

INTRODUCTION AND BIOECOLOGICAL PROPERTIES OF INDIGOFERA (INDIGOFERA TINCTORIA L) PLANT IN THE CONDITIONS OF SURKHANDARYA REGION

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ANNOTATION

This article covers a wide range of plants that will attract people's attention as natural dyes are a quality and environmentally friendly product that is especially valued at all times and will never become a tradition. Among them, the indigo blue dye obtained from the leaves of the valuable indigofera plant stands out. The Latin word for "king of colors" is known for its seven climates. His name even appears in historical sources. According to reports, an indigo-painted garment of the ancient Egyptian pharaoh Tutankhamun has been widely reported to have been preserved and used for 3.5 thousand years without losing its color and quality.

Keywords: Indigofera, Flora, Potanini, Treatment of Leukemia, Areal.

INTRODUCTION

The large-scale reforms being carried out in our country are supported by our people. The first results of these changes are reflected in the life and daily life of our people, the social activity of our people, confidence in the future is growing. Surkhandarya was endowed by the Creator with beautiful nature. The relief of Surkhandarya region consists of mountains and plains, sloping and expanding from north to south. The flora of the region also depends on natural conditions. The area of plants varies according to color, structure, development and viability. Unfavorable conditions of the external environment lead to changes in the appearance and internal structure of the plant. Under the influence of changing conditions, the plant dies or shows signs of adaptation to those conditions. At the same time, the land is not only a huge asset, but also a factor that determines the future of the country. This is evident in Uzbekistan. The richness of our nature is the variety of medicinal and raw materials grown on the soil of our sunny land. Among such plants it is worth mentioning the plant *Indigofera Tinctoria L.*

Indigofera Tinctoria L. number increases the nutrients in the soil by absorbing atmospheric nitrogen with the help of nodular barter that develops at the root of the plant and greatly helps to improve the agro-ecological properties of saline, degraded soils.

Indigofera A species of plant in the legume family. Herbs or shrubs are surrounded by more odd-leaved leaves. The colors of the flowers are pink, dark red and white, located on the buds on the leaf axils. Fruit beans. There are more than 700 species, widespread in tropical and subtropical regions. There are 3 species in the CIS countries (*I. gerardiana*, *I. potaninii*, *I. krilovii*) ornamental species are grown in the Crimea, South Caucasus and Central Asia. *Indigofera* is a beautiful flowering plant, propagated by seeds, many species are propagated by ants. Dyed *indigofera* (*Indigofera tinctoria L.*) Many *indigofera* give blue indigo. *Basma* (hair

dye black dye) is obtained from dyed indigofera leaves. Many species of indigofera contain the glycoside indican³, which gives it a blue indigo color.

The leaves of indigofera are elliptical, the flowers are pink and purple, the fruit is a bean with 4-6 seeds. An annual, biennial and perennial plant, depending on the climate of the place where it grows. Indigofera is planted to make the soil strong. It is also planted as an ornamental flower for its beautiful flowers. The indigofera prefers sunny areas. The location of the leaves is opposite.

SIGNIFICANCE AND APPLICATION

Two dyes are obtained from indigofera leaf powders — a very strong dark blue dye for fabrics and a dye for indigo hair. The first jeans were dyed from indigofera leaf dyes. Indigofera leaves are also used in medicine. Indigofera contains indirubin, ratenoid, deguelin, rotenol. The wide and rational use of medicinal plants in folk and scientific medicine is closely connected with the name of the great oriental scholar Abu Ali ibn Sina. In his "Laws of Medicine" he describes the medicinal properties of plants, as well as how to use them, how to treat certain diseases. More than 1000 years have passed and the instructions of our scientist have not lost their force. We all know that in recent years, the demand for artificial drugs has been declining, and the demand for drugs made from medicinal plant raw materials has been growing. In addition to allergies to artificial drugs, it is observed that they cause some diseases. Herbal medicine has several advantages over synthetic drugs. In particular, the complexity of their composition, ie the variety of ingredients, not only improves the healing properties of the product, but also increases the strength and quality of the effect, does not adversely affect the human body. Therefore, the majority of drugs (47%), especially 80% of drugs used in the treatment of diseases of the cardiovascular system, are made from plant raw materials.

For the treatment of irreversible scratches and wounds - For the treatment of inflammation of the throat, larynx, gums and tonsillitis - For the treatment of cancer - For the treatment of leukemia - For the treatment of dog bites or snake bites - For the treatment of liver diseases
Indigofera in cosmetology Used: - Anti-inflammatory properties Eliminates itching, cures inflammation and relieves itching of the scalp , soft, smart and volume-assisted Henna and basma are the only natural means for coloring hair, caring for hair from root to tip. And so, Hair dye with indigofera leaf powder is environmentally friendly, not only dyes the hair, but also has an effect on their health. Frequent use of such paints is advisable.

Areal - a wide area. <https://uz.m.wikipedia.org>

Introduction— (Latin.introductio-introduction), introduction of plants is the transfer of different plant species and varieties from their natural habitat to previously unexplored areas.<https://uz.m.wikipedia.org>

glycosidindican³ — in the form of indigoglycosides, is converted to dextrose by vaporic acids present in plants.<https://uz.m.wikipedia.org>

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