

Making of Fruit Leather from Kolang-kaling (*Arenga pinnata*) and Pineapple Fruit (*Ananas comosus*)

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ABSTRACT

This research was aimed to determine the best fruit leather formulation of mixing kolang-kaling and pineapple at various concentrations of the physicochemical characteristic (hardness, water content, ash content, pectin content, calcium content, vitamin C, dietary fiber, and antioxidant activity) and sensoric characteristic (taste, flavor, texture, colour). Kolang-kaling is seed of *Arenga pinnata* tree. It has dietary fiber content such as galactomannan pectin. The pineapple has dietary fiber too, such as, cellulose, pectin, lignin, hemicellulose. The dietary fiber compound in kolang-kaling and pineapple is used to form a gel and affect the texture of food, so it has potential to be processed into fruit leather. The research used a Completely Randomized Design (CRD) with six treatments and three repetitions. Mixing of palm sugar seed and pineapple with various concentration, these are: A (50% : 50%), B (60% : 40%), C (70% : 30%), D (80% : 20%), E (90% : 10%), F (100% : 0%). Through the organoleptic analysis obtained two the best treatments and favored by panelist are A and B treatment. These results have significant effect on flavor, color, texture, and taste. The organoleptic value for both of the treatments respectively are 3,57 and 3,70 (color); 3,77 and 3,52 (flavor); 4,00 and 3,93 (taste); 3,87 and 3,67 (texture). Then, these results also were significant effect on hardness, water content, pectin content, calcium content, total dietary fiber, and antioxidant activity. Furthermore, the analysis result of A and B treatment respectively are hardness content 0,57 and 0,82 N/cm²; water content 17,79% and 21,09%; pectin content 1,02% and 1,4%; Ca content 68 mg/100g and 72 mg/100g; total dietary fiber 13,77 g/100g and 16,50 g/100g; antioxidant activity 47,47% and 35,52%. Meanwhile, both of the treatments was not significant for ash content 0,67% and 0,72%; vitamin C 30,89 mg and 33,83 mg.

Keywords: fruit leather, kolang-kaling, pineapple