

ABSTRAK

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PEMANFAATAN BUAH LABU SIAM (*Sechium edule* [Jacq.] Sw) DAN JAMBU BIJI MERAH (*Psidium guajava* L.) DALAM PEMBUATAN SORBET

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(xviii + 108 halaman; 36 gambar; 24 tabel; 37 lampiran)

Buah labu siam digunakan dalam pembuatan sorbet untuk meningkatkan pemanfaatan dan nilai jual labu siam dalam bentuk produk pangan komersial dengan tambahan buah jambu biji merah. Penggunaan buah jambu biji merah dapat memberikan nilai tambah (warna, rasa, aroma dan vitamin C) pada sorbet labu siam. Buah labu siam dan jambu biji merah diolah menjadi sorbet dengan rasio 100:0, 90:10, 80:20, 70:30, 60:40, dan 50:50. Sorbet dianalisis pH, total padatan terlarut, warna, kandungan vitamin C, dan diuji organoleptik (skoring dan hedonik). Rasio buah terpilih yaitu 50:50, memiliki pH $4,82 \pm 0,04$, total padatan terlarut $23,05 \pm 1,35$ °brix, nilai °Hue $35,09 \pm 1,27$ (merah), tingkat kecerahan $42,74 \pm 0,92$, kandungan vitamin C $8,69 \pm 0,71$ mg/100g, dan paling disukai panelis secara keseluruhan ($6,20 \pm 0,76$). Rasio buah terpilih digunakan dalam pembuatan sorbet dengan jenis (CMC, gum arab, dan karagenan) dan konsentrasi (0%, 0,25%, 0,50%, dan 0,75%) penstabil yang berbeda. Sorbet dianalisis pH, total padatan terlarut, warna, kandungan vitamin C, *overrun*, waktu leleh, dan diuji organoleptik (skoring dan hedonik). Formulasi sorbet terpilih yaitu CMC dengan konsentrasi 0,75%, memiliki nilai pH $5,32 \pm 0,11$, total padatan terlarut $23,20 \pm 0,14$ °brix, nilai °Hue $37,92 \pm 3,08$ (merah), tingkat kecerahan $42,03 \pm 1,12$, *overrun* $8,43 \pm 0,78$ %, waktu leleh $16,79 \pm 0,34$ menit, kandungan vitamin C $8,88 \pm 0,84$ mg/100g, tekstur paling halus, dan paling disukai panelis berdasarkan tekstur ($5,32 \pm 1,14$).

Kata Kunci : labu siam, jambu biji merah, sorbet, penstabil, vitamin C

Referensi : 104 (1995-2020)

ABSTRACT

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UTILIZATION OF CHAYOTE (*Sechium edule* [Jacq.] Sw) AND RED GUAVA (*Psidium guajava* L.) FRUITS IN THE MAKING OF SORBET

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(xviii + 108 pages; 36 figures; 24 tables; 37 appendices)

Chayote are used in the making of sorbet to increase the utilization and value of as commercial food products with the addition of red guava. Red guava are used to make chayote sorbet with added value (color, taste, aroma and vitamin C). Chayote and red guava are processed into sorbet with ratios of 100: 0, 90:10, 80:20, 70:30, 60:40, and 50:50. Sorbet were analyzed in terms of pH, total dissolved solids, color, total vitamin C content, and organoleptic properties (scoring and hedonic). The selected fruit ratio was 50:50 with pH of 4.82 ± 0.04 , total dissolved solids of 23.05 ± 1.35 °brix, °Hue value of 35.09 ± 1.27 (red), lightness index of 42.74 ± 0.92 , total vitamin C content of 8.69 ± 0.71 mg / 100g, and the most preferred by panelists (6.20 ± 0.76). The selected fruit ratios were used in the making of sorbet with different types (CMC, gum arabic, and carrageenan) and concentrations (0%, 0.25%, 0.50%, and 0.75%) of stabilizers. Sorbet were also analyzed for pH, total dissolved solids, color, total vitamin C content, overrun, melting time, and organoleptic (scoring and hedonic). The selected sorbet formulation is the one made using 0.75% CMC with pH value of 5.32 ± 0.11 , total dissolved solids of 23.20 ± 0.14 °brix, °Hue value of 37.92 ± 3.08 (red), lightness index of 42.03 ± 1.12 , overrun of $8.43 \pm 0.78\%$, melting time of 16.79 ± 0.34 minutes, total vitamin C content of 8.88 ± 0.84 mg / 100g, the smoothest texture, and the most preferred by panelists based on texture (5.32 ± 1.14).

Keywords : chayote, red guava, sorbet, stabilizer, vitamin C

References : 104 (1995-2020)