

Although scientific research on this plant began in 1881, it was over 100 years later in 1992 that it was first investigated for cultivation. The research was initiated by the Kirstenbosch National Biodiversity Institute and funded by the Agricultural Research Council (ARC). In 1996, the first harvest from a commercial plantation was obtained. The official Honeybush industry emerged in 1999 when the South African Honeybush Tea Association (SAHTA) was formed.



#### What is it used for?

Honeybush is mainly used to make herbal tea, having a pleasant, mild sweet, honey-like taste and aroma. The leaves and stems are used to make the tea, which contains no caffeine and has a lower tannin content than oriental teas (i.e. *Camellia sinensis*). Honeybush extracts can potentially be used in the food and beverage industry as flavourings in ready-to-drink beverages such as ice tea, fruit juice blends and sweets. Potential use by the cosmetic and pharmaceutical industries is also being investigated due to the high levels of antioxidants.

The taste and active ingredients vary greatly between the species, making some better adapted to specific uses.



### Unique to South Africa

All 23 species of Honeybush are native to the South African fynbos, and are found in the Western and Eastern Cape Provinces. They grow in a narrow region along the coast, bounded by the Cedarberg Mountains in the North, the Cape Peninsula in the South and Port Elizabeth to the East. The fynbos covers an area of 85 240 km², throughout which wild Honeybush grows sporadically.

Honeybush is well adapted to the climate and soil conditions in these areas and grows in nematode free, well-drained, sandy-loam soils with a low pH and low phosphorus levels. It prefers the cooler, wetter, misty conditions on the southern slopes of the mountains, and is also found in very specific habitats such as on mountain slopes, marshy areas, and coastal bands, depending on the species.



## Growing Honeybush

Three species of Honeybush are mainly used commercially by the industry, including *Cyclopia intermedia* ("Bergtee"), *C. genistoides* ("Kustee") and *C. subternata* ("Vleitee").

Of the three "commercial" species, *C. intermedia* contributes the largest market share, but is almost exclusively harvested from the wild, and indications are that it can only be harvested every second or third year, making it difficult and uneconomical to cultivate. Continual unsustainable wild harvesting is problematic as it may result in over-harvesting of the plants, which could cause extinction of this species in some areas. The main cultivated species are *C. subternata* and *C. genistoides* and these are localised in the area from Overberg to Langkloof, with approximately 200 hectares under cultivation in total.

Honeybush is a long-lived perennial and needs to be planted in full sun with well-drained soil conditions. Some species (e.g. *C. aubternata*) are "seeders" (meaning they drop seeds for future growth) which are fast growing but are destroyed by fire and tend

to live less than ten years. Other species (e.g. *C. intermedia* and *C. genistoides*) are slow growing and re-sprout from the root tuber (which contains the nutrient reserve), after being cut or burned. Each hectare produces currently between two - five tons per hectare (for *C. genistoides*) and up to eight tons for the higher yielding species such as *C. subternata*. Improved cultivation methods are being investigated to increase the yield further.

Sowing in seedling trays, via seeds or cuttings, takes place between summer and autumn, and the young seedlings are grown in a nursery before being planted out during the winter, preferably before the end of August. Harvesting time varies between the different species, but is usually done before they flower (July October), as the flowers drain the energy reserves of the plants. Re-sprouters (*C. genistoides*) can be harvested about two to three years after planting. The seeders (*C. subternata*) can be harvested about one to two years after planting, depending on the soil and climate, but need to be cut back during harvesting to 30 - 50 cm above the ground in the early winter. Following the first harvest in plantations, the plants can be harvested annually.



# The Honeybush Industry

Originally a cottage industry, Honeybush tea was mainly a traditional source of employment and income for local people, and limited to personal use and consumption. All the tea was harvested from the wild, with different batches of tea varying in taste and quality. As the industry has developed, the natural Honeybush populations have diminished due to the continual (and unsustainable) harvesting, and commercial cultivation has been encouraged, although this is still very limited. The organized industry officially began in 1999 with the launch of the South African Honeybush

Tea Association (SAHTA). With 25 active members, this non-profit body (which is in the process of becoming a Section 21 Company) coordinates and promotes the development of the industry — and now involves a variety of sectors, including agriculture, horticulture, the food and beverage industry, wholesale and retail, and the catering industry.

Of the annual harvest, more than 75% is still based on wild harvested Honeybush and the majority of this comes from the Langkloof area. Honeybush is cultivated by 10 Honeybush growers with more than one hectare, plus a few growers with smaller plantations. Of these 10, seven are commercial, and three are community based. These previously disadvantaged communities in Haarlem, Ericaville and Groendal make up about 15% of the total area under cultivation. Additional Honeybush plantations in and around communities are imminent, due to the suitability of the growing conditions in specific areas, which will provide further employment opportunities and contribute to black economic empowerment and skills transfer.



The current industry also involves five processors scattered through these areas, whose task is to cut, ferment, dry, sieve, grade and pack the tea according to the intended use (tea bags and loose tea). Honeybush that is not fermented does not change colour, and is used and marketed as green tea. Most of the tea is exported in bulk and repackaged under various brand names.

The total harvest in 2008 was more than 200 tons of Honeybush tea, and of this, 85% was exported to the UK, the Netherlands, the USA and Germany. This export market is divided into conventional, organic (including both wild and cultivated) and green tea. All wild harvested Honeybush could potentially be

certified as organic, and these principles are also recommended for cultivation of Honeybush. However, although organic principles are followed, due to the high cost of organic certification, only a small percentage of farmers are registered.

The marketing component of the Honeybush industry is currently limited to only five companies - and this needs to be expanded as the industry grows, to ensure distribution can keep pace with demand.

# Industry Challenges

Currently, the demand for Honeybush exceeds supply, and this is due to both the increasing international export market, and the emerging local market in South Africa. This is putting the natural/wild populations of Honeybush under threat due to unsustainable harvesting, which also impacts upon the livelihood of the local harvesters. The number of commercial growers of cultivated Honeybush needs to be rapidly expanded to meet demand, in parallel to conservation measures to protect the threatened wild populations. New land, suitable for growing Honeybush, needs to be found in other areas such as the Klein Karoo.

Cultivated Honeybush species need to be improved through breeding programmes and to improve the production methods, so they are adapted for increased yield, bioactive compounds, resistance to specific pests and diseases, and a longer survival rate. Rigorous research is also needed to provide scientific evidence to substantiate the numerous health benefits claimed to enable it to compete internationally. Currently, 95% of all Honeybush research is either undertaken or coordinated by researchers at the ARC Infruitec-Nietvoorbij.

For more information on Honeybush, contact Marlise Joubert on 021 809 3331 or email her at joubertm@arc.agric.za or visit the website of the Honeybush Research Programme of the Agricultural Research Council at <a href="http://www.arc.agric.za/home.asp?pid=4045">http://www.arc.agric.za/home.asp?pid=4045</a>

/www.arc.agric.za/home.asp?pid=4045 www.sahonevbush.co.za





Sponsored by the Department of Economic Development and Tourism