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International Journal of Marine Science, 2018, Vol.8, No.14, 114-126
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Research Article **Open Access**

Intensification of Seaweed Cultivation *Eucheima cottonii* with Verticulture Method in the Water of Kelagian Island, Lampung Bay

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 International Journal of Marine Science, 2018, Vol.8, No.14 doi: [10.5376/ijms.2018.08.0014](https://doi.org/10.5376/ijms.2018.08.0014)
 Received: 24 Jan., 2018
 Accepted: 13 Feb., 2018
 Published: 30 Mar., 2018

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Preferred citation for this article:
 Hendri M., Rozirwan, Apri R., and Handayani Y., 2018, Intensification of seaweed cultivation *Eucheima cottonii* with verticulture method in the water of Kelagian Island, Lampung Bay, International Journal of Marine Science, 8(14): 114-126 (doi: [10.5376/ijms.2018.08.0014](https://doi.org/10.5376/ijms.2018.08.0014))

Abstract *E.cottonii* production is not still optimal and there are opportunities to increase production by developing methods that to utilize the depth level as a growing medium. Method of verticulture cultivation with pocket nets, more innovative and have high production level. This study aimed to solve the problems in seaweed cultivation by optimizing the land. Design of vertical cultivation

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Keywords Verticulture; Kelagian Island; Cultivation; Seaweed and *E.cottonii*

Background
 Indonesia as an archipelagic country with a total of 13,466 islands and a coastline length of more than 81,000 km has enormous potency for the development of seaweed commodities. The indicative land area can be used for the cultivation of Indonesian seaweed commodity reaches 769,452 ha. That number, only about 50% or an area of 384,733 ha which is effectively utilized (Sahat, 2013). One of the potential seaweed jeans to continue to be developed is *Kappaphycus alvarezii* (Doty). Philippine and Indonesia are the two major producing countries of *karrageenan* in the world market (Adnan and Porse, 1987). Over the last 30 years, *K. alvarezii* and *Kappaphycus striatum* (Schmitz) Doty from the Philippines have been introduced to more than 20 tropical countries for cultivation purposes (Glenn and Doty, 1990; Arecos, 1995).
 The need for seaweed with good quality, high productivity and sustainable is still a homework that can't be fulfilled until now. Indonesia is a major seaweed producing country. Currently the high demand can be filled by

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International Journal of Marine Science, 2018, Vol.8, No.12 doi: [10.5376/ijms.2018.08.0012](https://doi.org/10.5376/ijms.2018.08.0012)
Received: 24 Jan., 2018
Accepted: 13 Feb., 2018
Published: 23 Feb., 2018

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Preferred citation for this article:
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