THE INFLUENCE OF SAMBILOTO LEAF (*Andrographis paniculata*)
EXTRACT AS AN IMMUNOSTIMULATOR AGAINST THE
PROLIFERATION OF LYMPHOCYTE BLOOD CELL IN
MICE INFECTED WITH *Salmonella typhimurium*

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ABSTRACT

Sambiloto leaf (*Andrographis paniculata*) extract is a herbal medicine that
used to be an immunostimulator when the body is getting ill and decline in body
function. The purpose of this research is to prove that therapy of sambiloto leaf
(*Andrographis paniculata*) extract as immunostimulator can increase the
proliferation of lymphocyte blood cells in mice with *Salmonella typhimurium*
infection. Twenty five mice were divided into five experimental groups on the
therapy of sambiloto leaf (*Andrographis paniculata*) extract for 6 days, and
twenty five mice others on the therapy of sambiloto leaf (*Andrographis
paniculata*) extract for 13 days. All groups, except K(-), infected with \( \frac{1}{2} \) ml of \( 10^5 \)
cells/ml *Salmonella typhimurium* intraperitoneally. After five days incubation
period, mice were given extract of sambiloto leaf (*Andrographis paniculata*) 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*) extract. The
data of this study was analyzed with ANOVA according to the completely
randomized factorial sampling design, if F value is higher than *F* \(_{table}\) continued by
Tukey HSD test (Honestly Significant Difference). The result of this research
showed that there were no significant differences (p>0.05) between treatment
groups in increasing number of absolute lymphocyte cells in the blood of mice
with *Salmonella typhimurium* infection.

Keywords: sambiloto (*Andrographis paniculata*), *Salmonella typhimurium*,
infectious disease, lymphocyte, mice.