ABSTRACT

Chemoprevention Activities Of The Mixture Extract Of (Kaemferia pandurata Roxb.) and (*Andrographis paniculata* Nees.) Againts Benzo(a)pyrene-Induced Fibrosarcoma On Mice in Vivo

The aim of present study was to observed chemoprevention activities of the mixture extract of *Kaempferia pandurata* Roxb. And *Andrographis paniculata* Nees. againts benzo(a)pyrene-induced fibrosarcoma on mice in vivo.

The mixture extract of *Kaempferia pandurata* Roxb. and *Andrographis paniculata* Nees. showed cancer prevention activities in four parameters which are percentages of cancer incidence in mice, fibrosarcoma weight analized with anava, scoring of neoplastics changes analized with kruskall wallis statistic methode, and Lactates Dehydrogenase analysis using spectrofotometers methode. Fibrosarcoma carcinogenesis induced by benzo(a)pyrene 0.3% subcutaneously in mice were inhibited by The mixture extract of *Kaempferia pandurata* Roxb. and *Andrographis paniculata* Nees. at a dose of mixture extract of *Kaempferia pandurata* Roxb. and *Andrographis paniculata* (1:1); 147mg/kgBB for first dose, 441.5 mg/KgBB for the second dose, and 735 mg/KgBB for the last dose, orally. Cyclophosphamide was used as positive control and one group without The mixture extract of *Kaempferia pandurata* Roxb. and *Andrographis paniculata* Nees. as negative control.

Mice was subjected to experiment for two months, starting 14 days before dosing of benzo(a)pyrene and there after maintained with same diet and condition. The inhibition by The mixture extract of *Kaempferia pandurata* Roxb. and *Andrographis paniculata* Nees. of the first dose was 75%, the second dose was 50%, and the last dose was 25%. The weight of cancer tissue data was then analized using one way anava with the result on the mean are (0,199 ± 0,1425) for the first dose, (0,164 ± 0,2490) for the second dose, and (0,104 ± 0,2080) for the last dose. Chemotherapy activity determined by using Kruskal Wallis methode then continued with Z-test analysis, and statistics analysis of *Lactate Dehydrogenase* using Anava. And result showed that the mixture etanol extract have chemoprevention activities to fibrosarcoma's cancer on mice that induce by benzo(a)pyrene. Even the third dose showed comparable activities as cyclophosphamide activities.

These result showed chemopreventif activity of The mixture extract of *Kaempferia pandurata* Roxb. and *Andrographis paniculata* Nees. againts benzo(a)pyrene-induced fibrosarcoma on mice in vivo.

Key words : *Kaempferia pandurata* Roxb., *Andrographis paniculata* Nees.,Chemopreventive