

# Cancer Association of South Africa (CANSA)



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## Fact Sheet on Honeybush Tea

### Introduction

*Cyclopia*, better known by the common name Honeybush, or 'Heuningbos' in Afrikaans, is a genus of flowering plants in the legume family, *Fabaceae*, of the subfamily *Faboideae*. The description was published by Étienne Pierre Ventenat in 1808. The name *Ibbetsonia*, published two years later, is regarded as a synonym of this genus – John Sims (was the first editor of *Curtis's Botanical Magazine* [1801–1826 vols. xiv–xlii] after the death of the founder, William Curtis, and edited *Annals of Botany* [1805-6] with Charles Konig). John Sims had commemorated the physiologist Agnes Ibbetson with this name.

It grows only in small areas in the southwest and southeast of South Africa and has many similarities with Rooibos Tea.

[Picture Credit: Honeybush]

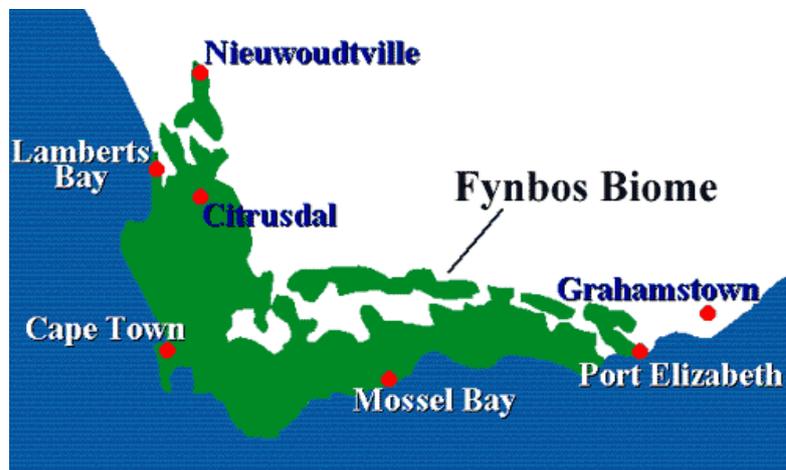
Honeybush is so named because the flowers smell of honey. The taste of Honeybush Tea is similar to that of Rooibos Tea but a little sweeter. In some rural districts it used to be common



practice to keep a kettle of Honeybush Tea infusing on the stove ready for drinking while scenting the whole house – unlike tea prepared from *Camellia sinensis*, the product does not turn bitter with long-term simmering.

(Jillian Michaels; Wikipedia).

The plant is a shrub of the Fabaceae family (Leguminosae) that grows in the fynbos botanical zone (biome), indicated in green in the map on the right. It is a narrow region along the coast, bounded by mountain ranges. Fynbos is a vegetation type, characterised mainly by woody plants with small leathery



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leaves (fynbos is from the Dutch, meaning fine leaved plants). (ITM Online).

### Varieties of Honeybush Tea

There are dozens of species of Honeybush Tea found in the wild, of which mainly 4 or 5 are in widespread home or commercial use. These are:

- *Cyclopia intermedia*, known as 'bergtee' (mountain tea), found between Port Elizabeth and the edge of the Langkloof
- *Cyclopia genistoides*, known as 'kustee' (coastal tea), found mostly in the Western Cape near Yzerfontein and Darling and also thriving in the South Cape if cultivated
- *Cyclopia maculata*, grown in the Outeniqua area near George
- *Cyclopia sessiliflora*, known as 'Heidelberg-tee', named after the town Heidelberg in South Africa, where it grows in the local mountain range
- *Cyclopia Subternata*, known as 'vleitee' (marshland tea) or 'valleitee' (valley tea)

Some species can be cultivated whereas others have resisted all attempts at cultivation and must be harvested in the wild. It is not always easy to discover what the seeds need to enable them to germinate; some kinds bear elaiosomes (see below) and might be dependent on the services of particular ants or birds. *Cyclopia intermedia* (mountain tea) is one of the teas that is harvested in the Kouga mountains where it grows naturally. Mountain tea regenerates within three years after harvesting or devastation by fire; consequently less than one third of the mountain yield is available for harvesting each year by rotation.

Elaiosomes are fleshy structures that are attached to the seeds of many plant species. The elaiosome is rich in lipids and proteins, and may be variously shaped. Many plants have elaiosomes that attract ants, which take the seed to their nest and feed the elaiosome to their larvae. After the larvae have consumed the elaiosome, the ants take the seed to their waste disposal area, which is rich in nutrients from the ant frass and dead bodies, where the seeds germinate. This type of seed dispersal is termed *myrmecochory* from the Greek 'ant' (myrmex) and 'dispersal' (kore). (Wikipedia).

[Picture Credit: Cape Honeybush]



### Nutritional Facts of Honeybush Tea

According to the Department of Chemistry of the University of the Free State, Honeybush Tea contains the following nutritional components:

Nutrients	Function in Body	Mg Per 240ml
Iron (Fe)	Essential for transport of oxygen in the blood	0,3mg
Potassium (K)	Necessary for metabolic processes	0,01mg
Calcium (Ca)	Necessary for strong teeth and bones	0,01mg
Copper (Cu)	Necessary for different metabolic processes	0,003mg
Zinc (Zn)	Necessary for normal growth and development and healthy skin	0,015mg
Magnesium (Mg)	Necessary for healthy nervous system and for other metabolic processes	0,002mg
Manganese (Mn)	Necessary for metabolic processes and for bone growth and development	0,11mg
Sodium (Na)	Necessary for fluid and acid-base balance	1,5mg

Further research by the Department of Chemistry of the University of the Free State indicated that substantial amounts of (+)-pinitol is present in Honeybush tea. Pinitol is used as an expectorant and also has anti-diabetic activity. (Bates, *et al.*, 2000).

### Health Benefits of Honeybush Tea

Honeybush Tea is made as a simple herbal infusion. One of its early recognised benefits as a tea substitute is its lack of caffeine, which makes it especially suited for night time consumption and for those who experience nervousness and want to avoid ordinary tea. As a result, it had a reputation as a calming beverage, though it may not have any specific sedative properties. It also has a low content of tannins, so it does not make a highly astringent tea, which can be a problem with some grades of black or green tea or when ordinary tea is steeped too long.



[Picture Credit: Honeybush Health]

The traditional use of the tea for treating cough may be explained, in part, by its content of pinitol, a modified sugar (a methyl group replaces hydrogen in one position of glucose) that is similar to inositol. Pinitol, named for its major source, pine trees, is also found in the leaves of several legume plants; it is an expectorant. Pinitol is also of interest for apparent

blood-sugar lowering effects, as demonstrated in laboratory animal studies (it may increase the effects of insulin), and is being considered as a drug for diabetes. Honeybush also contains flavones, isoflavones, coumestans, luteolin, 4-hydroxycinnamic acid, polyphenols, and xanthenes. These ingredients serve as antioxidants and may help lower blood lipids.

The isoflavones and coumestans are classified as phytoestrogens, used in the treatment of menopausal symptoms, an application for which honeybush has recently been promoted. The flavones and isoflavones of Honeybush are similar to those in soy, another leguminous plant, also used in treatment of menopausal symptoms.

Luteolin is the primary yellow pigment of the flowers and has been used historically as a dye (most often obtained for this purpose from the plant called Dyer's Weld, *Reseda luteola*). (Smith, *et al.*, 2001; van der Walt, 2000; Bates, *et al.*, 2000; Kamara, *et al.*, 2003; Marnewick, *et al.*, 2003; Chiechie, 1999).

Honeybush Tea has no negative side effects - Honeybush tea, grown in South Africa, has no negative side effects whatsoever. Other key health benefits of Honeybush Tea includes:

- Caffeine-free
- Very low tannin levels
- It is very soothing and calms the central nervous system
- Eases constipation
- Can be applied topically to skin irritations
- Full of antioxidants to guard against free radical attack
- Contains polyphenols that boost the immune system and to help reduce the degenerative effects of lifestyle diseases
- Rich in minerals such as iron, potassium, calcium, copper, zinc, magnesium, manganese, and sodium

(Health24; eHow).

Properties that enhances health - Honeybush Tea possesses numerous properties that enhance the health of people that use it:

#### Isoflavones & Coumestans

The dietary phyto-oestrogen-hormone-dependant process. This is advantageous for:

- Regulation of menstruation cycles
- Prevention of breast, prostate and Uterus cancer
- Reduces the risk of Osteoporosis
- Anti-fungal properties
- Anti-virus properties
- Anticholesterolemic-lowers cholesterol levels
- Hypolipemic-lowers fat levels
- Anti-microbial
- Anti-oxidant

Specific Luteolin is anti-spasmodic and anti-oxidant. 4-Hydroxycinnomic acid is anti-fungus and Antihepatotoxic.

## Xanthones

- Anti-inflammatory
- Anti-hepatotoxic – works against kidney poisoning
- Anti-virus
- Anti-diarrhoea
- Anti-fungus
- Anti-oxidants
- Anti-depressant

## Flavones

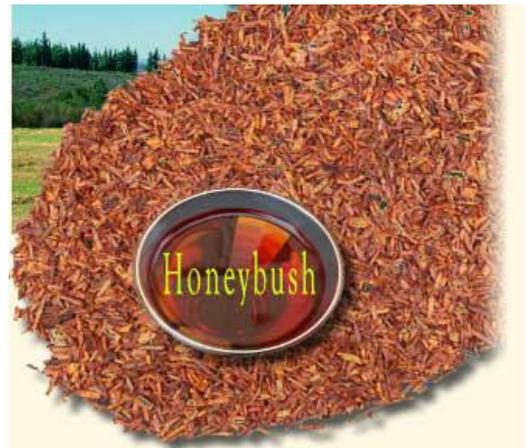
- Vitamin-type activity (mixture of eriodictyol and hesperidien)
- Anti-oxidants
- Anti-microbial
- Anti-virus
- Anti-inflammatory
- Spasmolytic
- Diuretic (increases Urinating)
- Non-feeding sweeteners

Research on Honeybush Tea has only started recently in the 1990's and already great progress was made on testing and researching the medicinal values of this tea. De Nysschen, *et al* found three major phenolic compounds in Honeybush tealeaves in 1995: a xanthone c-glycoside, mangiferin and O-glycosides of hesperitin and isosakuranetin, two flavanones.

(Department of Chemistry, University of the Free State).

Honeybush Tea improves the immune system - Honeybush Tea is a natural source of many antioxidants, including major phenolic compounds. Phenolic compounds play a significant role in protecting the immune system from oxidative stress, which could damage cells, according to a 2013 review published in "Nutrients." Phenolic compounds also modulate the immune system, which helps the body's natural defenses against infections. This may be responsible for the belief that Honeybush Tea is effective in relieving colds, influenza and other diseases (Livestrong).

[Picture Credit: Coarse Honeybush]



## Honeybush Tea protects from inflammatory diseases

- evidence also exists that the phenolic compounds in Honeybush Tea are able to reduce inflammation and prevent the development of chronic inflammatory diseases. Phenolic compounds have a direct effect on down-regulating the body's inflammatory response, as demonstrated in inflamed intestinal cells similar to those seen in inflammatory bowel disease, according to a December 2010 study published in "Chemico-Biological Interactions." This makes Honeybush Tea effective in providing short-term inflammatory relief as well as helping to prevent or ameliorate inflammatory diseases like IBD or Crohn's disease (Livestrong).

Women's Health - Honeybush Tea is valuable to women's health, according to Montego Rooibos Herbal Tea, because it helps regulate periods and reduces the risk of osteoporosis and cancer of the breast and uterus (eHow).

Good for gastrointestinal health – people suffering from digestive problems can benefit from drinking Honeybush Tea. It can be taken to alleviate heartburn, nausea and constipation. It can also help cure constipation. It treats abdominal cramps and colic pain in infants (Natural Home Remedies).

### **Downsides of Honeybush Tea**

None whatsoever as no negative side effects have ever been reported, therefore, Honeybush Tea can be drunk freely. If Honeybush is brewed or boiled for longer than ten minutes, the antioxidant activity becomes even much higher.

### **Medical Disclaimer**

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## Honeybush

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## Honeybush Health

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