

ABSTRAK

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PENINGKATAN AKTIVITAS ANTIOKSIDAN DAN SIFAT ORGANOLEPTIK MINUMAN DAUN SIRSAK DENGAN PENAMBAHAN BUBUK KAYU MANIS

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(xv + 59 halaman, 6 tabel, 21 gambar, 14 lampiran)

Antioksidan tertinggi pada tanaman sirsak terletak di bagian daun. Daun sirsak mengandung senyawa fitokimia seperti fenolik, flavonoid, terpenoid, alkaloid, dan saponin. Bahan alami lain yang mengandung antioksidan yaitu kayu manis yang terletak di bagian kulit. Pada penelitian ini, daun sirsak diolah menjadi daun sirsak kering dan kayu manis diolah menjadi bubuk sebagai bahan tambahan pada minuman daun sirsak. Tujuan dari penelitian ini adalah mengetahui pengaruh variasi waktu pengeringan daun sirsak dan konsentrasi bubuk kayu manis terhadap aktivitas antioksidan dan karakteristik minuman daun sirsak dan menentukan waktu pengeringan daun sirsak dan konsentrasi bubuk kayu manis terpilih berdasarkan aktivitas antioksidan dan karakteristik minuman daun sirsak. Analisis yang dilakukan pada minuman daun sirsak yaitu aktivitas antioksidan, total fenolik, total flavonoid, dan uji organoleptik (skoring dan hedonik). Penentuan minuman daun sirsak terpilih berdasarkan pada aktivitas antioksidan, total fenolik, total flavonoid, dan uji organoleptik. Hasil analisis menunjukkan minuman daun sirsak dengan waktu pengeringan 170 menit dan konsentrasi bubuk kayu manis 0,5% menghasilkan peningkatan mutu dengan aktivitas antioksidan tertinggi ($47099,38 \pm 660,05$ ppm), total fenolik ($197,77 \pm 1,02$ mg GAE/L), dan total flavonoid ($15,15 \pm 0,03$ mg QE/L) dengan tingkat kecerahan ($51,89 \pm 0,02$) dan hedonik warna ($6,13 \pm 1,196$), hedonik aroma ($5,53 \pm 1,165$), hedonik rasa ($5,57 \pm 1,165$) dan penerimaan keseluruhan ($5,83 \pm 1,147$) yang menunjukkan tingkat kesukaan (suka).

Kata kunci : antioksidan, bubuk kayu manis, daun sirsak kering, total fenolik, total flavonoid

Referensi : 52 (1995–2020)

ABSTRACT

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IMPROVING ANTIOXIDANT ACTIVITY AND ORGANOLEPTIC PROPERTIES OF SOURSOP LEAF DRINKS WITH THE ADDITION OF CINNAMON POWDER

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(xv + 59 pages, 6 tables, 21 figures, 14 appendices)

The high antioxidant content in soursop plants is located in the leaves. Soursop leaf also have phytochemical compounds such as phenolics, flavonoids, terpenoid, alkaloids, and saponins. Another natural ingredient that contains antioxidants is cinnamon, which is located in the bark. In this research, soursop leaves are used in making of soursop leaf dried and cinnamon is processed into powder as an additon to soursop leaf drink. The aim of this study was to determine the effect of variations in soursop leaf drying time and cinnamon powder concentration on antioxidant activity and characteristics of soursop leaf drink and to determine the drying time of soursop leaves and concentration of selected cinnamon powder based on antioxidant activity and characteristics of soursop leaf drink. Soursop leaf drinks will be analyzed for antioxidant activity, total phenolics, total flavonoids, and organoleptic tests (scoring and hedonic). Determination of the preferred soursop leaf drink formulation based on antioxidant activity, total phenolics, total flavonoids, and organoleptic tests. The analysis showed that soursop leaf dried with a drying time of 170 minutes and a concentration of 0.5% cinnamon powder resulted in an increase in quality with the highest antioxidant activity (47099.38 ± 660.05 ppm), total phenolic (197.77 ± 1.02 mg GAE/L), and total flavonoids (15.15 ± 0.03 mg QE/L) with the lightness value of (51.89 ± 0.02) and significantly higher hedonic color (6.13 ± 1.196), hedonic aroma (5.53 ± 1.165), hedonic taste (5.57 ± 1.165) and overall acceptance (5.83 ± 1.147) that indicate a like.

Keywords : antioxidant, cinnamon powder, soursop leaf dried, total flavonoid, total phenolic

References : 52 (1995-2020)