

Plant Nomenclature

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Over the centuries there have been numerous attempts to identify and name plants in an orderly fashion. Early attempts at identification relied on Latin words to describe various aspects of a plant. As more and more plants were identified and classified, the length of individual names increased as well. It was not uncommon to have plants named or described with eight or more words.

Historical Development

In the mid-1750s Carl von Linné, a Swedish botanist using the pen name, Linnaeus, wrote *Species Plantarum* and changed the way plants are named. He made two primary contributions to the field of nomenclature.

He stated that all plants should be given two names. The first identifies the genus; the second represents the species. This format is known as the Latin system of binomial nomenclature. Over the years it has been modified and expanded, but it is still the basic structure of our modern system.

The language of plant nomenclature is Latin. In the 18th century, Latin was the language of science, and many Latin plant names were carefully constructed to render information about the plant. Such names fall into one of four categories:

1. Latinized descriptive phrases are often derived from Greek words and reflect a particular plant quality. A few examples are “alba” (white), “rubra” (red), and “serrata” (toothed). The medicinal value of some plants is seen in their names, such as lungwort (*Pulmonaria*).
2. Some plant names may be anagrams with absolutely no meaning at all. Such naming practices are no longer considered acceptable. However, because of the rule of first priority, existing anagrams must be retained if they are the earliest known name for a plant.
3. Some plant names are tributes to mythological Greek and Roman characters. Plant names in this category include *Narcissus*, *Dianthus*, and *Andromeda*.
4. A number of plant names commemorate significant contributions from early botanists and plant explorers. Most generic names ending in “ia” honor former plants keepers. Gardeners are familiar with *Magnolia*, *Forsythia*, and *Zinnia*, named for Pierre Magnol, William Forsyth, and Johann Zinn, respectively.

Everyday Nomenclature

The complete name of any plant in commercial trade includes the genus, the species, and a common name, in that order. The first letter of the genus is capitalized, the species is lowercase, and both are either underlined or written in italics. Examples of complete names are: *Cucumis sativus* (cucumber), *Lathyrus odoratus* (sweet pea), and *Cercis canadensis* (eastern redbud).

The Latin genus and species name is a universal format used worldwide and should be understood by everyone discussing a plant. Common names, on the other hand, are just that — common to a particular area, region, or country, and may not provide accurate identification of a plant in all situations. *Nymphaea alba* (European white waterlily) for example, has 245 different common names across Europe. The genus and species name is thus best used in discussions of plant materials.

Some plants may have a third Latin name after the genus and species. It is preceded by “var.,” which signifies a variety or group of plants subordinate to the species. The differences between a true species and a variety of that species are inheritable and should show in succeeding generations of the variety. Examples of varieties are *Cercis canadensis* var. *alba*, which has white flowers, and *Gleditsia triacanthos* var. *inermis*, a thornless variety of common honeylocust.

A relatively new horticultural term is cultivar. A cultivar is a collection of cultivated plants that are clearly distinguished by certain characteristics and which, when reproduced (sexually or asexually), retain their distinguishing characteristics. Cultivars do not occur in nature and must be maintained under cultivation. Cultivar names are written with single quotes, and the first letter of each word is capitalized; or “cv.” is inserted before the name, and the single quotes are deleted.

Examples of cultivars are *Berberis thunbergii* ‘Crimson Pygmy’ and *Cornus florida* var. *rubra* ‘Cherokee Chief.’ Crimson Pygmy Japanese barberry has deep-red foliage instead of green like the species, and Cherokee Chief dogwood has flowers of a deeper red than the variety *rubra*.

Occasionally a plant name may have the letter “x” between the genus and species. This represents an interspecific hybrid resulting from a cross between two species within the genus. An example is *Viburnum x burkwoodii* (Burkwood viburnum), which resulted from a cross between *V. carlesii* and *V. utile*.