ANALYSIS OF ANTIOXIDANT CONTENT IN YELLOW AND RED ONION (*ALLIUM CEPA* L.)

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Final Year Project Report Submitted in
Partial Fulfilment of the Requirements for the
Degree of Bachelor of Science (Hons.) Chemistry
in the Faculty of Applied Sciences
Universiti Teknologi MARA

JANUARY 2019

ABSTRACT

ANALYSIS ANTIOXIDANT CONTENT IN RED AND YELLOW ONION

(*ALLIUM CEPA L.*)

Onion is a common type of vegetable used in our daily food intake. It is rich in antioxidant that can protect human body from free radical reactive oxygen. Through this research, the analysis antioxidant content of red and yellow onion using different extraction solvent was measured which are methanol, chloroform and hexane. The best extraction solvent is methanol compared to chloroform and hexane. Preliminary test was conducted to analyze type of antioxidant and metabolic compound contained in onion. Red onion showed high presence of phenolic antioxidant types from phenol group. Through this analysis, it showed that red onion contained highest antioxidant content 177.59 μM Fe[II]/mL onion extract and the lowest is red 47.02 μM Fe[II]/mL onion extract with hexane extraction by FRAP method where Fe^{3+} -TPTZ complex is reduced by antioxidants to intense blue forming Fe^{2+} - TPTZ absorbance 593 nm.

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