

## A REVIEW ARTICLE ON CASIA ABSUS LINN

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### ABSTRACT

*Casia absus Linn. Is a plant in the family Fabaceae is an erect or procumbent much branched annual or short lived perennial. Though this plant has a foreign origin, it is found throughout most of India. Commonly in open habitats and wastland, ascending up to 1500 meter in the himalayas. The plant parts used for the treatment of bronchitis, asthma, cough, conjunctivitis, leucoderma, renal and hepatic diseases, constipation, tumors, venereal ulcer and wound healing. The active chemical constitute sito-sterol-beta -D- glucoside and alkaloids-chaksine and isochaksine. The main aim of the article is to highlight the botanical description and medical uses against various diseases.*

**KEYWORDS:** *Casia Absus Linn .Botanical Discription, Antitrypsin Activity, Antidiabetic Activity, Antioxidant Activity, Antifungal Activity, Traditional uses*

### INTRODUCTION

India is rich in genetic resources of medicinal plants. These medicinal plant contain several chemical constituents that act on human physiological action. Sanskrit name chakshushya is the name given to the herb by the Nighantu grant has as it is applied as collyrium in eye disorders. It is seen throughout India from the Himalayas to temperate regions. It is present in all tropical regions across the world. It is also found in the continents of Australia, central America and Africa. Its synonyms are Chaksu (Hindi), Chakusya, Aranyakullithaka (Sanskrit), Chimed (Gujarati), Ivala, Rankulith, Ranhulge (Marathi), Kann kutakin bij, Kadhulig (Kannada), Bankulthi, Banku kirti kalay (Bengali), Chanubala Vittulu (Telugu), Karum (Tamil), Jasmeejaz (English), and Shimbi Kul (Ayurveda).

### DESCRIPTION

**Botanical characteristics Habit:** An erect viscid annual or biennial herb, 15-60 cm high. Stem and branches clothed with spreading viscid glandular hairs. **Stem:** Compound, rachis viscid hairy, petioles 2-2.5 cm long, leaflets two pairs, very oblique, 1.6-3.8 by 0.8-2.5 cm, the terminal pair the largest, elliptic-obovate, obtuse or sub -acute, minutely mucronate, nearly glabrous, slightly hairy .

**Flower:** Reddish -yellow, in terminal or leaf-opposed, few flowered racemes. pods ,2.5 -4.5 cm by 6-8 mm, ligulate, nearly straight, oblique ,dehiscent ,compressed ,thin and clothed with bristly hairs. 4-6, trapezoid-ovoid ,black, shining ,4.5 by 4 mm. **Flowering and fruiting period:** October- November and December - January.

## TAXONOMIC POSITION

- Kingdom: Plantae.
- Division: Magnoliophyta
- Class: Magnoliophyta
- Order: Fabales
- Sub family: Caesalpiniodeae
- Tribe: Cassieae
- Genus: Cassia
- Species: Absus

## BIOCHEMICAL CONSTITUENTS

The seeds contain sito-sterol-beta-D-glucoside and alkaloids –chaksine and isochaksine. Chaksine is anti bacterial against *Mycrococcus pyogenes* var. *aures* and *Streptococcus haemolyticus*. It stimulates contraction of different tissue of plain muscles, like uterus, intestine, bladder and muscles in blood vessels. It depresses the parasympathetic nerve endings of certain organs like intestine and bladder. Chaksine and isochaksine possess a local anesthetic effect intradermally. It produces a sustained fall in blood pressure and produces a weak anti- acetylcholine effect. Roots also contain anthraquinones and alo- eodin.

## TRADITIONAL USES

Chakshushya is used in hematuria, vaginal ulcers, ring worm, skin diseases. Leaves of *Casia absus* were used traditionally for many diseases. The leaves are astringent and used in the bronchitis, asthma, cough, constipation, venereal ulcer, hemorrhoids, and yaw treatment.

Leaves paste is used for wound healing and is externally applied on tumors. Roots of *C. absus* (liquor form) are used to relieve constipation. *Cassia absus* seeds used to cure different eye diseases like conjunctivitis, leucoderma, syphilitic ulcers, renal and hepatic diseases. The seeds of *C. absus* contain the flavonoids, luteolin, apigenin, hydrocarpin, and isohydrocarpin. Paste of *C. absus* seed powder with honey is orally used for general type of cancer and locally applied for wound healing and treatment of ringworm.

Seeds also have antihypertensive effect and are administered in powder form in a dose range of 1–2 gm. hemorrhoids. It also increases the blood as tonic. Decoction of *C. absus* seeds is used for irritable bowel syndrome.

## VARIOUS ACTIVITY OF CASIA ABSUS LINN

Antioxidant activity: *Casia absus* seed extract was examined antioxidant activity in previous study. *C. absus* seeds contain high phenolic and flavonoid content including luteolin, quercetin, 3,5,7,40-tetrahydroxy-20,50-dimethoxy flavone, and others. These isolated compounds could have antioxidant potential.

### **Antitrypsin Activity**

Casia absus seeds contain protein designated as CATI that has ability to inhibit bovine trypsin in a competitive manner. Trypsin inhibitory potential of CATI showed that it could be used as potential candidates for the development of the transgenic plant against the microbes and insect.

### **Antidiabetic Activity**

a-amylase enzyme inhibitors are important in controlling diabetes mellitus. Previous study shows that Cassia absus seed fractions inhibited a-amylase enzyme concentration in concentration-dependent manner.

### **Antiglycation Activity**

From previous studies, it comes to know that methanol, n-butanol, n-hexane, and ethyl acetate fractions of C. absus seeds could have antiglycation property. Some polysaccharides, oligosaccharides, and polyphenols have antiglycation activity. These are present in C. absus seeds.

### **Antifungal Activity**

Cassia absus seed methanolic extract was showed activity against *Candida tropicalis*, *Candida albicans*, and *Candida parapsilosis* at 1000, 750, and 500 µg in a dose-dependent manner. Agar well diffusion assay was used for estimating antifungal activity.

## **CONCLUSION**

From above literature it is concluded that Casia absus (Linn.) is responsible for the various therapeutic potentials in eye ailments, hepatic disorder, kidney disorders. Many researches shows antifungal activity, antitrypsin activity of Casiaabsus.

## **REFERENCES**

1. Saeed Ahmad, Ayesha Hassan, Waheed Mumtaz Abbasi and Tayyeba Rehman. *Phytochemistry and pharmacological potential of Casia absus- a review.Res -2017.*
2. *Ayurvedic Medicinal Plant of India . Dr. Ramesh KumarBhutya.vol.-1.*
3. *Priyavata sharma vol.2.*

