THE INFLUENCE OF BACTERIOCINS AND BORAX TO RAT’S KIDNEY HISTOPATHOLOGY PATTERN

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ABSTRACT

Borax is a toxic substance but its still commonly use for food preservative, while bacteriocins that known as safety biopreservative for food is still rarely used by people. The aim of this research is to determine the influence of bacteriocin and borax to the kidney’s histopathology changes of the rats (Rattus Norvegicus) such as degeneration and necrosis. The bacteriocin and borax were given orally by spuit for 14 days. Sterilized aquadest was given for P0 group as much as 0.5 ml. Bacteriocins with 80 AU of active substance was given for P1 group, and P2 had given borax 26 mg for each rat for a day. On the 15th days, the rats were prepared to the euthanasia and necropsy procedure, then the kidneys was taken to made the histopath preparation. The observation was done by microscope with 400x magnification. There was a significant difference of the degeneration and necrose between each treatment group. Depend on the Mann-Withney test, the group of P0 significantly different to the P2 group (p<0.05). P0 is not significantly different to the P1 group (p>0.05).

Key words: Bacteriocins, Borax, Kidney histopatology, Rats.