

Unique way to document all SA species

Researchers are planning a 17-day expedition to document animal and plant species in South Africa's biodiversity hot spots, University of Johannesburg spokesman Herman Esterhuizen said yesterday.

The goal is to barcode 20 000 specimens by next April and a further 40 000 by April 2013.

The expedition would be headed by a Toyota environment outreach group and a DNA project - International Barcode of Life (iBOL).

The expedition will be part of the UN's international year of biodiversity. The project's goal is to assemble a DNA barcode reference library for all life on earth.

By 2015, iBOL will gather DNA barcode records for five million specimens representing 500 000 species.

A group of scientists and students drawn from the University of Johannesburg, the University of Guelph in Canada, Cape Nature and SA National Parks will lend a helping hand.

All DNA barcodes will be loaded onto an online database which the scientific community and amateur naturalist groups can access.

Three of the country's hot spots will be used for collection of data, including the Succulent Karoo on the coast of Namibia, Northern Cape and Western Cape; the Cape Floristic region in the Western Cape; and Maputaland-Pondoland-Albany.

iBOL is the brainchild of Paul Hebert who was in a store with his wife when he wondered if all the items could be identified by simply using 10 numbers of a barcode, why this could not be applied to DNA.

While using DNA to identify species was not new, the idea of using the same small strand of DNA from each species to differentiate it from others was.

Hebert said DNA barcoding had huge practical implications, including learning about the rise and fall of species and the effect that environmental changes have on them.

The project will identify species that need conservation and try to curb the illegal trade of endangered species.

Scientists also hope to identify invasive and poisonous organisms and control pests and diseases.
- Sapa

Published on the web by Pretoria News on July 20, 2010.

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