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BIOMORPHOLOGICAL CHARACTERISTICS OF *ATROPA BELLA-DONNA* L. FROM THE ALKALOID PLANT

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Abstract: *In this article, the botanical description, geographical distribution, medicinal properties and ways of use of *Atropa bella-donna* L., an alkaloid-preserving plant, have been described based on various sources.*

Key words: *area, type, genus, alkaloid, morphine.*

Аннотация: *Эта статья о растении, содержащем алкалоид. На основе различных источников описаны ботаническое описание, географическое распространение, лечебные свойства и способы использования *Atropa bella-donna* L.*

Ключевые слова: *ареал, виды, род, алкалоид, морфин.*

Аннотатсия: *Ushbu maqolada o'zida alkaloid saqlovchi o'simlikdan *Atropa bella-donna* L.ning botanik tavsifi, geografik tarqalishi, dorivorlik xususiyati va foydalanish yo'llari turli manbalar asosida bayon qilindi.*

Kalit so'zlar: *areal, tur, turkum, alkaloid, morfiy.*

INTRODUCTION

There are 10-12 species of medicinal plants on Earth, with chemicals, pharmacological and medicinal properties of more than 1,000 plant have been



inspected. Our country in Uzbekistan has 577 species of medicinal plants, including 250 species are used in scientific medications [1,2].

Treatment of almost all diseases in the human body will not be without the participation of various different medicines using medicinal plants. In scientific medicine, medicine is directly used by various medicinal plants.

MATERIALS AND METHODS

Morphology, ecology, and medicinal properties of *Atropa bella-donna* L. species belonging to the Solanaceae family were highlighted based on various methods and sources [3,4,5].

RESEARCH RESULTS

Atropa bella-donna L. leaf surface and root Common (medicinal) belladonna belongs to the family of belladonnas. Perennial herb growing up to 2 m tall. The rhizome is multi-headed, and the root is thick and branched. The stem is single, sometimes several, green, unbranched in the lower part, and 3 branches are formed in the upper part, which, in turn, give off spherical branches. Everything is simple. dark green, arranged in pairs with a short band on the stem. One of these pairs of leaves is always larger. Large leaves are elliptic, and small ones are ovate. The flowers hang in the axils of the leaves and are located singly or in pairs. The calyx is cylindrical brown with five teeth, it remains with the fruit, the calyx is five-lobed, the tip is slightly turned towards the back, it is purple in color, and the base is yellow-brown. 5 paternal, maternal nodes are located above.



Overview of *Atropa bella-donna* L.



The fruit is a purple-dark, shiny, double-lobed, slightly flat, MANY-SEEDED, sour-sweet delicious wet fruit. The seed is kidney-shaped, brown, and has pits on the upper side. It blooms from June-July. All parts of the plant are poisonous! Medicinal belladonna The upper part of the stem of the plant is covered with glandular hairs, the corolla is darker. The stem of the Caucasian belladonna is hairless. In medicine, both plants are used equally.

Geographic distribution. Both plants grow in forests and roadsides, water banks, meadows at an altitude of 200-1000 m. Product preparation. A leaf of a plant that grows wild is harvested twice in one summer. The leaves of those grown in plantations are harvested 3-4 times throughout the summer. As soon as the plant blooms, the leaves from the lower part of the stem, and at the end of flowering, the leaves from the new branches, are collected. After the formation of seeds, the above-ground part of the plant is harvested at a length of 10 cm. If new branches appear after the plant is cut, the leaves on them are also collected 1-2 times. Harvested products are cut into 4 cm lengths and then dried. Belladonna in plantations is grown for 5-6 years. After mowing the top part of the earth for the last time, the roots are dug up, washed, cleaned of soil and cut to a length of 10-20 cm (often lengthwise). The root of the plant is dried in the opener, and the leaves and tops are dried in dryers (at a temperature not exceeding 40°). If the leaf is dried in the open air for a long time, the alkaloids may decompose. The chopped tops and roots are sent to factories for the preparation of galenic preparations and the extraction of atropine alkaloid from the root.

Appearance of the product. The finished product consists of plant leaves, tops and roots. Beddadonianite, simple leaf. ellipsoidal and ovate, sharp-pointed, straight Birrali, zmil or kolena ēkā rupamā Box, FRAGILE, House up to 25 cm, za up to 13 cm. The product is odorless and inexpensive. It has a sharp taste. Because the leaf absorbs moisture quickly, it is hygroscopic, so it should be stored in cool areas, preferably in an airtight container. Plant, above-ground Bismi caramagan,



cylindrical, stems, leaves and flowers mixed with zapak. Povsinnyx upper roof, ox hall, ne oka, pore core. 4 cm long, 1.5 cm thick. Illinoy Biranamrabēša YoBa is united in length, is bent, and the first side is kudrami-sarotsi, okgarxiid color. It is 20 cm long and 0.6-2 cm wide. The root is uncontradicted, azzik. It has a spicy taste. Eddoyi, uncle. Osadisav scopolia to belladonna product

The leaf of the plant is suspended (it. Plants grow in one place). Scopolia leaf differs morphologically and anatomically from belladonna leaf. doughs, distinct, visible NET 895 gills on the underside of the leaf (morfologix, farki). Barginite, the cuticle layer is not visible, crystalline, and the cells are almost absent.

Belladonna preparations are anti-spasmodic, anti-spasmodic (in spasm of the urinary tract and urinary tract), stomach and duodenal ulcers, cholecystitis, gall bladder disease, kidney colic, as an antidote, as well as in the treatment of bronchial asthma, as well as in reducing the fluid secreted by the salivary and salivary glands. is used. Apart from these, it is also used to expand the cornea in eye diseases. Root, drug. Parkinson's disease is treated for a long time, atropine and scopolamine are used in medicine from belladonna plant, alkagons, gvoslenamine is not used because it is toxic. Medicinal preparations. Atropine alkaloidinix, salt atropine sulfate, soot, as well as powder, extract, nastoyka are prepared from the leaves and the upper part of the ground.

In conclusion. Belladonna (*Atropa belladonna*) is a plant that contains LOW alkadones, such as atropine, scopolamine, and gnosinamine. These substances are used medicinally to treat certain diseases, but due to their high toxicity, Belladonna should only be used medically, under supervision, and with caution.

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