#### ADLN-PERPUSTAKAAN UNIVERSITAS AIRLANGGA

## ABSTRACT

# Standardization of Simplicia and Extract of *Hedyotis corymbosa* 'leaves'

### Indra Aditya

*Hedyotis corymbosa 'leaves'* is one of medicinal plant and had been used as traditional medicine. So far, in its uses, bitterleaf will be developed as standardized herbal drug and phytopharmaca product. So that, the standardization process should be done and it was begun by determination of standard parameter of simplicia and extract which will be used. Standard parameter which used in this research refers to Herbal Pharmacopoeia of Indonesia. This research will compare the result of standardization *Hedyotis corymbosa 'leaves'* of from Magelang, Surabaya, Tawangmangu.

The result of the standard parameters of *Hedyotis corymbosa* 'leaves' simplicia showed that determination of water soluble extractive substance from magelang was  $(9,30\% \pm 0,16)$ , from Surabaya was (10,20%  $\pm$  0,31), from Tawangmangu was (10,43%  $\pm$ 0.31). Determination of ethanol soluble extractive substance from Magelang was  $(4,32\% \pm 0,21)$ , from Surabaya was  $(5,41\% \pm 0,24)$ , from Tawangmangu was  $(4,54\% \pm 0,14)$ . Determination of loss on drying content from magelang was  $(9,41\% \pm 0,36)$ , from Surabaya was  $(10,37\% \pm 0,02)$ , from Tawangmangu was  $(10,82\% \pm 0,13)$ . Determination of total ash content from Magelang was (19,76% ± 0,28), from Surabaya was (11,23%  $\pm$  0,14), from Tawangmangu was (16,66%  $\pm$  0,40). Determination of acid insoluble ash content from Magelang was (0,66%  $\pm$  0,01), from Surabaya was (0,85%  $\pm$  0,04), from Tawangmangu was  $(0,87\% \pm 0,02)$ . Determination of total flavonoid content from Magelang was  $(2.22\% \pm 0.11)$ , from Surabaya was  $(2,13\% \pm 0,10)$ , from Tawangmangu was  $(3,19\% \pm 0,04)$ .

xii

SKRIPSI

### ADLN-PERPUSTAKAAN UNIVERSITAS AIRLANGGA

Chromatograph pattern by TLC showed that *Hedyotis corymbosa* '*leaves*' from all area have rutin.

The result of the standard parameters of *Hedyotis* corymbosa'leaves' 96% ethanolic extract showed that, the yield of extract from Magelang was 8,4%, from Surabaya was 8,2%, from Tawangmangu was 10,8%. Determination of total ash from Magelang was (15,79%  $\pm$  0,27), from Surabaya was (12,83%  $\pm$  0,18), from Tawangmangu was (10,49%  $\pm$  0,43). Determination of acid insoluble ash content from Magelang was (0,86%  $\pm$  0,02), from Surabaya was (1,75%  $\pm$  0,03), from Tawangmangu was (1,30%  $\pm$  0,03). Determination of the water content from Magelang was (14,32%  $\pm$  0,58), from Surabaya was (14,66%  $\pm$  0,58), from Tawangmangu was (15,65%  $\pm$  0,58). Determination of total flavonoid content from Magelang was (25,95%  $\pm$  0,43), from Surabaya was (23,91%  $\pm$  0,37), from Tawangmangu was (32,34%  $\pm$  0,21).

Keyword : Standardization, Herbal Pharmacopoeia of Indonesia, Hedyotis corymbosa 'leaves'.