

## ABSTRACT

### GENERAL STANDARD PARAMETER DETERMINATION ETHANOL EXTRACT 70 % LEAFS of *Justicia gendarussa* Burm. f. FOR CLINICAL TRIAL PHASE II IN PILOT SCALE

Leaf of *Justicia gendarussa* Burm. f. or recognize ordinary by gandarusa represent one useful drug crop one of its benefit is as drug of man contraception. Have been conducted by research that compound which implied in its leaf is gendarusin A having chemical formula 6,8-di- $\alpha$ -L-arabinopiranosil-4',5,7-trihidroksi-flavon can cause the antifertility. Mechanism of this compound is prevent the penetration spermatozoa by degrading activity of enzyme of hialuronidase spermatozoa. In its exploiting is leaf gandarusa made by a extract form of where in its development is expected by the extract can be used as by phytopharmacy product. Therefore to guarantee the final product have the constant certain parameter value is beforehand needed by a process standardize.

Extract was made by maserasi of ethanol 70 %. Extract obtained to be condensed by evaporator until got a viscous extract. This extract is called ethanol extract 70 %.

Spesific parameter value was dissolve in water was obtained by  $54,37\% \pm 0,89$ ; dissolve in ethanol obtained by  $60.71\% \pm 0,75$ ; volatile oil content was obtained by  $0.99\% \pm 0,01$ . While parameter non specific that was obtained by loss on drying was obtained by  $22,50\% \pm 0,11$ ; water content was obtained by  $7,94 \pm 0,05$ ; total ash content was obtained by  $8,19\% \pm 0,09$ ; acid insoluble ash content was obtained by  $2,39\% \pm 0,05$ ; test of toxic metals indicate that the ethanol extract 70 % did not contain the toxic metals of Hg and As, and contain the Pb =  $0,224$  ppm, and Cu =  $0,012$  ppm; test of microbial contaminant showed that in the extract total plate number (TPN) = 9.400, TPN of moulds = 0, TPN of yeasts = 0, MPN coliform = 0 and did not contain *Salmonella*, *Clostridium*, *Staphylococcus aureus* dan *Pseudomonas aeruginosa*.

Detemination of gendarusin A content in ethanol extract 70 % conducted with HPLC method by using HPLC Shimadzu LC-10 AT, Column of Noca-Pak c 18, Eluen methanol-water with the comparison 30 : 70, flow rate 1 mL/minute, oven temperature 30 °C, and detector UV-VIS at wavelength 270 nm. Initially made the standard curve between rate and wide of area and was obtained by equation of regression =  $28,6615 x + 32,3727$  with the correlation coefficient 0.9967. Then sample solution was tested and got wide of area. From the equation of regression was obtained gendarusin A content in ethanol extract 70 % by  $1,00\% \pm 0,03$