# Pharmacological Properties Of Licorice.

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Annotation: Licorice species is a perennial herb of the family Fabaceae, 50-100 cm tall. Of the species of licorice grown in Central Asia, the following two types are used in medicine: Common licorice (licorice) - Solodka obiknovennaya Glycyrrhiza glabra L. and Ural licorice G - uralensis Fisch. In modern medicine, the demand for drugs derived from natural sources is growing. Such a medicinal plant is widely used in medicine as an anemic plant, in diseases of the respiratory tract, as a expectorant, cough suppressant, anti-inflammatory drug.

keywords: Extract of the respiratory tract, licorice root, inflammatory diseases, licorice plant, gilisirrizin.

## I. INTRODUCTION

Icorice is an ancient medicinal plant. Licorice root is used in folk medicine for the treatment of various diseases, especially burns and dry extracts of the root, and the juice is used as a expectorant, chest pain, shortness of breath, dry throat, whooping cough, diuretics, and mild constipation in chronic constipation. Abu Ali Ibn Sina treated the roots of this plant with inflammation of the kidneys, bladder and stomach, as well as isthmus and lung diseases. Glycyrrhizal root drugs are used to treat asthma, eczema, allergic dermatitis and other diseases, as well as for the treatment of gastric and duodenal ulcers and inflammatory diseases due to their anti-inflammatory and spasmodic effects of liquvirtin, licuroside and flacarbon. Licorice root powder, The concentrated and concentrated juice of the cut root is used in pharmaceutical practice in the preparation of hapdori, to improve the taste of liquid dosage forms and tea-extracts. Complex licorice powder used as a root powder exudate, extract of the chest elixir (Elexir pectoralis) used in respiratory diseases, cut root fragments are included in the expectorant and diuretic and laxative teas used in lung diseases. The root of the licorice plant is widely used in the food industry (beer, kvass, etc.) and in the textile, chemical and other sectors of the economy. Complex licorice powder used as a root powder exudate, extract of the chest elixir (Elexir pectoralis) used in respiratory diseases, cut root fragments are included in the expectorant and diuretic and laxative teas used in lung diseases. The root of the licorice plant is widely used in the food industry (beer, kyass, etc.) and in the textile, chemical and other sectors of the economy. Complex licorice powder used as a root powder exudate, extract of the chest elixir (Elexir pectoralis) used in respiratory diseases, cut root fragments are included in the expectorant and diuretic and laxative teas used in lung diseases. The root of the licorice plant is widely used in the food industry (beer, kvass, etc.) and in the textile, chemical and other sectors of the economy.

Licorice species are found in the deserts and semi-deserts of Central Asia, especially in Turkmenistan and Uzbekistan (along the Amudarya and Syrdarya rivers), Kazakhstan (along the Syrdarya and Ural rivers and Lake Balkhash), the Caucasus and the former Soviet Union in southern Europe and saline deserts in Siberia. grows on rivers and lakes, in crops as weeds, on sandy soils and slopes, and in tugai forests. Licorice stem consists of several, erect, unbranched or low-branched leaves, odd-feathered complex, 3-7 pairs of elliptical, elongated-ovate or pinnate, flat-edged leaves, arranged in series on the branches with a stem using a band.

Licorice root contains up to 24% saponin gilisyrizin compound, up to 20% sugar, around 4% up to 28 different flavonoids, coumarins, 6-34% starch, 2-4% bitter, pectin and other substances. The main biologically active substances of the root are glycyrrhizin compounds and flavonoids. From their combination are prepared various medicinal phytopreparations. Glycyrrhizin is 40 times sweeter than sugar. The expectorant effect of licorice phytopreparations is due to the glycyrrhizin in its root. Under its influence, the secretion of cells of the trachea, bronchi and mucous membranes increases. Increases the activity of ciliated epithelium. The sputum in the upper respiratory tract is diluted, facilitated, and the cough is softened and reduced. At the same time the root of anise and its extract have a spasmolytic effect, relaxing the smooth muscles in the walls of the bronchi. This effect is manifested by the effect of liquitoside on the flavonoids in the extract.

Another important pharmacological property of licorice root and extract is its anti-inflammatory effect. Such an effect was seen in the reduction and elimination of the inflammatory process caused by histamine, serotonin and bradykinin under experimental conditions. Such an anti-inflammatory effect of the plant is considered to be due to the fact that glycyrrhizin, which is formed as a result of metabolic hydrolysis of glycyrrhizinic acid, reduces inflammation like corticosteoids.

Eucalyptus leaves are rich in tannins and essential oils, which allovs you to prepare special therapeutic infusions for conditions of the respiratory system, as it has a bronchodilator effect. It should be noted that these oils derived from the leaves are sold under the name quinol or eucalyptus. They are used in lotions, as fragrences, and in the pharmaceutical industry for local and domestic use. Interestingly and uncomfortable features; because it is widely used in medicine, in the woodworking industry, as well as in swamps as a biological controller of malaria-infected mosquitoes; it is also an aggressive tree due to its drying up for the ecosystem. An antibacterial drug celled chlorophyll is derived from eucalyptus leaves/

Thick extract of licorice root 20.7 g anise oil 0.34 g novshadil 1.38 g, 20.41 ml of 90% ethyl alcohol, up to 100 ml of water 20-40 drops 6-7 times a day. 3 parts crushed anise root and crushed zubturum leaf, 4 parts tincture of crushed whitewash, (1 g - 200 ml) 1 tablespoon in tracheitis bronchitis drink 2–3 times daily after meals. Dark extract of licorice root (Extractum Glyrrhizae spissum) is used in the preparation of pills.

## II. THE PURPOSE OF THE WORK

Taking into account the above, to study the high efficacy of licorice plant in acute and chronic forms of respiratory diseases.

### III. CONCLUSION

The presence of glycyrrhizin in licorice root is also explained by the fact that this substance is similar to steroid hormones in its properties, as well as the presence of flavonoids, essential oils and polysaccharides, ascorbic acid, resins.

### IV. **REFERENCES:**

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