

ABSTRACT**Chemopreventive Activity of the Mixture of Diterpene Lactone Fraction of Bitter Herb (*Andrographis paniculata* Nees) and Oil Ethanol Extract Fraction of Galanga Rhizome (*Kaempferia galanga* Linn) on the Carcinogenesis of Mice Colon by DMBA Induced**

The aim of the present study was to observed chemopreventive activity of the mixture of diterpene lactone fraction of bitter herb (*Andrographis paniculata* Nees) containing andrographolide and oil ethanol extract fraction of galanga rhizome (*Kaempferia galanga* Linn) containing 1:1 EPMS on the carcinogenesis of mice colon by DMBA-induced.

Male and female white mice (8 weeks of age) were used in this research and were grouped as indicated treatment : (KP) positive control-fed with curcumin, (D1) dose 1-fed with 3,9 mg/ kg BB each of andrographolide and EPMS, (D2) dose 2- fed with 11,7 mg/kg BB each of andrographolide and EPMS, (D3) dose 3- fed with 19,5 mg/ kg BB each of andrographolide and EPMS, (KN) negative control-fed with CMC-Na and were treated peroraly daily while initiation. Mice were treated with DMBA peroraly once a week for six weeks to induce colon cancer and after 8 weeks, animals were sacrificed and colons were removed. Colon epithelial tissues were evaluated histopatologically and data processing use One Way ANOVA. Total number of hyperchromatic nuclei, mitotic, and pleumorfisms reduced significantly ($p < 0.05$) in all group treated with experimental substance (D1, D2 and D3) compared to the negative control group (KN). Total number of hyperchromatic nuclei, mitotic, and pleumorfisms in D1 reduced significantly ($p < 0.05$) compared to the positive control group but in D2 and D3 it is reduced unsignificantly ($p > 0.05$). It is demonstrated that both of D1, D2 and D3 groups have anti colon cancer activity whereas D2 and D3 shows higher activity similar to positive control group.

Keywords : chemopreventive, *Andrographis paniculata* Nees, *Kaempferia galanga* Linn, colon cancer