The purpose of this work was to generalized the results of studies of physical-chemical properties of oral suspension, which are the basis of quality control methods, the definition of self-life and storage conditions of the medicine.

Suspensions are an important class of pharmaceutical dosage forms. The advantages of suspension dosage forms include effective dispensing of hydrophobic drugs; avoidance of the use of cosolvents; masking of unpleasant taste of certain ingredients; offering resistance to degradation of drugs due to hydrolysis, oxidation or microbial activity; easy swallowing for young or elderly patients; and efficient intramuscular depot therapy. In addition, when compared to solution dosage forms, relatively higher concentration of drugs can be incorporated into suspension products. At present, many drug formulations are available as suspensions, such as:

- ✓ oral antacid suspensions;
- ✓ oral antibacterial suspensions;
- ✓ oral analgesic suspensions;
- ✓ oral antifungal suspension;
- ✓ dry antibiotic powders for oral suspensions preparation;
- ✓ topical lotions etc.

The pharmacy suspensions making requires the special attention.

One of the characteristic features of suspensions is their ability to settle. That's why the stability is one of the important requirements to them. There are the sedimentary and aggregational suspension stability. Sedimentary stability prevents the particles from sedimentation due to their size. Suspensions stability will be the more, the less is the radius of dispersive phase. So, the grinding process is the important technological operation at suspensions preparing, which ables to disperse the solid drug particles as thin, as possible. Suspension stability depends on the ratio of dispersed particles in dispersive phase with dispersive environment. The denser the dispersive phase is, the faster the particles settle; when the density is lower, they surf faster. When the densities are near the equal index, the suspension is the most stable. The suspensions sedimentation obtains two different variants. At first, the particles settle separately, without connection with each other. The settlement is slower. This dispersive system is classified as aggregatively stable. But we can have another accident, when the solid suspension particles coagulate under the action of molecular gravity forces and sediment in the whole flakes form. Those systems are aggregatively unstable.

In accordance with the requirements of SPU, oral liquid medicines (suspensions) are controlled by the following parameters: description, identification, homogeneity, content of the container, microbiological purity, quantitative determination. If necessary, the particle size, pH, admixture, tightness of the container are controlled also. The aggregational stability of the oral suspension was studied in accordance with generally accepted methods.

Based on the obtained results a project of analytical normative documentation that regulates the quality of the oral suspension have been developed.

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THE URGENCY OF MEDICINES CREATION BASED ON PLANT RAW MATERIALS

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During all periods of development of the pharmaceutical market, the interest of scientific medicine to medicinal plants as a source of raw materials for the production of effective and safe medicines has not diminished. In our country, in recent years, not only has the number of producers involved in the production of medicinal plant raw materials increased, but also increased the number of consumers who use herbal medicines as a more mild, safe and complex treatment.

The pharmaceutical market is a dynamic sector of the world economy, which is explained by the growth of its capacity, the rapid expansion of the range and the low elasticity of demand for medicines. For specialists in the pharmaceutical profile, knowledge of the specific conditions for

the dynamics of the development of the Ukrainian pharmaceutical market in various regions of the country is of great importance, since they directly affect the market of raw materials - the medicinal plant base. The Ukrainian market of herbal medicines is characterized by a tendency to grow, despite the small volume of this segment in the total volume of the pharmaceutical market.

The analysis of literature data shows that currently, medicinal plant preparations constitute about 10% of the total number of drugs registered in the domestic market. In addition, according to the forecasts of specialists, the total demand for medicinal plant raw materials will grow by 17.8% on average from 2010 to 2020, including 4.8% in the healthcare system and 31.8% in the chemical and pharmaceutical industry.

At the same time, there are a number of problems hampering the situation in the market of medicinal plant raw materials, in particular: there is a tendency to deplete the natural resources of medicinal plants; deteriorates the quality of raw materials under the influence of radiation and man-made pollution; a significant number of non-official for the Ukrainian market species of medicinal plants and medicinal plant raw materials; competition to traditional types of medicinal plant raw materials from the side of biologically active additives to food is observed. Medicinal herbal preparations are obligatory subjected to state regulation of the turnover of medicinal products; this gives a significant advantage on the part of quality and efficiency in comparison with biologically active additives. It should be noted that in most dietary supplements active ingredients of plant origin are introduced in the form of the same medicinal plant material, is not subject to mandatory state regulation and has a simplified surface standardization and control system. All this affects the quality of care.

It has long been ethnoscience uses more than 10 000 species of plants in the treatment of various diseases in the form of tinctures, lotions, and pomace extracts from medicinal herbs. To date, about 300 species of plants are considered official in our country and 220-230 species of medicinal plants are used for medical purposes according to the current regulatory documentation. Of these, about 130 processes the chemical-pharmaceutical industry, and about 90 kinds of medicinal plants after primary processing goes to the pharmacy chain, annually undergoing changes in the range of 10-15% as a finished product. Since supplies are excluded some species due to the depletion of their natural resources or the cessation of the release of medicinal products obtained from them, have lost their significance. At the same time, new types of raw materials for the production of newly medicinal herbal preparations are included in the nomenclature of blanks.

The growth of the pharmaceutical industry and the constant development of new and more effective synthetic and biological medicinal products do not reduce the importance of medicinal plants in many countries. On the contrary, due to the growing population in developing countries and interest, manifests itself in industrialized countries, the demand for medicinal plants has significantly increased, as well as products based on them. Recognition of their role for health is promoted by the requirements of different countries in the quality, safety and efficacy of medicinal plants, as well as the assistance of the World Health Organization in the preparation of the legislative framework in this field.