

POISONOUS PLANTS DATURA STRAMONIUM

¹K.Giyosov, ²I.Raxmonqulov

¹Tashkent state agrarian university

²Tashkent state agrarian university-student

Article history:	Abstract:
<p>Received: 11th February 2022 Accepted: 11th March 2022 Published: 28th April 2022</p>	<p>Datura stramonium is an annual, odorous, poisonous herb belonging to the family Solanaceae. Alkaloids, essential oils and carotene such as giosstiamine, scopolamine, atropine were found in the leaves and seeds. They are used in folk medicine and medicine against various diseases.</p>

Keywords: Poisonous Plants, Alkaloids, Giosstiamine, Scopolamine, Atropine, Carotene, Asmatol, Solutan And Asmatin.

INTRODUCTION

The strange thing about the world of plants is that in one place itself grows one plant root, the body, flowers, leaves, fruits contain sugar balls in, the second one collects poisons. There are about 10 thousand species of poisonous plants. Most poisons grow in tropical countries. In what region the plant grows, both have an effect on its toxicity, for example, plants that grow in the South do not collect poisons in the northern regions, or the amount will be very small. The venom of plants accumulates in its various organs, for example, in the root of the Parpi and in the root of the Morula, in the leaf of the Folia digitalis. Poisonous

plant poisons do not have the same effect on all living things. Poisonous to humans *Atropa belladonna* and *Datura stramonium* do not affect rabbits and birds.

Among the crops, poisonous plants, which are encountered in the style of a weed of a year, for example, a ditch, *Datura stramonium*, seeds of dark grasses, can poison human organs when using flour, which is extracted from mixed silt. Therefore, it is necessary to clean these usims from poisonous grass on planted crops. Many poisonous plants also have medicinal properties, for example, drugs from *Datura stramonium* are used in the treatment of various diseases



Picture-1



PLANT DESCRIPTION.

A one year old herbaceous plant belonging to the Solanaceae family, which grows up to 100-150 sm in height. The root of the Arrow, where the roots are branched (picture-1). The stem grows erect, and the top grows like a half-moon. The leaves are sequentially, bandaged, egg-like, sharpened, on the basis of which the wedge is narrowed. The young leaves on top are strongly hairy. The length of the Leaf is up to 25 sm, the width is up to 20 sm, the top is green, the bottom is light green, the foliage turns out very noticeable. Alone, the Leaf emerges from the seeded places of the armpits and stem, the band becomes bald. The fruit is an egg-shaped breast, four pieces of celandine, covered with coarse and thick thorns with a blunt end. The length of the seeds is 3-3,5 mm, black, small, round-kidney, compressed from the sides. It blooms for a long time from June to autumn. It bears fruit in July. All parts of this plant are poisonous.

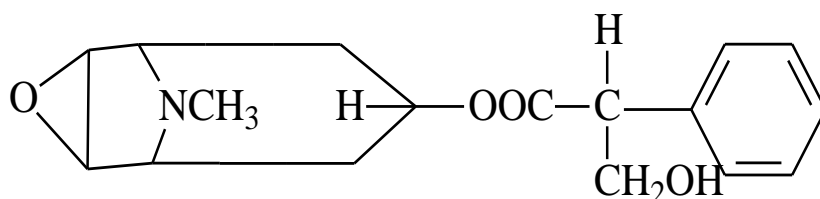
PLACE OF GROWTH. PROMOTION.

Datura stramonium grows in all regions of Central Asia, in southern Kazakhstan, in the Caucasus, in crops, near settlements, on the outskirts of roads, on the banks of soybeans and ditches, in the groves of weeds. To obtain the drug is sown in the Krasnodar Territory, Crimea and Moldova. The leaves and berries of the gooseberry and the seeds of the plant are used.

CHEMICAL COMPOSITION

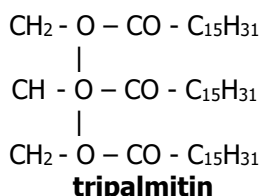
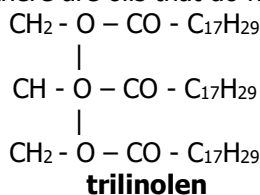
In the leaves of Datura stramonium there are also alkaloids 0,23-0,37%, in the bushes 0,06-0,24%, in the roots 0,12-0,27%, in the flowers 0,13-1,9% and in the seeds 0,08-0,22%.

The main alkaloids: gioosiamin- $C_{17}H_{23}NO_3$, atropine- $C_{17}H_{23}NO_3$, scopolamine- $C_{17}H_{21}NO_4$ these alkaloids are extracted from the juniper berries, its gidrobromide scopolamine preparation is used in medicine.

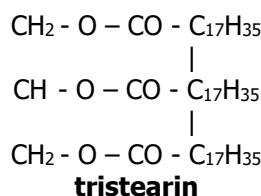
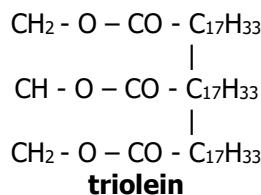


Gidrobromide scopolamine- $C_{17}H_{21}NO_4$

Also found in the leaves 0,041% efirium oil 0,1% natural pigment carotene - $C_{40}H_{56}$ (tetraterpene), 1,7% tannins. In their seeds there are oils that do not dry up



to 17-25%, the content of which includes trilinolen - 45%, triolein - 40%, tripalmitin - 12%, tristearin - up to 2% and lignoserin - ($C_{24}H_{48}O_2$) acids.



Collection of raw materials and its quality.

Basically, Datura stramonium leaves are harvested 3-4 times during the vegetation period, from the beginning of the flowering phase to the time when the fruit is

harvested, that is, late autumn. Certain precautions are required when collecting the raw materials of this plant. For example, this plant cannot be caught by hand, and when collecting raw materials, it is



necessary to use gloves. Collected raw materials cannot be dried at home and especially in the ovens, it is better to get rid of in the open air in a cool place.

EFFECT AND USE

Avicenna Datura stramonium used the decoction and tincture of the herb in place of eye drops and anti-cough medicine. In folk medicine, Datura stramonium is used as a means of relieving pain in neurosis, psychosis and neuralgia, in diseases of rheumatism, as a soothing, soothing, soothing.

In modern medicine, the chemical structure of the scopolamine alkaloid, obtained from the fruits of the plant, is close to atropine.

Scopolamine has a calming effect on the central nervous system, slows down the motor-secretory function of the gastrointestinal tract, the work of sweat, salivary glands, bronchial glands. Therefore, Ham is used to treat inflammatory diseases of the gastrointestinal tract, gall bladder, urinary tract from this plant. The Leaf is part of the astringent and asthmatic tobacco, which is smoked in cases of shortness of breath, severe cough, bronchial asthma and other diseases of the respiratory tract.

LITERATURE

1. Ходжиматов М. Дикие лекарственные растения. - Таджикистан, Д., 1989.
2. Турова А.Д. Лекарственные растения СССР и их происхождение. М., 1974.
3. Аюпов И.Э. Важнейшие отечественные лекарственные растения и их применение. Ташкент. Медицина, 1990. – 446 с.