Identification Of Lactic Acid Bacteria From The Faeces Waste Of Beef Cattle As a Probiotic Candidate

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ABSTRACT

Probiotics are food supplement to give benefit for animal and human to increase microflora at intestine, increase nutritional on food, and immunity. The main ingredient is lactic acid bacteria (BAL). The shape of BAL is bacil or coccus, includes of genus Enterococcus, Lactobacillus, Lactococcus, Leuconostoc, Pediococcus, Streptococcus. The Bacteria are found living in organ, intestinal tract, respiratory tract, and genital path on human or animal. This study aimed to know lactic acid bacteria species in faeces waste from beef cattle as probiotic candidate through enrichment method, primary isolation, secondary isolation, gram staining and Microbact Identification Kits (Oxoid) test. The result from this study is there was Lactobacillus fermentum and Lactococcus lactis ssp lactis on faeces waste. The result of identification from two bacteria was same with the purpose that two bacteria can produces lactic acid, and antimicrobial. This two bacteria affect probiotic product be able to increase taste of food, nutritional, and flavour that good for increase livestock appetite. The result from this study that two bacteria is very potential be probiotic candidate.

Key word: Probiotic, lactic acid bacteria, Lactobacillus fermentum, Lactococcus lactis ssp lactis, enrichment method, primary isolation, secondary isolation, gram staining, Microbact Identification Kits (Oxoid) test, livestock appetite, nutritional, flavour.