biology of South Seas, Academy of
Sciences UkSSR, Sevastopol, USSR

Using special sampler vertical distribution of gastropods and harpacticoids was investigated on Cystoseira. Different patterns of distribution for some species were found out.

User de appareil spécial a été étudiée le repartition verticale de gastropods et harpacticoids sur la Cystoseira, différence modèle de repartition de quelques espèces ont été argumentalé.

Vagil fauna inhabiting macrophytes is studied usually in samples from the whole thallus. Special sampler was used allowing to register organisms according to separate vertical layers of thallus. Using this method some daily stations were done on the Black Sea, near Sevastopol : samplers were taken at the definite depth each 2 or 3 hours. Fauna was fixed separately according to 3 vertical layers of thallus (each layer was 20cm high). This method reveals the peculiarities of vertical distribution of some species of animals on Cystoseira thallus.

123 samplers from 41 Cystoseira thallus were collected in 3 daily stations (May, 3, 15, November 24, 1975) at the depth of 0,5, 1,5; 3,5m. Gastropods species were discovered as follows: *R.splendida* Eichw., *R.parva* (Costa), *Tricollia pulla* (L.), *Bittium reticulatum* (Costa).

Distribution of these species on several layers can be seen at the following Table :

Number of samplers where present species was found

Layer	Species: <i>R.splendida</i>	<i>R.parva</i>	<i>T.pulla</i>	<i>B.reticulatum</i>
Upper	: 41	: 1	: 0	: 0
Middle	: 40	: 21	: 1	: 0
Lower	: 41	: 5	: 11	: 13
	: :	: :	: :	: :

R.splendida occupied all layers, *R.parva* - middle part of thallus mainly, *T.pulla* and *B.reticulatum* - lower layer only.

Harpacticoids were counted and identified in 15 samples (May, 1976).

From 23 species registered 13 were found in upper layers, 19 species in the middle layers and 17 species in lower layers. Mass species as *Laophonte setosa* and *Dactilopodia tisboides* are distributed almost equally in all layers, whereas *Heterolaophonte uncinata* occupies mainly upper layer, *Parastenhelia spinosa* and *Paramphias copsis longirostris* - lower and middle layers.

Discussion.

It was shown that some species of molluscs and harpacticoids are connected with definite parts of thallus. It turned out that nematodes are distributed on thallus unequally too, these samples are not treated fully yet.

Considerable daily vertical migrations of animals on *Cystoseira* thallus were revealed. Migrations make vertical distributions of animals more complex, distribution patterns undergoing daily changes. Therefore relation of animals to definite layers is indicated here only for such species, which have these specific features during the whole day.