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Some niche segregation characteristics of freshwater fish species inhabiting rice fields associated permanent water bodies

Habit at use by fish species has indicated that specific characteristics of a target habitat are more important as well as habit characteristics around the unit. However, habitat itself is important for species distribution. Habitat structures of a lotic water body can be predicted most obviously with repeatable sequences of stream units such as pools, riffles and cascades. In lentic water bodies habitat structures may be different. Habitats available for fish species can be studied using classified habitat characteristics of both lotic and lentic water bodies. The present study was designed to investigate niche segregation characteristics of fish species occupying stagnant and perennial, rice field associated water bodies. Two perennial rice field associated permanent water bodies were selected. Fish species were sampled using a multi mesh gill net between 07.00-09.00 hours. Catch was taken to the laboratory for analysis. Water quality parameters of the study sites were also collected for al sampling dates. For the fish samples morphometric measuremenmts and food preferences were examined. Data showed variations in body size, morphometic features and consumed food examined. Data showed variations in body size morphometic features and consumed food. However,

body size variations not necessarily represent niche segregation. Yes this was quite evident from number of gill rakers and especially with the gut contents. Diversity of the samples was dependent on habitat characteristics and physicochemical characteristics of the water bodies. Among studied. Among studied species *Puntius amphibitus*, Puntius dorsalis and Amblypharyngodon melettinus showed an overlap in feeding niche. However according to characteristics of gil rakers, this competition seems to be excluded at least to some extent due to apparent food particle size preferences. Sharp niche segregation with food preferences has been previously emphasized using radioisotope techniques. Because food selection is considered as an important factor in identifying niche differentiation. Nevertheless. Our findings do not exclude the fact that within a given habitat niche overlaps are likely. To support this view we reveal that some fish species from rice field associated water bodies may find competition at least to some extent, although many possess potentially different niche characteristics.