

### Intisari

Penelitian tentang pembuatan tablet ekstrak daun mimba bertujuan untuk mengetahui sifat fisik tablet ekstrak daun mimba yang dibuat secara granulasi kering dan adakah pengaruh kadar Amprotab terhadap sifat fisik tablet ekstrak daun mimba tersebut.

Dalam penelitian ini dibuat lima formula tablet ekstrak daun mimba dengan kadar Amprotab 5%, 7,5%, 10%, 12,5%, dan 15%. Campuran bahan kecuali bahan penghancur eksternal dan bahan pelicin dikempa menjadi *slug*. *Slug* dihancurkan menjadi granul. Granul diayak dengan ayakan no mesh 12/20. Granul yang diperoleh diuji waktu alirnya dan dikempa menjadi tablet. Tablet yang diperoleh diuji sifat fisiknya, meliputi: keseragaman bobot, kekerasan, kerapuhan, dan waktu hancur. Hasil dianalisis menggunakan anova satu arah dan jika ada perbedaan yang bermakna dilanjutkan dengan uji *scheffe*.

Hasil yang diperoleh menunjukkan bahwa Amprotab dengan kadar yang berbeda-beda mempengaruhi waktu hancur tablet. Semakin tinggi kadar Amprotab maka waktu hancur tablet semakin cepat. Selain itu hasil penelitian menunjukkan bahwa tablet daun mimba yang dibuat menggunakan Amprotab sebagai bahan penghancur dan menggunakan metode granulasi kering menghasilkan tablet yang memenuhi syarat sifat fisik tablet.

## ABSTRACT

The research of the production of the Neem (*Azadirachta indica*. Juss) leaves extract tablets had been done, with the purpose to determine the physical properties of the tablets which were made by dry granulation method and to observe the effect of various concentration of Amprotab as disintegrant on the physical properties of the tablets.

Five formulas were made with the various Amprotab concentration of 5%; 7,5%; 10%; 12,5%; and 15%. The component except the external disintegrant and the lubricant was compacted into slugs. Slugs then were crushed into granules. Granules were sieved with the number sift of 12/20 mesh. Granules were tested of their flow ability time, and compacted together with the external component to be tablets. The tablets were tested of their physical properties such as weight uniformity, hardness, friability, and the disintegration time. The data were evaluated statistically using one way Anova and there were significant differences, it was continued by the Scheffe test with 95% confident interval.

The result showed that the various concentrations of Amprotab affected the disintegration time. The higher the Amprotab concentration, the faster the disintegration time would be. Beside, it showed that the tablets of all formulas which were produced met the requirements of tablet physical properties.