

Stellenbosch doctoral student hits honeybush tea's sweet spot



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Stellenbosch PhD student Brigitte de Preez testing samples of honeybush tea in the lab.

Image: Anton Jordaan

Research carried out by a doctoral student at Stellenbosch University could pave the way to putting SA's honeybush tea on the global map.

Revered by the Khoi San people, who were probably the first humans to brew the tea from the fermented leaves and stems of the honeybush plant, the brew has long been championed for its antioxidant properties.

Its spread to the palates of the world has been hampered by a lack of quantifiable agreement on how a great cup of honeybush tea should look, smell and taste.

That may all change following the work done by PhD student Brigitte du Preez, whose dissertation focuses on how to describe and quantify the differences between brews in a way that improves quality control.

"Honeybush tea has a recognisable, fragrant floral, apricot, caramel and fynbos-sweet aroma and sweet taste," said Du Preez.

"Its characteristic sensory profile has been mapped and can be used in quality scoring of samples of different production batches of the tea."

Her study, part of the Agricultural Research Council's (ARC) research on honeybush tea, showed it would be possible to provide a sensory "quality seal" for different batches of tea.

Those sensory qualities — including aroma, appearance and taste — are vital to tell the difference between a high-quality cuppa and a bad one.

Without specific SA government standards, tea of variable quality is finding its way onto the market, she said.

"High-quality honeybush tea has a reddish-brown colour and a high intensity of floral, fruity and sweet aromas, with sweetness and some astringency on the palate," said Du Preez.

"Poor quality tea is characterised by an insipid overall sensory character on the palate, high intensities of taints, including 'smoky', 'medicinal' and 'musty' flavours."

After speaking to industry stakeholders, Du Preez developed a rapid, easy-to-use quality grading system based on three commercially important honeybush species (*C. intermedia*, *C. subternata* and *C. genistoides*).

Using a dataset drawn from the sensory, colour and turbidity (clarity) analyses of 585 tea batches, she developed universal chemical-based reference standards to replace the food-based reference standards used previously.

Her work is likely to help tea both tea producers assess tea batches for blending and researchers cultivating honeybush tea plants.

Her research will also provide a basis for certification, vital for getting *Cyclopia spp* and its bright yellow flowers, whose smell give the honeybush its name a better chance of being accepted on overseas markets.

"As demand for honeybush tea grows, all production batches should meet optimum quality standards," said Du Preez.

"Only quality batches should reach the market."



Honeybush tea samples in the laboratory.

Image: Brigitte du Preez