

**ABSTRAK:** Kayu secang dan jahe merah dapat dimanfaatkan sebagai alternatif minuman fungsional dalam bentuk *jelly drink*, dikarenakan kedua bahan tersebut mengandung senyawa yang memiliki sifat antioksidan. Penelitian ini bertujuan untuk mengetahui karakteristik mutu secang *jelly drink* dengan penambahan sari jahe merah dengan konsentrasi yang berbeda. Penelitian ini merupakan penelitian eksperimental dengan rancangan percobaan yang digunakan pada penelitian ini adalah Rancangan Acak Lengkap (RAL) faktor tunggal yaitu konsentrasi sari jahe merah (J1=20%, J2=25%, J3=30%, J4=35%, J5=40%). Hasil penelitian menunjukkan bahwa karakteristik mutu secang *jelly drink* dengan penambahan sari jahe merah berbeda nyata pada nilai Sig < 0.05 terhadap viskositas, nilai pH, aktivitas antioksidan, dan hedonik dan mutu hedonik aroma, tekstur, dan rasa. Perlakuan terbaik dipilih berdasarkan mutu organoleptik dan aktivitas antioksidan terbaik yaitu konsentrasi jahe merah 35% dengan nilai rerata viskositas 986.7 cP, rerata pH sebesar 4.47, aktivitas antioksidan dengan rerata nilai IC<sub>50</sub> sebesar 72.97, rerata skor hedonik aroma sebesar 5 (suka), rerata skor hedonik tekstur sebesar 5 (suka), rerata skor hedonik rasa sebesar 5 (suka), rerata skor mutu hedonik aroma sebesar 4 (aroma jahe agak kuat), rerata skor mutu hedonik tekstur sebesar 4 (agak mudah hancur), dan rerata skor mutu hedonik rasa sebesar 4 (rasa pedas jahe agak kuat). Perlakuan dengan konsentrasi sari jahe merah 35% memiliki nilai rata-rata kadar flavonoid total sebesar 24.29 mg/100 gram. Selain itu, tidak ditemukan cemaran logam berat serta didapatkan hasil angka lempeng total dan angka kapang khamir sebanyak <1x10<sup>2</sup> koloni/mL.

**Kata kunci:** Antioksidan, jahe merah, kayu secang, minuman jeli

**ABSTRACT:**

*Sappan wood and red ginger can be used as alternative functional drinks in the form of jelly drinks, because these two ingredients contain compounds that have antioxidant properties. This study aims to determine the quality characteristics of secang jelly drink with the addition of red ginger extract with different concentrations. This research is an experimental study with the experimental design used in this study was a single factor Complete Randomized Design (CRD), the concentration of red ginger extract (J1=20%, J2=25%, J3=30%, J4=35%, J5= 40%). Results showed that the characterization of the quality of secang jelly drink with the addition of red ginger extract was significantly different at the Sig value <0.05 for viscosity, pH, antioxidant activity, and hedonic and hedonic quality of aroma, texture, and taste. The best treatment was chosen based on the organoleptic quality and the best antioxidant activity, that is red ginger concentration of 35% with an average viscosity of 986.7 cP, pH of 4.47, antioxidant activity with an IC<sub>50</sub> value of 72.97 (strong), aroma hedonic score of 5 (likes), hedonic score texture score of 5 (likes), hedonic score of taste is 5 (likes), score of hedonic quality of aroma is 4 (the aroma of ginger is rather strong), score of hedonic quality of texture is 4 (rather easily crushed), and score of hedonic quality of taste of 4 (spicy ginger flavor is rather strong). The treatment with a red ginger extract concentration of 35% had an average total flavonoid content of 24.29 mg/100 gram. In addition, no heavy metal contamination was found and the total plate number and yeast mold number were <1x10<sup>2</sup> colonies/mL.*

**Keywords:** Antioxidant, jelly drink, sappan woods, red ginger