

Global barcode project to scan plants in the wild

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(PhysOrg.com) -- A cheap and fast method of identifying the world's most important plants in the wild could soon be possible, thanks to a global project involving the University of Adelaide.

Researchers from Adelaide, North America, Africa, China and Europe are collaborating to create genetic barcodes for up to 20,000 grass species around the world, using a genetic marker found in the DNA.

"Grasses are the foundation of human civilization," says Professor Andrew Lowe from the Australian Centre for <u>Evolutionary Biology</u> and Biodiversity at the University of Adelaide.

"Wheat, barley, rye and oats are all grasses, as are many important pasture species used to graze domesticated animals, but they are notoriously difficult to identify in the wild."

Professor Lowe says the Grass Barcoding of Life Project (GrassBoL) will develop a standard method of genetic identification for grasses and their relatives, benefiting many different areas of research, including ecology, agronomy and evolution.

"We all know the convenience of being able to scan groceries at the supermarket to create a list of what we are purchasing. Imagine being able to do the same thing for <u>native plants</u> in the wild.

"Being able to rapidly identify these grasses in their natural habitats will



allow us to adapt to climate change by choosing appropriate staple crops for shifting climates," Professor Lowe says.

The driving force behind the project is Dr Hugh Cross from the State Herbarium of South Australia and a University of Adelaide affiliate.

Dr Cross presented his early barcoding work on 100 Australian grass species at a recent meeting in Mexico, where an international agreement was reached to share data and scientific outcomes.

Funding valued at \$350,000 has been provided for the project by the International Barcode of Life, Australian Biological Resources Study and the Federal Government's Taxonomy Research & Information Network.

"We agreed to cooperate to develop barcodes for over 20,000 species of plants," Dr Cross says.

Professor Lowe says all information will eventually be made available online for scientists around the world.

Provided by University of Adelaide

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