

## ***HOODIA* IN NAMIBIA**



### **What is *Hoodia***

*Hoodia* is a spiny stem succulent growing in the arid north-western, western and southern parts of Namibia. The fleshy, cylindrical stems are armed with many rows of spines. The leaves are absent. Flowers can range from very small (1cm in diameter) to large (15cm in diameter), saucer or bell-shaped and be either yellowish, red to pink or brown. They usually have a distinct carrion- or faeces-like smell. The pods are horn-like and arranged in pairs. The drop-shaped seeds are brown when ripe, and are attached to a tuft of silky-white hairs.

*Hoodia* has been making international headlines in recent years for its commercial potential as a natural weight-loss product. The age-old use of *Hoodia* as an appetite suppressant is based on indigenous knowledge of the San. Today it remains a popular plant with people in southern and western Namibia, as food and to treat conditions such as high blood pressure and diabetes.

Ten species are found in Namibia, the most common being *Hoodia gordonii* and *H. currorii*. They are distributed in the north-western, western and southern regions of the country.



Distribution maps for this publication were based on Herbarium records.

This booklet serves as a guide for the identification of the different *Hoodia* species in Namibia, for use by rural communities and non-taxonomist.

### Conservation Status

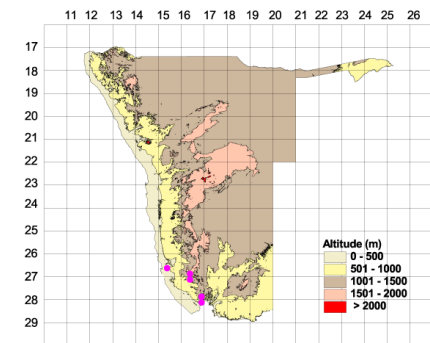
Although none of the *Hoodia* species currently found in Namibia are threatened with extinction, over-harvesting particularly of *Hoodia gordonii* and *H. currorii* is a concern. All *Hoodia* species in Namibia are protected by Nature Conservation Laws. This means that the harvesting, cultivation, relocation of plants and trade of *Hoodia* material is subject to permit controls. Permits are obtainable from the Ministry of Environment & Tourism. In addition to Namibian legislations, all *Hoodia* species are listed on the Convention of International Trade in Endangered Species of Fauna and Flora (CITES), Appendix 2, which means that international trade in wild-harvested *Hoodia* is regulated.

### *Hoodia alstonii*



*Hoodia alstonii* is characterised by its sturdy, upright, pale grey stems, and its small yellow flowers. It can grow up to 1m high. The stems are armed with extremely hard, sharp spines. The flowers are produced in large numbers on the upper parts of the stems. They are 1 – 1.8cm in diameter and bell-shaped.

**Distribution:** *Hoodia alstonii* is limited to the winter rainfall region of Namibia. It occurs in two disjunct localities: east to north-east of Lüderitz and in the Orange River basin.



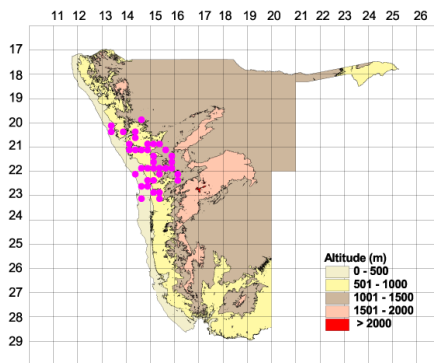
***Hoodia currorii* subsp. *currorii***



*Hoodia currorii* subsp. *currorii* is an untidy spreading shrub of up to 1m high. The stems are upright, pale grey-green and very spiny. The flowers are large, 5 - 10cm in diameter, star-shaped and hairy on the inside. The colour can vary from pink to red or orange-brown, with a distinct carrion-like smell. This species is often confused with *H. gordonii*. Differences are discussed under *H. gordonii*.

**Distribution: *H. currorii***

subsp. *currorii* is widespread in the arid western parts of the country, from Walvis Bay northwards up to the Kunene River. Also common along the road from Karibib to Swakopmund.



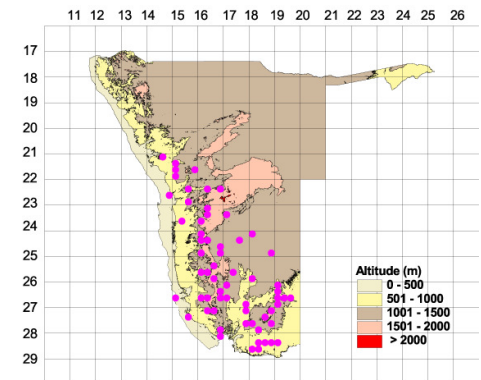
***Hoodia gordonii***



*Hoodia gordonii* is one of the most common species in Namibia. It is recognized by its compact look, its large, plate shaped flowers, which vary from pink to maroon, to orange-yellow. The size varies from 5 - 150 cm in diameter. It is usually found in plains in the southern parts of the country. It is often confused with *H. currorii*, especially when not in flower, and differs from it by its angular, hairless flowers and its distribution.

**Distribution: *H. gordonii***

is widespread and fairly common in the south, where it is often seen on sandy plains. It extends as far north as the Brandberg.



## *Hoodia officinalis*



Photo: S.Rügheimer

*Hoodia officinalis* subsp. *delaetiana*



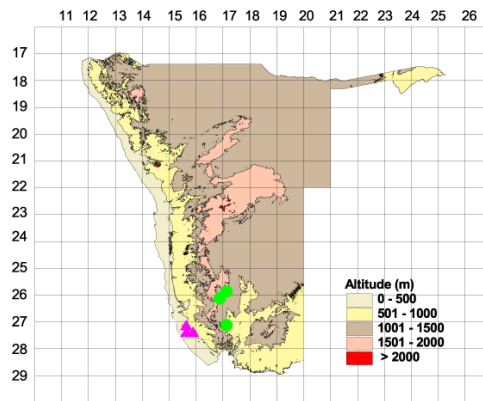
Photo: S.Rügheimer

*Hoodia officinalis* subsp. *officinalis*

*Hoodia officinalis* is a fairly small species of 20 - 40cm high. Plants are 3 to many-stemmed. The flowers are small, 1 – 1.5cm in diameter, flat, red-brown to yellow-brown, with a yellow centre. Two subspecies are recognized: *Hoodia officinalis* subsp. *officinalis*, and *Hoodia officinalis* subsp. *delaetiana*. The easiest way to tell them apart is by their distribution.

### **Distribution:**

*H. officinalis* subsp. *delaetiana* (▲) is restricted to the Sperrgebiet whilst *H. officinalis* subsp. *officinalis* (●) is widespread in the South.



*H. officinalis* subsp. *officinalis* is said to be the sweetest-tasting of the *Hoodias*, and is well-known among the people in the South.

## *Hoodia parviflora*



Photo: S.Rügheimer



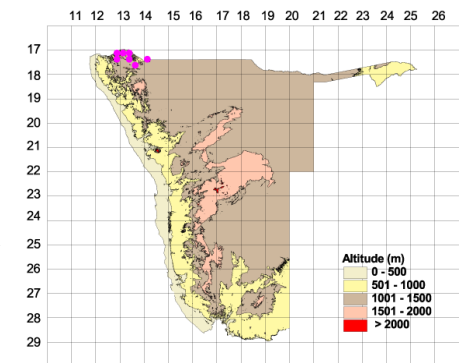
Photo: S.Rügheimer



Photo: S.Rügheimer

*Hoodia parviflora* is the tallest of all *Hoodia* species in Namibia. It can grow up to 2m tall. The stems have a distinct bluish-grey look. The flowers are borne in dense clusters around the stem tips. They are medium sized (3 - 4cm in diameter), yellow to yellowish-brown and foul-smelling.

**Distribution:** *H. parviflora* is restricted to the Kunene region, where it is often found in Mopane shrubland.

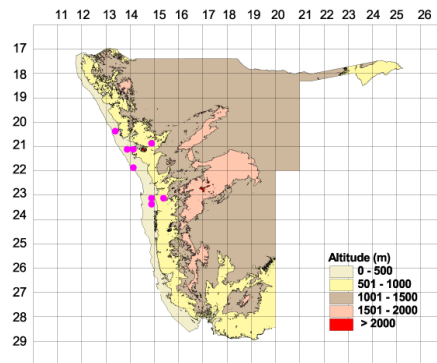


### *Hoodia pedicellata*



*Hoodia pedicellata* is a small, spineless plant that occurs only in the coastal belt between Swakopmund and the Kunene River. Stems sprawling (growing out from under the rocks), all arising from the base. Spines absent or if present, not well developed. Flowers small, star-shaped, in dense clusters around the stem tip, deep red, lobes reflexed.

**Distribution:** *H. pedicellata* occurs exclusively in the coastal mist-belt of the Namib Desert, from south of Swakopmund northwards into Angola.



### Understudied Species

The species in this section are currently not represented in the National Herbarium of Namibia (WIND) and there is no photographic material available. If you think you might have seen them, or know where they occur, please contact the National Herbarium.

### *Hoodia flava*

*Hoodia flava* is a spiny shrub up to 0.5m tall, but mostly much smaller. Stems 3 to many, grey-green, all arising from the base, armed with hard, sharp black spines. Flowers small, up to 1.2cm in diameter, yellow sometimes flushed brown or rarely entirely brown, flat.

This species is distinguished from the other *Hoodia* species by its small yellow flowers and its unique distribution. Plants usually grow inside bushes, on gentle gravelly slopes or summits of hills.

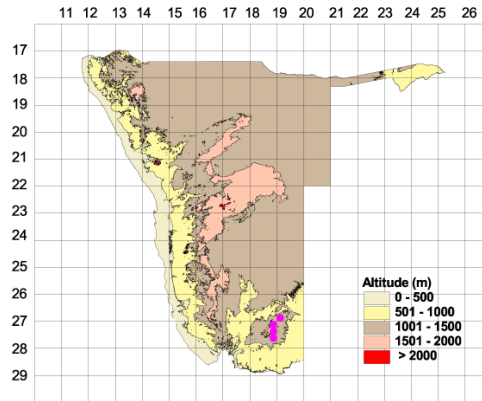
**Distribution:** In Namibia, *H. flava* is only known from the eastern and southern flanks of the Great Karas Mountains.

### *Hoodia juttae*

*Hoodia juttae* is a small many-stemmed shrublet up to 0.3m tall. The plant has a compact habit, often being broader than tall. The flowers are medium-sized, 2 – 5cm in diameter and shallowly saucer-shaped. The colour may vary from yellow-brown to deep flesh-pink. The venation is distinct.

*H. juttae* is quite similar to *H. gordonii* and in the Karas Mountains these two species often occur together. However, *H. juttae* does not get quite as tall as *H. gordonii*, and the stems are a bit stouter. Also, the flowers of the former are smaller and have a distinct venation.

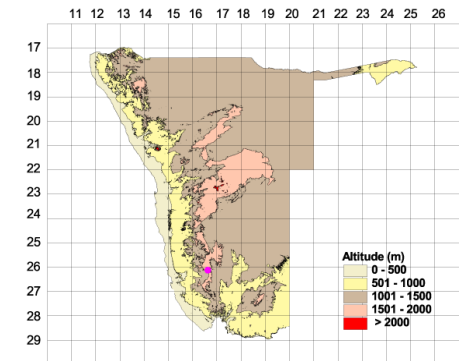
**Distribution:** This species occurs only in the Little and Great Karas Mountains.



### *Hoodia ruschii*

This is a many-stemmed shrub up to 0.5m tall. The stems are stout, erect and brownish to grey-green. They are densely covered with sharp, hard spines. The flowers are medium sized, 2 - 4cm in diameter, saucer-shaped, deep red to red-brown. They are covered with papillae on the inside.

**Distribution:** *H. ruschii* is known only from the eastern flanks of the Tiras Mountains.

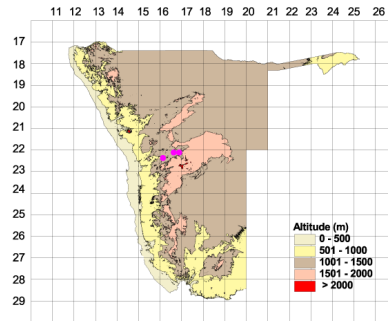


### *Hoodia triebneri*

*Hoodia triebneri* is a shrub up to 0.3m tall and 0.5m broad, with 10 to 30 stems. The stems are erect and relatively slender, bearing strong spines. The flowers are small (1 – 1.5cm in diameter), bell-shaped and dark maroon to almost black. They are exceedingly foul-smelling. Without flowers, *H. triebneri* can easily be mistaken for *H. gordonii*.

**Distribution:** *H. triebneri*

occurs along the Swakop River from west of Okahandja to near Otjimbingwe and Karibib. Plants grow in gravelly areas underneath *Acacia* trees or below ridges.



**Useful Contacts**

If you would like to obtain further information, please contact one of the following:

National Botanical Research Institute  
Private Bag 13184  
Windhoek  
Tel: 061 - 2029111

Ministry of Environment & Tourism  
Tel: 061 – 2842111

*Hoodia* Working Group  
Tel: 061 – 2842545 or 061 – 2842111

Hoodia Grower's Association (HOGRAN)

Tel: 061 – 2029111

**Further Reading**

Bruyns, P,V. 2005. Stapeliads of Southern Africa and Madagascar. Umdaus Press, Hatfield, South Africa.

Carr, S. 2004. Spotlight on Agriculture No 79. Ministry of Agriculture, Water & Forestry.