ABSTRACT

LARASATI PUJI RAHAYU.  The Effect of Sambiloto, Adas and Sirih Merah Extract on Avian Influenza Virus Infection in Broiler: Histopathology of Liver and Kidney.  Supervised by AGUS SETIYONO.

The objective of this research was to study the effect of extract formulation of sambiloto (Andrographis paniculata), adas (Foeniculum vulgare), and sirih merah (Piper crocatum) to inhibit H5N1 avian influenza virus infection in broiler. Active compounds from each herb were andrographolide, anethole, and piperine respectively. Broiler was divided into eight groups, two as negative (no herbal, unvaccinated) and positive (no herbal, vaccinated) control and the other six groups were treated with herbal formula concentration given 5%, 7.5%, and 10% respectively. The six treated groups were split into three vaccinated and the remaining unvaccinated groups. After infected with H5N1 avian influenza virus, sample from each groups were necropsied and liver and kidney were taken to be evaluated histopathologically. Result of this study indicated that the group treated with 7.5% herb and vaccinated showing the mildest histopathological changes in both organs.

Keyword: broiler, avian influenza, herbal, liver, kidney