

## ASPECTS OF USE OF GLYCYRRHIZA GLABRA EXTRACT

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*Glycyrrhiza glabra* is a plant found in Asia and parts of southern Europe. In Ukraine, this plant is found in the Crimea and the Donetsk, Odesa, Mykolaiv, Kherson and Zaporizhzhya regions. Licorice - a perennial herb of the legume family Fabaceae.

Licorice root is used in medicine since ancient times, it was used the people of ancient India, Tibet, China. Currently, *G. glabra* is going through his second birth.

Liquorice preparations are used as an expectorant, anti-inflammatory drugs for respiratory diseases, in the treatment of gastric and duodenal ulcers. Some components of licorice are successfully used in the treatment of skin diseases (eczema, psoriasis, urticaria, allergic dermatitis and dermatitis) since they exhibit  $H_1$  – histamine receptors. Also, there are data on the positive dynamics of healing burns and festering wounds of the skin under the influence of the extract of licorice.

The roots and rhizomes of licorice – *Radix Glycyrrhizae* provide interesting from the point of pharmacological view flavonoids (3 – 4%) and triterpene saponins (glycyrrhizin about 20%).

At the Department of the industrial technology of drugs (NPhU) is developing a combination drug for the topical treatment of dermatological diseases and wound healing, which includes a dry extract of licorice root. The investigation of soluble extract, derivatographic studies to determine the melting temperature, the optimum process conditions developed introduction of dry extract of the ointment on the emulsion base.

Phytochemistry has regained its strength in the drug discovery process in the past few years, as nature is the best inventive chemist providing ample chemical structural diversity. The present review highlights the contribution of *G. glabra* in

modern medicine for the development of new ointment drugs for the treatment of wound healing and skin diseases.

## **ETHANOL EXTRACT STANDARDIZATION FROM ACHILLEA MILLEFOLIUM HERB**

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There are more than 20 remedies at pharmaceutical market in Ukraine and Russia Federation (like Rotokan, Wundehil etc.) which contain biologically active substances obtained from yarrow herb (*Achillea millefolium*). Still, there is neither monodrug, nor biologically active supplement made of yarrow herb which should be reconsidered as this plant raw material has a broad spectrum of pharmacological activity and can become a basis for creation of new drugs with antimicrobial and anti-inflammatory effect.

The study of extraction procedure shows that liquid extract obtained with the help of 60% ethanol has the highest antimicrobial activity.

The preliminary chemical research of the yarrow herb ethanol extract shows that it contains hydroxycinnamic acid derivatives, coumarins, flavonoids, polyphenolic compounds, chlorophylls and terpenoids. The obtained extract turns out to have antimicrobial activity against gram-positive and gram-negative bacteria and fungi. According to all the data, mentioned above, there is a possibility to develop a new remedy with antibacterial activity from *Achillea millefolii* herb.

Going on with this research, the standardization of the extract should be carried out according to the requirements of the State Pharmacopoeia of Ukraine. Our suggestion is to make the identification of the extract regarding flavonoid and terpene content, make a control of a relative density, ethanol, methanol and 2-propanol content as well as to control the dry residue and heavy metal content,