

Kahandamodera lagoon is situated on the Southern coastal area of Sri Lanka (between 80 52 – 80 54 E, 6.03 – 6.05 N) bordering the agroecological regions of DL land DL 5 where 75% expectancy of rainfall is greater than 775 mm to 500 mm. Ranna Oya is the major source of water to the Estuary. Though much smaller in area (total area 60 ha, true mangrove habitat area 26 ha.) in comparison to some other important lagoons in the vicinity such as Rekawa (260 h) and Kalametita-Lunama, the lagoon is know for its floristic uniqueness and scenic beauty.

The floristic survey was carried out using belt transects (24 m x 4 m) at three representative sites. Profile diagrams were constructed. Faunal survey was carried out through field observations and available data.

The survey indicated that the lagoon borders are fringed with mangrove vegetation with areas of low density cover around 15%, medium density cover around 60% and high density cover around 25%. Nine true mangrove species were identified indicating that 31% of the total number of mangrove species known from Sri Lanka are present in this habitat...

In the Hambantota district, a community of *Napa fruticans* was found only at this location. Further, some species which are notably absent at Rekawa, such as *Bruguiera*

*sexangula*, *Sonneratia caseolaris* were present at Kahandamodera. in high abundance. Forty four mangrove associates distributed within 32 families including two endemics were identified. In the faunal analysis, 20 bird species, 10 mammal species 15 snake species, 23 tetrapod species, 8 amphibian species and 4 crustacean species were identified.

Kahandamodera estuary can therefore be categorized as an area with high biodiversity.