

## **THE CHEMICAL COMPOSITION OF THE MEDICINAL PLANTAGO**

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### **ABSTRACT**

*This article describes a natural medicinal plantain plantago used in the treatment of peptic ulcer disease, its chemical composition, the effect on the body of biologically active substances contained in plants.*

**Keywords:** *plantago, peptic ulcer, terpenoid, flavonoid, iridoid, syrup, tincture, decoction.*

### **АННОТАЦИЯ**

*В этой статье описывается натуральное лекарственное растение-подорожник, используемое при лечении язвенной болезни, его химический состав, влияние на организм биологически активных веществ, содержащихся в растениях.*

**Ключевые слова:** *подорожник, язвенная болезнь, терпеноид, флавоноид, иридоид, сироп, настойка, отвар.*

### **ANNOTATSIYA**

*Ushbu maqolada oshqozon yarasi kasalligini davolashda ishlatiladigan tabiiy dorivor o'simlik-plantain, uning kimyoviy tarkibi, o'simlik tarkibidagi biologik faol moddalar organizmiga ta'siri tasvirlangan.*

**Kalit so'zlar:** *plantain, oshqozon yarasi, terpenoid, flavonoid, iridoid, sirop, damlamasi, qaynatma.*

### **INTRODUCTION**

Throughout human history, people have sought natural remedies to improve their well-being and get rid of disease. Including the causes of peptic ulcer disease, depending on the degree of treatment, using natural or synthetic drugs, surgery is established.

**Gastric ulcer** ( *lat . Ulcus gastrica* ) is a chronic disease in which trophic disorders occur in the gastric mucosa. Gastric ulcer is more common in men aged 20-50 years. The disease is characterized by frequent recurrences in spring and autumn. The cause of peptic ulcer is usually stresses that strengthen the nervous system of a person, which in turn causes spasms of the muscles and blood vessels of

the gastrointestinal tract. As a result of impaired blood supply to the stomach and juice begins to have a negative effect on the mucous layer of the stomach, gastric ulcers develop. As a result of the appearance of the main cause of stomach ulcers *Helicobacter pylori* bacteria and mechanisms to protect the stomach and violation of the balance between aggressive factors, the gastric mucous membrane which separates proteins (*pepsin* enzyme responsible for digestion) and cannot withstand hydrochloric acid.

### **LITERATURE REVIEW AND METHODOLOGY**

According to statistics, 14% of the world's population suffers from this disease.

Recently, there has been an increasing trend of the disease among women.

There are various methods of treatment of peptic ulcer disease. conservative and surgical methods, drug treatment is carried out on the basis of pathogenetic principle (principle): it is recommended to regulate the protective activity of the membrane, cell regeneration and local blood circulation, the use of antibacterial agents against *Helicobacter pylori*.

The benefits of medicinal plants are recognized all over the world and many scientific studies have been conducted to prove their effectiveness.

In fact, almost half of all pharmaceutical products today are derived from medicinal plants.

It is known that the harmful effects of any synthetic drugs on the body are often mentioned. This is because a synthetic drug used to treat one disease can cause another disease, poison it, or have a detrimental effect on it. But natural medicines made from medicinal plants do not have a negative effect on the human body. However, the use of plants without knowing the chemical composition and effects on the body can lead to negative consequences.

Therefore, it is very important to know the chemical composition of each medicinal plant used.

### **DISCUSSION**

Plantago is a medicinal plant belonging to the plantago family, which has been widely used in folk medicine for 1000 years. Its leaves, seeds, root tinctures, decoctions, ointments, syrups, rinses, eye and nose drops, dried powder form, extracts cough, epilepsy, tonsillitis, gingivitis, tooth decay, inflammation of the oral mucosa, nosebleeds, tuberculosis, hemorrhage vomiting, dysentery, hemorrhoids, hematomezis, abdominal pain, gastrointestinal inflammation and ulcers, obstructive diseases of the liver and spleen, liver cancer, uterine ulcers, menometrorrhagia,

polymenorrhea, urinary incontinence, urinary tract and bladder pain, kidney stones, widely used in conjunctivitis, eye ulcers, gangrene, burns, obesity, itching, skin rashes, dangerous wounds and various diseases. The chemical composition of this plant has been studied by various scientists. Accordingly, the main medicinal parts of the plant: the chemical composition of the leaves and seeds were determined from various extracts.

Saturated and unsaturated fatty acids from the seeds of zubtutum: myristic, palmitic stearic, oleic, linoleic, linoleic, arachidonic, ligroserin, 9-hydroxy-cis-11-octadecyl acids; from carbohydrates: glucose, fructose, xylose, rhamnose monosaccharides, sucrose disaccharide and planteose trisaccharide, polysaccharides.

Carbohydrates in leaves: raffinose (trisaccharide), stachiosis (tetrasaccharide), from leaf wax: triterpene acids, oleanol, ursol, ferulic acids; fatty acids: myristic, palmitic stearic, arachidonic acids; alkaloids: indicaine, plantoginin; caffeic acid derivatives: plantomeidoside, acteoside; flavanoids: apigenin-7-glycoside, baicalin, gipidulin, gipidulin-7-glucuronide, homoplantoginin, luteolin, luteolin-7-glycoside, luteolin-7-diglycoside, nepetin-7-glycoside, scutellarein; iridoid glycosides: aucubin, catapol, asperuloside, gardoside, geniposide acid, mayorozone, melitoside, 10-hydroxymayoroside; vitamins: beta-carotene, ascorbic acid, phylloquinone-vitamin K1, carotenoids; organic acids: oxalate, eruc salicyl, benzoic, gentis, vanilla, para-coumaric, kinematic, para-hydroxybenzoic acids were isolated.

## CONCLUSION

Aucubin glycoside, baicalin and hypidulin, which are found in plants, have anti-inflammatory effects, ursol and oleanol, ferulic acids slow down tumor growth and have anti-hyperlipidemic effects. Almost all flavanoids are antioxidants.

The medicinal properties of zubtutum depend on the amount of biologically active substances in it. In gastric ulcer diseases, it is sought to be highly effective as a result of how the plant is consumed.

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