



## Phytochemicals Screening and Antioxidant Activity Test of *Isis Hippuris* Methanol Extract

Mohammad Sayuti\*, Widya Dwi Rukmi Putri, Yunianta

Faculty of Fisheries and Marine Sciences, Universitas Brawijaya, Jl. Veteran, Malang  
65145, Jawa Timur Province, Indonesia

**Abstract :** *Isis hippuris* (Sea bamboo) had been well-known by the East Indonesian and usually used as jewelry and sold as an export commodity. This research aims to understand phytochemicals screening results and antioxidant activity of *Isis hippuris* also to discover antioxidant content of *Isis hippuris* different parts and maceration times. Extraction method used was maceration technique with methanol as solvent for 24, 48, and 72 hours (1:8 of sample : solvent). Qualitative phytochemicals test were done by measured alkaloid, flavonoid, steroid/triterpenoid, saponin, phenol hydroquinone and tannin. The antioxidant test was done using 1,1-diphenyl-2-picrylhydrazyl (DPPH) 0.2 mM method with 1:4 of DPPH and sample ratio.  $IC_{50}$  (inhibitory concentration) value was used as a parameter to interpret antioxidant activity. The results of phytochemicals screening of *Isis hippuris* skin showed that alkaloid, flavonoid, phenol, steroid, and saponin were founded while from axial parts contained alkaloid, flavonoid, phenol and steroid. DPPH  $IC_{50}$  results of *Isis hippuris* skin part with 24, 48 and 72 hours maceration times, respectively were 635,26 ppm, 635,61 ppm and 663,40 ppm, while on the axial part were 870,34 ppm, 887,74 ppm, and 899,52 ppm. DPPH  $IC_{50}$  value either on the skin or axial parts were higher than 200 ppm which means chemical compounds founded on Sea Bamboo were less active but still have potential as an antioxidant.

**Keywords:** phytochemical, sea bamboo, *Isis hippuris*, antioxidant, DPPH.

Mohammad Sayuti *et al* /International Journal of ChemTech Research, 2016,9(7),pp 427-434.

\*\*\*\*\*