

A COMPARATIVE STUDY OF A LAGOON-FRINGING AND A
RIVERINE MANGROVE ON THE SOUTH-EAST COAST OF SRI LANKA

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Lagoon-fringing mangroves on the shores of Rekawa lagoon and the Riverine mangroves on the banks of Ranna Oya estuary at Kahanda Modera were studied using belt transects. Important physico-chemical parameters of water and soils were investigated; species of macroflora and their zonation were recorded; density and dbh woody species were estimated; fauna, wherever present, was collected and identified.

Water samples of Rekawa lagoon and sites within the mangrove were more saline than those of Kahanda Modera. Mangroves at both locations have been highly disturbed by man; Kahanda Modera mangrove more so than the other. The zonation of the macroflora was quite different in the two mangrove communities. The composition and the zonation at Kahanda Modera were somewhat similar to those of riverine mangroves along the west coast¹, but those of Rekawa mangals were rather distinctive. Nypa fruticans formed a narrow fringe at Kahanda Modera, although this taxon was recorded outside its expected range of distribution, Sonneratia caseolaris, Bruguiera sexangula, Aegiceras corniculatum Excoecaria agallocha and Ardisia elliptica were the other common species of this mangal community. The Rekawa mangrove had a Rhizophora mucronata fringe (which was mostly cut down) at the water's edge, followed by a mixed mangrove zone of Bruguiera gymnorhiza, Lumnitzera racemosa, Avicennia marina, Aegiceras corniculatum and Excoecaria agallocha, followed by a relatively extensive zone of Ceriops tagal. Typical mangrove fauna such as cerithidean gastropods and grapsid crabs recorded from mangrove swamps of the west coast² were seldom found, and this extreme rarity of mangrove fauna may be partly attributed to the absence of seasonal flooding due to the failure of North East monsoon rains and the formation of sand bars blocking the openings in to the sea, for the past 3-4 years.

References

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