



Diversity of Dragonfly Species in the Hakkinda Islands of Mahaweli River in the Gatabe Area

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Abstract

Hakkinda Islands surrounded by the Mahaweli River, close to the Kandy-Gatambe area is a bio-geographical hotspot in Sri Lanka. However, bio-geographical importance of these islands have been overlooked during the last few decades as a result of development projects and varied human activities. Recently, Waratenna-Hakkinda area has been declared as a protected environmental area. According to the rudimentary survey, this protected area can be identified as a special habitat for dragonfly species, which biologically comes under the Class Insecta (Order-Odonata; Infraorder- Anisoptera). Since the knowledge about diversity of dragonfly species of the particular site is limited, this study was performed to bridge the gap in prevalent knowledge. This research is guided by Quantitative-Deductive research methodology. Under this methodology, line transects and quadrat sampling methods have been used in primary data collection process. According to research findings, a total of 16 dragonfly species from 08 families are identified and both riverine forest and river islands have rich diversity compared with home gardens in the area. Among the available species, 37.5% are identified to be endemic to the country. Three species, namely, Oriental Green Wing (*Neurobasis chinensis*), Black-tipped damsel (*Vestalis apicalis*) and Sri Lanka Ultima gem (*Libellago finalis*) are identified as vulnerable species. This research concludes that there is a high diversity of dragonfly species in this river islands and riverine forest areas, however human activities and their irresponsible behaviour may directly/indirectly negatively influence on dragonfly habitats and their breeding colonies. The research, thus, identifies an immediate requirement for a mechanism and regulations to protect a biologically important breeding colony of dragonfly species and their habitats to protect their diversity.

Key words: Hakkinds protected area, dragonfly species, diversity, habitat protection

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