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Lactobacillus sp. Isolates Slaughterhouse Waste as Probiotics for Broilers

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Abstract : The aim of this study was to utilize the waste from slaughterhouses for chicken feed ingredients is probiotic. Livestock waste produced by livestock activities such as feces, urine, food remains, as well as water from livestock and cage cleaning. The process starts with the isolation of bacteria. Rumen fluid is taken at Slaughterhouse Giwangan, Yogyakarta. Isolation of Lactobacillus ruminus is done by using de Mann Rogosa Sharpe (MRS) medium. In the sample showed a rod-shaped bacteria are streaked onto an agar plates. After it was incubated at 37ºC for 48 hours, after which it is observed. The observation of these lactic acid bacteria it will show a clear zone at about the colony. These bacterial colonies are white, round, small, shiny on the agar plate mikroenkapsul In the manufacturing process carried out by the method of freeze dried using skim milk in addition capsulated material. Then the results of these capsulated bacteria are mixed with feed for livestock. The results from the mixing of capsulated bacteria in feed are to increase the quality of animal feed so as to provide a good effect on livestock. Scanning electron microscope testing we have done show the results of bacteria have been shrouded in skim milk. It can protect the bacteria so it is more durable in use. The observation of the bacteria showed a sheath on Lactobacillus sp. Preservation of bacteria in this way makes the bacteria more durable for use. As well as skim milk can protect bacteria that are resistant to the outside environment. Results of probiotics in chicken feed showed significant weight gain in chickens. Calculation Anova ($P < 0.005$) shows the average chicken given probiotics her weight increased.

Keywords : chicken, probiotics, waste, Lactobacillus sp, bacteria
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