

# Local scientists on trail of adulterated honey

## Francesca Villette

HONEY has become the target of food fraud in South Africa, whereby cheap sugar syrups are added, or it gets diluted with cheaper low-quality versions.

In order for distributors to detect whether the honey they are selling is the real thing or not, food scientists and analysts from Stellenbosch University and the University of Rome La Sapienza have developed a method using near-infrared spectroscopy – whereby protein and moisture contents can be measured simultaneously from a single sample.

South Africa consumes about 4 000 tons of honey a year, but only produces about 1 500 tons.

Marena Manley, a professor in the university's Food Science department, said not only was the consumer misled regarding honey's adulteration, local producers could not compete with the low prices.

Another form of misconduct is that honey is labelled as being produced locally, when it has actually been imported or diluted with imported honey.

“Authentic South African sam-

ples, despite coming from diverse regions and having been made from pollen from different types of flowers, share specific spectroscopic characteristics that help to differentiate them from imported and adulterated honeys.

“There was therefore a need for a fast, non-destructive, easy to use and low-cost classification method to detect adulteration in South African honey,” Manley said.

Chairman of the SA Bee Industry Organisation Mike Miles said a steady decline of bees in the country over recent years due to climate change and deforestation had added to the problem.

“We don't have a strong beekeeping industry because there are limited food sources.

“Between pollination seasons bees have to be kept fat and healthy, but since the vast destruction of Eucalyptus plants, this is more difficult,” Miles said.

China is the world's largest producer of honey, and South Africa imports from there.

In 2006 South Africa was the 64th largest honey producer, producing 0.11% of world production.

*francesca.villette@inl.co.za*