ABSTRACT

PHYSICAL QUALITY AND DISSOLUTION TEST OF CAPSULE DOSAGE FORM MIXTURE OF ETHYL ACETATE FRACTION OF SAMBILOTO (*Andrographis paniculata* Nees.) HERBS AND OIL FRACTION OF ETHANOLIC EXTRACT KENCUR *Kaempferia galanga* Linn. RHIZOME

Sambiloto (*Andrographis paniculata* Nees.) and kencur (*Kaempferia galanga* Linn.) are medicinal plants had been use as traditional medicines which have a lot medicinal functions, and is an anticancer. Realizing the potential combination of both plants as anticancer medicine, it will be needed to develop good phytopharmaceutical product of the combined ethyl acetate fraction of sambiloto herbs and oil fraction of ethanolic extract kencur.

The aim of this research is to investigate the physical quality and dissolution of the combined ethyl acetate fraction of sambiloto and oil fraction of ethanolic extract kencur capsule dosage form.

In this research, every capsule contains of ethyl acetate fraction of sambiloto equal to 15,0 mg andrographolide and oil fraction of ethanolic extract kencur equal to 15,0 mg ethyl *p*-methoxycinnamate. Then, physical quality (test for uniformity of weight, uniformity of medicament content, and test for disintegration) and dissolution test of the capsule can be tested.

At test for uniformity of weight, the average percentage deviation of the weight of capsule's content is 1,08%±0,94 and there is not any deviation above 7,5% to 15%. For content of medicament, the average content for andrographolide is 105,73% with SD 5,23%, and the average content for ethyl *p*-methoxycinnamate is 98,43% with SD 5,75%. The average result of test for disintegration is 317±5,29 seconds or 5 minutes and 17 seconds. For dissolution test, the result showed that in the 120th minute, the andrographolide concentration is 28,88 mg/L with percentage of dissolute andrographolide is 87,01% and also dissolution efficiency of andrographolide is 51,39%. The ethyl *p*-methoxycinnamate concentration is 41,82 mg/L with percentage of dissolute ethyl *p*-meyhoxycinnamate is 126,11% and dissolution efficiency of ethyl *p*-methoxycinnamate is 85,66 %.

Keyword (s) : *Andrographis paniculata* Nees., *Kaempferia galanga* Linn., physical quality, dissolution test of capsule