

USAGE LOGARITHMIC DISTRIBUTION ON PLANKTON COMMUNITY DIVERSITY IN ARTIFICIAL PONDS

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The community is arranged of species, that live at same time and on the same area. The measurement methods of community diversity depend on number of species and number of individuals in each of these species. The community has rare species, and rich species. Many species only have single individual, two individuals and so on until only a few species have many individuals. These data were best fitted by the logarithmic distribution. The measurement of plankton community diversity, that 100 day old, in artificial ponds, had result, it found 27 species and total individual was 10 811 599, so logarithmic index was 0.9999999, and diversity index was 1.0811. The distribution became 1.0811; 0.5404; 0.3604; 0.2703; and so on. In the short, the plankton community had many species that had one individual and only few species have many individuals. And Structure of community was influenced by the riches species.

Keywords: Logarithmic distribution, community, species.