

ANALISIS KELAYAKAN USAHA PERMEN JELLY BUAH MELON (Cucumis melo L.)

INTISARI

Buah Melon adalah salah satu komoditas hortikultura dengan prospek pasar yang tinggi, namun memiliki umur simpan yang pendek. Buah melon perlu diolah agar umur simpan, kualitas dan value bertambah. Permen jelly adalah produk olahan buah melon yang mudah diolah, disimpan, dan dikonsumsi. Tujuan penelitian ini untuk menganalisis kandungan fisikokimia dan kelayakan usaha permen jelly melon. Permen Jelly yang diolah dari buah melon organik premium budidaya Greenhouse Fablabs Jogja FRC UGM. Metode penelitian yaitu eksperimen dengan rancangan acak lengkap (RAL) satu faktor variasi gelling agent. Dilakukan uji diuji organoleptik dan fisikokimia pengulangan duplo terhadap kadar air, kadar abu, gula reduksi, dan vitamin C, data dianalisis menggunakan metode analisis variansi Anova Single Factor. Dilakukan analisis kelayakan usaha dengan pengintegrasian uji organoleptik dan fisikokimia. Resep terpilih adalah sampel AK (Agar Karagenan), AG (Agar Gelatin), dan GK (Gelatin Karagenan). Hasil uji organoleptik dari 30 responden sampel AG lebih disukai daripada AK dan GK dari warna, tekstur, rasa, dan aroma. Hasil fisikokimia AG dan GK, kadar air (19,76% dan 9,72%), kadar abu (2,81% dan 1,66%), gula reduksi (12,38% dan 5,56%), dan vitamin C (71,55% dan 78,17%) sesuai dengan SNI dan AKG. Hasil uji anova dengan α 0.05 diperoleh hasil F hitung $>$ F tabel, perbedaan gelling agent pada sampel AK, AG, dan GK berpengaruh signifikan terhadap kandungan fisikokimia. Hasil analisis finansial sampel AG pada tahun ke-10 diperoleh nilai IRR 109%, NPV Rp13.195.953.283, PP 1,8 tahun, BEP penjualan produk ke- ke-47.670 dan BEP rupiah Rp953.391.400. Berdasarkan hasil analisis kelayakan usaha yang dilakukan sampel AG dan GK layak untuk dijadikan usaha.

Kata kunci: kelayakan usaha, melon, pengembangan produk, permen jelly

FEASIBILITY ANALYSIS OF MELON FRUIT JELLY CANDY BUSINESS (Cucumis melo L.)

ABSTRACT

Melon fruit is a horticultural commodity with high market prospects but has a short shelf life. Melons need to be processed to increase shelf life, quality, and value. Jelly candy is a processed melon product that is easy to process, store, and consume. This research aims to analyze the physicochemical content and feasibility of the melon jelly candy business. Jelly candy made from premium organic melons cultivated by Greenhouse Fablab Jogja FRC UGM. The research method is an experiment with a completely randomized design (CRD) with one factor of gelling agent variation. Organoleptic and physicochemical tests were carried out using duplicate repetitions of water content, ash content, reducing sugar, and vitamin C, the data were analyzed using the Anova Single Factor analysis of variance method. A business feasibility analysis was carried out by integrating organoleptic and physicochemical tests. The selected recipes were AK (Carrageenan Agar), AG (Gelatin Agar), and GK (Carrageenan Gelatin) samples. The organoleptic test results of 30 AG sample respondents were more favorable than AK and GK in terms of color, texture, taste, and aroma. AG and GK physicochemical results, water content (19.76% and 9.72%), ash content (2.81% and 1.66%), reducing sugar (12.38% and 5.56%), and vitamins C (71.55% and 78.17%) by SNI and AKG. The results of the ANOVA test with alpha 0.05 showed that $F_{count} > F_{table}$, the difference in gelling agent in AK, AG, and GK samples had a significant effect on the physicochemical content. The results of the financial analysis of the AG sample in the 10th year obtained an IRR value of 109%, NPV IDR 13,195,953,283, PP 1.8 years, BEP for sales of the 47,670th product, and BEP rupiah IDR 953,391,400. Based on the results of the business feasibility analysis carried out by the AG and GK samples, it is suitable to be used as a business.

Keywords: business feasibility, melon, product development, jelly candy