

**EFFECTS OF GALANGAL RHIZOME SOLUTION ( *Alpinia galanga*) AS PRESERVATIVE BEEF BE REVIEWED OF THE pH VALUE AND THE NUMBER OF BACTERIAL COLONIES**

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**ABSTRACT**

The aim of this research was to know the antibacterial effect of galangal rhizome solution (*Alpinia galanga*) with the number of bacterial colonies and pH value in beefs from market Surabaya as the parameter. The beef samples were divided into 36 pieces and each sample was 25 grams. The research method was completely randomized design by using four concentration of galangal rhizome solution  $0\text{ gr } 100\text{ ml}^{-1}$ ,  $10\text{ gr } 100\text{ ml}^{-1}$ ,  $20\text{ gr } 100\text{ ml}^{-1}$ ,  $0\text{ gr } 100\text{ ml}^{-1}$  and three storage time 0 hours, 3 hours, 6 hours. The obtained data then were analyzed by ANAVA. The result of this research showed significantly different ( $P < 0,05$ ) between the control and treatment the number of bacterial colonies and not significantly different ( $P > 0,05$ ) between the control and treatments the pH value. Based on those result, it could be concluded that galangal rhizome solution affecting in decreasing number of bacterial colonies and not affecting of pH value.

**Keywords** : galangal rhizome solution, number of bacterial colonies, pH value, beef