

RINGKASAN

Susu adalah salah satu bahan pangan yang kaya akan kandungan zat gizi yang penting bagi tubuh manusia dalam kehidupan sehari-hari. Seiring dengan perkembangan zaman, susu mengalami perkembangan produk. Salah satu produk olahan susu yang populer adalah yoghurt. Dalam pembuatan yoghurt dengan penambahan sari buah belimbing terdapat 5 tahap yaitu: pembuatan sari belimbing, sterilisasi, pencampuran, fermentasi, dan analisa. Adapun tujuan dari penelitian ini untuk mengetahui pengaruh konsentrasi sari belimbing dan waktu fermentasi terhadap kadar asam laktat, pH, dan viskositas. Variabel yang digunakan yaitu konsentrasi sari belimbing 10, 20, dan 30% serta waktu fermentasi 18, 20, dan 22 jam. Dari penelitian diperoleh hasil minimal pada variabel konsentrasi sari belimbing 10% dan waktu inkubasi 18 jam dengan kadar asam laktat 1,08%, pH sebesar 4, dan viskositas 73,63 cP. Sementara hasil maksimal pada variabel konsentrasi sari belimbing 30% dan waktu fermentasi 22 jam dengan kadar asam laktat 1,80%, pH sebesar 4, dan viskositas 95,5 cP.

Kata kunci : Autoklaf, Belimbing, Fermentasi, Yoghurt

ABSTRACT

Milk is one of the foods that are rich in nutrients that are important for the human body in everyday life. Along with the development of the age, milk experienced product development. One of the most popular dairy products is yoghurt. In making yoghurt with the addition of star fruit juice there are 5 stages: making star fruit juice, sterilization, mixing, fermentation, and analysis. The purpose of this study to determine the effect of star fruit juice concentration and fermentation time to lactic acid levels, pH, and viscosity. The variables used are concentration 10, 20, and 30% of star fruit extract and fermentation time 18, 20, and 22 hours. From the research, it was found that there were minimal results on star fruit juice concentration variation of 10% and fermentation time of 18 hours with lactic acid level of 1.08%, pH 4, and viscosity of 73.63 cP. While maximum results on star fruit juice concentration variables 30% and 22 hours fermentation time with lactic acid levels of 1.80%, pH of 4, and viscosity of 95.5 cP.

Keywords : Autoclave, Fermentation, Star Fruit, Yoghurt