

## **ABSTRACT**

### **FORMULATION OF SWEET CILEMBU FLOUR (*Ipomoea batatas* (L.) Lam) AND FERMENTED MAIZE (*Zea mays L*) ON THE CHEMICAL AND SENSORY OF FLAKES**

**By**

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This research was aimed to tried the formulation of sweet Cilembu flour and fermented maize flour that has the best chemical and sensory properties on flakes. This research was arranged in a Complete Randomized Block Design (CRBD) with four repetitions. The formulation was consisted of 7 levels of comparisons of sweet Cilembu flour and fermented maize flour L1 (70%: 10%); L2 (60%: 20%); L3 (50%: 30%); L4 (40%: 40%); L5 (30%: 50%); L6 (20%: 60%); and L7 (10%: 70%). They were with eggs, margarine, sugar and salt, then tapioca the same amount of. Flakes produced was be analyzed for them chemical and sensory properties. The chemical analyzed were moisture, ashes, fat, protein and crude fiber contents, and sensory properties included the texture, flavor, color and overall acceptance. The data were analyzed using ANOVA and further tested with Least Significant Difference (LSD) at 5%. The result of this research showed that formulation significantly affected the moisture, ash, fat, protein and crude fiber of the flakes, also significantly affected on color liking rate, texture, taste and flavor, also the overall acceptance. The best treatment was found in L2

formulation (sweet Cilembu flour 60% : fermented maize flour 20%) with moisture 2.17%, ash 2.10%, fat 2.44%, protein 4.41%, and crude fiber 3.72%, with liking rate is liked.

Keywords: Fermented maize, *flakes*, sweet Cilembu flour

## **ABSTRAK**

### **FORMULASI TEPUNG UBI JALAR CILEMBU (*Ipomoea batatas* (L.) Lam) DAN TEPUNG JAGUNG (*Zea Mays*) TERFERMENTASI TERHADAP SIFAT KIMIA DAN SENSORI FLAKES**

**Oleh**

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Penelitian ini bertujuan untuk mendapatkan formulasi tepung ubi jalar Cilembu dan tepung jagung terfermentasi yang memiliki sifat kimia dan sifat sensori yang terbaik pada *flakes*. Perlakuan ini disusun dalam Rancangan Acak Kelompok Lengkap (RAKL) dengan empat kali ulangan. Formulasi terdiri dari perbandingan tepung ubi jalar Cilembu dan tepung jagung terfermentasi dengan 20% tapioka sebanyak 7 taraf, yaitu L1 (70% : 10%); L2 (60% : 20%); L3 (50% : 30%); L4 (40% : 40%); L5 (30% : 50%); L6 (20% : 60%); L7 (10% : 70%) dicampur dengan telur, margarin, gula dan garam. *Flakes* yang dihasilkan kemudian dilakukan analisis kimia dan sensori. Analisis kimia yang dilakukan yaitu kadar air, abu, lemak, protein dan serat kasar, sensori yaitu tekstur, rasa dan aroma, warna serta penerimaan keseluruhan. Data dianalisis dengan sidik ragam kemudian diolah lebih lanjut menggunakan uji Beda Nyata Terkecil (BNT) pada taraf 5%. Hasil penelitian menunjukkan bahwa formulasi berpengaruh nyata terhadap kadar air, kadar abu, lemak, protein dan serat kasar *flakes*, juga

berpengaruh nyata pada tingkat kesukaan warna, tekstur, rasa dan aroma serta penerimaan keseluruhan. Perlakuan terbaik yaitu pada formulasi L2 (tepung ubi jalar Cilembu 60% : tepung jagung terfermentasi 20%) dengan kadar air sebesar 2,17%, abu 2,10%, lemak 2,44%, protein 4,41% dan serat kasar 3,72%, dengan tingkat kesukaan disukai.

Kata kunci: Tepung jagung terfermentasi, *flakes*, tepung ubi jalar Cilembu