

**Conclusion.** Analyzing the results obtained during the experiment, we arrived at the following conclusions. The solution of aloe juice and kalanchoe is a stimulant and the development of shoots and roots for bushes (black currants).

Infusion of willow branches – is a stimulator for the formation of roots and accelerates the development of the root system. The use of raw branches of willow and “Cornevin” solution showed similar results. Apical dominance is observed, the growth of lateral shoots is slower than when stimulating the solutions of aloe and kalanchoe juice.

## **IN VIVO STUDY OF HOW SOME SALVIA OFFICINALIS EXTRACTS AFFECT DIURESIS IN RATS**

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**Introduction.** In medical practice non-steroid anti-inflammatory drugs (NSAIDs) commonly used for pharmacotherapy of pain syndrome of different genesis, for treatment of various inflammatory diseases. NSAIDs have many side effects such as nausea, ulcerations, hepatic and kidney toxicity, etc. Search of safe and effective component among different salvia officinalis extracts as an alternative to NSAIDs defined as a goal point. Considering so salvia officinalis is already being used in folk medicine and dentistry for treatment and prevention of different inflammatory and local infectious diseases.

**Aim** was to investigate how complex of phenolic compounds with argenin, polysaccharide complex, cleared complex, saponin complex affect diuresis in rats.

**Materials and methods:** the effect on diuresis in rats was studied by the method of Berkhin E.B. White nonlinear rats weighing 130-160 g were used. Six animals in the study groups and in the control group. In the study of diuretic action rats contained in a constant diet with free access to water. Before the start of experimental studies, rats were kept for 2 hours without food and water. Doses of 10, 20, 50, 70 mg/kg were studied in the form of fine water suspension which was introduced by a catheter into the stomach of animals. After 30 minutes, intra-gastric administration of tap water via special metal probe which was introduced at a rate of 3 ml per 100 g body weight of the animal. Urine was collected. Diuresis was assessed after 2 and 4 hours in ml and calculated into the percentage to the control. The content and care of the animals were in accordance with the provisions of the European Convention for the Protection of Vertebrate Animals used for experimental and other scientific purposes (Strasbourg, 1986).

**Results and discussion.** Complex of phenolic compounds with argenin, polysaccharide complex, cleared complex, saponin complex appeared to have antidiuretic effect with a tendency to increase with decreasing the dose; maximum antidiuretic effect was obtained using lower doses.

**Conclusions.** Complex of phenolic compounds with argenin, polysaccharide complex, cleared complex, saponin complex of salvia officinalis were investigated in doses 10, 20, 50, 70 mg/kg to see how they affect diuresis in rats. All the extracts have shown antidiuretic activity in various intensity. Some of them have shown biphasic curve of action saving the main tendency low dose – high action effect. It is possible to conclude that salvia complexes similarly to NSAIDs inhibited diuresis in rats. Consequently, therefore salvia officinalis is a perspective plant for further pharmacological studies.

## **ISOLATION AND IDENTIFICATION OF LIMONENE**

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**Introduction.** Limonene, as one of the main components of the essential oil of orange has antiviral, hormone-controlling, antioxidant effects; increases the level of enzymes in the liver. Limonene can dissolve readily fats, waxes and petroleum products, is an alternative to toxic solvents (in accordance with the principles of «green chemistry» and intermediate raw materials in the chemical synthesis of medicinal