

ABSTRACT

The Effect Of Chitosan Type And Concentration On Physical Characteristics Of Chitosan-*Aloe Vera* Film As Wound Dressing

Arianti Zaenina Cahyani

Chitosan is a polysaccharide consisting of glucosamine and N-acetylglucosamine which can be used as wound healing and film forming polymer. *Aloe vera* has glucomannan as anti-inflammatory, antibacterial agent and can be used to improve the effect of chitosan as wound healing. Film wound dressing has benefit such as improved patient compliance, transparent, flexible, and simple application. The objective study was to determine the effect of chitosan type and concentration on physical characteristic of chitosan-*Aloe vera* film as wound dressing. The result showed that the addition of chitosan with different type affected film thickness and moisture content. The addition of chitosan concentration affected film pH, moisture content, and swelling index. The interaction between chitosan type and concentration affected film moisture content and swelling index.

Keywords: Chitosan, *Aloe vera*, Film, Wound dressing.