## Inaktivasi Bakteri *Escherchia coli* dalam Sari kedelai

(Inactivation of Bacteria Escherchia coli on Soybean concentrate)

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## **ABSTRACT**

Study of inactivation of bacteria Escherchia coli on soybean concentrate was aim to determine the kinetics model of inactivation of bacteria Escherchia coli on soybean concentrate and D value with used the variation of heating temperature and time. There were two kind of soybean concentrate consist of 0% and 7%. Heating temperature was consist of  $60^{\circ}$ C,  $70^{\circ}$ C,  $80^{\circ}$ C and  $90^{\circ}$ C. Heating time was consist of 1 minute, 3 minute and 5 minute. The kinetics model and D value calculated using linear regression. The result showed that the variation of heating temperature and time of 0% sugar soybean concentrate showed the inactivation models of Escherchia coli are y=0,0103x+0,1447 with r=0,8783 and the inactivation models of 7% sugar soybean concentrate showed the inactivation models of Escherchia coli are y=0,007x+0,4083 with r=0,690. D value showed the best value of 0% sugar soybean concentrate is  $D90^{\circ}$ C= 0,99 minute for 7% sugar soybean concentrate.

**Keywords**: Soybean Concentrate, Escherchia coli, Inactivation, D value