

RINGKASAN

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan gowok (*Syzygium polycephalum*) terhadap kadar air dan tingkat *firmness* yoghurt sinbiotik. Gowok dipilih karena mengandung senyawa bioaktif seperti flavonoid, fenolik, dan antosianin yang berpotensi meningkatkan nilai fungsional yoghurt. Selain manfaat kesehatan, kualitas yoghurt juga ditentukan oleh karakteristik fisik seperti kadar air dan tekstur.

Penelitian dilakukan menggunakan metode eksperimen dengan Rancangan Acak Lengkap (RAL) yang terdiri atas empat perlakuan dan lima ulangan. Perlakuan meliputi yoghurt tanpa gowok (P0), penambahan bubuk kulit gowok 0,5% (P1), bubuk daging gowok 0,5% (P2), dan bubuk buah gowok utuh tanpa biji 0,5% (P3). Variabel yang diamati adalah kadar air dan tingkat *firmness*. Data dianalisis menggunakan uji ANOVA dan dilanjutkan DMRT apabila terdapat pengaruh nyata.

Hasil penelitian menunjukkan bahwa penambahan bubuk gowok 0,5% tidak berpengaruh nyata ($P > 0,05$) terhadap kadar air maupun tingkat *firmness* yoghurt sinbiotik. Nilai kadar air berkisar antara 87,08%–87,56%, sedangkan nilai *firmness* berkisar antara 7,676–7,908 gr. Hal ini menunjukkan bahwa penambahan bubuk gowok pada konsentrasi 0,5% belum mampu mengubah karakteristik fisik kadar air dan tingkat *firmness* pada yoghurt secara signifikan.

Kata kunci: Gowok, Bakteri Asam Laktat, Yoghurt Sinbiotik, Kadar Air, *Firmness*

SUMMARY

*This study aimed to determine the effect of adding gowok (*Syzygium polycephalum*) on the moisture content and firmness level of synbiotic yogurt. Gowok was selected because it contains bioactive compounds such as flavonoids, phenolics, and anthocyanins, which have the potential to enhance the functional value of yogurt. In addition to its health benefits, yogurt quality is also determined by physical characteristics such as moisture content and texture.*

The study was conducted using an experimental method with a Completely Randomized Design (CRD) consisting of four treatments and five replications. The treatments included yogurt without gowok (P0), the addition of 0.5% gowok peel powder (P1), 0.5% gowok flesh powder (P2), and 0.5% whole gowok fruit powder without seeds (P3). The observed variables were moisture content and firmness level. Data were analyzed using ANOVA followed by Duncan's Multiple Range Test (DMRT) when significant effects were detected.

The results showed that the addition of 0.5% gowok powder had no significant effect ($P > 0.05$) on the moisture content or firmness level of synbiotic yogurt. The moisture content values ranged from 87.08% to 87.56%, while the firmness values ranged from 7.676 to 7.908 g. These findings indicate that the addition of gowok powder at a concentration of 0.5% was not sufficient to significantly alter the physical characteristics, namely moisture content and firmness, of synbiotic yogurt.

Keywords: *Gowok, Lactic Acid Bacteria, Synbiotic Yogurt, Moisture Content, Firmness.*