



STUDY OF HERPETOFAUNA AND THEIR MICROHABITATS IN KALLAI ESTUARY, KOZHIKODE DISTRICT, KERALA, INDIA- A SYSTEMATIC EVALUATION

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ABSTRACT

Estuarine wetlands are home to a special group of creatures that can withstand a combination of saltwater tides and freshwater run-off from diverse habitats. To account for the diverse selection of reptiles, this research observes amphibians and reptiles in the Kallai Estuary, Kozhikode district, Kerala, India. The study was conducted for a period of 2 years from May 2018 to April 2020. A maximum of 397 members belonging to 5 amphibian species and 13 reptile species were obtained using swift comprehensive opportunistic daytime and nighttime surveys in all habitats. The most numerous amphibian species was *Rana cyanophlyctis* (n=209, 44.5 percent), while the most prolific reptile species was *Boiga trigonata* (n=84, 13.10 percent). The majority of the species (38.89%) use terrestrial microenvironments. The results of this analysis on amphibians and reptiles' endurance for tidal water environments will expand the ecological range that these species may occupy. This research provides species narratives with both a focus on distinguishing characteristics and morphometrics. The research region should be prioritised for conservation since various ecological fragmentations have been substantiated as a consequence of technological expansion and urbanisation developments.

Keywords: Amphibians, Estuarine wetland, Microhabitats, Kallai Estuary, Reptiles