



Phytochemicals Properties and Fatty Acid Profile of Green seaweed *Caulerpa racemosa* from Madura, Indonesia

Yushinta A. Sanjaya^{1*}, Simon B. Widjanarko², Dwi Setijawati³, Masruri⁴

¹Doctoral Program of Fisheries and Marine Science, University of Brawijaya, Indonesia

²Departement of Agricultural Product Technology, Faculty of Agricultural Technology, University of Brawijaya, Indonesia

³Departement of Fisheries Technology, Faculty of Fisheries and Marine Science, University of Brawijaya, Indonesia

⁴Departement of Organic Chemistry, Faculty of Mathematic and Natural Science, University of Brawijaya, Indonesia

Abstract : Three different treatment of *Caulerpa racemosa* - fresh, semi-dried and dried - were assayed for proximate composition, and antioxidant activities (EC50). Fatty acids profile was also investigated by GC-MS. The analysis showed that the water content was significantly different in the three treatments, but showed no difference in protein, fat, carbohydrates, fiber, ash and total phenols. The total flavonoid and antioxidant activity of semi-dried *C. racemosa* was highest, compared the others. Drying changed the fatty acid composition of *C. racemosa*. Fatty acids from fresh and semi-dried *C. racemosa* followed the same pattern with USFA>SFA, while dried *C. racemosa* SFA>USFA.

Keyword : *Chlorophyta*, fresh, semi-dried, dried, phytochemical properties, fatty acids.

Yushinta A. Sanjaya *et al* /International Journal of ChemTech Research, 2016,9(5),pp 425-431.
