

A Preliminary Survey on Butterfly Fauna at Rajagala Archaeological Site, Ampara, Sri Lanka

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Abstract : The Rajagala Archaeological site (RAS) is located 26 km from Ampara town (7°29'25.22" N, 81°36'59.05" E) accessible through the Ampara-Uhuna-MahaOya highway of the Eastern province of Sri Lanka. This site has recently been added to the tentative list of UNESCO world heritage site and is also a forest reserve. This dry zone forest consists of tropical mixed evergreen vegetation and scrublands on a rocky outcrop of elevation of about 350 meters above mean sea level. It is also scattered with several ponds of differing sizes on rocky outcrops, rocky cliffs, and about 50 cave dwellings. No comprehensive biodiversity survey of any sorts has been conducted at the RAS so far. Therefore, a preliminary survey was conducted to determine its butterfly fauna diversity. An opportunistic Visual Encounter Survey method was used to observe various butterfly species during the morning between 8:00am-12:00noon and in the evening between 2:00-6:00pm on 3 site visits in October 2017, February 2018, and November 2019. All encountered species were photographed using a Nikon D750 camera with Sigma 105mm f/2.8 EX DG OS HSM macro lens, and field guide books were used to identify them. Sri Lanka is home to 248 species of butterflies, of which are 26 are endemic. At RAS, we observed a total of 39 species (15%) of butterflies belonging to 5 Lepidoptera families. Out of these, one endemic species (4%) and 9 endemic subspecies were also identified. The former was *Troides darsius*, also known as the Sri Lanka birdwing which is the national butterfly and the largest butterfly in Sri Lanka, and the latter were Plains cupid (*Chilades pandavallana*), Yamfly (*Loxura atymnus arcuate*), Common Cerulean (*Amides celenotissama*), Tawny Rajah (*Charaxes saphon saphon*), Tamil Yeoman (*Cirrochroa thais lanka*), Angled Castor (*Ariadne ariadne minorata*), Glade Bushbrown (*Mycalesis patina patina*), Common Crow (*Euploea core asela*) and Blue Mormon (*Papilio polymnestor parinda*). The endemic subspecies belonged to 3 Lepidoptera families (3 from Lycaenidae, 5 from Nymphalidae, and 1 from Papilionidae family). Anthropogenic activities such as unauthorized cattle farming, forest clearance, and man-made forest fires currently threaten this site. If such trends continue, it may lead to the reduction of butterfly fauna diversity within this area in the future.

Keywords : lepidoptera, rajagala, Sri Lanka birdwing, endemic

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