

Mykhailyk D.
**RESEARCH ABOUT DEVELOPMENT
OF MEDICINAL DRUGS FROM WHITE WILLOW BARK**
Scientific supervisor L. Vishnevskaya,
National Pharmaceutical University, Kharkiv, Ukraine

There are about 12 thousand plants that have healing properties and are used in both traditional and folk medicine. In this case, medicinal plants are often combined with other techniques of treatment.

The use of plants as drugs has come from ancient times and is still playing a significant role in the arsenal of medicines in modern medicine. This is due to some of the benefits of phytotherapy compared with synthetic drugs. The interest in phytotherapy is a cause of changes in the age structure of the population: an increase in the elderly and the elderly who are usually suffering from some diseases that require long-term use of drugs and the risk of development of side effects should be small.

Herbal remedies play big sense in the prevention of diseases. No wonder, that absolutely healthy people are not present in our time, most of us are in so-called the third condition - between health and disease, on the verge of failure of adaptive mechanisms, that is, when the body needs an easily corrective action of the plant, normalizes slightly modified functions of the organism. It should be noted that the plants raw materials are a relatively cheaper and affordable source of medicinal products.

A special role phytotherapy plays in pediatric practice, because plants act softer and rarely give negative complications. Uncommon side effects can be explained by the fact that "Herbal medicine is a valuable biogenetic complex, which includes active substances-proteins, essential oils, trace elements, vitamins and more." It is believed that such a complex was formed in a living cell, therefore, it has a greater resemblance to the human body than an isolated, chemically pure active substance, therefore it is easier to assimilate and gives less side effects. It is believed that such a complex was formed in a living cell, therefore, it has a greater resemblance to the human body than an isolated, chemically pure active substance, therefore it is easier to assimilate and gives less side effects.

Taking into account the above, the object of our study was the willow white (*Salix alba*). White willow bark contains a large number of biologically active substances: glucose responsible for stress relief, metabolic processes, brain nutrition, flavonoids (about 2% catechins, flavones, flavonols, flavanones) produce antioxidant and anti-inflammatory effects, glycosides (3%) decrease the level of cholesterol affects the immune processes, tannins (about 12%) have anesthetic, anti-inflammatory effect, tannin (11% -12%) produces astringent effect, so the bark helps with diseases of the gastrointestinal tract.

Biologically active substances in the complex have hemostatic, antiseptic, diuretic action. They expand coronary vessels and reduce the rhythm of the heart, prevent the formation of blood clots, increase bronchial secretion, promote blood coagulation, have the ability to increase the allocation of pancreatic juice, have an antiviral effect.

Also *Salix alba* is used for urogenital system diseases, liver and spleen, bleeding. When applied externally helps with sweating, sore throat, has a bactericidal effect on the oral cavity during rinsing.

Drugs of white willow bark are presented in the form of crushed powder (extract), tablets, capsules, tea. In the form of capsules and pills is an extract that is obtained by vacuum extraction.