

ABSTRACT

Noodle is a very popular food among Indonesian. Its high consumption leads to increasing wheat importation. This work studied the making of noodle from taro flour and fermented cassava (gathotan) flour as texturing agent. We employed a factorial randomized design with two factors, namely proportion of gathotan flour and water (1: 5, 1: 6, 1: 7) to make gel, and proportion of gathotan gel and taro flour (1: 0.8, 1: 0.9, 1: 1). Textural properties and cooking quality were studied. The results showed that water proportion, flour proportion, and their interactions had no significant effect ($P \geq 0.05$) on cooking time, cooking loss and water absorption. Proportion of water affected significantly ($P < 0.05$) hardness, adhesiveness, springiness, cohesiveness, gumminess, chewiness, and resilience. Proportion of flour affected significantly ($P < 0.05$) hardness, adhesiveness, cohesiveness, gumminess, chewiness, resilience. Interaction of the two factors significantly ($P < 0.05$) influenced hardness, springiness, cohesiveness, gumminess, chewiness, and resilience. Cooking time ranged from 27.55 to 31.56 minutes, cooking loss ranged from 7.76 to 20.03% and water absorption ranged from 178.71 to 242.53%. Hardness of taro noodle ranged from 1742.88 to 3185.08 g, adhesiveness ranged from (-8.03)-(-66.04), springiness ranged from 0.75 to 0.96, cohesiveness ranged from 0.34 to 0.73, gumminess ranged from 820.82 to 1860.28, chewiness ranged from 820.82 to 1860.28, and resilience from 0.34 to 0.86.

Keywords: *Taro, dried noodles , cooking quality, texture.*

ABSTRAK

Mi merupakan makanan yang sangat digemari masyarakat Indonesia. Tingginya konsumsi dan kebutuhan mi seiring meningkatnya volume impor gandum, pada penelitian ini akan dilakukan pembuatan mi dengan bahan baku kimpul sebagai alternatif tepung terigu. Pembuatan mi kering kimpul membutuhkan adanya modifikasi bahan berupa penambahan tepung gathotan dengan tepung kimpul, karena bahan tersebut tidak mengandung gluten. Penelitian ini bertujuan untuk mengetahui proses pembuatan mi kering dan mendapatkan nilai uji tekstur dan *cooking quality* mi kering kimpul. Faktorial (RALF) dengan 3 faktorial diantaranya penambahan proporsi tepung gathotan dengan air (1:5, 1:6, 1:7) dan gel gathotan dengan tepung kimpul (1:0,8, 1:0,9, 1:1). Pengujian tekstur dan *cooking quality* menggunakan alat berupa Texture Analyzer. Hasil penelitian menunjukkan bahwa pada pengujian *cooking quality*, proporsi air, proporsi tepung dan interaksi proporsi air dengan proporsi tepung tidak berpengaruh nyata ($P \geq 0,05$) terhadap *cooking time*, *cooking loss* dan *water absorption* sedangkan pada pengujian tekstur, proporsi air berpengaruh nyata ($P < 0,05$) terhadap *hardness*, *adhesiveness*, *springiness*, *chohesiveness*, *gumminess*, *chewiness*, *resilience*. proporsi tepung berpengaruh nyata ($P < 0,05$) terhadap *hardness*, *adhesiveness*, *chohesiveness*, *gumminess*, *chewiness*, *resilience*. Interaksi proporsi air dengan proporsi tepung berpengaruh nyata ($P < 0,05$) terhadap *hardness*, *springiness*, *chohesiveness*, *gumminess*, *chewiness*, *resilience*. Pengujian *cooking quality* pada parameter *cooking time* berkisar 27,55-31,56 menit, *cooking loss* berkisar 7,76-20,03% dan *water absorption* berkisar 178,71-242,53%. Pengujian tekstural diperoleh hasil tertinggi pada parameter *hardness* 1742,88-3185,08 g, *adhesiveness* (-8,03)-(-66,04), *springiness* 0,75-0,96, *chohesiveness* 0,34-0,73, *gumminess* 820,82-1860,28, *chewiness* 820,82-1860,28, *resilience* 0,34-0,86.

Kata kunci: *Kimpul, mi kering, cooking quality dan tekstural.*