

Chromatographic Analysis of the Composition of the Plant "Orthilia Secunda"

A. Q. Ganiyev, M. J. Zarifbayeva, R. Kh. Muydinov, Kh. M. Mustanov

Tashkent State Agrarian University

R. A. Abdullayeva

Tashkent Pharmaceutical Institut

ABSTRACT: The article provides information on the distribution of the plant in nature of *Orthilia secunda*, about which family it belongs, as well as the chromatographic analysis of the dried part of the plant, about the presence of macro and micro elements in its composition, the most necessary for human health, and also about the presence of Phytoestrogen and Progesterone in its chemical composition.

KEYWORD: *Orthilia secunda*, unilateral *orthilia*, perennial herbaceous plant, coriander, coumarins, tannins, flavanoids, Quinones, Arbutin and methylarbutine, Vitamin C, tartaric and citric acids, macro and micro elements.

INTRODUCTION

Orthilia-popularly called *orthilia* lopsided-is a plant of the Heather family. It has such a characteristic name, because it is used for the prevention and treatment of female gynecological diseases. This is a low plant with a long stem: every year its root system grows to another 1 meter. The leaves are oval, green. Green-white flowers resemble small bells and are collected in brushes. Since the brushes are bent on one side, they are called one-sided *orthilia* [1].

This is a unique plant, helping many diseases since ancient times, and even diseases that cannot be treated with traditional medicine famous for its ability. In ancient Russia, a mash of grass with a simple appearance-freedom is simply understood. It was she who helped give birth joy to infertile women and protected pregnant women from miscarriage and premature birth. This plant, whose use is not limited to gynecology, was called "treatment of 40 diseases". Among doctors, even ardent supporters of a conservative approach recommend the use of this plant, whose secret to their patients was previously known only to a few herbalists. No matter what area of Medicine this plant is widely used [2-3].

Many threeraydi in the wild in *orthilia*. It is much more difficult to grow this plant. It is widely distributed in the forest zone of the Northern Hemisphere. Especially adapted to the climate of the countries of Russia, Ukraine, Belarus. The plant grows well on moist and sandy soil. Since the demand for this plant in the current period is high, the implementation of measures for reproduction by introduction is an urgent task of the present day (picture-1).



picture-1

Local residents of North America (Alaska) use seeds for food, and from above the earth as tea substitutes. *Orthilia* helps women to get health and the joy of a full life, prevent the onset of old age. Due to its balanced composition, *orthilia* has a set of valuable medicinal properties. The use of plant-based drugs cleanses the blood and improves its composition [4-5].

BOTANICAL DESCRIPTION OF THE PLANT.

2-th Name of this plant-unilateral *orthilia* (lot. *Orthilia secunda*) is a perennial herbaceous plant that grows in the forest zone of the Northern Hemisphere, representing the Ericaceae family.

Perennial grass with a height of 5-25 sm. The root stem is long, branched, has many additional roots, thin. Every year it grows up to 1 meter. The leaves are green, alternately located on the stem, round or oval, divided into whole or partial. The upper part of the stem-with a lanset-like Shell, Green or brown in tone. The leaves are located at the bottom of the stem. The flowers are hanging, mostly densely located at the tip of the branch. In the European part of Russia in the form of a bell, it blooms in June-July. Flowers are pollinated mainly with the help of wind. The length of the fruit is 5-6 mm oval in shape and opens from the bottom up.

In August, the fruit ripens. The plant multiplies mainly from its seeds, and also by vegetative way, multiplies through the underground buds of the Earth. At the end point of growth, shoots form leaves up to 3-5 soles [5].

THE EXPERIMENTAL PART

10 gr dry dried *Orthilia secunda* the plant was extracted in 250 ml of chloroform. Several times the extracts formed during the extraction process were collected and driven. The composition was determined using liquid chromatography. There are a lot of chemical compounds in the composition of the plant. Partridge: There are macro and microelements, which are most necessary for the body's health, such as coumarins, tannins, flavanoids, Quinones, Arbutin and methylarbutine, Vitamin S, tartaric and citric acids.

In addition, the chemical composition includes Phytoestrogesterone and Phytoprogesterone, which is effective in treating female and male infertility.

It is also used in the treatment of diseases such as rheumatism, gout.

The herb is used as a decoction, infusions, alcohol tincture, shower, herbal teas.

CONCLUSION

For medicinal purposes, the air part of the plant, including feathers and flowers, is used. Its collection is carried out during the flowering period, when the concentration of nutrients is maximum. Herbs dry in the shade. Sunlight is not allowed. Ready-made raw materials can be stored for two years. It is desirable to carry out collection of herbs of *ortilya* in sunny, dry weather.

LITERATURE

1. Gubanov I. A. et al. *Orthilia secunda* (L.) House [*Ramischia secunda* (L.) Garcke] — One-sided *Ortilia* // Illustrated determinant of plants of Central Russia. In 3 vols. — M.: T-in scientific ed. KMK, In-t technolog. issl., 2004. — Vol. 3. Angiosperms (dicotyledons : separate-seeded)
2. Nikiforov Yu. V. *Altai herbs-healers*. — Gorno-Altaysk : Yuch-Sumer – Belukha, 1992. (Accessed: November 3, 2009)
3. Schroeter A.I. *Medicinal flora of the Soviet Far East*. — M.: "Medicine", 1975. — 327 p.
4. Levchuk A. P. Hemostatic and uterine agents // *Proceedings of the NIHFI*. — 1927. — Issue 15. — pp. 3-79.
5. Telyatev V.V. *Useful plants of Central Siberia*. — Irkutsk, 1985. — 417 p.