

# Botanical Names

Scientific Notation

# So why bother with Botanical names anyway?

- ▶ It's an International scientific language that will be understood by gardeners in any part of the world.
- ▶ Common names vary, even within countries and regions, so you can never be sure which plant is being referred to.
- ▶ If you use the Latin name at least you'll be talking about the same thing.

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- ▶ Botanical names are written on entry cards of all horticulture exhibits.
- ▶ While the HB does not require botanical names for design exhibits, Linda is requiring (or highly urging) all participants of this series of Floral Design Studies to use them to name plants in their designs.
- ▶ Rationale: This is an educational course of study. Use it as an opportunity to learn all you can not only about floral designs, but also the plants used in making the designs.

- ▶ Taught in Flower Show School:
- ▶ King David cried, “Oh, for goodness sakes!”

- ▶ King Kingdom (Plants, Animals, Fungi, Bacteria, Protists)
- ▶ David Division - or a word ending in -phyta
- ▶ Cried Class-- a word ending in -psida
- ▶ Oh Order- a word ending in -ales
- ▶ For Family - a word ending in -aceae
- ▶ Goodness Genus
- ▶ Sakes Specific epithet

The HB lists the following:

- ▶ Family - A grouping of plants sharing certain genetic and structural characteristics. Ends in **-aceae**. Do not include this name on an entry card.
- ▶ Genus (plural genera) - subgroup of family or closely related plants. 1<sup>st</sup> name.
- ▶ Specific Epithet - a subgroup of a genus. 2<sup>nd</sup> name.
- ▶ Variety - A distinct group occurring naturally within a species that have unique characteristics distinct from other plants in the species. 3<sup>rd</sup> name.

(See next page.)

- ▶ Cultivar -a hybrid or sport of a species which will not come true when seeds are planted. 3<sup>rd</sup> name.
- ▶ Series - Cultivars identical to each other except for color
- ▶ Patented Name -Names used for marketing. Usually different from cultivar names. May or may not be trademarked. Capitalized, not italicized, underlined or surrounded by single quotes.

*Euphorbia hypericifolia* 'Inneuphdia' Diamond Frost®.

Trademark – unregistered. Has limited legal rights of ownership. Mark with ™.

Registered Trademark – has extensive legal rights of ownership. Mark with ®

*Phlox  
paniculata*



## Writing Scientific Names



*Rudbeckia fulgida*  
var. *sullivantii*  
'Goldsturm'

### • Genus Name

1. The genus name is written first.
2. The genus name is **always** underlined (if written by hand) or italicized (if typed).
3. The first letter of the genus name is always capitalized.

Example : Salvia or *Salvia*

### • Specific Epithet

1. The specific epithet is written second.
2. The specific epithet is **always** underlined (if written by hand) or italicized (if typed).
3. The first letter of the specific epithet name is **never** capitalized.

Example: farinacea or *farinacea*

The scientific name of this plant would appear as follows:

Salvia farinacea or *Salvia farinacea*

The common name, Mealy Cup Sage could be included below the scientific designation. Enclose it in parentheses.

*Salvia farinacea*

(Mealy Cup Sage)

Cultivar names are given when a mutation occurs **due to human influence (a hybrid or sport)**.

## •Cultivar Names

1. The cultivar name is written within single quotes.
2. Capitalize the cultivar name.
3. **Never** underline or italicize the cultivar name.

Example: *Rosa grandiflora* 'About Face'

Sometimes the abbreviation **cv.** is used to signify that the mutation is a cultivar.

cv. is placed after the specific epithet and is **not** underlined or italicized.

Example: *Rosa grandiflora* cv. About Face

# Variety

A distinct group occurring naturally within a species that have unique characteristics distinct from other plants in the species.

When writing the variety name, separate it from the genus and specific epithet by the abbreviation var. (abbreviation is not italicized or underlined or capitalized, but the varietal name is italicized or underlined).

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- ▶ *Phyllostachys nigra* var. *henonis* is a variety of black bamboo. (some different characteristic such as color of leaves or stalk, but still *P. nigra*.)
  - ▶ There is a white flowering redbud that was found in nature. Its scientific name is *Cercis canadensis* var. *alba*. The varietal term "alba" means white. (but still *C. canadensis*.)
  - ▶ A Hybrid has at least two parents. A variety does not have two different parents from two different species.

# What about those x's?

- ▶ Sometimes an x is placed before the generic (genus) name. In that case, the plant is a mix between two genera.
- ▶ If the x appears before the specific epithet (or species name), it is a cross between two species.

Examples:

**Generic cross:** *× Fatshedera lizei* (cross between *Fatsia japonica* and *Hedera helix*).

**Species cross:** *Platanus ×acerifolia* thought to be a hybrid of *Platanus orientalis* (Oriental Planetree) and *Platanus occidentalis* (American Sycamore).

# Other considerations

- ▶ Some plants are so highly hybridized that writing all the information would be difficult, the information may be lost, or you may be unable to find a complete scientific designation. This may be true with such large groups of plants as orchids, succulents, bromeliads, lilies, and others.
- ▶ If you cannot be sure of the specific epithet, you might choose to simply write sp. after the generic name. (sp. - singular, spp. Plural) Example: *Cattleya* sp. You might not get full credit for naming an orchid this way, but you don't want to name a cultivar or a grex (man-made hybrid) incorrectly.
- ▶ Always do the best you can to find the complete name of a specimen. Unless you are a scientist writing professional literature, less is sometimes acceptable.

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1. The entry tag is used to properly identify the exhibit and is one of the best methods to educate the public.
2. Exhibitors should provide as much of the botanical binomial or current scientific designation as possible. Common names, enclosed in parentheses, can be included below the scientific designation.

Note: Always do the best you can. At the very least you can underline, italicize, capitalize (or not) correctly. If you get that part right, chances are that nobody will know the difference.