

Standardization Of Simplicia And Ethanol Extract Of Purun Danau (*Lepironia articulata* (Retz.) Domin) Rhizome

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Abstract

Purun Danau (*Lepironia articulata* (Retz.) Domin) has been shown to have antimalarial and antioxidant activity. This study aimed to standardize simplicia and extract of *L. articulata* by determining the value of its specific and non-specific parameters. Sampling of *L. articulata* rhizome was carried out in three places, namely the Halat, Haur Gading, and Guntung Manggis. The standardization method used was based on the Indonesian Herbal Pharmacopoeia and the General Standard Parameter of Extract. The results of organoleptic observations showed that *L. articulata* simplicia was reddish-brown in color, chelated taste, and has specific odor. Microscopic observation showed parts of this plant which were epidermis, cortex, endodermis, parenchyma, bundle vessels, and scalariform vessels. Ethanol soluble moisture content was 10.00%-12.66%, water-soluble extract content 8.03%-10.87%, drying shrinkage 7.10%-7.33%, total ash content 2.03%-2.52%, acid insoluble ash 0.33%-0.42%, Pb content 5.698-9.989 ppm, Cd content 0.300-0.500 ppm, Hg content 0.070-0.090 ppm. Ethanol extract of *L. articulata* rhizome contained alkaloids, flavonoids, tannins, glycosides, and saponins. TLC profile showed the R_f value which did not show any different. The yield obtained was 8.05%-11.23%, total ash content 1.58%-1.67%, acid insoluble ash 0.23%-0.33%, and moisture content 7.10%-8.50%. Standardization of simplicia and ethanol extract of purun danau (*Lepironia articulata* (Retz.) domin) rhizome has met the criteria.

Keyword: Standardization, *Lepironia articulata*, specific parameters, nonspecific parameters