ABSTRACT

RIDI ARIF. Red Blood Cell Count, Hematocrit, and Hemoglobin Concentration of Superovulated Ewes Administered Temulawak Extract Plus during Pregnancy. ANDRIYANTO and WASMEN MANALU.

Superovulation is a reproductive technology used to enhance the productivity of ewes. This study was conducted to determine the effect of superovulation and temulawak extract plus administration on the red blood cell count, hematocrit, and hemoglobin concentration of ewes during pregnancy. A total of 16 ewes weighing between 20-25 kg were divided into 4 groups with 2×2 factorial arrangement. The first factor was superovulation and the second factor was administration of temulawak extract plus. Variables measured were number of red blood cell, hematocrit, and hemoglobin concentration. Blood samples were drawn from the jugular vein monthly during the five-month pregnancy period. The control group had the lowest number of red blood cell, hematocrit, and hemoglobin concentration as compared to other groups while the superovulated ewes administered temulawak extract plus had the highest value. Superovulated ewes had the highest red blood cell count, hematocrit, and hemoglobin concentration as compared to control and temulawak treatment. The number of red blood cell and hematocrit increased during the early pregnancy and decreased during late pregnancy. Hemoglobin concentration did not change significantly during pregnancy. It was concluded that superovulation of ewes prior to mating and temulawak extract plus administration during pregnancy could increase the number of red blood cell, hematocrit, and hemoglobin concentration.