ABSTRAK

Penelitian ini dilakukan untuk mengkaji pengaruh suhu dan lama waktu pemanasan terhadap aktivitas antioksidan selai berbahan dasar buah rasberi (*Rubus rosifolius*). Dilakukan uji pendahuluan terhadap ekstrak rasberi meliputi skrining fitokimia dan uji kadar fenolat total dengan metode *Folin ciocalteu*. Ekstrak buah rasberi diperoleh dengan metode maserasi menggunakan pelarut air. Selai rasberi diolah pada variasi suhu (70, 80, 90, 100)°C dan waktu pemanasan (15, 20, 25) menit. Uji aktivitas antioksidan selai rasberi ditentukan dengan metode radikal DPPH dan pengaruh suhu dan waktu pemanasan terhadap aktivitas antioksidan selai rasberi ditentukan pula secara statistik dengan metode ANOVA dua jalur pada taraf 5%. Hasil penelitian menunjukkan bahwa ekstrak rasberi memiliki kandungan golongan senyawa metabolit sekunder yaitu alkaloid, flavonoid, terpenoid, tanin, kuinon, dan antosianin. Kadar fenolat total dalam ekstrak rasberi sebesar 18,182 mg/L setara asam galat. Berdasarkan hasil uji statistik terhadap selai rasberi menunjukkan bahwa pengaruh suhu dan lama waktu pemanasan dapat menurunkan nilai aktivitas antioksidan secara signifikan.

Kata kunci: rasberi, *Rubus rosifolius*, selai, aktivitas antioksidan, suhu dan waktu pemanasan.

ABSTRACT

This research had been done to evaluate the effect of temperatures and length time heating on antioxidant activity of raspberry (*Rubus rosifolius*) jam. Preliminary test of raspberry extract which include phytochemicals screening based of color test method or precipitate formation, and total phenolic content test using Folin Ciocalteu method. Raspberry extract was obtained by maseration method using water solvent. Raspberry jam processed at various temperatures (70, 80, 90, 100)°C and various time heating process for (15, 20, 25) minutes. The antioxidant activity of raspberry jam was determined by anti-free radical DPPH method and the effects of temperatures and time heating on antioxidant activity also determined by two ways ANOVA at rate 5%. The results showed that raspberry extract contain of secondary metabolites like alkaloid, flavonoid, terpenoid, kuinon, tannin, and anthocyanin. Total phenolic content on raspberry extract was 18,182 gallic acid equivalent. Based on statistical result of raspberry jam indicated that temperatures and time heating reduced antioxidant activity significantly.

Keywords: raspberry, *Rubus rosifolius*, jam, antioxidant activity, temperature and time heating.