

ABSTRAK

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KAJIAN PUSTAKA TENTANG PENGARUH PENAMBAHAN *GUAR GUM* ATAU *XANTHAN GUM* TERHADAP KARAKTERISTIK FISIKOKIMIA DAN SENSORI BERBAGAI MI NON TERIGU

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(ix + 33 halaman: 2 gambar; 4 tabel; dan 2 lampiran)

Mi yang dibuat dari tepung non terigu memiliki tekstur lengket, tidak kenyal, dan *cooking loss* tinggi. Penambahan hidrokoloid, seperti *guar gum* atau *xanthan gum* diharapkan dapat mengatasi kekurangan tekstur mi dari tepung non terigu. Tujuan dari kajian pustaka adalah untuk mengkaji pengaruh penambahan *guar gum* atau *xanthan gum* terhadap karakteristik fisikokimia dan sensori mi non terigu. Penambahan *xanthan gum* menghasilkan nilai *hardness* yang lebih rendah dibandingkan *guar gum* yang dapat dilihat dari penambahan *xanthan gum* pada mi beras merah melati, serta mi beras tepung dan kacang hijau. *Xanthan gum* dan *guar gum* memengaruhi sifat *adhesiveness* dan *cohesiveness*. *Guar gum* menghasilkan nilai *springiness* yang lebih tinggi pada mi. Penambahan *guar gum* pada mi menghasilkan *cooking loss* yang lebih rendah pada mi beras melati dan mi tepung beras dan kacang hijau. Pada uji hedonik untuk parameter *firmness*, panelis lebih menyukai mi dengan penambahan *guar gum* dibandingkan dengan *xanthan gum*, sedangkan untuk *stickiness*, panelis lebih menyukai mi dengan penambahan *guar gum* pada konsentrasi yang sama. Secara keseluruhan, penambahan *guar gum* atau *xanthan gum* memengaruhi karakteristik fisikokimia dan sensori berbagai mi non terigu. Penambahan 0,2% *guar gum* atau 0,2% *xanthan gum* merupakan konsentrasi terbaik dalam formula mi non terigu.

Kata kunci : *guar gum*, mi non terigu, *xanthan gum*

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ABSTRACT

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LITERATURE REVIEW OF THE EFFECT OF GUAR GUM OR XANTHAN GUM ADDITION ON PHYSICOCHEMICAL AND SENSORY CHARACTERISTICS OF VARIOUS NON-WHEAT NOODLES

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Noodles with flour as raw material cannot be consumed by Celiac Disease patients, and their availability is still imported, so noodles are made with non-wheat raw materials. The disadvantage of non-wheat noodles is that they do not contain gluten which is composed of glutenin and gliadin which causes non-wheat noodles to have a sticky texture, not chewy, and result in high cooking loss. These problems can be overcome by adding hydrocolloids, such as guar gum or xanthan gum. The purpose of this study was to examine the effect of the addition of guar gum or xanthan gum on the physicochemical and sensory characteristics of non-wheat noodles. The addition of xanthan gum resulted in a lower value hardness than guar gum which can be seen from the addition of xanthan gum to jasmine brown rice noodles, flour rice noodles and green beans. Xanthan gum and guar gum affect adhesiveness and cohesiveness. Guar gum produces a higher value springiness in noodles. The addition of guar gum to noodles resulted lower cooking loss in jasmine rice noodles and rice flour noodles and green beans. In the hedonic test for firmness parameter, panelists prefer noodles with the addition of guar gum compared to xanthan gum, while for stickiness, panelists prefer noodles with the addition of guar gum at the same concentration. Overall, the addition of guar gum or xanthan gum affected the physicochemical and sensory characteristics of various non-wheat noodles. The addition of 0.2% guar gum or 0.2% xanthan gum is the best concentration in the non wheat noodle formula.

Keywords : guar gum, non wheat noodle, xanthan gum

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