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**STUDY OF THE DISTRIBUTION AND ABUNDANCE
OF KEY MANGROVE PLANT SPECIES IN
PAMBALA MANGAL**

A PROJECT REPORT PRESENTED

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SUMMARY

Mangroves are found in intertidal areas of tropical and sub-tropical coastlines. Mangrove substratum is inundated twice a day by tides. Mangroves exhibit many xerophytic characteristics as adaptations to the unfavourable environment. In Sri Lanka, mangroves are distributed discontinuously along the shore line. The distribution and abundance of key mangrove species in Pambala arêa of Chilaw lagoon was investigated.

This study was carried out using belt transect method. Each transect was 10m in width and the length runs across the mangrove. Structural diversity of two transects were studied in terms of floristic composition, density, basal area, tree height and Shannon diversity index.

Ten mangrove species were encountered in this locality. The highest stand density values recorded from transect I and II were 4800 plants per ha and 1400 plants per ha respectively. *Avicennia officinalis* and *Lumnitzera racemosa* were the dominant species. Higher basal areas for the mangrove stands in transect I indicates greater maturity than the mangrove stand in transect II. Shannon diversity index for transect I and II were 1.5 and 1.3 respectively. The clearance of mangrove stands for prawn farming is the major threat for this mangrove stand. For conservation and management, reforestation, creation of awareness among people is required.