

ASSEMBLAGE PATTERNS OF FISHES IN MANGROVE AND NON-MANGROVE HABITATS OF AN ESTUARY IN EASTERN COAST OF INDIA by RAY P, Malla G, Sivakumar K, Johnson JA.—The confluence of Godavari River (second longest river in India) with the Bay of Bengal gives rise to an extensive riverine estuary characterized by one of the largest patches of mangroves on the east coast of India. Different habitats, including mangrove-lined creeks, a river mouth, and bay were surveyed between December 2014 and November 2016 using locally-available trammel nets. A total of 115 species were recorded during the study, out of which *Leiognathus equulus*, *Mystus gulio*, *Dichomyctere fluviatilis*, and *Dendrophysa russelii* were the most abundant species, contributing >50% of total fish abundance. Multivariate analysis revealed salinity to be an important factor that segregated the fish community into habitats with lower salinity and habitats with higher salinity. The oligohaline mangrove creeks were dominated by *M. gulio* (predominantly a freshwater species), while habitats with higher salinity were dominated by *L. equulus* and *D. russelii*. Overall, the nonmangrove habitats had higher species diversity than the mangrove-lined creeks. The fish composition of Godavari Estuary was also compared and found to be similar to other estuaries in the eastern coast of India. Results of this study will assist in monitoring the changes in fish community of the estuary as a result of freshwater flow regulation by a large dam, which will become operational in a few years.—Wildlife Institute of India, 36, Navkranti Apartments, 75, I.P. Extension, Patparganj, Delhi-110092, India. Email: <paromitaray20@gmail.com>.

GENETIC DIVERSITY OF *CARCINOSCORPIUS ROTUNDICAUDA* IN PENINSULAR MALAYSIA by Fairuz-Fozi N, SATYANARAYANA B, Zauki NAM, Kaben AM, Muslim AM, Nelson BR, Ludwig Triest, Dahdouh-Guebas F.—The mangrove horseshoe crab, *Carcinoscorpius rotundicauda*, has a restricted distribution throughout Asia. The present study analyzed its genetic diversity (CO1 sequencing) in Pahang (in the east), Perak (in the west), and Johor (in the south) states in Peninsular Malaysia. Freshly deposited eggs (6–8 nos.) and adult crab blood (0.5 ml) samples were collected every month (January 2016 to January 2017). Due to no observed nesting activity at Perak, only blood samples from the crabs found as bycatch by local fishers were considered. The isolated data were analyzed using GenBank® of the NCBI, and similarities were found with the DNA sequences of *C. rotundicauda* from India, Thailand, and Vietnam. From the phylogenetic tree of resemblance between samples, it was possible to distinguish two major clades separating West and East Malay Peninsula. While the West Malay Peninsula with Perak (Straits of Malacca) population has a lineage of Odisha (Bay of Bengal) and Phuket (Andaman Sea), the East Malay Peninsula with the Pahang (South China Sea) population has a lineage of Bac Lieu (South China Sea) and Bang Pu (Gulf of Thailand). The southernmost Johor (Straits of Johor) population was found to be a subclade of the East Malay Peninsula and suggests a historical connectivity with the South China Sea, but separated from direct influence. Overall, *C. rotundicauda* populations on the west and the east coasts of Peninsular Malaysia are distinctly separate for which local topography in the south (as land barrier) along with sea surface currents could be responsible.—Institute of Oceanography and Environment (INOS), Higher Institution Centre of Excellence (HICoE) in Marine Sciences, Universiti Malaysia Terengganu—UMT, 21030 Kuala Terengganu, Terengganu Darul Iman, Malaysia. Email: <satyam2149@gmail.com>.