

# Cracking the species code for plants

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A recent article published in the *Botanical Journal of the Linnean Society* searches for one or more short pieces of DNA code that could eventually be used in an automated fashion to reliably identify almost all land plant species.

Plants are essential to our survival and that of most other animals on earth. It is easy to overlook this fact because they have become discretely embedded into our everyday lives. Plants provide us with food, medicines, and raw materials used by our industries. In spite of their importance, very few of us could name more than a tiny fraction of the plants that surround us.

True, most would have little difficulty in distinguishing between a buttercup from a dandelion (provided both are in flower) but only a hand full of experts could identify all 1600 native plants in the UK, and nobody is able to name all of the 250,000 or so plant species recorded world-wide. Accurate plant identification on a large scale is nevertheless vital if we are to protect the most biodiverse regions of the world. Equally, plant identification based on DNA could help in the search for new sources of pharmaceutical drugs, check ingredients in food and industrial products or provide a new source of forensics information for criminal investigations.

In a step towards addressing these needs, a consortium of scientists from the United Kingdom, the USA, Sweden and Syria have collaborated in the search for one or more short pieces of DNA code that could eventually be used in an automated fashion to reliably identify almost all

land plant species.

This study, recently published in the *Botanical Journal of the Linnean Society*, has provided a short-list of six gene regions that are present across almost all land plants, suitable for use on processed food products and sufficiently variable in their code to allow separation of closely related species. The next step is to test these regions (and a small number of others identified previously) against a very large number of plants from throughout the world.

More information: *Botanical Journal of the Linnean Society*, Online ISSN: 1095-8339, [www.interscience.wiley.com/joi/121639682/abstract](http://www.interscience.wiley.com/joi/121639682/abstract)

Provided by Wiley

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