

**EFFECT OF STEAMING DURATION ON  
ANTIOXIDANT ACTIVITY OF THE ROOTS OF BANDUNGAN  
ORANGE SWEET POTATO (*Ipomoea batatas* (L.)L.)**

**ABSTRACT**

We did a study on steaming duration effect on antioxidant activity of raw and steamed (20 and 30 minutes) roots of Bandungan orange sweet potatoes (*Ipomoea batatas* (L.)L.). The study used DPPH (*1,1-diphenyl-2-picrylhydrazyl*) method. The raw roots were extracted in 2 days and the steamed roots in 3 days with maseration technique using ethanol. The qualitative test of antioxidant activity was shown by decolouration of DPPH solution. The reaction time for quantitative test using visible spectrophotometer at 521,0 nm was 5 minutes. The EC<sub>50</sub> value for raw roots was 7133,03 ppm (713,31 mg extract), 20 minute-steamed roots was 3446,73 ppm (86,16 mg extract) and 30 minute-steamed roots was 1805,02 ppm (45,12 mg extract). Statistical analysis with ANOVA showed that there was a significant difference between raw roots, 20 minute-steamed roots and 30 minute-steamed roots. The greatest antioxidant activity was given by 30 minute-steamed roots.

**Key words** : antioxidant, DPPH, orange sweet potato roots, steaming, EC<sub>50</sub>  
(*Effective Concentration*)