

PENGARUH PENAMBAHAN TEPUNG DAUN KELOR (*Moringa oleifera*) TERHADAP MUTU MIE SHIRATAKI

[*The Effect of Additional Moringa Leaf (Moringa oleifera) Flour On The Quality of Shirataki Noodles*]

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ABSTRACT

Mie shirataki is a type of noodle made from porang flour which can accelerate satiety but is not sufficient to meet nutritional needs, so it is necessary to add moringa leaf flour to increase nutrition for the body. This study aims to determine the effect of adding Moringa leaf flour to shirataki noodles. This study used a Completely Randomized Design (CRD) with a single factor, namely the addition of moringa leaf flour with treatments of 0%, 3%, 6%, 9%, 12%, and 15% with 3 replications to obtain 18 experimental units. Observational data were analyzed using Analysis of Variance (ANOVA) with a significance level of 5% using Co-Stat. Significantly different data were further tested with Polynomial Orthogonal for chemical and physical quality and Honestly Significant Difference Test (HSD) for organoleptic quality. The results showed that the treatment of moringa leaf flour gave significantly different effects on water content, protein content, tensile strength, and organoleptic hedonic scale and scoring scale, but not significantly different on ash content. Moringa leaf flour treatment of 3% was the best treatment which produced shirataki noodles with 93.15% water content; 0.63% ash content; protein content 2.35%; tensile strength 0.21 kg/cm²; with organoleptic color "green", aroma "typical of Moringa leaves, slightly unpleasant", texture "slightly mushy", and taste "typical of moringa leaves, slightly lacking" with a hedonic response liked slightly by the panelists.

Keywords : shirataki noodles, moringa leaf flour, porang flour.

ABSTRAK

Mie shirataki merupakan jenis mie yang berbahan dasar tepung porang yang dapat mempercepat rasa kenyang namun belum cukup untuk memenuhi kebutuhan nutrisi sehingga perlu ditambahkan tepung daun kelor untuk meningkatkan nutrisi bagi tubuh. Penelitian ini bertujuan untuk mengetahui pengaruh penambahan tepung daun kelor terhadap mie shirataki. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan faktor tunggal yaitu penambahan tepung daun kelor dengan perlakuan 0%, 3%, 6%, 9%, 12%, dan 15% dengan 3 kali ulangan sehingga diperoleh 18 unit percobaan. Data hasil pengamatan dianalisis menggunakan analisis keragaman (ANOVA) dengan taraf nyata 5% menggunakan *Co-Stat*. Data yang berbeda nyata diuji lanjut dengan *Polynomial Orthogonal* (MOP) untuk mutu kimia dan fisik serta Uji Beda Nyata Jujur (BNJ) untuk mutu organoleptik. Hasil penelitian menunjukkan bahwa perlakuan tepung daun kelor memberikan pengaruh yang berbeda nyata terhadap kadar air, kadar protein, *tensile strength*, dan organoleptik skala hedonik maupun skala skoring, namun tidak berbeda nyata terhadap kadar abu. Perlakuan tepung daun kelor 3% merupakan perlakuan terbaik yang menghasilkan mie shirataki dengan kadar air 93,15%; kadar abu 0,63%; kadar protein 2,35%; *tensile strength* 0,21 kg/cm²; dengan organoleptik warna "hijau", aroma "khas daun kelor, agak langu", tekstur "agak lembek", dan rasa "khas daun kelor, agak kurang" dengan respon hedonik agak disukai oleh panelis.

Kata Kunci : mie shirataki, tepung daun kelor, tepung porang.