PENGARUH FORTIFIKASI TEPUNG RUMPUT LAUT DAN TEPUNG DAUN KELOR TERHADAP MUTU MIE INSTAN JAGUNG DAN *MOCAF*

The Effects of Fortification of Seaweed Flour and Moringa Leaf Flour on The Quality of Corn and Mocaf Instant Noodles

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ABSTRACT

The purpose of this study was to identify the effects of the concentration of moringa leaf flour and seaweed flour on the quality of instant noodles. The study was carried out in the laboratory using a full random design (RAL) of a single factor of six treatments and three deuteronomy. The treatment was concentration of corn flour : mocaf : moringa leaf flour and seaweed flour of E. spinosum) included P_1 (65%: 20% : 0%: 15%); P_2 (65%: 20% : 3%: 12%); P_3 (65%: 20% : 6%: 9%); P_4 (65%: 20% : 9%: 6%); P_5 (65%: 20% : 12%: 3%); P_6 (65%: 20% : 15%: 0%). Parameters for the quality of the noodle are those of chemicals properties (moisture content, fat content, protein content, iodine content, calcium content, and crude fiber content), physical properties (rehidration time, cooking time, cooking loss, and the color of noodles), and the organoleptic properties (taste, aroma and texture). The results showed that concentration of moringa leaf and seaweed flour significantly affected moisture content, fats, protein, iodine, calcium, crude fiber, rehidration time, cooking time, cooking loss, color, and organoleptic both hedonic and scoring. The treatment of P_2 was the best treatment of instant noodles at moisture content 7,04%; fat content 1,04%; protein content 9,2%; iodium content 5,58%; calcium content 0,15%; crude fiber content 9,71%; rehidration time 10,36 minutes; cooking time 10,22 minutes; cooking loss 11,33%; L 28,13 before cooking and 40,46 after cooking, and hue 77,3 before cooking and 83,71 after cooking.*

***Keywords**: fortification, instant noodle, moringa leaf flour, seaweed flour*

ABSTRAK

Tujuan penelitian ini adalah untuk mengetahui pengaruh konsentrasi tepung daun kelor dan tepung rumput laut terhadap mutu mie instan. Penelitian ini dilaksanakan di laboratorium dengan menggunakan rancangan acak lengkap (RAL) faktor tunggal yang terdiri dari 6 perlakuan dan tiga ulangan. Faktor perlakuan meliputi konsentrasi tepung jagung: mocaf: tepung daun kelor: tepung rumput laut *E. spinosum* yaitu P_1 (65%: 20% : 0%: 15%); P_2 (65%: 20% : 3%: 12%); P_3 (65%: 20% : 6%: 9%); P_4 (65%: 20% : 9%: 6%); P_2 (65%: 20% : 12%: 3%); P_2 (65%: 20% : 15%: 0%). Parameter kualitas mie yang diukur adalah kualitas kimia yang meliputi kadar air, kadar lemak, kadar protein, kadar iodium, kadar kalsium, dan kadar serat kasar, kualitas fisik meliputi waktu rehidrasi, *cooking time, cooking loss*, dan warna mie, dan sifat organoleptik (rasa, aroma dan tekstur). Konsentrasi tepung daun kelor dan tepung rumput laut memberikan pengaruh yang berbeda nyata terhadap kadar air, kadar lemak, kadar protein, kadar iodium, kadar kalsium, kadar serat kasar, waktu rehidrasi, *cooking time, cooking loss*, warna, serta mutu organoleptik baik hedonik maupun skoring. Perlakuan P_2 merupakan perlakuan terbaik mie instan dengan kadar air 7,04%; kadar lemak 1,04%; kadar protein 9,2%; kadar iodium 5,58%; kadar kalsium 0,15%; kadar serat kasar 9,71%; waktu rehidrasi 10,36 menit; *cooking time* 10,22 menit; *cooking loss* 11,33%; L* 28,13 sebelum dimasak dan 40,46 setelah dimasak, serta Hue° 77,32 sebelum dimasak dan 83,71 setelah dimasak.

Kata Kunci: fortifikasi, mie instan, tepung daun kelor, tepung rumput laut