



Hoodia

(*Asclepiadaceae*)

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REPUBLIC OF SOUTH AFRICA

Scientific name: *Hoodia gordonii* (Asclepiadaceae)

Common names: Bobbejaangaap, bergghaap, bitterghaap, bokhorings (Afrikaans); khobab (Khoi), ghaap, hoodia, Queen of the Namib, African hats, milkweed

Family: Apocynaceae

Background

The plants are naturally from southern Africa (arid parts) and southern Namibia. It is found in deep Kgalagadi sands, on dry stony slopes or flats and under the protection of xerophytic bushes. In South Africa, hoodia is distributed in the northeastern part of the Western Cape, the north and northwestern regions of the Northern Cape.

Description

Hoodia gordonii is a leafless, spiny succulent that grows up to 50 cm high. Plants under ideal conditions can attain a height of 1 m. Hoodia takes five years to fully mature and the plant is about 0, 61 m tall.

The stem

In the early stages of germination only one stem is produced but at a later stage the plant produces clusters of green, upright stems. The stem can grow to a height of 0, 5 to 1 m tall. Hoodia gordonii has a greysh-green to pale brown stem.

The flowers

The flowers are large and have a carrion-like (rotted meat) smell. Hoodia gordonii flowers are borne on or near the top of the plant. They vary in colour, from pale straw to dark maroon. The plants normally flower in August or September. The flowers can reach a diameter of 75 mm.

Seed

The seed is produced annually in October and November. The seed capsules resemble small antelope or goat horns, hence the Afrikaans common name of bokhorings. The seeds are light brown in colour, are flat and have a pappus of fluffy hair attached to their one end.

Climate and Soil Requirements

The plant thrives in extremely high temperatures of up to 50 °C and it prefers light shade. A minimum winter temperature of 10 °C is needed. It prefers a well- drained red, sandy loam soil with a pH of 6, 2. Seeds germinate best in temperatures of 15 to 26 °C.

Uses

The plant is used for the treatment of heart disease, diabetes, cancer and stroke, as a thirst quencher, mood enhancer, a cure for severe abdominal cramps, stomach ache, haemor-

rhoids, tuberculosis, indigestion and hypertension. It can also be used for human consumption as an appetite suppressant.



Cultural Practice

Soil Preparation

No soil preparation is needed.

Planting

Planted can be done in spring. The seeds should not be planted deeper than 0, 5 cm. Over-seeding can lead to damping off when the seeds start germinating.

Propagation

Propagation is mainly from seed.

Irrigation

Irrigate the seeds lightly so that the soil is moist. The soil should be kept slightly moist while the seeds are germinating, but do not overwater them. Once the seeds have germinated, irrigation can be applied four times a week under warm conditions (28 °C or higher) and in the winter months it can be once every two weeks.

Fertilisation

Small quantity of very well-rotted, sieved compost is necessary.

Pest Control

The major insects identified in the plant include mealybugs, snails, slugs, scale, red spider mites and nematodes (eel-worm).

The control measures that must be taken are:

- chemical control – use of registered pesticides recommended, and.
- picking off the snails.

Disease Control

The major diseases identified include rot.

The control measures that must be taken are:

- sanitation - removal of the rotted part from the healthy parts by cutting it away.
 - conservation of healthy parts with a sealer; and.
- chemical control – use of a registered fungicide is recommended.



Harvesting Methods

Wet plant material may only be harvested during non-flowering and seeding periods, normally between April and August. A maximum of ten (10) stems may be cut off on the southern side of plants larger than 40 cm in diameter. Cutting on the southern side provides shelter from stems that are left on the northern side of the clump. This helps the plant to survive after harvesting. The stems must be cut off at least three fingers' width (5 cm) above ground level with a sharp, stainless steel blade.

Acknowledgement

South African National Botanical Institute and members of Agri-Africa/Karwil Consultancy are herewith acknowledged for the information provided.

Reference

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