

PHARMACOGNOSTIC STUDY OF RAW MATERIALS FROM THE FRAXINUS EXCELSIOR

Jarashova M., Abdillaev B.

National University of Pharmacy, Kharkiv, Ukraine

musienko.pharm@gmail.com

Introduction. European ash (*Fraxinus excelsior*) – it is a tall tree, a representative of the family Oleaceae, with openwork oval crown and straight subramose branches. Bark gray, cracked, black kidney, large leaves, imparipinnate. Flowers of Ash are small, purple or brown, without perianth, gathered in panicles. Fruit-lionfish linear form. Flowering ash in April and May, and the flowers he appear before the leaves. He is originally from Europe and the Caucasus, from where it spread in Asia Minor. Now it is customary to plant deciduous and mixed forests of the European part of Russia, it is growing in the Crimea, Moldova and the North Caucasus. Spring juice ash, because of the high content of mannitol is used as a substitute for sucrose for diabetic patients.

Medicinal raw materials in the tree are the leaves, fruits and bark. In European ash contains carbohydrates in large quantities, salts of organic acids, essential oils, saponins, vitamin C, carotenoids, resin and bitter. In fruits, fats and proteins, in addition, can be found vitamins C and P.

The bark ash contains sugars, mannitol, phenolics, including coumarins, alkaloids. Established antibacterial activity of infusion ash leaves against the tubercle bacillus. The essential oils of the plant detrimental effect on fungi and protozoa. Ash bark extract is part of the food additive "Revmavit", which is used in the treatment of arthritis. Ash Drugs used in official medicine in Germany and Switzerland as antirheumatic and diuretic.

Aim. To conduct a pharmacognostic studies of the semina of *Fraxinus excelsior*.

Materials and methods. The object of the study were the semina of *Fraxinus excelsior*, harvested in May – July 2015.

Results and discussion. In the light of a comprehensive study of the plants studied European ash seed.

We conducted obtain polysaccharide fractions from leaves, bark and flowers of European ash and studied their qualitative structure. Obtained fatty oil, determined the amounts, studied the fatty acid composition of fat oil.

Conclusions. These results confirm the prospect of studying European ash as a source of various kinds of medicinal raw materials.