

## **Technical Session (Poster) C1: Animal Science and Nutrition**



## **Biomass Estimation of Economically Important Sea Weeds Along the Southern Coast of Sri Lanka**

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### **Abstract**

Sri Lanka has a coastline of approximately 1700 km, along which many varieties of marine algae are found. There are nearly 260 species of seaweeds growing along the coastal line. Out of these only a few species of *Chlorophyceae*, *Rhodophyceae* and *Phaeophyceae* are common as economically important. Although there is a good potential for development of the seaweed industry in Sri Lanka the currently available data is insufficient for determining the abundance of seaweed resources available in the country. To improve this industry NARA has conducted a field survey to determine the distribution and abundance of standing population of the presently available seaweed in Sri Lanka. Main objectives of this survey are to determine the standing biomass and cover of economically imported seaweeds in Southern coastal belt and identification of the sites in the southern coastal belt for culturing the economically important seaweed species. Ten sampling points were randomly selected from six sampling sites using 0.25m<sup>2</sup> quadrant. Percentage coverage of different seaweed species at each sampling site were used for further analysis. There were twenty five seaweed species including ten green algae species, twelve red algae species and three brown algae species. The highest seaweed coverage (85%) is recorded from Tangalle while the lowest coverage (18.5%) recorded from Polhena. Galle shows the highest total dry weight (744g/m<sup>2</sup>) and Midigama shows the lowest total dry weight (233.6 g/m<sup>2</sup>) of seagrass. *Sargassum spp*s was more abundant in Southern coastal area and there is a potential for culturing. *Velonia* species was collected from all sites and *Ulva lactuca* was collected from Midigama, Mirissa and Polhena sites and it reveals that, seawater in the area was polluted because *Ulva lactuca* is an indicator of determining the level of pollution of sea water.

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