

ABSTRACT

Isolasi Dan Identifikasi Bakteri Asam Laktat dari Buah Coklat (*Theobroma Cacao*) sebagai Penghasil Bakteriosin dengan Metode Gen 16s rRNA

Literature Review

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LAB (Lactic Acid Bacteria) are present in fruits and they play an important role for the fruit's maturation process. Cacao is one of the fruit that contains LAB. LAB can produce bacteriocin, a peptide antibiotic which has an inhibitory activity against pathogenic bacteria. Thus, LAB can become a new source of antibiotic and can be made as an alternative solution to overcome the problem of antibiotic resistance. The aim of this study is to find and explore the LAB species which is contained in the cocoa fruits that have antibacterial activity. The research was conducted in the format of literature/scoping review by searching related articles using Google Scholar Database. The data is then extracted and compared between the similarities and differences amongst each articles that are used. From the results of the study, isolation of the LAB species from cacao fruits was carried out with MRS media and identification could be done more accurately using 16S rRNA gene method. The results shown that the LAB species contained in cocoa fruits are as follows: *Lactobacillus plantarum subsp. Plantarum*, *Lactobacillus pentosus*, *Pediococcus acidilactici*, *Lactobacillus brevis*, *Lactobacillus curvatus*, *Lactobacillus casei*, *Lactobacillus Fermentum*. Further experimental research is needed to identify the LAB species in the cocoa fruits using the 16S rRNA gene method to improve the accuracy of the results.

Keyword: Cacao, lactic acid bacteria, bacteriocin, 16S rRNA gene