

## SEASONAL TEMPERATURE VARIATIONS AND ITS IMPACTS ON LEECHES IN UDAWATTAKELE, KANDY

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Climate is the most crucial factor that impacts species function. Seasonal temperature variations influence species tolerance, adaptation, feeding, migration, reproduction and niche. Leeches that belong to Phylum Annelida especially live in wet and fresh water environments. The study area, i.e. UdawattaKele Sanctuary, is situated in the wet zone and receives monsoon showers from May to September. The objective of this paper is to determine how seasonal temperature variations impact two selected types of leeches around the 'Raja pokuna' and along the 'Sindunuela' in the UdawattaKele forest area. Research methodology was based on the primary data collection method. Data were obtained in April (Sunny day) and June (Rainy day) in 2013 from six selected 2 m x 2 m plots in each of the sites 'Raja pokuna' and 'Sindunuela' in UdawattaKele. Techniques such as surface interpolation and time-series analysis were used in addition to GIS to achieve the objectives. According to the study, in three 2 m x 2 m plots the number of earth worms (*Oligochaetes*) were 18, 12 and 27 and blood suckers (*Hirudinea*) were 03, 10 and 02 around the 'Raja pokuna' in April. In June, the species numbers were very high due to continuous rain and darkness and the number of the earthworms were nearly 550, 400 and 600 and the blood suckers were 900, 750 and 1050 around the 'Raja pokuna'. In 'Sindunuela' it appears that the species numbers were almost of the same pattern. In three 2m x 2m plots the number of earthworms were 05, 13 and 21 and blood suckers were 02, 07 and 00 around the 'Raja pokuna' in April. In June, the number of earthworms was nearly 1100, 750 and 9500 and blood suckers were 750, 800 and 900 around the 'Raja pokuna'.

**Keywords:** Climate, Leaches, UdawattaKele