ABSTRACT

(LITERATURE REVIEW)

ANTIOXIDANT TEST TOMATO FRUIT EXTRACTS EXTRACTED WITH VARIOUS SOLUTIONS USING DPPH METHOD

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Tomato (Solanum lycopersicum) fruit that familiar in our daily lives. , Tomatoes contain high levels of antioxidants, namely lycopene, the ability to control free radicals. Also the presence of beta-carotene and vitamin C. Lycopene the main carotenoid in tomatoes which a powerful antioxidant. The purpose of this study to determine the antioxidant activity of tomatoes use a variety of different solvents.

The literature review of this article take from 3 journals. The equation also obtain how to determine the antioxidant activity by use the spectrophotometric method. This method base on the measurement of DPPH absorption which shows the reduction of the purple-red color.

The conclusion that tomato fruit extract use methanol has the ability to reduce free radicals (DPPH) with IC 50 levels indicate that tomatoes have strong antioxidant activity against DPPH (a,a-diphenyl-B picrylhydrazyl) which also greater than vitamin C. Meanwhile, use 80% acetone as a solvent show that the antioxidant activity of fresh tomato acetone extract greater than that of tomato paste acetone extract

Suggestions need to be carried out further research, for example with Ethyl Acetate solvent, to find out which type of solvent the best for extract tomatoes so that the best antioxidant activity.

Keyword : extracts, antioxidant, solanum lycopersicum