

## ABSTRAK

Penelitian pengaruh penambahan ekstrak jahe merah (*Zingiber officinale var. rubrum*) pada pembuatan yoghurt berbahan dasar susu kambing terhadap sineresis, daya ikat air dan *whey* bebas bertujuan untuk mengetahui pengaruh penambahan ekstrak jahe merah (*Zingiber officinale var. rubrum*) dengan konsentrasi yang berbeda terhadap terhadap sineresis, daya ikat air dan *whey* bebas yoghurt susu kambing. Penelitian menggunakan Rancangan Acak Lengkap (RAL) dengan empat perlakuan konsentrasi ekstrak jahe merah (2%, 4%, dan 6%) dan lima ulangan. Variabel yang diukur adalah sineresis, daya ikat air dan *whey* bebas yang diperoleh dianalisis dengan analisis variansi. Hasil analisis variansi (ANOVA) menunjukkan bahwa penambahan ekstrak jahe merah tidak berpengaruh nyata ( $P>0,05$ ) terhadap nilai sineresis, daya ikat air, maupun *whey* bebas pada yoghurt susu kambing. Rataan nilai sineresis yang diperoleh sebesar 41,97%, daya ikat air 58,19%, dan *whey* bebas 65,69%. Kesimpulan penelitian penambahan ekstrak jahe merah tidak berpengaruh nyata terhadap sineresis, daya ikat air dan *whey* bebas.

**Kata kunci:** yoghurt, susu kambing, jahe merah, sineresis, *whey* bebas



## ABSTRACT

The study of the effect of adding red ginger extract (*Zingiber officinale* var. *rubrum*) in the manufacture of goat milk-based yogurt on syneresis, water holding capacity and free *whey* aims to determine the effect of adding red ginger extract (*Zingiber officinale* var. *rubrum*) with different concentrations on syneresis, water holding capacity and free *whey* of goat milk yogurt. The study used a Completely Randomized Design (CRD) with four treatments of red ginger extract concentration (2%, 4%, and 6%) and five replications. The variables measured were syneresis, water holding capacity and free *whey* obtained were analyzed by analysis of variance. The results of the analysis of variance (ANOVA) showed that the addition of red ginger extract had no significant effect ( $P>0.05$ ) on the value of syneresis, water holding capacity, or free *whey* in goat milk yogurt. The average value of syneresis obtained was 41.97%, water holding capacity 58.19%, and free *whey* 65.69%. The conclusion of the study was that the addition of red ginger extract had no significant effect on syneresis, water binding capacity and free *whey*.

**Keywords:** yogurt, goat milk, red ginger, syneresis, free *whey*

