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Santalum album (Sandl wood/ Sudu Hanun) is an obligate angiosperm xylem-tapping woody root hemiparasite. Sanalum is mainly exploited for its scented heart wood. The worldwide demand for Sandalwood and its products on the rise. This preliminary study was carried out to investigate the basic biological and physiological aspects of *S. album* and its current status in Sri Lanka.

Comparisons between the herbarium specimens and the isolated genomic DNA showed that there are no differences between the Indian and Sri Lankan Sandalwood plants, Germination studies proved that seeds soaked in 0.05% gibberellic acid is the best method to enhance the germination rate of Sandalwood seeds. Vesicular arbuscular mycorrhizal associations were found to be less common inparsitized Santalum seedlings than unparasitized seedlings. The swollen bell – shaped haustoria of Santalum showed penetration to the xylem of the host roots thus enabling it to abstract hostxylem sap. Being a typical root hemiparasite this species showed a significantly low chlorophyll content in the leaves (2.30 mg g^{-1}) than one of its common host, *Caesalpinia pulcherima* (3.85 mg g^{-1}). This investigation further showed that S. album maintains a significantly low (-0.87 MPa) water potential than its host *C. pulcherima* (-0.69 MPa) to enable it to maintain a favorable water potential gradient to abstract host derived xylem sap.

Natural stands of Santalum are present in the districts of Kandy, Kurunegala, Ratnapura, and Badulla. The biologyassociated with the investigated Sandalwood plants carries all the hallmarks that this species can be successfully cultivated in many areas of Sri Lanka as an additional cash crop for tree farmers.