THE EFFECT OF TADPOLES (*Rana catesbeiana*) SERUM TO TOTAL AND DIFFERENTIAL LEUKOCYTES RATS (*Rattus norvegicus*) THAT INDUCED *Dimetylbenz-α-anthracene* AS AN ANIMAL MODEL SKIN CANCER

Nur Prabowo Dwi Cahyo

ABSTRACT

This study aims to determine the effect of tadpoles (*Rana catesbeiana*) serum to total and differential leukocyte in animal model rat albino (*Rattus norvegicus*) that induced skin cancer by Dimethylbenz-α-anthracene (DMBA). Male rats induced by DMBA 20 mg/rat twice a week for 18 days to induce skin cancer. Tadpole's serum injected intracutaneously after cancer is known. Negative control (C-) was not induced with DMBA and tadpole's serum, while positive control grup (C+) was induced to DMBA. The treatment groups P1, P2, and P3 were induced with DMBA and injected tadpole's serum 100%; 75%; 25%/rat/day. This study used a Completely Randomized Design (CRD). Data were analyzed with ANOVA and continued by Duncan multiple test. The results obtained average number ± SD of total leukocyte C-, C+, P1, P2, and P3 is 12000.00 ± 3814.88, 3975.00 ± 2451.36, 8650.00 ± 5470.83, 6390.50 ± 3007.18 and 5590.00 ± 1292.18 respectively. There are significant differences regarding an increase in number of total leukocyte on treatment, but there is not real difference between C+ , P1, P2 and P3. Results obtained average number of limphocyte and monocyte are not significant but in granulocyte is significant. Based on the results, it can be concluded that tadpoles serum effective to increase number of total leukocyte and differential leukocyte (especially in granulocyte) in animal model of rats induced skin cancer.

Keywords: total leukocytes, differential leukocyte, *Rana catesbeiana*, serum, skin cancer