

**PENGARUH PENAMBAHAN TEPUNG GEMBILI (*Dioscorea esculenta*)
TERHADAP KUALITAS FISIKO-KIMIA DAN
SENSORIS KEJU *MOZZARELLA***

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan tepung gembili (*Dioscorea esculenta*) terhadap sifat fisiko-kimia dan sensoris keju *mozzarella*. Keju *mozzarella* dibuat dari bahan dasar susu sapi dengan penambahan tepung gembili dengan tiga level berbeda yaitu 0, 0,2 dan 0,4% (w/v) dengan tiga kali pengulangan. Data hasil penelitian dianalisis menggunakan analisis variansi pola searah untuk sifat fisiko-kimia dan Kruskal Wallis untuk sifat sensoris keju, kemudian dilanjutkan dengan *Duncan's New Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa penambahan tepung gembili tidak berpengaruh ($p>0,05$) terhadap rendemen, pH, keasaman, kadar lemak, *free fatty acid* (FFA), kadar air, protein terlarut, tekstur, kemuluran, rasa dan daya terima. Rerata rendemen, lemak, FFA, kadar air, protein, tekstur, dan kemuluran berturut-turut adalah $33,44\pm 3,25$; $22,97\pm 2,50$; $2,72\pm 0,60$; $53,87\pm 2,24$; $16,98\pm 0,49(\%)$; $8,00\pm 3,75N$; $2,78\pm 1,53N^{-1}$. Penambahan tepung gembili mempengaruhi warna dan aroma. Keju *mozzarella* tanpa penambahan tepung gembili memiliki nilai aroma yang lebih baik daripada dengan penambahan tepung gembili. Kesimpulan penelitian ini adalah penambahan tepung gembili tidak mempengaruhi kualitas fisiko-kimia keju *mozzarella*. Keju *mozzarella* berdasarkan kadar airnya termasuk keju lunak/*soft*.

Kata kunci : Keju *mozzarella*, Tepung gembili, Kualitas fisiko-kimia, Sifat sensoris

THE EFFECT OF LESSER YAM (*Dioscorea esculenta*) FLOUR ON PHYSICO-CHEMICAL CHARACTERISTIC AND SENSORY OF *MOZZARELLA* CHEESE

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ABSTRACT

The study aimed to investigate the effect of lesser yam (*Dioscorea esculenta*) flour on physico-chemical characteristic and sensoric of *mozzarella* cheese. Basic material of *mozzarella* cheese was used cow milk and different levels of lesser yam flour i.e 0, 0.2, and 0.4% (w/w) with 3 replications. Data was analysed by one-way variance analysis for physico-chemical characteristic and Kruskal Wallis for sensoric characteristic of cheese, and continued by *Duncan's New Multiple Range Test* (DMRT). The result showed that the addition of lesser yam flour had no effect ($p>0,05$) on rendemen, pH, acidity, fat content, *free fatty acid* (FFA), water content, soluble protein, texture, elasticity, flavour, and acceptability of cheese. Average of rendemen, fat, FFA, water content, protein, texture, and elasticity were 33.44 ± 3.25 ; 22.97 ± 2.50 ; 2.72 ± 0.60 ; 53.87 ± 2.24 ; $16,98\pm 0,49(\%)$; $8.00\pm 3.75N$; $2.78\pm 1.53N^{-1}$, respectively. Addition of lesser yam flour affects color and aroma. *Mozzarella* cheese without addition of lesser yam flour had better flavour than without lesser yam flour. In conclusion, addition of lesser yam flour had no effect on physico-chemical characteristic of *mozzarella* cheese. Based on water content, *mozzarella* was included soft cheese.

Keywords : *Mozzarella* cheese, Lesser yam flour, Physico-chemical characteristic, Sensoric characteristic