

APRILIA PRATIWI NPM. 18.03.3.1.1.00091. Penambahan Tepung Alur (*Suaeda maritima*) sebagai Sumber Aktivitas Antioksidan pada Produk Mi Kering Komposit MOCAF dan Tepung Jagung (*Zea mays L.*). Pembimbing **Prof. Ir. Umi Purwandari, M.App.Sc., Ph.D.** dan **Dr. Darimiyya Hidayati, S.TP., M.P.**

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh komposit tepung mocaf dan tepung jagung serta penambahan konsentrasi tepung alur (*Suaeda maritima*) terhadap karakteristik tekstural, sensoris dan aktivitas antioksidan mi. Penelitian dilakukan dengan desain penelitian Rancangan Acak Lengkap (RAL) dengan 2 faktor perlakuan yaitu perbandingan formulasi tepung mocaf dan tepung jagung (90%:10%, 80%:20% dan 70%:30%) serta konsentrasi tepung alur (5% dan 10%), sehingga diperoleh 6 kombinasi sampel dengan masing-masing memiliki 2 ulangan. Parameter pengujian dalam penelitian ini meliputi kadar air, *cooking time*, *cooking loss*, sensoris, aktivitas antioksidan dan tekstur. Hasil penelitian menunjukkan bahwa formulasi tepung mocaf dan jagung serta konsentrasi tepung alur tidak berpengaruh nyata terhadap kadar air mi kering, namun berpengaruh nyata terhadap nilai *cooking loss* (jumlah padatan yang terlarut selama pemasakan) serta tingkat kesukaan warna, rasa dan tekstur mi kering. Perbandingan konsentrasi tepung alur berpengaruh nyata terhadap nilai *cooking time* (waktu pemasakan) mi kering dan aktivitas antioksidan mi kering. Persentase inhibisi pada mi kering sebesar 29,39% dengan $IC_{50} > 200$ ppm (tergolong sangat lemah). Mi kering formulasi terbaik pada perbandingan 90% tepung mocaf dan 10% tepung jagung serta konsentrasi tepung alur 10%. Pengujian tekstur dari formulasi terbaik memiliki nilai *hardness* (921,3997 gf), *adhesiveness* (-41,5830 gs) dan *springiness* (0,7972 gs).

Kata Kunci : *Cooking loss*, *cooking time*, mi kering, tepung jagung, tepung mocaf

APRILIA PRATIWI NPM 18.03.3.1.1.00091. *Addition of Alur Flour (Suaeda maritima) as a Source of Antioxidant Activity in MOCAF Composite Dry Noddles and Corn Flour (Zea mays L.). Under the guidance of Prof. Ir. Umi Purwandari, M.App.Sc., Ph.D. and Dr. Darimiyya Hidayati, S.TP., M.P.*

ABSTRACT

This study aims to determine the effect of the composite of mocaf flour and corn flour and the addition of the concentration of groove flour (Suaeda maritima) on the texture, sensory and antioxidant characteristics of noodles. The study was conducted using a completely randomized design with 2 treatment factors, namely the comparison of the formulations of mocaf flour and corn flour (90%: 10%, 80%:20% and 70%:30%) and the concentration of groove flour (5% and 10%), so that 6 sample combinations were obtained with each having 2 replications. Test parameters in this study include water content, cooking time, cooking loss, sensory, antioxidant activity and texture. The results showed that the formulation of mocaf and corn flour and the concentration of groove flour had no significant effect on the moisture content of dry noodles, but significantly affected the value of cooking loss (amount of dissolved solids during cooking) and the level of preference for color, taste and texture of dry noodles. Comparison of flour concentration has a significant effect on the value of cooking time of dry noodles and the antioxidant activity of dry noodles. The percentage of inhibition in dry noodles was 29.39% with IC₅₀ > 200 ppm (very weak). The best formulation of dry noodles was at a ratio of 90% mocaf flour and 10% corn flour and 10% groove flour concentration. Texture test of the best formulation had hardness value (921.3997 gf), adhesiveness (-41.5830 gs) and springiness (0.7972 gs).

Keywords : *Cooking loss, cookingtime, dry noodles, corn flour, mocaf flour*