INTISARI

Pemanfaatan sumber daya alam di Indonesia masih belum maksimal. Salah satunya ditunjukkan dengan rendahnya tingkat kemandirian Indonesia dalam penyediaan bahan baku obat. Bahan Baku Obat (BBO) yang meliputi zat aktif dan zat tambahan (eksipien) yang diperlukan dalam industri farmasi hampir 95% masih impor, seperti garam dan amilum. Penelitian ini bertujuan untuk mengetahui adakah perbedaan kualitas dari karakteristik fisika, kimia dan mikrobiologi amilum lokal *food grade* dengan amilum *pharmaceutical grade*. Sampel yang digunakan adalah amilum manihot yang beredar di pasaran yaitu amilum manihot merek Rosebrand dan Cap Pak Tani Gunung, dan digunakan pembanding amilum *pharmaceutical grade*, yaitu Amprotab. Penelitian ini dilakukan di Laboratorium Fakultas Farmasi Universitas Gadjah Mada Yogyakarta.

Penelitian dilakukan dengan cara menguji karakteristik fisika, kimia dan mikrobiologi amilum manihot *food grade* dan *pharmaceutical grade*. Hasil uji dianalisis dengan menggunakan statistika deskriptif dan dilanjutkan dengan analisis perbandingan antar sampel secara deskriptif komparatif dengan pendekatan kualitatif, dengan mengacu pada standar yang terdapat dalam Farmakope Indonesia dan USP-NF.

Hasil dari pengujian dan perbandingan amilum *food grade* dan *pharmaceutical grade* menunjukkan bahwa tidak ada perbedaan kualitas pada karakteristik fisika dan kimianya, namun terdapat perbedaan kualitas pada karakteristik mikrobiologinya. Karakteristik fisika dan kimianya memenuhi syarat amilum manihot *pharmaceutical grade* yang terdapat dalam Farmakope Indonesia dan USP-NF, namun tidak pada karakteristik mikrobiologinya.

Kata kunci *:* komparasi, amilum, *food grade, pharmaceutical grade*

ABSTRACT

Utilization of natural resources in Indonesia is still not maximal. One of them is shown by the low level of Indonesian independence in the supply of drug raw materials. Almost 95% of drug raw materials that required in the pharmaceutical industry which include active substances and additives (excipients) are still imported, such as salt and starch. This study aims to determine whether there are differences in the quality of physics, chemical and microbiological characteristics of local food grade starch with pharmaceutical grade starch. The samples used were starch manihot which sold in the market namely starch manihot brand Rosebrand and Cap Pak Tani Gunung, and used the comparison of amylum pharmaceutical grade that is Amprotab. This research was conducted at the Laboratory of Faculty of Pharmacy Gadjah Mada University of Yogyakarta.

The research was conducted by examining physics, chemical and microbiological characteristics of starch manihot food grade and pharmaceutical grade. The test results were analyzed using descriptive statistics and continued with comparative descriptive comparative sample analysis with a qualitative approach, with reference to the standards contained in the Indonesian Pharmacopoeia and USP-NF.

The results of the testing and comparison of food grade and pharmaceutical grade starch showed that there was no difference in the quality of physical and chemical characteristics but there were differences in the quality of microbiological characteristics. Physical and chemical characteristics qualify for Farmakope Indonesia and USP-NF, but not on microbiological characteristics.

Keywords : *comparation, starch, food grade, pharmaceutical grade*