

**MOLECULAR IDENTIFICATION OF *Lactobacillus* sp.  
FROM ANIMAL FRESH MILK**

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## ABSTRACT

### MOLECULAR IDENTIFICATION OF *Lactobacillus* sp. FROM ANIMAL FRESH MILK

*Lactobacillus* sp. is lactic acid bacteria that act as probiotics which provide range of health benefits especially to human digestion. *Lactobacillus* sp. can be found on various dairy products sources such as fresh milk. The aim of this study was to isolate and identify *Lactobacillus* sp. from cow and goat fresh milk. Biochemical test was used for the morphological identification of *Lactobacillus* sp. from animal fresh milk. The results obtained in the study confirmed that the tested cow and goat fresh milk consist of *Lactobacillus* sp. Identification of *Lactobacillus* sp. was carried out using molecular method, Polymerase Chain Reaction (PCR) with specific primers Lacto-16S-F (5' GGAATC TTC CAC AAT GGA CG 3') and Lacto-16S-R (5' CGC TTC ACG CCC AAT AAA TCC GG 3'). All samples showed positive results of DNA band on gel electrophoresis and amplicon size was 216 bp. *Lactobacillus* sp. was successfully identified in animal fresh milk. Finding in this study suggested to carry out DNA sequencing from the PCR products for the identification of *Lactobacillus* sp. on the species level.