

KARAKTERISTIK FISIKOKIMIA YOGURT DENGAN KOMBINASI BAHAN BAKU SUSU SAPI DAN KOLOSTRUM

ABSTRAK

Penelitian bertujuan untuk mengevaluasi kualitas yogurt dengan bahan baku susu, kolostrum dan kombinasinya. Penelitian menggunakan 12L susu sapi dan 12L kolostrum hasil pemerahan hari ke 2-3 pascapartus. Rancangan yang digunakan Rancangan Acak Lengkap (RAL), 6 perlakuan dan setiap perlakuan diulang 4 kali. Perlakuan P0 = 100% susu sapi + 0% kolostrum; P1 = 80% susu sapi + 20% kolostrum; P2 = 60% susu sapi + 40% kolostrum; P3 = 40% susu sapi + 60% kolostrum; P4 = 20% susu sapi + 80% kolostrum dan P5 = 0% susu sapi + 100% kolostrum. Kualitas yogurt yang diamati adalah kadar protein, air, nilai pH, water holding capacity, viskositas dan sineresis. Hasil penelitian menunjukkan perlakuan tidak berpengaruh nyata ($P > 0,05$) terhadap kadar air dan pH yogurt berpengaruh nyata ($P < 0,05$) terhadap, water holding capacity dan sineresis, tetapi berpengaruh sangat nyata ($P < 0,01$) terhadap kadar protein dan viskositas yogurt. Disimpulkan penggunaan kolostrum sapi sebagai bahan baku pembuatan yogurt yang ditambahkan dalam pembuatan yogurt mampu meningkatkan kualitas yogurt, yaitu meningkatkan kadar protein, water holding capacity, viskositas, dan menurunkan sineresis.

Kata kunci: yogurt, kolostrum, kadar air, kadar protein, pH, viskositas, water holding capacity, sineresis.



CHARACTERISTICS OF YOGURT WITH A COMBINATION OF RAW MATERIALS MILK AND COLOSTRUM

ABSTRACT

This study aims to evaluate the quality of yogurt with milk as raw material, colostrum and its combinations. The study used 12L of cow's milk and 12L of colostrum from 2-3 days after delivery. The design used was completely randomized design (CRD), 6 treatments and each treatment were repeated 4 times. Treatment P0 = 100% cow's milk + 0% colostrum; P1 = 80% cow's milk + 20% colostrum; P2 = 60% cow's milk + 40% colostrum; P3 = 40% cow's milk + 60% colostrum; P4 = 20% cow's milk + 80% colostrum and P5 = 0% cow's milk + 100% colostrum. The quality of yogurt observed were protein content, water, pH value, water holding capacity, viscosity and syneresis. The results showed that the treatment had no significant effect ($P > 0.05$) on the moisture content and pH of the yogurt but had a significant effect ($P < 0.05$) on the water holding capacity and syneresis of yogurt, but had a very significant effect ($P < 0.01$) on protein content and viscosity at yogurt.. It is concluded that the use of cow colostrum as raw material for making yogurt which is added in the manufacture of yogurt can improve the quality of yogurt, namely increasing protein content, water holding capacity, viscosity, and reducing syneresis.

Keywords: yogurt, colostrum, moisture content, protein content, pH, viscosity, water binding capacity, syneresi

