

SA scientists hunt for elusive plant 'barcode'

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A University of Johannesburg project hopes to track down the elusive genetic barcode of Earth's plant species through research at the Kruger National Park, the university said on Tuesday.

A small team of scientists aims to collect examples of all the plants in the park and has collected 1 600 specimens so far, said university spokesperson Herman Esterhuizen.

The plants will be studied using DNA sequencing and barcoding techniques.

DNA barcoding allows quick and inexpensive species identification. It has been successfully applied to animals but not yet to plants, he said.

"We hope to be the team to identify the genetic barcode for plants," said team leader Dr Michelle van der Bank, of the department of botany and biotechnology.

This would allow botanists to do groundbreaking identification of species using the barcoding method, she said.

"People around the world are working to find out which part of the genome will be used to identify any plant because that hasn't been found yet," said team member Olivier Maurin.

Collecting samples at the Kruger National Park offers the best way to try to find the barcode, he said.

The collection process started in September last year and is the most complete and recent inventory of the park's flora. Samples are analysed, categorised and stored at the university, and DNA duplicates are sent to the park and other institutions.

In 2004 an international initiative was launched to promote DNA barcoding.

"In the case of plants, the search for short fragments of DNA that will act as 'barcode' has thus far proved unsuccessful," said Esterhuizen.

Scientists from 11 institutions are searching for the "elusive gene" that would allow them to barcode the Earth's 300 000 plant species, he said. -- Sapa