

ASWAGANDHA

Botanical Name : Withania somnifera

Common Name : Ashwagandha

Family : Solanaceae

Part Use : Root & stem

Origin : Originating from India. Important medicinal plant in Ayurvedic and medicinal importance for over 3,000 years in India

- ⇒ withania species are widely distributed in the drier parts of tropical & subtropical zones
- ⇒ wide distribution in India, dry regions, Pakistan, Sri Lanka, Iraq, Iran, South Africa.
- ⇒ In India naturally found in forest and particularly cultivated in Rajasthan, Punjab, M.P., Haryana, Himachal Pradesh etc.

Botanical Character &

- ⇒ withania is a short, branched, ^[1-1 1/2 m] 30-70 cm in height, perennial shrub.
- ⇒ Stem erect, branched, hairy
- ⇒ Leaf are simple, alternate, elliptic with entire margin
- ⇒ Inflorescence - simose, flowers are small, green, bell shaped.
- ⇒ Fruit - red yellow berry
- ⇒ Root - stout, long, tubercous, fleshy, branched, whitish brown.

Chemical Composition:

- ⇒ The main constituents of withania are alkaloids and withanolides [steroidal lactones] main alkaloids are Anaferrine, ~~Ananathyrine~~, Somniferin, withaferin-A, witha somniferin

Cultivation:

- ⇒ In India, cultivation of Ashwagandha particularly in semi tropical areas with good drainage & a tempⁿ range 22-35°C grow in July & August month in rainy season it is a medicinal plant so fertilizers are not needed, but sandy loam, & 7.85 pH, green yard manure are beneficial.
- ⇒ Ashwagandha threads dry with sunny day.
- ⇒ Seeds are germinate in 5-7 days in nursery and 6 week old seedling ready for transplant.
- ⇒ It is medicinal so proper irrigation is not maintain unless the crop begins grows in areas with limited rainfall.

Disease & Pest Control:

- ⇒ Common pest or insect are white crabs & mites
- ⇒ Destroy leaves and apical part of stem.
- ⇒ Spraying of wettable sulphur is cure.

Root Knot Disease:

- Water logging.
- Not well aeration. | water drainage causes root knot.
- Seedling Blight & Leaf blight disease:
- By excess of humidity & cloudy day.

Harvesting :

- ⇒ Ashwagandha crop is ready for harvest after 6-7 month when the leaves dry and berries turn red.
- ⇒ In harvesting entire plant is _____ and root are separated.
- ⇒ The roots are green, dried and based on usage small pieces or in powder form.

Uses :

- ⇒ With root powder has been used for century in traditional Indian medicine over 3000 years.
- ⇒ Also known as Indian ginsberg with various potential benefits as an adaptogen, stress reduces & anti-inflammatory agent.
- I> Stress : It help reduce stress and anxiety by monitoring HPA [Hypothalamic Pituitary Adrenal] excess.
- II> It help to improve cognitive performance including memory attention focus and mentality.
- III> It contain antioxidant and anti-inflammatory effect which help to protect the body from oxidative stress & inflammation and also increase immunity.

iv) It help in reduce sugar level suffering with diabetics .

(v) The steroidal lacton with afirane - can help to treat few type of cancer.

(vi) It is used to improve testosterone level

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