THE EFFECT OF IMUNOSTIMULATOR SAMBILOTO (*Andrographis paniculata* Nees.) EXTRACT ON GAMMA INTERFERON IN MICE INFECTED BY *Salmonella typhimurium*

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ABSTRACT

Sambiloto (*Andrographis paniculata* Nees.) extract is a herbal medicine that used to be an imunostimulator when the body is getting ill and decline in body function. The purpose of this research is to prove that therapy of sambiloto (*Andrographis paniculata* Nees.) etanol extract has andrographolide content which had potentially increase against imun respon. The object of the research were to prove the effect of Andrographis paniculata Nees. *Salmonella thyphimurium* infected mice. Twenty five mice were divided into five experimental groups on the therapy of sambiloto leaf *Andrographis paniculata* Nees. extract for 6 days, and twenty five mice others on the therapy of sambiloto leaf *Andrographis paniculata* Nees. extract for 13 days. All groups, except K(-), infected with $10^5$ cells/0.5 ml *Salmonella typhimurium* intraperitoneally. After five days incubation period, mice were given extract of sambiloto leaf *Andrographis paniculata* Nees. in different doses, which were P1 with 4.42 mg/25g BW/day, P2 with 6.82 mg/25g BW/day, P3 with 9.25 mg/25g BW/day, while P0 is an experimental group which not given on therapy of sambiloto leaf *Andrographis paniculata* Nees. extract. The data were analyzed using one way (ANOVA). The observe parameters were IFN-$\gamma$ with imunohistokimia technique. The result of this research showed that there were no significant differences ($p>0.05$) between treatment groups in indicates that increase the production IFN-$\gamma$. More higher dose of treatments would be increase and ensure conclude that *Andrographis paniculata* Nees. has the imunostimulator.

**Key words:** Sambiloto, *Salmonella typhimurium*, mice, Imunohistokimia.