THE PRODUCTION OF HARD CANDY FROM CURRY LEAF (*Murraya koenigii*).

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DECLARATION

I hereby declare that this research project is based on my original work except for quotations and summaries which have been duly acknowledge.

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ABSTRACT

This research had been carried out to determine the finest formulation of hard candy from *Murraya koenigii* (curry leaf). In this research, there were 6 samples tested which were sample R (hard candy contains 0% of curry leaf), sample A (hard candy contains 2% of curry leaf), sample B (hard candy contains 4% of curry leaf), sample C (hard candy contains 6% of curry leaf), sample D (hard candy contains 8% of curry leaf) and sample E (hard candy contains 10% of curry leaf). Analysis that were carried out in this research were colour analysis ('L', 'a' and 'b'), moisture content, water activity, vitamin C and sensory evaluation. The attributes for sensory evaluation were colour, shape, aroma, taste, hardness and overall acceptance. For determination of colour, results show that sample R had the highest value 97.41 ± 0.07 for the lightness 'L'. The lowest 'L' value 91.99 ± 0.05 was obtained from sample E. The results also show that, there were significant different ($p < 0.05$) between each sample but no significant different between sample C and D. For the 'a' value, sample R showed the highest value 0.24 ± 0.03 and sample D exibited the lowest value -1.60 ± 0.04, which lead to greenness. There was no significant different between sample A, D and E but there was significant different between other sample. For the 'b' value, sample C exhibited the highest value 6.19 ± 0.03. While sample R were the lowest 2.03 ± 0.01. There was no significant different ($p < 0.05$) between sample A and D, and between sample B and E. Sample A had the highest moisture content of 4.99 ± 0.87 while sample C had the lowest 2.56 ± 1.59. There was no significant different ($p < 0.05$) between sample R, D and E. For water activity, sample E had the highest value and sample C had the lowest. Every sample had a low value of vitamin C. Sample D was the most acceptable by panel due to the highest mean score in three attributes shape, taste and overall acceptance. From the result there were no significant different in the overall acceptance which means all of the sample are accepted at the same level.

PENGHASILAN GULA-GULA KERAS DARIPADA DAUN KARI
(*Murraya koenigii*)

ABSTRAK

Kajian ini dijalankan untuk memperolehi formulasi yang terbaik untuk gula-gula daun kari. Terdapat 6 sampel yang dikaji dalam kajian ini iaitu sampel R (gula-gula mengandungi 0% daun kari), sampel A (gula-gula mengandungi 2% daun kari), sampel B (gula-gula mengandungi 4% daun kari), sampel C (gula-gula mengandungi 6% daun kari), sampel D (gula-gula mengandungi 8% daun kari) dan sampel E (gula-gula mengandungi 10% daun kari). Analisis yang dijalankan adalah analisis warna ('L', 'a', 'b'), kandungan lembapan, aktiviti air, vitamin C dan penilaian sensori. Atribut yang terlibat dalam penilaian sensori adalah warna, bentuk, aroma, rasa, kekerasan dan penerimaan keseluruhan.Bagi analisa warna, sampel R mempunyai nilai tertinggi 97.41±0.07 untuk kecerahan 'L'. Nilai terendah kecerahan 'L' 91.99±0.05 diperolehi dari sampel E. Keputusan menunjukkan perbezaan yang signifikan ($p<0.05$) diantara setiap sampel tetapi tiada perbezaan signifikan antara sampel C dan D. Bagi nilai 'a', sampel R memiliki nilai yang tertinggi 0.24±0.03 manakala sampel D pula terendah -1.60±0.04, yang mana nilai ini cenderung kepada warna kehijauan.Tiada perbezaan yang signifikan ($p<0.05$) di antara sampel A, D dan E tetapi terdapat perbezaan signifikan antara sampel yang lain. Bagi nilai 'b', sampel C adalah sampel yang memiliki nilai tertinggi 6.19±0.03. Manakala sampel R adalah yang terendah 2.03±0.01. Tiada perbezaan yang signifikan ($p<0.05$) antara sampel A dan D, dan antara sampel B dan E. Sampel A memiliki kandungan lembapan yang tertinggi iaitu 4.99±0.87 manakala sampel C memiliki yang terendah 2.56±1.59. Tiada perbezaan yang signifikan antara sapel R,D dan E. Bagi aktiviti air, sampel E memiliki nilai tertinggi dan sampel C terendah. Setiap sampel yang diuji memiliki bacaan nilai vitamin C yang rendah. Sampel D adalah sampel yang paling tinggi penerimaan oleh panel berdasarkan nilai min tertinggi bagi tiga atribut iaitu bentuk rasa dan penerimaan keseluruhan. Berdasarkan keputusan yang diperolehi, tiada perbezaan signifikan di antara sampel bagi atribut penerimaan keseluruhan yang bermaksud kesemua sampel diterima pada kadar yang sama oleh panel.