

Plant Names



Scientific plant names

Every plant that has been described by scientists has been given a scientific name. Each plant has a genus name (like a surname) and a species name, or epithet (like a given name). Together, these two names uniquely identify that plant. ***Fagus sylvatica*** is the name for the European beech tree and no other plant in the world has this name combination.

Once you know the scientific name of a plant, it is easy to find other information on it, for example: other names it is known by, where it grows, the types of habitat it grows in, its uses, whether it is edible or toxic, and if it has any cultural significance.

Kew information sheet B2

Left: English names can be misleading. Spanish moss (*Tillandsia usneoides*) doesn't come from Spain and is not a moss! Its specific epithet 'usneoides' means lichen-like which is much more descriptive.



Why are scientific names better than English ones?

A scientific name will tell you a lot about a plant. In the same way that members of a family of people will share a surname, groups of closely related plants share a genus name. *Cupressus sempervivens*, *Cupressus macrocarpa* and *Cupressus bakeri*, for example, are trees which have been grouped together because they share many characters and are therefore, considered to be related. This means that given a plant name, if you are familiar with other plants in that genus, you can make an educated guess about the appearance, smell or chemistry of the new plant even if you've never seen it before. In other words, a genus name is **predictive**.

The **uniqueness** of a scientific name is vital as it prevents a huge amount of confusion. The same common name can be used for more than one plant. For example the name 'bluebell' is given to *Hyacinthoides non-scripta*, which carpets English woods in spring. However, in Scotland the 'bluebell' is *Campanula rotundifolia*, a delicate flower of dry, open ground. If you were reading something that mentioned bluebells, how would you know which plant it was talking about?

A plant can also have many different common names that vary between regions and through time. Many plants have more than one vernacular (local) name. Bird's-foot-trefoil (*Lotus corniculatus*), for example, is also known in the UK as hen and chickens, Tom Thumb, granny's toenails, cuckoo's stockings, and Dutchman's clogs. Finding information on a plant is almost impossible if you have to search under references to all the names it is, or has ever been, known by.

Scientific names are also **recognised globally**. This means that when botanists in Bangor, Bogata, Bombay or Biysk mention *Meconopsis baileyi* they are all talking about the same plant.

Another good reason for using scientific names is that the majority of the world's plants do not have English names!

Plant names – how are they written?

Genus and species names should be written in italics (or underlined). The complete citation of a name would also include the name, or an abbreviation of the name, of the person who published the species. The person who first described *Magnolia grandiflora* and had the name and description published was Linnaeus, usually abbreviated to L. in plant name citations:

***Magnolia grandiflora* L.**

In botanical texts, another convention is that once a genus has been mentioned, it can be abbreviated (usually to the first letter) in subsequent text. So as our example has already been written, it can now be abbreviated to *M. grandiflora*.

Why use Latin?

Botanical Latin is an international language used by botanists the world over for naming and describing plants. It originates from the Latin of the Roman plant writers, notably Pliny the Elder (A.D. 23-79). The Swedish botanist Carolus Linnaeus (1707-79) formally established the tradition that all plants should be given Latin names (or names of Latin form) and that works relating to them should also be in Latin.

This tradition of using Latin has continued for many good reasons. Latin is a dead language, so the meanings of words do not change in the same way as those for living languages. Also, botanical Latin is very descriptive, with many terms for shape, texture and colour. Another advantage is that Latin does not inspire the political jealousies that might emerge if botanists were to convert to, say, English or Spanish.



Equisetum giganteum (*Giant horsetail*)

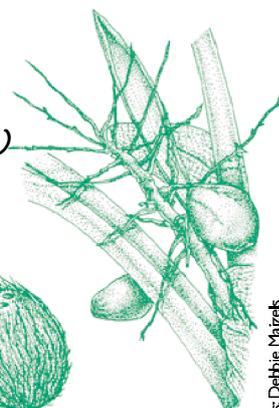
Equus = horse, *setum* = bristle

giant

Cocos nucifera (*Coconut*)

referring to a monkey (from Portuguese)
- the nut (fruit) with its three holes is
reminiscent of a monkey's face

nut-bearing



Bellis perennis (*Daisy*)

From Latin *bellus* = pretty *perennial*

Galanthus ikariae

Gala = milk, *anthos* = flower
(*Snowdrop* genus)

from the island of *Ikaria* in the Aegean. According to
Greek mythology, this is the island from where *Icarus*
made his unsuccessful flight to the Heavens

Scabiosa atropurpurea

From Latin *scabies* = itch:
the plant was once used as a remedy for skin diseases

dark purple - referring to
the colour of the flower

Iris foetidissima (*stinking iris*)

A rainbow, presumably from the
many colours of the flowers

fetid *most* = smelliest!

Forsythia spectabilis

Named after William Forsyth
(1737-1805)

showy

Corylopsis veitchiana

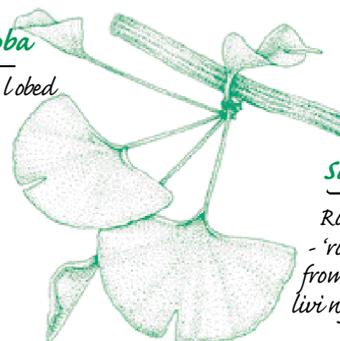
From Greek *korylos* = hazel,
- *opsis* = like (hazel-like foliage)

after the Veitch family who sent many collectors
out on expeditions for plants for their nursery

Ginkgo biloba

The Chinese name for *Ginkgo*

two-lobed



Saxifraga biflora

Rock to break *two -*
'rock-breaker', *flowered*
from its habit of
living in crevices

Above: Scientific plant names can usually be broken down to extract meaningful descriptions or aide-mémoires.

Comprehensive lists of derivations and roots of plant names can be found in the references in 'Further information'.

Why do plant names keep changing?

One of the commonest reasons for name changes is misidentification. Plants can be introduced into horticulture under an incorrect name that can quickly spread and become familiar before being corrected. Also, according to the set of rules for naming plants (the International Code for Botanical Nomenclature), if a plant has been described more than once, then the oldest name has priority.

As taxonomists study plants in closer detail, they may change their ideas about relationships between them. A genus may be split into two or more groups, or a plant can be moved from one genus to another. For example in the nineteenth century *Azalea* was merged with *Rhododendron*, and *Chrysanthemum* has been split into several genera. Although it may be inconvenient at the time, using the most up-to-date knowledge about which genus a plant belongs to increases predictivity, or the amount of information that you can presume about a plant (discussed above). An accurate name puts a plant in the correct place in the filing system of botanical classification. (See information sheet B1 for more information.)

Botanical Latin – common terms in names

Knowing the origins or meanings of names helps to make them more interesting, informative and memorable. Many names describe the plant, or a part of it. Others mention the region or habitat in which the plant grows. Some suggest medicinal properties or other uses, while others simply commemorate the name of its discoverer or a botanist who worked on it.

One area of confusion with scientific names is that the endings change. The reason is that in Latin an adjective must agree in gender with its noun. For example, *niger*, *nigra*, or *nigrum* all mean 'black'. Here, the root 'nig-' or 'nigr-' is the bit to recognise.

Further information

Stearn W.T. (1992) *Botanical Latin*. 4th edn. David and Charles, Newton Abbot, Devon.

Johnson A.T. and Smith H.A. (1972) *Plant Names Simplified*. Landsmans Bookshop Ltd., Bromyard, Herefordshire.

Garden Gate website: Glossary of roots of botanical names.
<http://garden-gateprairienet.org/bottrts.htm>