

SIFAT FISIK AMILUM PREGELATIN, AMILUM GRANULAT DAN AMILUM ALAMI BIJI NANGKA (*Artocarpus Integra Merr. (Thumb.)*)

INTISARI

Penelitian tentang amilum biji nangka (*Artocarpus Integra Merr. (Thumb.)*) secara pregelatinasi dan granulasi telah dilakukan. Penelitian ini bertujuan untuk mengetahui sifat alir dan kompaktibilitas amilum manakah yang paling baik antara amilum pregelatin dan amilum granulat dan amilum alami biji nangka.

Penelitian ini termasuk jenis eksperimental murni, menggunakan amilum biji nangka dengan metode pregelatinasi dan granulasi. Selanjutnya dilakukan uji sifat fisik terhadap granul meliputi waktu alir, sudut diam, indeks pengetapan, densitas granul, kadar air dan kompaktibilitas. Data dianalisis berdasarkan parameter yang berlaku dan statistik dengan *ANOVA* satu arah, untuk perbedaan yang bermakna hasil diuji *Scheffe* dengan taraf kepercayaan 95%.

Hasil pemeriksaan waktu alir, kadar air, sudut diam dan indeks pengetapan menunjukkan bahwa amilum pregelatin biji nangka mempunyai sifat alir yang lebih baik dibandingkan amilum alami dan amilum granulat. Pada uji kompaktibilitas dari ketiga jenis amilum menunjukkan sifat fisik amilum yang rendah.

Kata kunci : amilum pregelatin, amilum granulat, amilum termodifikasi.

ABSTRACT

Research about the physical propertiesie of jackfruit seeds starch (*Artocarpus integra Merr.* (Thumb.)) in pregelatinized starch and granulated starch had been done. The aims of this research were compare the fluidity values and the compactibility values of natural jackfruit seed starch.

The research is pure experimental, using three types of jackfruit seed starch i, e natural starch, pregelatinized starch and granulated starch. The test was performed on the flowability time, reposed angle, tapping index, granule density,, water content and compactibility. The datas then was evaluated, based on the available parameters and analized statistically using one-way ANOVA. For the significant differences, they were analized using Scheffe-test with 95% confident interval.

Test results showed that the pregelatinized starch jackfruit seeds had better fluidity compared with the natural starch jackfruit seeds had better fluidity compared with the natural starch and granulated starch. However the results of compactibiity of the three types of starch showed the poor values.

Keyword : pregelatinized starch, granulated starch, modified starch, jackfruit seed.