

10 ECOLOGICAL STUDY ON THE GILL PARASITES OF *SIGANUS SUTOR* FROM THE INDIAN OCEAN. H. Coene, A. Geets and F. Ollevier - University of Leuven (KUL).

A preliminary qualitative study on the gill parasite fauna has been carried out. It showed that six species of gill parasites occur on *Siganus sutor* of the Kenyan coastal area : the monogeneans *Pseudohaliotrema* sp., *Tetrancistrum sigani* and *Microcotyle mouwoi*, Copepoda *Hatschekia* sp. and Caligidae and the Isopod *Gnathia* sp.

The microhabitat selection of the parasites within the host individuals has been investigated through their distribution on the gill arches, sectors and filaments. This study shows that the choice of microhabitat is species specific. Each species has its own specific distribution pattern on the gill arches of the host. Furthermore, it seems that the distribution on a gill arch is not at random. The monogeneans show a clear aggregation per filament. The results have been compared with the different hypotheses put forward in literature on microhabitat selection and niche restriction. The nature of the distribution of parasites within the host population has been questioned. Prevalence, mean intensity and abundance of the metapopulation of gill parasites have been compared between two adult populations of siganids and between an adult and juvenile subpopulation. Similarity in prevalence and mean intensity of infection with gill parasites was shown for the two adult siganid-populations. The comparison between the adult and juvenile siganids concerning their parasite fauna has drawn the attention on the dynamical characteristics of the parasite-host system. Here, distinct differences in prevalence and mean intensity were observed.

The frequency distribution of the parasite populations was compared with mathematical distribution models. Most parasites showed an aggregated distribution which was best described by the negative binomial model.

11 EFFECT OF VARIOUS ENVIRONMENTAL CALCIUM LEVELS ON THE UPTAKE OF COBALT BY THE COMMON CARP, *CYPRINUS CARPIO*. S. Comhaire, R. Blust, L. Van Ginneken, F. D'Haeseleer and O.L.J. Vanderborgh - University of Antwerp (RUCA).

The acclimation and exposure effect of various external calcium levels on cobalt uptake by the common carp, *Cyprinus carpio*, was studied in chemically defined freshwater. For this purpose fish (2-6 g) were acclimated during a 16 day period to different external calcium concentrations ranging from 0.1 to 10 mM. Cobalt uptake experiments were performed with fish exposed in water with the same range of