

INTISARI

Penelitian tentang *reworking potential* gelatin sebagai bahan pengikat pada pembuatan tablet metampiron secara granulasi basah telah dilakukan, dengan tujuan untuk mengetahui daya ikat gelatin sebagai bahan pengikat tablet metampiron setelah mengalami beberapa kali pengempaan, untuk mencapai maksud tersebut pada penelitian ini dilakukan pengempaan sebanyak tiga kali pada setiap formula dengan tekanan yang sama. Hasil pada tiap pengempaan dihancurkan untuk mendapatkan granul ukuran mesh 14/35, kemudian granul yang dihasilkan diuji sifat fisiknya, setelah memenuhi syarat kemudian ditablet. Tablet yang dihasilkan diuji sifat fisiknya.

Penelitian yang dilakukan termasuk jenis penelitian eksperimental sederhana dengan menggunakan rancangan acak lengkap pola searah. Data yang diperoleh dianalisis dengan dua cara pendekatan, yaitu pendekatan secara teoritis, yang dilakukan dengan membandingkan terhadap pustaka yang ada dan yang kedua pendekatan secara statistik melalui analisis variansi (ANOVA) satu arah dengan taraf kepercayaan 95%, jika ada perbedaan yang bermakna dilanjutkan dengan uji *Scheffe*.

Hasil penelitian menunjukkan bahwa ada pengaruh pengempaan berulang terhadap sifat fisik tablet yang dihasilkan. Tablet yang dihasilkan pada pengempaan awal, mempunyai kekerasan dan kerapuhan yang lebih kecil, serta waktu hancur yang lebih cepat daripada tablet yang mengalami pengempaan ulang. Pada tablet yang mengalami pengempaan ulang (sampai dua kali pengulangan), kerapuhan dan kekerasan tablet cenderung meningkat dan waktu hancur tablet cenderung semakin lama. Meskipun demikian potensi daya ikat gelatin sebagai bahan pengikat masih bagus, karena tablet hasil pengempaan ulang masih memenuhi persyaratan sifat fisik tablet berdasarkan pustaka yang ada.

ABSTRACT

The research about gelatin reworking potential as a binder agent in the making of metamphyron tablet using wet granulation method has been conducted, in order to knowing the gelatin cohesiveness ability as binder agent of metamphyron tablet after several compression. To aim this purpose, the research conducted three times compression in every formula with the same pressure. The result of each compression was disintegrating to gain the 14/13-mesh size granule, and then the physical characteristic of the granule was tested. After the requirement was achieved, the granule was formed into tablet and then its physical characteristic was tested.

This study was simple experimental research by using one way pattern random method. The data gained was analyzed with two approaches, first was theoretical approach that was conducted by comparing the result to the literature. Second was statically approach by using one way analysis of variance (ANOVA) with its reliability was 95%, if there any significant differences, it will be proceed with the Scheffe test.

The result of the research showed that there was recompression effect of binder agent to the physical characteristic of the tablet that was produced. The tablet that produced by one compression having lower hardness and friability, and faster disintegration period compared to the tablet which produced trough several compression. The tablet that produced trough twice compression, its friability tended to higher, its hardness tended to be higher and having longer disintegration period tended. Nevertheless, cohesiveness ability of gelatin as a binder agent was still good, it was because of the tablet produced by recompression was achieved the physical characteristic requirement of the tablet base on reference.