

TROPHIC NICHE AND NUTRITIONAL PROFILE OF TWO MUDSKIPPERS *PERIOPHTHALMUS NOVEMRADIATUS* AND *BOLEOPHTHALMUS BODDARTI* IN THEIR NATIVE ESTUARINE HABITAT

*The mudskippers *Periophthalmus novemradiatus* and *Boleophthalmus boddarti* occupy the intertidal zone of tropical mangrove-fringed shores. However, both species have their own unique diet. The former is an herbivore and latter is carnivore. In order to reveal relationship between and diet in two species the specific activities of invertase, amylase cellulase, esterase, protease, pepsin and esterase are estimated in different size groups from liver, anterior and posterior gut. There is a positive correlation between total length and body weight with protease, pepsin and esterase in *P.novemradiatus* whereas same positive correlation is found in case of invertase, amylase, cellulase, esterase in *B.boddarti* ($P<0.01$). The relative gut length also supports their feeding habit. The activity of digestive enzymes can be thus used as an effective indicator of feeding habits, resource partitioning and the development of digestive enzymes in these two mudskippers.*
