ABSTRAK

Mie basah merupakan produk pangan berbasis tepung terigu yang banyak dikonsumsi masyarakat Indonesia. Penggunaan bahan non-terigu seperti sawi hijau dan talas dalam formulasi mie dapat menurunkan kualitas tekstur akibat lemahnya jaringan gluten yang terbentuk. Penambahan hidrokoloid alami berupa gel daun cincau hijau (*Cyclea barbata* L. Miers) berpotensi memperbaiki karakteristik fisik, kimia, dan sensoris mie basah yang dihasilkan. Penelitian ini bertujuan mengetahui karakteristik fisik (elastisitas, *cooking time*, daya serap air, *cooking loss*, dan warna), kimia (kadar air dan kadar serat kasar), dan sensoris (warna, aroma, rasa, dan tekstur) mie basah berbasis sawi-talas pada berbagai konsentrasi gel cincau hijau, serta menentukan konsentrasi optimal yang menghasilkan produk terbaik. Rancangan percobaan menggunakan satu faktor, yaitu konsentrasi gel cincau hijau pada empat taraf: 0% (A0/kontrol), 2.5% (A1), 5% (A2), dan 7.5% (A3), masing-masing dengan tiga ulangan, data dianalisis secara deskriptif. Hasil penelitian menunjukkan bahwa penambahan gel cincau hijau memberikan perbedaan pada seluruh parameter yang diuji. Elastisitas meningkat konsisten dari 20.79% (A0) menjadi 43.84% (A3). *Cooking time* tertinggi diperoleh pada A2 (150 detik), sedangkan *cooking loss* terendah pada A3 (6.29%), dan daya serap air tertinggi pada A0 (182.36%). Kadar air berkisar 31.39-33.22%, memenuhi SNI 2987-2015. Kadar serat kasar tertinggi pada A3 (5.92%). Penilaian sensoris menunjukkan intensitas warna hijau meningkat dari kategori hijau muda (A0: 2.66) menjadi hijau sedang (A1-A3: 3.14-3.17), aroma terkuat pada A2 (3.25), rasa tertinggi pada A1 (3.02), dan tekstur paling kenyal pada A3 (3.67). Perlakuan A3 (7.5%) merupakan konsentrasi optimal yang menghasilkan karakteristik fisik, kimia, dan sensoris mie basah sawi-talas terbaik secara keseluruhan.
Kata Kunci: mie basah, gel cincau hijau, hidrokoloid alami, pengenyal alami, sawi-talas.

ABSTRACT

Wet noodles are a wheat flour-based food product widely consumed in Indonesia. The use of non-wheat ingredients, such as mustard greens and taro, in noodle formulations may reduce textural quality due to the weakened gluten network. The addition of a natural hydrocolloid in the form of green grass jelly (Cyclea barbata L. Miers) leaf gel has the potential to improve the physical, chemical, and sensory characteristics of wet noodles. This study aimed to determine the physical characteristics (elasticity, cooking time, water absorption, cooking loss, and color), chemical characteristics (moisture content and crude fiber content), and sensory characteristics (color, aroma, taste, and texture) of mustard greens-taro-based wet noodles with different concentrations of green grass jelly leaf gel, as well as to determine the optimal concentration that produced the best product. The experiment employed a single-factor design with four levels of green grass jelly leaf gel concentration: 0% (A0, control), 2.5% (A1), 5% (A2), and 7.5% (A3), each with three replications. The data were analyzed descriptively. The results showed that the addition of green grass jelly leaf gel affected all evaluated parameters. Elasticity increased consistently from 20.79% (A0) to 43.84% (A3). The longest cooking time was obtained at A2 (150 s), whereas the lowest cooking loss was observed at A3 (6.29%), and the highest water absorption was found at A0 (182.36%). The moisture content ranged from 31.39% to 33.22%, which complied with the Indonesian National Standard (SNI 2987:2015). The highest crude fiber content was recorded at A3 (5.92%). Sensory evaluation showed that the intensity of the green color increased from light green (A0: 2.66) to medium green (A1-A3: 3.14-3.17). The highest aroma score was obtained at A2 (3.25), the highest taste score at A1 (3.02), and the highest chewiness score at A3 (3.67). Treatment A3 (7.5%) was identified as the optimal concentration, producing the best overall physical, chemical, and sensory characteristics of mustard greens-taro-based wet noodles.

Keywords: wet noodles, green grass jelly leaf gel, natural hydrocolloid, natural texturizer, mustard greens-taro