

**HUMORAL IMMUNE RESPONSE IN RABBITS IMMUNIZED  
PROTEIN LARVAE OF *Rhipicephalus sanguineus*  
(LATREILLE, 1806)(ACARI : IXODIDAE)**

**WILLY NARA PUTRA**

**ABSTRACT**

The aim of this study was to determine the humoral immune response in rabbits immunized protein larvae of *Rhipicephalus sanguineus*. This study used a whole extract larvae of *R. sanguineus* as antigen obtained using sonication techniques. Antibodies obtained from the blood of rabbits immunized whole extract larvae of *R. sanguineus*. Blood sampling performed on day 14, 21, 28 and 35. Antibodies and antigens obtained are used for the Indirect ELISA test then read by an ELISA reader at a wavelength of 405 nm. The results of the ELISA reader in the form of OD values. OD values analysis by descriptive statistics using SPSS. Statistical analysis showed OD values at blood sampling day 14, 21, 28 and 35 was  $0.060 \pm 0.009$ ;  $0.201 \pm 0.038$ ;  $0.147 \pm 0.025$  and  $0.296 \pm 0.035$ . In the graph shown increasing OD values at days 21 and 35, while a decrease in OD values occurred on day 28. The conclusion of this study is immunization with whole extract of *R. sanguineus* larvae can cause humoral immune response in rabbits with the highest OD value on day 35.

**Keywords:** *Rhipicephalus sanguineus*, whole extract, Indirect ELISA