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The new method of seaweed cultivation in Indonesia

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Kappaphycus alvarezii and *Eucheuma denticulatum* are few species of seaweeds that widely cultivated by coastal community in Indonesia. However, currently *Eucheuma* sp. production was significantly reduced caused by many problems such as herbivorous attack in field cultivation. This study aims to examine the effect of utilization of new seaweeds cultivation method on monthly production. New methods of seaweeds cultivation are floating cages. The research was conducted during March to December 2013 in Lakeba seaweeds cultivation area, Baubau city, Southeast Sulawesi, Indonesia. Underwater observation was conducted to observe the effect of floating cages on herbivorous. To calculate the effectiveness of Floating cages design, we were using three different design size of Floating cages, (200×200×50 cm, 200×400×50 cm and 100×400×50 cm). In terms to analyze the effect of floating cage on seaweeds production, we were compare the production of *K. alvarezii* and *Eucheuma denticulatum* by using long line methods and floating cages methods. The results showed that the floating cages completely keep and eliminate pests on seaweed. Ideal size being used for the cultivation of seaweed are 100×400×60 cm. The size designs are highly mobile and easily moved to desired location. In the period of cultivation of 50 and 90 days was observed that *E. denticulatum* were cultured with floating cages have average growth 389.2 g and 865.8 g, respectively. While the cultivated with longline average growth is 236.7 g and 531.8 g respectively. This shows a fairly significant difference of both. As for the *K. alvarezii* seen that during the cultivation of 50 and 90 days, the average growth of the weight is 329.3 g and 740 g respectively. While cultured with longline, average growth is 177.5 g and 487.5 g respectively. Growth *Kappaphycus alvarezii* looks slower than the *Eucheuma denticulatum*. Trend growths of both species tend to be highly increased after 50 days and decreased after a 70-day maintenance period. The cultivation by using floating cages produces fairly good growth with no of pest attacks that can affect growth rates.

Biography

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