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**Diversity and Distribution of Freshwater Crabs in Sri Lanka**

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**Abstract**

Freshwater Crabs plays a key role in biodiversity and ecological balance of crustaceans found in Sri Lanka. Geographical location of the island with the combination of tropical climate and diverse ecosystems provides an ideal habitat for these creatures. This study is based on the described freshwater crabs found in Sri Lanka and focus on their geographical distribution and the diversity. The data comprises from 1961 to date with a combination of datasets from field surveys and existing literature. These field surveys were conducted in diverse habitat types including, wetlands, rivers, streams, isolated regions, etc. literature consist of taxonomical identifications through morphological examinations and genetic analysis. Geospatial techniques in Geographic Information Systems (GIS) were used to map the distribution, diversity, and potential hotspot within the country. 51 described species of freshwater crabs from seven different genus of *Ceylonthelphusa*, *Clinothelphusa*, *Mahatha*, *Oziotelphusa*, *Pastilla*, *Perbrinckia*, and *Spiralothelphusa* were mapped. The findings represent a diverse distribution across Sri Lanka, especially in the wet zone and the montane regions. All seven genera were found in the wet zone of the country, while only genus *Spiralothelphusa* and *Oziotelphusa* showed an expanded distribution to intermediate and dry zones. Wet zone of Sri Lanka consists of the highest diversity and vulnerability becoming the hotspot of freshwater crabs. Although the distribution map shows an evident lack of data in Northern Province, Eastern Province, and eastern parts of the Southern Province. Furthermore, the findings of current study provide a comprehensive overview of the distribution, diversity, and hotspot of freshwater crabs in Sri Lanka bridging the knowledge gap for future studies on the patterns of habitat preferences and modelling, significance, and the ecological importance, expanding field surveys through regions in northern and eastern parts of the country where the data is extremely limited, conservation initiatives with sustainable management strategies.

**Keywords:** Freshwater crabs, Sri Lanka, Geographic distribution, Hotspot, Decapod crustaceans