

**STUDI KOMPARATIF KONSENTRASI PENGIKAT AKASIA
2%, 5%, DAN 10% TERHADAP KARAKTERISTIK FISIK TABLET
KITOSAN METODE GRANULASI BASAH**

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ABSTRAK

Telah dilakukan penelitian untuk menganalisis pengaruh konsentrasi Akasia sebagai pengikat terhadap karakteristik fisik tablet pada pembuatan tablet kitosan menggunakan metode granulasi basah. Konsentrasi bahan pengikat yang ditambahkan adalah 2%, 5% dan 10%. Evaluasi terhadap karakteristik fisik tablet dilakukan pada Formula I, Formula II, dan Formula III meliputi keseragaman bobot, keseragaman ukuran, kekerasan, friabilitas, dan waktu hancur tablet memenuhi spesifikasi. Data hasil pemeriksaan karakteristik fisik tablet kemudian diolah secara statistik dengan metode *independent t-test* dengan taraf signifikan 5% pada Formula II dan III. Dari analisis secara statistik diperoleh hasil bahwa berdasarkan pemeriksaan karakteristik tablet friabilitas, kekerasan tablet dan waktu hancur terdapat perbedaan yang signifikan antara Formula II dan III. Sedangkan untuk keseragaman bobot, dan keseragaman ukuran tidak menunjukkan perbedaan yang signifikan.

Kata Kunci : Akasia, kitosan, tablet, pengikat, granulasi basah



COMPARATIVE STUDY OF CONCENTRATION OF AKASIA 2%, 5%, DAN 10% ON THE PHYSICAL CHARACTERISTICS OF CHITOSAN TABLETS USING WET GRANULATION METHOD

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ABSTRACT

A research was conducted to analyze the influence of concentration of acacia as a binder against the physical characteristics of chitosan tablets in the manufacture of tablets using wet granulation method. Concentration of binder added is 2%, 5% dan 10%. There were three formulas to be evaluated: Formula I, Formula II, and Formula III. The evaluation of the physical characteristics of tablets was based on the uniformity of weight, dimension, hardness, friability, and disintegration time. The result of evaluation from Formula I, II, and III was conformed with qualifies of characteristics tablet. The results of the physical characteristics of tablets were analyzed statistically by *independent t-test* with a significant level of 5%. The statistical analyzed showed that dimension, friability, and disintegration time, there were significant differences between Formula II and III whereas, uniformity of weight and hardness showed no significant difference.

Key words : *acacia, chitosan, tablet, binder, wet granulation*

