INTISARI

Penelitian tentang sifat fisik amilum pregelatin, amilum granulat dan amilum alami kimpul (*Xanthosoma violaceum* Schott.) telah dilakukan. Tujuan dari penelitian ini adalah untuk mengetahui sifat alir dan kompaktibilitas yang paling baik amilum pregelatin, amilum granulat dan amilum alami kimpul.

Penelitian ini termasuk penelitian eksperimental yang mengikuti rancangan acak lengkap pola satu arah dan menggunakan amilum kimpul sebagai bahan penelitian. Uji-uji yang dilakukan meliputi uji sudut diam, indeks pengetapan, kerapatan *bulk*, kompaktibilitas dan penetapan kadar air. Data diuji secara teoritis berdasarkan parameter yang berlaku dan statistik dengan *ANOVA* satu arah, jika berbeda bermakna dilanjutkan dengan uji *Scheffe* dengan taraf kepercayaan 95%

Hasil penelitian menunjukkan bahwa amilum pregelatin kimpul dengan ukuran 30/50 *mesh* mempunyai sudut diam yang paling kecil dan kompaktibilitas yang paling besar serta kadar air yang paling kecil, sedangkan amilum granulat dengan ukuran 30/50 *mesh* mempunyai sudut diam yang paling besar dan kompaktibilitas yang paling rendah secara bermakna. Dengan demikian amilum pregelatin mempunyai sifat alir dan kompaktibilitas yang paling baik disbanding amilum granulat dan amilum alami kimpul.

Kata kunci : Amilum pregelatin, amilum granulat, sifat alir, kompaktibilitas dan kimpul

ABSTRACT

The research about physical properties of pregelatinized starch, granulated starch and natural starch of blue taro (*Xanthosoma violaceum* Schott.) had been done. The aim of the research was to observe the best flowability and compactibility among the pregelatinized starch, the granulated starch and the natural starch of blue taro

The research was conducted based on the pure experimental design and it used blue taro starch as a subject. Modified starch and natural starch were tested for the angle of repose, tapping index, compactibility, bulk density and moisture content. The datas were evaluated theoretically based on the requirement needed and then was analyzed statistically using one way ANOVA followed by Scheffe-test (p = 0,05) for the significant different results.

The results showed that the pregelatinized of blue taro starch in 30/50 *mesh* had the smallest repose of angle, the largest compactibility and the lowest moisture content . The granulated starch in 30/50 *mesh* had the biggest angle of repose and the lowest compactibility. For the conclusion the pregelatinized starch had the best flowability and compactibility compared with th natural starch and the granulated starch.

Keywords : pregelatinized starch, granulated starch, flowability, compactibility and blue taro.