# EFFECT OF VARIATION IN REFLUX EXTRACTION TIME OF MOUNTAIN PAPAYA *(Carica pubescens)* SEEDS ON ANTIOXIDANT ACTIVITY

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## *ABSTRACT*

***Background:*** *Mountain papaya (Carica pubescens) is a typical highland plant that grows in the Dieng Plateau area, Wonosobo Regency, Central Java. All parts of mountain papaya from the base of the roots to the tips of the leaves, flowers, and fruits have various properties. Meanwhile, carica seeds are one of the agricultural waste products known to contain active ingredients in the form of alkaloids, steroids, flavonoids, saponins, tannins, and triterpenoids. The content of secondary metabolites such as flavonoids and alkaloids has the potential as an antioxidant. To find out the antioxidant, extraction is carried out first. One factor that can affect the extraction process is the extraction time.* ***Objective:*** *This study aims to determine the best time in the process of extracting antioxidants from samples using the DPPH (1,1-diphenyl-2-picrylhydrazyl) method.* ***Research Method:*** *This study used the hot extraction method (reflux). The extraction times tested were 120 minutes, 150 minutes, and 180 minutes.* ***Research Results:*** *The results of the study at an extraction time of 120 minutes were the best time with the smallest IC50 value compared to extraction times of 150 minutes and 180 minutes. Statistical tests, one-way ANOVA tests, obtained a sig value or p-value <0.05 which indicated that there was a significant difference in the extraction solvent on the antioxidant value of Carica pubescens seeds.* ***Conclusion:*** *From the results of the study, it can be concluded that the antioxidant activity of n-hexane extract of mountain papaya seeds at all time variations was in the weak category.*

***Keywords:*** *Mountain Papaya Seeds, Extraction, Reflux Time*