Medicinal uses: Ashwagandha has been a prized top notch adaptogenic tonic in India for 3000 - 4000 years. The plants contain the alkaloids withanine and somniferine, which are used to treat nervous disorders, intestinal infections and leprosy. All plant parts are used including the roots, bark, leaves, fruit and seed.

In Ayurveda, the roots of W. somnifera are used to prepare the herbal remedy Ashwagandha. Ashwaganda has been traditionally used to treat various symptoms and conditions, although there are few scientific studies of the compound

## Active constituents

The main active constituents are <u>alkaloids</u> and <u>steroidal lactones</u>. These include <u>tropine</u> and <u>cuscohygrine</u>. The leaves contain the steroidal lactones, <u>withanolides</u>

Common name: Winter Cherry • Hindi:

Ashwagandha अश्वगंधा, Rasbhari • Kannada:

Kanchuki • Marathi: Ghoda, Tilli • Gujarati:

Ghodaasun • Telugu: Vajigandha • Malaya-

lam: Amukkuram • Tamil: Amukkuram

Botanical name: Withania somnifera

Family: Solanaceae



Krishi Vigyan Kendra, Reasi

P.O.Dera baba banda bahadur. Reasi PIN 182301

Phone 01991-287802

## MAP series

## Ashwagandha (Withania somnifera)



LALIT UPADHYAY, SHAHID AHAMAD,
BANARSILAL, MANDEEP SINGH, ARVINDER
KUMAR, SATBIR SINGH



Krishi Vigyan Kendra, Reasi

Introduction: It grows as a short shrub (35–75 cm) with a central stem from which branch extend radially in a star pattern (stellate) and covered with a dense matte of wooly hairs (tomentose). The flowers are small and green, while the ripe fruit is orange-red and has milk-coagulating properties. The plant also has long brown tuberous roots that are used for medicinal purposes.

Ashwagandha, is native to drier parts of India. It is a perennial herb that reaches about 6 feet in nature. In the greenhouse they flower in the late fall and winter. Orange fruits in persistent papery calyxes follow the small greenish flowers. Ashwagandha is propagated by division, cuttings or seed. Seed is the best way to propagate them. Seed sown on moist sand will germinate in 14-21 days at 20° C.

Cultivation: Withania somnifera is grown as late rainy season (kharif) crop. Semi-tropical areas receiving 500 to 750 mm rainfall are suitable for its cultivation as a rainfed crop. If one or two winter rains are received, the root development improves.

Pathology: Withania somnifera is prone to several pests and diseases. Leaf spot disease caused by Alternaria alternata is the most prevalent disease, which is most severe in the plains of Punjab, Haryana, and Himachal Pradesh. Biodeterioration of its pharmaceutically active components during leaf spot disease has been reported. Oxyrachis tarandus (a Treehopper/cowbug species) feeds on the apical portions of the stem, making them rough and woody in appearance and brown in colour. The apical leaves are shed off and the plant gradually dies away