

As we have seen, all powders of medicinal raw materials and their mixture, which also was subject to delamination, had very low technological properties, such as low flowability, high index of the angle of natural slope, high humidity, which we proposed to correct using the method of wet granulation. For this, we prepared solutions of moisturizers, as which we used distilled water, ethyl alcohol in concentrations of 40, 75, and 96%, as well as solutions of potato starch and methylcellulose in concentrations of 2, 3 and 5% and studied their influence on the technological parameters of the obtained granulate. It was established that the use of moisturizers allowed to increase low index, and the use of distilled water and ethanol in different concentrations (40, 75 and 96%) did not lead to a significant improvement of this indicator, at the same time, the use of solutions of potato starch and methylcellulose significantly increased the flowability indicator, especially at a concentration of 3 and 5%

Conclusions. Based on the conducted research, the composition was proposed pharmaceutical composition in the form of capsules of tonic action. Conducted tests on the technological properties of a mixture of dry extracts. It has been proven that it has very poor flowability and moisture. Conducted research on the selection of excipients with the aim of selection of a humidifier for wet granulation.

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MICROSCOPIC STUDIES OF STEVIOSIDE POWDER

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Actuality. Diabetes at the global level, unfortunately, firmly holds the primacy among the most common and dangerous diseases of the 20th century, and now the 21st century. The global epidemics of plague, smallpox, and typhus, which raged in the past, have gone into the past, but their place has not remained empty. New diseases correspond to new times. Medicine will call the previous century "the era of diabetes", which are the main causes of death worldwide: no other reason kills more people every year than from these diseases[3].

Therefore, an important task of medicine and pharmacy is the search for effective substances of plant origin and the development of drugs based on them. Trehalose stevioside is promising in this context. These substances have proven themselves in the complex treatment of diabetes mellitus[1,2,4].

The purpose of the work. Analyze and summarize the data of scientific literature on the issue of methodological approaches to the creation of tablet dosage forms as well as the state of development of drugs for the prevention and treatment of diabetes mellitus in the world and to confirm the prospects of creating medicines based on stevioside

Materials and methods: Pharmaceutical development of a new drug is based on such components as the development of a methodological approach, biomedical requirements for drugs, pharmaco-technological tests, marketing analysis of the modern pharmaceutical market

Results. Powdered substances are polydisperse systems with different shapes and sizes of particles. Recently, crystallographic studies are often used in the pharmaceutical development of various dosage forms. Therefore, it is advisable to study the shape and size of the particles of the substance under study, especially since this study allows us to predict the need to use certain groups of excipients to develop the composition and technology of a solid dosage form. Also, the shape and size of particles determine such technological characteristics of substances as flowability, compressibility, bulk density, specific surface area.

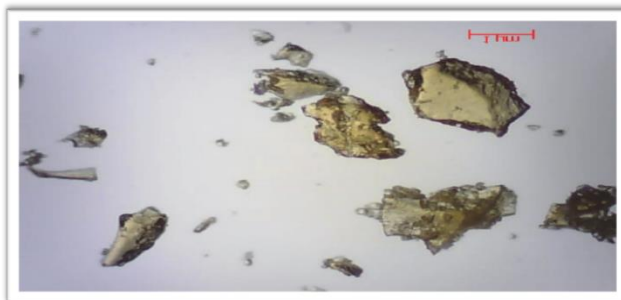


Fig. 1. Results of crystallographic study of stevioside powder

Conclusions. The data obtained indicate that it has transparent particles of white-yellow color, which are a polydisperse crystalline system of an anisodiametric type. According to the thickness and length of the particle, this powder can be attributed to the group of finely dispersed powders. The crystals have a smooth surface and jagged edges. The shape factor varies from 0.25 to 0.8. The analysis did not allow us to identify the determining geometric particle size, which makes it possible to classify the substance as polydisperse. This, in turn, may indicate unsatisfactory flowability of the powder and predict the introduction of excipients from the group of fillers and lubricants

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ВИВЧЕННЯ ПОКАЗНИКІВ ОСМОТИЧНОЇ АКТИВНОСТІ СУПОЗИТОРНИХ ОСНОВ

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Вступ. Згідно Державного реєстру ЛЗ про зареєстровані ЛЗ на ринку України станом на 06.11.2022 зареєстровано 14279 найменувань ЛЗ, з них 4352 – вітчизняного виробництва. Згідно АТС класифікації супозиторії відносяться до групи С05А - засоби для лікування геморою і анальних тріщин для місцевого застосування. До групи С05А входять: С05АА - кортикостероїди; С05АD - місцевоанестезуючі засоби; С05АХ - інші засоби для лікування геморою і анальних тріщин для місцевого застосування.

Кількість цієї групи включає у собі 16 препаратів 9-ти торгових найменувань. У тому числі частка вітчизняних ЛЗ становить 50 % (8 найменувань), інші 50 % (8 найменувань) –