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**Species richness and diversity of reptiles of the Giritale nature reserve of North-Central province, Sri Lanka**

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Herpetofaunal assemblage of Sri Lanka contains 176 species of reptiles. The reptile fauna of the wet zone forests has been studied comprehensively. However there is a paucity of data related to species diversity, abundance and habitats of the reptiles in the dry zone forests. Therefore the present study concentrated in recording the species diversity of reptiles at the Giritale Nature Reserve, a dry zone forest of Sri Lanka. Four habitat types, namely, grasslands, paddy fields, forests and human habitations within the nature reserve were identified using digital maps. Reptiles in each habitat type were recorded using three quadrates (10m×10m) each month from May 2006 to April 2008. Visual encounter surveys (VES) were conducted along three 1km line transects in each habitat every month. Reptile species richness (S) and Shannon-Weiner Diversity Index {H'} were calculated. Four hundred and eighty nine individuals of 31 species and ten families of the orders Squamata and Chelonea were recorded during the study. These included one Boidae species, eight Colubrids, one Elapid, one Uropeltid, one Viper species, six Agamid Lizards, six Geckoes, four Skinks, two Monitors and one Tortoise species. Endemic species recorded were the Sri Lankan Flying Snake (*Chrysopelea taprobanica*), Schneider's shield tail (*Rhinophis oxyrhynchus*), Painted lipped lizard (*Calotes ceylonensis*), Whistling lizard (*Calotes liolepis*), Sri Lankan Kangaroo lizard (*Otocryptis nigristigma*), Blotched Ground gecko (*Geckoella yakhuna*), Kandian Gecko (*Hemidactylus depressus*), Haly's Tree Skink (*Dasia halianus*), Common Supple Skink (*Lankascincus fallax*) and Spotted Skink (*Mabuya madarazi*). The total abundance was highest in the human habitations with 12.20±9.21 (Mean±SD) and the lowest was in grasslands with 0.75±0.94 (Mean±SD). Highest species richness of 18 was recorded in the forest habitat and the lowest species richness of 5 was observed in the grasslands. Highest Shannon diversity index (H') of 2.29 was recorded in the human habitations while grasslands had the lowest diversity index of 1.07. However, the Shannon Weiner evenness (J) was highest in the paddy fields (J= 0.94) and was lowest in the grassland habitats (J= 0.66). *Sitana ponticeriana* and *Calotes versicolor* were the most common reptile species within the Nature Reserve. Since the Giritale Nature Reserve provides a suitable habitat for thirty one reptile species including ten endemic species every effort should be taken by the management to preserve this prime habitat for reptiles.

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