

ABSTRACT

STANDARD PARAMETER DETERMINATION AND FINGERPRINT OF DITERPEN LAKTON EXTRACT OF ANDROGRAPHIDIS HERB (*Andrographis paniculata* Nees.)

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Sambiloto (*Andrographis paniculata* Nees.) is one of medicinal plant and had been used as traditional medicine. So far, in its uses, Andrographidis Herb will be developed as standardized herbal drug and phytopharmaceutical drug. So that, the standardization process should be done and it was begun by determination of standard parameter of diterpen lacton extract which will be used. The aim of this study was to determine the specific and non specific parameters of diterpen lacton extract of andrographidis herb.

Andrographidis herb had been harvested, washed, cut, dried by flowing air and grinded into powder. Herbs powder made into extract by maceration in ethanol (96% v/v in water). The obtained extract was concentrated by the rotary evaporator then ethanol extract was separated with hexane. After that the part of ethanol-water was reextracted with ethyl acetate. Part of ethyl acetate extract was condensed by the rotary evaporator until really concentrated. Then the extract was dried in 50° C for 4 days. This product called as diterpen lacton which will be used for determination of standard parameters and fingerprint (TLC-Densitometri and FTIR).

The result of the specific parameters of diterpen lacton extract from *Andrographis paniculata* Nees. showed that the total of water soluble extractive substances content was (40.08 ± 1.34)%, alcohol soluble extractive substances content was (95.23 ± 3.00)%, and andrographolide content in diterpen lakton extract was (24.20 ± 1.55)%.

The result of the non specific parameters of diterpen lacton extract from *Andrographis paniculata* Nees. showed that total of ash content was (10.19 ± 0.23)%, loss on drying was (2.14 ± 0.02)%, Pb content was 0.749 ppm, Cu content was 0.288 ppm, Cd content was 0.461 ppm. Hg and As was undetected in diterpen lakton extract from *Andrographis paniculata* Nees.

The profile fingerprint of ethanol extract and diterpen lacton extract from *Andrographis paniculata* Nees. was identified by using FTIR and TLC-Densitometri.

Keyword : *Andrographis paniculata*, Parameter, Fingerprint, Andrografolide