ABSTRACT

GENERAL STANDARD PARAMETER DETERMINATION OF ETHANOL 96% (1:0,2) EXTRACT SEMANGGI LEAF

(Marsilea crenata Presl.)

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*Marsilea crenata* Presl. known as Semanggi, so far not much is known as a medicinal plant. *Marsilea crenata*’s component is a polyphenols and flavonoid include of this. Flavonoid have some activities such as anti-inflammatory, antioxidant, and anti-cancer. Laswati (2007) reported that *Marsilea crenata* Presl. has the effect of preventing osteoporosis in the female mice and postmenopausal women. So far, in its uses, *Marsilea crenata* Presl. will be developed as standardized herbal drug and phytopharmaca product. Phytopharmaca as a pharmaceuticals product have to comply qualification of modern drug, that is standardized finished product and raw material. Standard parameter of extract which will be used, have to conducted before to get standardized product. The aim of this study is to determine nonspecific and specific parameter of extract *Marsilea crenata* Presl.

The result showed nonspecific parameter of extract were loss on drying was (30,39 ± 0,279)%, water content was (11,96 ± 0,008)%, total ash was (8,21 ± 0,017)%, acidic insoluble ash was (0,12 ± 0,009)%, there is no solvent residue, negative for pesticide residues, Pb content was 0,184 ppm, Cd content was 0,047 ppm, Cu content was 2,724 ppm. As and Hg are not detected, and negative from microbial impurities. The specific parameter of extract showed that water soluble extractive substances was (7,59 ± 0,041)%, alcohol soluble extractive substances was (52,15 ± 0,390)%, volatile oil content was (0,40 ± 0,000)%, polyphenol content was (1,33 ± 0,019)% and organoleptic extract was viscous liquid almost half solid, blackish green, aromatic smell, and taste a little salty kelat.