ABSTRACT

Dhea Herawati. B.1610534. Chemical and Sensory Characteristics of Fruit Leather Kolang Kaling (*Arenga pinnata* Merr.) and Purple Sweet Potato (*Ipomoea batatas* L.). Supervised by Tiana Fitrilia and Dwi Aryanti Nur'utami.

Fruit leather is a food product from puree which goes through a drying process, in a sheet form that is easy to roll. The purpose of this study was to produce fruit leather made from kolang kaling and purple sweet potato and to determine the effect of the combination of kolang kaling and purple sweet potato, and the addition of citric acid on the chemical and sensory characteristics of the fruit leather. This study used a completely randomized design (CRD) with two factors. The first factor is the combination of kolang kaling and purple sweet potato with three treatment levels (90:10), (80:20), and (70:30). The second factor is the addition of citric acid with two levels of 0.5% and 1%. Data analysis uses the one way of variance (ANOVA) method, then if there is a difference, continue to analyze Duncan's Multiple Range Test (DMRT). The result of analysis showed that the combination of kolang kaling and purple sweet potato, the addition of citric acid, and the interaction of the two factors affected the chemical test (water content, pH, total sugar content, dietary fiber), physical test (tensile strength), and organoleptic test (hedonic). The selected fruit leather was formulation combination of kolang kaling and purple sweet potato (80:20) and addition of 0.5% citric acid**.** The selected fruit leather has moisture content 12.11%, pH 2.8, total sugar content 41.34%, dietary fiber 15.77%, and tensile strength (physical) 8.04. The value of the hedonic test results indicates a preference for color 8.33, aroma 5.48, texture 6.15, taste 7.37, and overall 7.12.

Keyword : fruit leather, kolang kaling, purple sweet potato, citric acid

ABSTRAK

Dhea Herawati. B.1610534. Karakteristik Kimia dan Sensori *Fruit Leather* Kolang Kaling (*Arenga pinnata* Merr.) dan Ubi Ungu (*Ipomoea batatas* L.). Dibawah bimbingan Tiana Fitrilia dan Dwi Aryanti Nur'utami.

Fruit leather merupakan produk makanan yang berasal dari *puree* yang melewati proses pengeringan, dengan bentuk lembaran yang mudah digulung. Tujuan penelitian ini untuk menghasilkan *fruit leather* berbahan dasar kolang kaling dan ubi ungu dan mengetahui pengaruh kombinasi kolang kaling dan ubi ungu, dan penambahan asam sitrat terhadap karakteristik kimia dan sensori *fruit leather*. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan dua faktor. Faktor pertama yaitu kombinasi kolang kaling dan ubi ungu dengan tiga taraf perlakuan (90:10), (80:20), dan (70:30). Faktor kedua yaitu penambahan asam sitrat dengan dua taraf 0,5% dan 1%. Analisis data menggunakan metode *one way analysis of variance* (ANOVA), kemudian jika terdapat perbedaan dilanjutkan analisa *Duncan's Multiple Range Test* (DMRT). Hasil analisis menunjukkan bahwa kombinasi kolang kaling dan ubi ungu, penambahan asam sitrat, dan interaksi kedua faktor berpengaruh terhadap uji kimia (kadar air, pH, kadar gula total, serat pangan), uji fisik (kuat tarik) dan uji organoleptik (hedonik). *Fruit leather* yang terpilih yaitu formulasi kombinasi kolang kaling dan ubi ungu (80:20) dan penambahan asam sitrat 0,5%. *Fruit leather* terpilih memiliki kadar air 12,11%, pH 2,8, kadar gula total 41,34%, serat pangan 15,77%, dan kuat tarik (fisik) 8,04 N. Nilai hasil uji hedonik menyatakan kesukaan terhadap warna 8,33, aroma 5,48, tekstur 6,15, rasa 7,37, dan *overall* 7,12.

Kata Kunci : *fruit leather*, kolang kaling, ubi ungu, asam sitrat