

## Cultivation of *Caulerpa lentillifera* Using Tray and Sowing Methods in Brackishwater Pond

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### Abstract

Commercial cultivation of *Caulerpa lentillifera* is now gaining recognition because of the increasing demand in the domestic and international market. Studies on the different culture methods for large scale production of the species in the country are scarce. The present study evaluated the effects of two cultivation methods namely sowing and tray on the growth and biomass production of *C. lentillifera* cultured in brackishwater pond. For the tray method, propagules were clipped in two 0.75 m x 0.75 m tray and were hung in bamboo frame whereas for the sowing method, propagules were planted directly in the pond substrate with an interval of one meter. The weight gain using the sowing method was significantly higher and could be translated to an average of 1 kg every month of new or harvestable biomass. Specific growth rate of *C. lentillifera* grown in the substrate was at 3.85% day<sup>-1</sup> during the first month and at 2.92% day<sup>-1</sup> during the second month and was significantly higher compared to that of stocks grown in trays. High organic load of the soil (substrate) could have improved growth and biomass productivity. The results show that cultivation of *C. lentillifera* using the sowing method is more effective. This system has significantly contributed to increase in biomass yield. Moreover, this method of farming entails lesser capital outlay without any other material requirements such as bamboos and trays.

**Keywords:** *Caulerpa lentillifera*; Cultivation