

Starting out: A List

Objective I: Plant diversity is well understood, documented and recognized

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Target 1: An online Flora of all known plants

"If you take a flower in your hand and really look at it, it's your world for the moment."

Artist Georgia O'Keeffe



SANBI



Curitiba Botanic Garden

An important first step in plant conservation is to make a list of the world's known plant species: we can't know a plant species is becoming extinct unless we know that it exists.

It may be surprising to know that until very recently, there was no complete checklist of the world's plants.

The first definitive list (The Plant List) was published in December 2010 and it provides the scientific (Latin) names for 300,000 species of plants. At the end of 2010, the Plant List was thought to be about 85% complete. Work is now continuing to complete the list.

At the same time as completing the list, this target focuses on developing the list into a "Flora". The word "Flora" with a capital 'F' refers to the publication of scientific descriptions of plants occurring within a given region. A Flora is more than just a list of plant names. It also typically includes common names, literature references, descriptions, habitats, geographical distribution, illustrations, flowering times and notes.

The importance of a name

Creating a definitive list of plants may seem a simple task. However, the same plant species may be given a different name by people in different places and at different times (or simultaneously). Each accepted name is based on a dried specimen of that plant, known as a herbarium specimen. The Plant List includes

300,000 species yet there are at least a further 480,000 names by which these plants are also known (synonyms). There are often many plant names for one plant species. For example, the tree which is commonly known as the Doum Palm or Gingerbread Tree, and whose scientific name (in Latin) is *Hyphaene thebaica*, is also known by 16 other scientific names.

A little history....

Botanists have been writing Floras since the early 1600s. Physicians used Floras for information on medicinal plants while horticulturists used Floras to identify plants that might be brought into cultivation. Floras have documented plants collected in exotic places as well as plants growing in a botanist's own area. The form of Floras--lists of plants with associated information about them--has changed very little over the centuries, but in the last two decades the use of computers to store and organize such information has increased dramatically.

Where are we now?

The Plant List, published in December 2010, is a working list of all known plant species. Version 1 aims to be comprehensive for species of Vascular plant (flowering plants, conifers, ferns and their allies) and of Bryophytes (mosses and liverworts). Collaboration between the Royal Botanic Gardens, Kew and Missouri Botanical Garden enabled the creation of The Plant List by combining multiple data sets held by these institutions and other collaborators.

The Plant List includes 620 plant families, 16,167 plant genera and 298,900 accepted species names. It also contains 477,601 synonyms (alternatives for the accepted names) and 263,925 names that are yet to be determined as accepted names or synonyms.



Find out more:

www.theplantlist.org
www.catalogueoflife.org
www.tropicos.org
www.efloras.org

