

### **A study on mass accumulation of macrophytes in Northern and Eastern coast of Sri Lanka**

<sup>1</sup>Thapeetha Yoganathan, <sup>1</sup>Saruga Kirisanth, <sup>1</sup>Uventhikka Sivanantham, <sup>1</sup>Sivagini Krishnamoorthy,  
<sup>1</sup>Ragavan Nadarajah, <sup>2</sup>Nahmagal Krishnapillai, <sup>1</sup>Shobiya Paramasivam, <sup>1</sup>Harichandra Khalingarajah,  
<sup>1</sup>Sivashanthini Kuganathan and <sup>1</sup>Sutharshiny Sathyaruban

<sup>1</sup>Department of Fisheries, University of Jaffna, Jaffna, Sri Lanka

<sup>2</sup>Department of Botany, University of Jaffna, Jaffna, Sri Lanka

Presenting author: sarugasiva@gmail.com

The coastal areas in Northern and Eastern part of Sri Lanka became an eyesore on 8<sup>th</sup> November 2021 with unprecedented amount of macrophytes piled upon the beaches. A survey was carried out to identify and analyze the distribution of macrophytes accumulated along the coast. Morphometric analysis was performed based on shapes of leaves, leaf margins, vein structures, leaf and stalk textures and length of petiole to confirm the species. The leaves of the plants under the study were found as shiny, roughly round, ovoid or kidney-shaped, up to 15 cm across in length with densely arranged longitudinal veins. Leaf stalks were bulbous and spongy. The petiole of the plant was about 50 cm long often swollen and its base enclosed in a stipule. From the morphometric study, the plants accumulated



## Topic 2 : Fisheries and Aquaculture

was identified as water hyacinth (*Eichhornia crassipes*). Water hyacinth is one of the world's most invasive aquatic plants that native to the Amazon basin, spread from South America to other parts of the world and is known to cause significant ecological and socio-economic effects. This plant was introduced as an ornamental plant into the state of West Bengal of India in the 18<sup>th</sup> century. Currently, India is severely infested by this weed. It is noteworthy that during the period of accumulation in Sri Lanka, the similar incident was also recorded in Kovalam Beach, India. Based on the meteorological data and the distribution of species, it was presumed that it had been followed by severe flood condition and also by high velocity water currents originated in the Bay of Bengal. As a follow up action, it is necessary to study the potential utilization of these accumulated plants in the future.