PERBANDINGAN DAYA ANTIBAKTERI BAKTERIOSIN DALAM SEDIAAN OBAT PROBIOTIK

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ABSTRACT

Probiotic drug is a drug that contain probiotic bacteria. Probiotics is life microbial feed supplement; which beneficially affect the host animal by improving its intestinal microbial balance. The probiotic bacteria produce antimicrobial substance; that can inihibit the growth of pathogenic bacteria, that called bacteriocin. One of bacteriocin is nisin, which exhibit antimicrobial activity against a wide range of Gram positive bacteria, and is particularly affective against bacterial spores. Three sample of probiotic drug contained in the marketplace, have been extracted to precipitate the bacteriocin. The extracts were then analyzed by using TLC-bioautography methods with *n*-butanol, acetate acid and water as mobile phase and *Staphylococcus aureus* ATCC 25923 as pathogenic bacteria. Of inhibition zone diameter obtained, can be known whether in the the same concentration, sample of probiotic drug have different antibacterial activity. There are different profile biaoutogram from extraxted samples of probiotic drug. None of that extracted samples have the same rf with nisin. All of etracted sample have microbial activity but smaller than nisin activity against *Staphylococcus aureus* ATCC 25923 bacteria.

Keyword: probiotic drug, bioautography, bacteriocin, nisin, *Staphylococcus aureus.*