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CONTAINS THE TROPANE DERIVATIVE MEDICINAL PLANTS WITH ALKALOIDS

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Annotation: This article sheds light on the morphology, distribution, chemical composition and application in medicine of medicinal plants, which contain alkaloids that are part of the tropane derivative.

Keywords: tropan, alkaloid, belladonna, atropine, giossiamine, scopolamine, mingdevona leaf, astmatol, astmatin.

BELLADONNA LEAF. Peanut part and root – FOLIA, HERBA ET RADICES BELLADONNAE is the name of the plant. Simple (medicinal) belladonna-Atropa belladonna L., The Caucasian Belladonna is an Atropa caucasica Kreyer, a genus in the family Solanaceae. Belladonna is a perennial herb growing to 2 m tall. The rhizome is multi-headed, and the roots are creamy and serrated. The stem produces an erect growing single, sometimes several, large, greenish, unbranched underside, and 3 branches at the top, which, in turn, produce ball branchlets on which the aisimon is located. The Leaf is simple, dark green, with a short band at the base, in series, in pairs. One of these pairs of leaves will always be large. The large leaves are elliðsoid and the small ones are ovoid. The flowers are arranged singly or in pairs, hanging on the leaf axils. The inflorescence is five — toothed, cylindrical bell-shaped, remains with the fruit, the inflorescence is five-lobed, the tip is slightly recurved towards the back, painted in purple, and the base part is yellow-bell. The paternity is 5, the maternity node is located at the top. The fruit is a purple-black, shiny, two-chambered, slightly flat, multi-seeded, sour-sweet tasty wet fruit. The seed is kidney shaped, bell-shaped, with pits on the upper side. Blooms from June to July. All parts of the plant are poisonous! The upper part of the stem of the medicinal belladonna plant is covered with glandular hairs, The Crown is darker. The stem of the Caucasian Belladonna will be featherless. In medicine, both plants are used in the same way. Geographical distribution. Both plants grow in forests and roadsides at altitudes of 200-1000 m, in water areas, in grasslands. Caucasian Belladonna is found in Zakavkazye, the North Caucasus and the Krasnodar Territory, and medicinal belladonna is found in the Carpathians, Western Ukraine, mountainous, forested districts of Crimea and the Republic of Moldova. Now belladonnalarnalar is grown in the territory of Krasnodar, in the Crimea and in the regions of Poltava and Voronezh.

Chemical composition. Alkaloids are found throughout the plant (0.40—1.30% at root, 0.14—1.20% at Leaf, 0.20—0.65% at STEM, 0.24—0.60% at Flower, and up to 0.70% at ripe fruit). According to XI DF, the sum of alkaloids in the Leaf should not be less than 0.3%, the sum of alkaloids in the root should not be less than 0.5%. Atropine, giossiamine, scopolamine are the main alkaloids of belladonna. Belladonna alkaloids belong to the tropane gruppas, which are structured in a complex etheric tiði. Tropane is a bicyclic compound formed from the nitrogen — mediated Union of pyrrolidine with piðiridine, and its alcohol-tropanol (or Tropine alcohol) combines with trop (aphenyl, (β — oxyðropion)

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acid to form a complex Ether — atropine (and left-twisting isomer giossiamine) alkaloid, while its oxytropanol-scopine alcohol combines with Tropic acid to form scopolamine (isomer giossin) alkaloids. Use. Belladonna preparations are antispasmodic in various spasmodic cases (spasm of the intestines and urinary tract) and are used in wound disease of the stomach and duodenum, cholecystitis, gallbladder stone disease, kidney colic as a pain medication, as well as in the treatment of bronchial asthma and in the reduction of fluid secreted by the salivary and mucous glands. In addition to these, it is also used to expand the pupil in eye diseases. The root drug is given in the treatment of Parkinson's disease. Of the alkaloids of the Belladonna plant, atropine and scopolamine are used in medicine, giossiamine is not used because it is poisonous. Medicinal preparations. Salt of the alkaloid atropine-atropine sulfate, a dark and dry extract, nastoyka is prepared from the leaf and part of the peanut. Decoction of the root prepared in wine. The Leaf is part of the poroshogi cigarette" Astmatol". In addition to these, extracts made from belladonna leaf and Root are contained in various complex preparations. MINGDEVONA leaf-FOLIA HYOSCYAMI is the name of the plant. Black mingdevona Hyoscyamus niger L., it is a member of the family Solanaceae. Biennial, sertuk, malignant plant. In the first year, only the rhizome forms petals. These leaves are banded, elongated, with a deep patchy section. The second yilipoya grows. The STEM is branched, reaching 50 150 CM in height. The leaves on the STEM are more rounded and crumbly compared to the root leaves, the general appearance is ovoid, those on the lower part of the STEM are 5-7 lobed, those on the middle part are 3-lobed, and those on the upper part are 1-2 large tooth-shaped edges, which are bandless in series on the stem. The leaves are covered with glandular hairs, so they are soft, sticky. The flowers, which are located on the leaf axils at the tip of the STEM, are more curved and form a twisted inflorescence. After the flowers open, the inflorescence is elongated. The inflorescence is cup-shaped, the basal part is serrated, 5-toothed (the tooth is straight and has a sharp tip) and remains with the fruit. The inflorescence is a wide funnel-shaped, 5-lobed, slightly recurved, pale yellow, the ground where the STEM and inflorescences are united is painted in dark purple. The paternity is 5, the maternal node is located at the top.

The fruit is a cup-shaped, two-chambered, multi-seeded cocoon that opens with a lid. The seed is small, round or kidney-shaped, flat, with a lot of small pits on the upper side. Mingdevona blooms throughout the summer. All parts of the plant are poisonous! Geographical distribution. It grows on roadsides, on Loose lying, inhabited and grazed lands, and among cultivated fields as a weed. It is found in Moldova, Ukraine, Belarus, the European part of Russia, Siberia, Central Asia and the Far East. The product is prepared in Ukraine, the North Caucasus, Kuibyshev and Voronezh regions. It is grown in Ukraine and the Krasnodar Territory. In medicine, along with black mingdevona, field mingdevona Hyoscyamus bohemicus F. W.Schmidt. (Hyoscyamus agrestis Kit.) are allowed to be used. The Dala mingdevon differs from the black mingdevon in that the STEM does not branch, the leaves on the STEM are poorly carved, and the rhizome does not have lumps. Chemical composition. All parts of the plant (0.15—0.17% at root, 0.045—0.1% at Leaf, around 0.02% at STEM, 0.06–0.1% at seed) contain alkaloids. According to XI DF, the Leaf should not contain less than 0.05% alkaloids. The main alkaloids of the plant are hyoscyamine, atropine, and scopolamine. Use. Mingdevona preparations are used in pain relief and in various spasmodic situations, such as belladonna preparations. Mingdevona oil is mixed with chloroform (in the case of liquid grease) and applied to the sore ground when the muscles are sore in rheumatism and neuralgia. Medicinal preparations. Dry extract, mingdevona oil. Mingdevona Leaf is a smoking powder (poroshok) in bronchial asthma:

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cigarettes "Astmatol" and "Astmatin", and mingdevona oil is part of the drug saliniment. BANGIDEVONA Leaf is the name of the plant FOLIA STRAMONII. The common bangidevona — Datura stramonium L, ituzumans-is a member of the family Solanaceae . An annual herbaceous plant with an unpleasant odor, reaching 100, sometimes 120 cm in height. The STEM is erect-growing, hairless,with a distinctive branching. The Leaf is simple, ovoid, with a sharp tip, with an unevenly deeply carved section, banded, dark green, hairless (those at the top of the STEM are hairy), located in series on the stem. The flowers are large, singly arranged on the stem. The inflorescence is tubular, five pointed, five-toothed, the basal part remains together with the fruit in the form of a ring. The inflorescence is white, funnel-shaped, long and narrow tubular, obliquely carved, five toothed, recurved, twice as large as the inflorescence; the paternity is 5, the maternal node is two-chambered, located upward. The fruit is an ovoid, hard and covered with large thorns, growing erect, opening with four sips. The seed is black, dull, round kidney-shaped, flat, with small pits on the upper side. Bangidevona blooms from June to autumn, the fruit ripens from July.

ALL PARTS OF THE PLANT ARE POISONOUS

Geographical distribution. It grows on inhabited land, roadsides, waterlogged areas, in ponds. It is mainly found in Ukraine, Belarus, Moldova, the European part of Russia, theCrimea, the Caucasus, Central Asia, the Baltic states, and in very small quantities in western Siberia and the Far East. It is grown in Ukraine and the Krasnodar Territory. The product is prepared mainly in Ukraine, the Voronezh region and the North Caucasus Chemical composition. All parts of the plant (0.23—0.37% on the Leaf, up to 0.2% on the STEM, up to 0.27% on the stem, 0.22% on the seed) contain alkaloids. According to XI DF, the Leaf should not contain less than 0.25% alkaloids. The main alkaloids are hyoscyamine, atropine, and scopolamine. Use. The bangidevona Leaf is part of the (smoking) powder (poroshok)lari — cigarettes "Astmatol" and "Astmatin", which are used in bronchial asthma.

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