International Journal of ChemTech Research
CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.10 No.15, pp 255-262, 2017

Composition of Pigments and Antioxidant Activity in Edible Red Seaweed *Halimenia durvilae* Obtained from North Sulawesi

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Abstract : This study was carried out to identify the pigment and antioxidant activity extracted from *Halimeniadurvilae*. Hexane, acetone and ethanol were used as extraction solvent. The pigments were measured consisting of chlorofhyll a, chlorofhyll b, total chlorofhyll, chlorofhyll c_1+c_2, fucoxathin, carotenoids, phycocyanin and phycoerythrin, while 1,1-diphenyl-2-picrylhydracyl (DPPH)radical scavenging and ferric reducing antioxidant power (FRAP) were used to studied their antioxidant activity. Total Phenolic content (TPC) were also investigated. The result showed hexane extract respectively containing highest level of all pigments. The lowest value of pigment was phycocyanin, recorded for hexane, acetone and etanol extract were 0.7875 ± 0.08; 0.1475 ±0.08 and 0.1565 ±0.02µg g^{-1}dried weight. Ethanol extract exhibited the lowest TPC (7,605±0.383µg GAE(Gallic acid equivalent)g^{-1}.Good value of radical scavenging of DPPH was acetone extract (scavenging activity of IC_{50} 1.211±0.03 mg ml^{-1}), The highest Reducing power was acetone, 0.17±0.01 uM Fe2+/mg extract, respectively. Thus *H.durvilae* could be used as natural pigment and antioxidant source which is potential to be applied in food product as functional food.

Sanger G.*et al* /International Journal of ChemTech Research**,** 2017,10(15): 255-262.

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