# GOSPODARKA I INNOWACJE



*Volume: 42 | 2023* 

Economy and Innovation ISSN: 2545-0573

For more information contact: editor@gospodarkainnowacje.pl

# ASSESSMENT OF THE QUALITY OF MEDICINAL PLANT RAW MATERIALS, ESSENTIAL OILS AND HERBAL PREPARATIONS OF LAVENDER OFFICINALIS, ROSEMARY OFFICINALIS, SAGE OFFICINALIS

### Shokirova Gavkharoy Nazirgulomovna, Ph.D

Doctor of Philosophy in Agricultural Sciences Teacher

## Madina Odiljon's Shirmatova

Master's student at the Department of Botany and Biotechnology, Ferghana State Universiti, Ferghana, Republic Of Uzbekistan

#### ARTICLEINFO.

# **Keywords:** metabolism, preparations, reactions, pharmaceutical, medicinal plants.

#### **Abstract**

The limited number of essential oils, extracts and individual components used in domestic medicines determines both the spectrum of their pharmacological action and the scope of application in medicine. These are mainly antiseptic, anti-inflammatory and wound-healing agents intended for the treatment of diseases of the respiratory tract, gastrointestinal tract, wounds and burns.

http://www.gospodarkainnowacje.pl/ © 2023 LWAB.

Medicine to drugs obtained from plant materials. This trend is typical not only for countries that traditionally and widely use medicinal plants (India, China, etc.), but also for countries with a highly developed chemical and pharmaceutical industry, which have great opportunities for carrying out large-scale work in the field of drug synthesis. To date, information has been accumulated on the biological activity of about 12,000 chemical compounds isolated from medicinal plants, with a fully or partially established structure, belonging to various classes of natural substances. As a result of a set of chemical reactions occurring in a plant cell, products of primary and secondary metabolism accumulate in plants, which determine the multiple and harmonious nature of their effect on the human body

For this reason, herbal preparations are, as a rule, less allergenic than synthetic drugs, which allows them to be used for chronic diseases for a long time

Centuries-old traditions and experience of Russian folk medicine have formed a high level of trust in medicinal plants in almost all social groups of the population. The resulting demand for herbal medicines in Russia is much higher than in most developed countries where, nevertheless, in recent years the share of natural medicines has accounted for about 20-25% of all prescriptions prescribed in outpatient practice

Currently, in the Russian Federation, herbal medicines are widely used in official medical practice. They are included in more than 85 pharmacotherapeutic groups of drugs and often do not have equivalent substitutes [15]. At the same time, the most common among both imported and domestic

Kielce: Laboratorium Wiedzy Artur Borcuch



herbal medicines are liquid dosage forms and, in particular - tinctures. The current stage of use of these drugs is based on the rational use of not only accumulated experience, but also on the achievements of scientific medicine in the field of studying the composition and characteristics of the biological activity of medicinal plants and active compounds isolated from them. A number of studies have shown that these drugs contain unique combinations of biologically active substances that provide a wide range of therapeutic and prophylactic effects

An analysis of domestic and foreign herbal medicines used in the modern pharmaceutical market indicates that in foreign practice, essential oil raw materials and essential oils are more widely used than in domestic medical practice. At the same time, it should be noted that in recent years the popularity of certain areas of traditional treatment methods has increased, in particular aromatherapy, in which the use of essential oils and preparations based on them is relevant.

The Register of Medicines of the Russian Federation includes about four dozen domestically produced drugs containing biologically active substances from essential oils. Basically, these are multicomponent drugs that provide a complex effect on the human body. The principle of combining various biologically active complexes of essential oil plants (alcohol extracts, essential oils and their components) in a medicinal product allows, in addition, reducing the effective dose of each of them and thereby avoiding possible side effects that occur when using high doses of essential oils (irritation, allergic reactions).

It should be noted that the component composition of these drugs is not very diverse: 42% of the drugs contain essential oils, the range of which is limited1. Thus, 7 preparations contain eucalyptus oil, 10 contain mint oil and menthol. Of other essential oils, in some cases clove, calamus, fir, pine and turpentine are used.

The pharmacological effect of essential oils is enhanced by the addition of individual substances, such as menthol, thymol, and camphor. Along with essential oils, the composition of the analyzed preparations includes alcoholic extracts and tinctures from chamomile flowers, yarrow herbs, thyme, thyme, oregano, and hop cones.

The limited number of essential oils, extracts and individual components used in domestic medicines determines both the spectrum of their pharmacological action and the scope of application in medicine. These are mainly antiseptic, anti-inflammatory and wound-healing agents intended for the treatment of diseases of the respiratory tract, gastrointestinal tract, wounds and burns. In addition, the pain-relieving, distracting and warming effects of essential oil preparations are widely used. A number of preparations containing essential oils are recommended for kidney stones.

#### References

- 1. Акашкина А.П., Российская Г.И., Лякина М.Н. Разработка и стандартизация фитопрепаратов // Актуальные проблемы создания новых лекарственных препаратов природного происхождения: Материалы II Междунар. съезда-Спб., 1998-С. 9-13.
- 2. Базарон Э.Г., Асеева Т.А. Вайдурья онбо трактат индо-тибетской медицины.- Новосибирск: Наука, 1984.-116 с.
- 3. Балковая Е.Н. Физиолого-биохимическая характеристика эфирномасличных растений. Днепропетровск, 1958.-175с.
- 4. Бандюкова В.А. Применение цветных реакций для обнаружения фла-воноидов путем хроматографии на бумаге // Растительные ресурсы.-1965.-Т 4. С. 591-599.
- 5. Баньковский А.Д. Исследования растений, применяемых в народной медицине, на содержание алкалоидов // Труды ВИЛАР, вып. 9. М.: Медгиз, 1949, - С. 134-139.
- 6. Блинков И.Л. Лекарственные растения в клинике. М., 1983. 63 с

Kielce: Laboratorium Wiedzy Artur Borcuch

