ABSTRACT

STANDARDIZATION OF LEAF SIMPLICIA *Justicia gendarussa* Burm f.
FROM VARIOUS GROW PLACES
(Region Mojokerto Land 1, Mojokerto Land 2, and Ponorogo)

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Leaf of *Justicia gendarussa* Burm f represent one of useful drug crop. One of benefit is as drug of man contraception. Major compound which implied in its leaf is gendarusin A having chemical formula 6,8-di-α-L-arabopyranosil-4',5,7-trihidroksi-flavon can cause the antifertilitas. In its exploiting is leaf gendarusa be used as by product fitofarmaka. Therefore to guarantee the final product have the constant certain parameter value is beforehand needed by an process standardize.

The goal of the study is to do standardization leaf of *J. gendarussa* Burm f from Mojokerto land 1, Mojokerto land 2, and Ponorogo. Its consists of specific and non-specific parameters. Specific Parameters are include macro-microscopic, assay dissolve gist in water and ethanol obtained, essential oil, and gendarusin A. While parameter of non specific that is obtained by dusty rate, dusty rate dissolve in water and not dissolve in acid, drying shrinkage, rate irrigate, heavy metal contamination, pesticide residues, and microbial contamination.

Assay of gendarusin A in leaf simplicia conducted with the method HPLC by using applinance of HPLC LC 10 AT, Eluen Methanol - irrigate with the comparsion 30 : 70, sped emit a stream of 1 mL / minute and at wavelength 254 nm. originally made by a permanent curve between rate and wide of area and optaged by equation of regression $y = 31.7535x - 1.2151$ with the correlation efficient 0.9919. Then sample solution is tested and got wide of area. From obtained by permanent curve equation of rate of gendarusin A in sample Mojokerto land 1 is (0.15±0.01)%, Mojokerto land 2 is 0.21%, and Ponorogo is (0.27±0.01)%.

It was expected that process of drying and storage of simplicia powder is given more attention because when stored or dried in damp place it was prone to overgrown with fungi and other bacteria. In addition, a further study to find out an appropriate HPLC method for determination of Gendarusin A in order to obtain better selectivity.

**Keywords:** *Justicia gendarussa* Burm. f, Standardization, Simplicia, HPLC, Gendarusin A