To this end, the recipes of Kharkiv pharmacies were studied and analyzed, namely, about 50 formulations of soft medicinal forms, causing difficulties in preparation. Ichthyol is widely used in medical practice, especially in dermatology in the treatment of various skin diseases.

We selected three difficult prescription ointments for the treatment of dermatological diseases containing ichthyol, which, due to its physico-chemical properties, creates problems in the technology for the extemporal preparation of many dosage forms.

The purpose of this study was to eliminate the difficulties that arise in the preparation and storage of ointments in order to increase their stability and extend shelf life.

Combined ointments were prepared taking into account generally accepted rules. For stabilization, the same auxiliary substances were used as in the preparation of emulsion ointments or various technological methods, which often play no less important role than the use of various auxiliary substances as a stabilizer.

Conclusions. The technology of multicomponent ointments for difficult formulations is experimentally substantiated, taking into account the physico-chemical properties of the ingredients that make up their composition. The stability of the prepared preparations during storage is determined.

BIOLOGICALLY ACTIVE SUBSTANCES OF WILLOW BARK IN TREATMENT OF INFLAMMATORY PROCESSES IN JOINTS

Postoy V. V., Mykhailyk D. O. Scientific supervisor prof. Vishnevska L. I. National University of Pharmacy, Kharkiv, Ukraine liliiavyshnevska@gmail.com

Introduction. Latin name of white willow – Salix alba. For medicinal purposes, usually used bark, which are harvested from trees, not younger 2-3 years old, in the spring, before the emergence of the first leaves, during the fecundity. The removed bark is cut and poured in airy places, laid out in a thin layer, then it is dried in dryers at $50-60\,^{\circ}$ C. Dried willow bark is kept no longer than 4 years.

The **aim** of the work was to determine the possibility of using the willow bark extract when developing the drug for the treatment of inflammatory diseases of the joints.

Results and discussion. Willow bark contains a large number of biologically active substances: glucose, flavonoids, glycosides, tannins, saligenin, and the main active ingredient is salicin, a compound similar in quality to aspirin. However, salicin does not adversely affect the digestive system.

A number of studies have shown that concentrated willow extract is effective in reducing pain and inflammation in joints.

The tea from the willow bark is considered "natural herbal aspirin," it should be noted that salicin containing the white willow bark gives less side effects than the aspirin itself. Acetylsalicylic acid (aspirin) was first obtained from the willow extract. In this case, aspirin may be more beneficial because willow bark has got desirable substances. Aspirin should be used only on prescription because long used can cause internal bleeding. Once in the body, salicin is cleaved in the liver to salicylic acid, which relieves pain, inflammation, and temperature.

Folk medicine also uses young leaves of willow, on the basis of which also make broths, infusions and puddings.

When rheumatism is cooked with a decoction: pour boiled bark on boiling water, allow it to stand for about an hour. It is recommended to take broth no more than three times a day.

Conclusions. The development of new medicinal products with bark willow extract, which would possess, in particular, anti-inflammatory properties, at the present stage is actual.