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Astragalus Dasyanthus Pall.

Kodirova Mohigul Sobirjonovna

EMAIL: kodirova@gmail.com

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4th year student of the Faculty of Industrial
Pharmacy of the Tashkent
Pharmaceutical Institute.

ABSTRACT: Wild perennial highly pubescent herbaceous plant. Has a wide spectrum of action (wound healing, hypotensive, diaphoretic, hemostatic, diuretic, vasodilator and cardiotonic) on the human body.

Key words: Astragalus, diuretic, hypotensive, arabin.

Introduction.

In medical practice, an infusion of the herb Astragalus woolly-flowered is allowed for use. Especially effective is the use of infusion of the herb Astragalus woolly-flowered in the initial stages of hypertension and in chronic cardiovascular insufficiency with a tendency to spasms of the coronary vessels, as well as acute and chronic nephritis. Infusion of the herb Astragalus woolly-flowered promotes the expansion of the vessels of the brain and peripheral vessels, which significantly improves blood circulation, indicators of general and intracardiac hemodynamics, and also saturates the internal organs with oxygen. They are good at treating angina pectoris, it is recommended for patients suffering from vascular diseases and kidney diseases. Astragalus herb infusion is used to rinse the mouth and throat, it is quite effective for sore throat, periodontal disease, stomatitis and other inflammatory processes. For a long time, astragalus has been used to normalize the coagulation and anticoagulant function of blood, normalize capillary blood flow and reduce capillary narrowing, relieve shortness of breath and cyanosis well, and increase urine output in patients. Astragalus woolly is used in the treatment of diseases of the musculoskeletal system, diabetes and bronchial asthma, lung diseases, eczema and psoriasis, as well as in many types of oncological pathologies, in particular leukemia, myeloma.

The economic value of Astragalus woolly-flowered, as well as other representatives of legumes (moths), lies in the ability to enrich the soil with nitrogen, due to their symbiotic relationship with nitrogen-fixing nodule bacteria of the genus Rhizobium. After the withering away of their aboveground parts, the soil is significantly enriched with nitrogen-containing compounds, which, through bacteria, are used not only by themselves, but also by other plants.

Astragalus woolly (Astragalus fluffy, or densely flowered (lat.Astragalus dasyánthus) is a species of the genus Astragalus (lat.Astragalus), the legume family, or Butterflies (lat.Fabaceae, or Papilonaceae, Leguminosae). The genus has 1500 species, it is the largest and among flowering plants in the flora of Russia (800 species). The scientific name of the genus comes from the Greek astragalos - "vertebra; dice", which is probably due to the characteristic for most of its species knotty stems. There is also another name for it - "cat pea" ... – «кошачий горох».

Botanical description

Perennial herb about 40 cm long, with a powerfully developed tap root system. The roots contain many sclerene elements, an important feature is also the settlement of bacteria in them, which have the ability to use atmospheric nitrogen for the synthesis of proteins. The leaves are petiolate, alternate odd-pinnate with 12-14 pairs of short-petiolate leaflets of an oblong-lanceolate or oblong-oval shape (15-20 mm long and 6 mm wide). Stipules are triangular-lanceolate, subulate, pointed, whitish at the ends.

The flowers are zygomorphic, butterflies, about 15-20 mm long, collected in dense capitate multiflorous (10-20 pieces) inflorescences (3-6 cm long), located on long axillary peduncles (15 cm). The perianth is double. Corolla light yellow, calyx campanulate, densely pubescent. All organs of the plant, except for the corolla, are densely covered with soft, long, whitish-yellowish hairs, especially the calyx. The fruit is a bean. Flowering period June-July.

Spread

Found in the southeastern regions of the European part of Russia. The distribution area reaches Volgograd and the Stavropol Upland. Not picky about moisture, does not tolerate waterlogging and shading. It grows mainly in areas with preserved steppe vegetation (mounds, forest edges, glades, abandoned places). The plant needs protection, is listed as an endangered species and is listed in the Red Book, harvesting in large quantities is prohibited.

Procurement of raw materials

Harvesting of the herb Astragalus woolly-flowered as a medicinal raw material is carried out in the phase of mass flowering, before the formation of fruits. Cut off the aerial part of the plant with a knife or scissors. Grass is dried in attics or in well-ventilated rooms, it is also possible in dryers at temperatures up to 50-55 ° C. The yield of raw materials from freshly harvested plants is small - about 20%. Dried astragalus herb has unlignified brownish-gray stems, leaves - grayish-greenish, flowers - yellow flowers, as well as a weak peculiar smell and sweetish taste. Raw materials are stored in paper bags for no more than 1 year in a dry place.

Chemical composition

Flavonoids - quercetin, kaempferol, isorhamnetin, astragalozoid, narcissin - were found in the herb of astragalus woolly-flowered; vitamins A, B, C, E, tannins, organic acids, coumarins, essential oil, triterpene compounds - glycyrrhizin, daziantobioside, steroids, iron, calcium, phosphorus, magnesium, sodium, silicon, manganese and other trace elements, and can also accumulate selenium.

Astragalus herb juice contains bassorin - 60-70%, arabin - 8-10%, triterpene saponins, mucous substances, pigments.

Botanical description

The medicinal properties of the woolly Astragalus are determined by its unique chemical composition and the harmonious ratio of nutrients contained in this plant. Infusion of the herb Astragalus wool-flowered has a diuretic, hypotensive, sedative and sedative effect. Improves heart function, dilates cardiac vessels and kidney vessels. The infusion has a positive effect on the course of hypertension, lowers blood pressure, therefore it is often used to treat the initial forms of hypertension, circulatory failure of I and II degrees, as well as in acute glomerulonephritis. Astragalus has a beneficial effect on the heart, dilates the coronary vessels and kidney vessels, increases urine output. When applied topically, an infusion of the herb Astragalus woolly-flowered has a wound-healing effect.

Application in traditional medicine

In folk medicine, a decoction of the herb astragalus woolly is used as an expectorant, diuretic, as well as for asthenia, kidney disease, burns, articular rheumatism, nervous diseases, for rinsing the mouth and pharynx with angina, stomatitis, periodontal disease. Astragalus woolly-flowered was highly valued for its antitumor effect, which was confirmed by numerous herbalists in practice. Therefore, the herb is used to treat benign and malignant tumors, as well as after chemotherapy during the recovery period. Along with the valuable useful properties listed above, astragalus eliminates excessive accumulation of water in dropsy and prevents cerebral edema. The use of astragalus herb is effective for rheumatism, muscular dystrophies, prolapse of the uterus and poisoning of various etiologies.

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