

Extraction Methods Effect on Antioxidant Activity of Ethanol Extract of Pasak Bumi (*Eurycoma Longifolia* Jack.) Root

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Abstract. Pasak bumi (*Eurycoma longifolia* Jack.) has various benefits, such as the root of *E. longifolia* is often used as an anti-microbial, anti-malarial, anti-inflammatory, dysentery and aphrodisiac. The antioxidant activity is closely related to the ability of *E. longifolia* root to maintain a fit condition. The benefits of the medicinal plants can be felt by the general public after going through both traditional and modern processing processes. One of the modern processing methods is to isolate secondary metabolites in plants or known as extraction. This study aims to determine the antioxidant activity of the roots of extracted *E. longifolia* using 96% ethanol solvent with different extraction methods. Extraction was performed by maceration, percolation, reflux, and soxhletation methods. The antioxidant activity test was carried out using the DPPH(1,1-diphenyl-2-picrylhydrazyl) method. The results shows that the antioxidant activity of *E. longifolia* extract using various extraction methods in the order soxhletation > reflux > percolation > maceration. From this research, it can be concluded that the percolation can be developed as extraction method of *E. longifolia* roots. Keywords: extraction, methods, antioxidant, *Eurycoma longifolia*, root