



Hoodia Gordonii

Authentic Hoodia – Are you sure?

By Rich Chludzinski

By now most of us know hoodia (pronounced who-DEE-ah) is being used extensively in several weight loss products. The particular hoodia species being used is hoodia gordonii. Because of the demonstrated appetite-suppressant qualities of this particular species, and heavy marketing campaigns by companies trying to sell over 300 different products worldwide, the demand for hoodia gordonii has completely outstripped supply. This has opened the door for counterfeit or diluted material being sold in the open market. Pricing pressures from large volume consumers has also forced some suppliers into fraudulent activities. So how can you be sure your Hoodia is authentic?

Hoodia primarily grows in the semi-deserts of South Africa, Angola, Namibia, and Botswana. Although the plant resembles a cactus, it is actually a succulent plant not in the cactus family. The western world learned that the San Bushmen of the Kalahari would eat hoodia to ward off hunger and thirst during long hunting expeditions. They would cut off the stem and eat the bitter-tasting plant. This is a tradition going back thousands of years.

There are over a dozen types of hoodia. Authentic hoodia gordonii contains an ingredient known as P57, which has been shown by many to suppress appetite. Only South African hoodia has the claimed properties. Hoodia gordonii is currently being sold on the internet and health food stores in capsule, liquid, and powder form. It is also being mixed with other products such as teas, syrups, fruit bars and protein shakes. An online search for hoodia will uncover hundreds of companies claiming to sell authentic product.

This heavy marketing has created such a

high demand for hoodia that a protected status was imposed on the plants typical of the Namib Desert, ranging from central Namibia to southern Angola. The plant is very difficult to grow and requires a hot, dry environment. It takes about five years before the pale purple flowers appear and the plant can be harvested. This long growing period, coupled with the sudden ballooning demand, are the key elements in the shortage of authentic material. As companies try to plan around the crop cycles, shortages arise, and counterfeit material begins to surface.

Some websites estimate that nearly 80 percent of all hoodia products are counterfeit. The governments of both South Africa and the United States have stepped in to help curb the problem. Hoodia gordonii is protected under C.I.T.E.S. treaties and is illegal to export from Africa without a proper C.I.T.E.S. certificate.

C.I.T.E.S. (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival. The organization was first conceived in 1963 and went into effect on July 1, 1975. Today, there are 171 parties (countries that have agreed to be bound by the convention), protecting more than 30,000 species of animals and plants. The organization imposed trade controls on hoodia in October 2004.

Several agencies in the U.S., including the Departments of Agriculture and Homeland Security, are regulating the importation of hoodia gordonii. These agencies require a C.I.T.E.S. certificate with all shipments, while importers must possess a permit issued by the USDA to import terrestrial plants (plants that



grow on land). While the steps being taken by the government are an excellent beginning to ensure you receive authentic product, they are not enough by themselves. Some hoodia companies use counterfeit or stolen C.I.T.E.S. certificates. While many products being sold include this certificate, claiming it ensures authenticity, it doesn't prove your hoodia gordonii is the real thing.

The most obvious frauds are the companies exporting material from countries other than South Africa. However, while some companies are importing product from South Africa, they are also "cutting" their product with several different plants, including cactus and grass species that resemble the same bitter taste, texture, and color as authentic hoodia gordonii. Therefore, a simple organoleptic test (taste, color, and smell) is not enough, even when used in conjunction with the proper export certification.

The only way to ensure your product is authentic is to have it examined by an independent testing laboratory. Using a process called thin layer chromatography (TLC) and proprietary procedures, a laboratory can compare a product sample to a certified reference standard and determine the product's authenticity.

A laboratory can also use a process called microscopy for testing hoodia authenticity. However, with microscopy alone, it is difficult to uncover a fraudulent product, because most product samples are in a powdered form and much of the structure used to identify the plant has been destroyed. However, when used in conjunction with thin layer chromatography testing, it provides a greater guarantee of authenticity. Ensure your testing laboratory uses TLC or HPTLC when testing your samples.

Because of the difficulty in obtaining authentic product, it is imperative for the laboratory to have quality procedures in place and a certified reference standard. A reputable laboratory will provide its customers with a test certificate, including photographs of the test results and a summary of the procedures used.

Hoodia gordonii has demonstrated its positive effect on weight loss over the past several years. Many people are living a healthier life after losing excess weight, with the help of products containing hoodia. Unfortunately, because of this success, the demand for the product has skyrocketed, while the supply of this endangered species remains limited. This type of supply/demand issue opens the door for unscrupulous individuals and companies to turn a quick profit exploiting the unsuspecting consumer. Fraudulent products not containing pure P57 are ineffective in the fight against obesity.

With the growing number of non-authentic products in the market today, it is extremely important for companies to guard themselves and their customers from fraudulent material. All consumers should demand a copy of the export paperwork from South Africa and a report from an independent testing laboratory using the proper procedures and equipment. Following these guidelines will protect you and begin to put an end to this growing problem. You will then be sure your hoodia is authentic.

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