

# What's In a Botanical Name?

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## Lessons from the Discovery Garden

You can spend a lifetime growing beautiful plants without memorizing their botanical names. However, just as knowing a little local language when you travel abroad enhances your experience, knowing a few Latin terms associated with plant characteristics helps you recognize what you see in the wild and growing in your garden. Touring botanic gardens and neighborhood nurseries becomes a rich experience. Exploring the colorful history and legacy coded in botanical names--and why not on these rainy afternoons--becomes entertaining.

There are practical reasons beyond simple curiosity to know botanical names. You can search for and order nursery plants with confidence that you will get exactly what you want. Advice you obtain for diagnosis of disease or pest-related damage of a plant identified by botanical name is likely to be more accurate and reliable.

Why do plants have tongue-twisting names? It's about knowledge, about making sense of the plant kingdom. Eighteenth century botanist, Carl Linnaeus, created a naming scheme or **nomenclature** to distinguish plants, one from the next. His nomenclature describes relationships between species according to their shared attributes. Today, the catalog of plants has grown into the International Code of Nomenclature of Algae, Fungi and Plants (ICN), which continually evolves as more becomes known.

Every **species** is uniquely described by two or more words--its **genus** and a **specific epithet**. For example, *Tropaeolum majus* describes the species we commonly call nasturtium. The genus--always in Latin--defines a larger class to which the plant belongs and is always followed by a species description or specific epithet. The Latin adjective or combination of modifiers that comprise the specific epithet often tells you what is special about the plant-- perhaps its use, scent, discoverer, growth habit, foliage or flower.

The specific epithet may also include **variety** (var.) and/or **cultivar** names (shown in single quotation marks). A variety is a naturally occurring modification of the species, while a cultivar is achieved through human intervention by selective breeding. A variety will reproduce identical to its parent, while a cultivar will not. For example, *Cynara cardunculus* var. *scolymus* is the familiar variety globe artichoke, and *Ocimum basilicum* var. *purpurascens* 'Dark Opal' is a common cultivar of purple basil.

The names "globe artichoke" and "purple basil" are **common names**. While common names are more familiar and we converse largely with common names, they are regionally variable. When you want to be sure you are talking about the same plant, use its botanical name.



*Camellia japonica*, as noted by its place name, grows well in Japan and similar climates. *Photo by Carla Glassman / WSU Skagit County Master Gardener.*

A **hybrid** name contains the symbol “x” and is given by the creator of the hybrid. For example, *Astilbe x crispa* ‘Perkeo’ names a unique hybrid dwarf astilbe. Botanical names of many beautiful flower species with complex parentage—species which have for centuries been hybridized, such as iris, fuchsias, and rhododendrons—are lengthy and sometimes unavailable. Instead you may read their abbreviated names as, for example, *Fuchsia x hybrida* ‘Voltaire’ or more simply still as *Fuchsia* ‘Voltaire’.



Christmas Cheer is a *Rhododendron caucasicum* hybrid that originated in Caucasus, a region in Europe. Photo by Carla Glassman / WSU Skagit County Master Gardener.

from distinctive structures at its leaf auricles—wavy thread-like, fiery orange setae resembling flames that engulf the mythic dragon head of ancient Chinese literature. In recent years it has been revealed that much imported bamboo in western gardens thought to be *Fargesia dracocephala* may instead be a similar species, the red-tipped *Fargesia apicirubens*. Be advised that true dragon's head bamboo may be in circulation, mistakenly or otherwise, also as *F. rufa* or *Fargesia* 'Rufa'.

As a key to plant selection, watch for terms in the specific epithet which suggest their desirability. An elementary example may be seen in place names.

By far the best method for choosing suitable plants for Pacific Northwest gardens is selecting varieties that come from places with similar weather and growing conditions. For our area, these places would include (among others) the New England states, British Columbia, England, Japan, China, northern or Eastern Europe, including Poland and Russia. Take note of these place names of plants at the Discovery Garden the next time you visit:

- *novae angliae* (of New England) in *Aster novae angliae*, or New England aster;
- *canadensis* (of Canada) in *Amelanchier canadensis*, or serviceberry;
- *japonica* or *niponicum* (of Japan) in *Pieris japonica* 'Purity', or Japanese andromeda; *Athyrium niponicum* var. *pictum*, or Japanese painted fern;
- *chinensis* (of China) in *Callistephus chinensis*, or China aster; *Astilbe chinensis* or Chinese astilbe;
- *caucasica* (of the Caucasus) in *Rhododendron caucasicum* x hybrid 'Christmas Cheer'; *Scabiosa caucasica*, or pincushion flower;
- *sibirica* (of Siberia) in *Iris sibirica*, or Siberian iris;
- *syriacus* (of Syria) in *Hibiscus syriacus*, or rose of Sharon.

In the way any language evolves over time, so do plant names. DNA study has advanced our knowledge of plant species causing some plant names to change. In the WSU Discovery Garden, for example, we find we must relabel our 'Autumn Joy' sedum, because it has been reassigned to a different genus. Its botanical name no longer is *Sedum spectabile* but *Hylotelephium spectabile*. How long, I wonder, it will take us to call it 'Autumn Joy' hylotelephium?

Similarly, plant names change when confusion of very similar species comes to light. As an example, a true dragon's head bamboo, *Fargesia dracocephala* (*draco*—dragon; *cephala*—head), derives its name

Shakespeare would say, “What’s in a name? That which we call a rose by any other name would smell as sweet.” True, indeed. Yet, so much more can you appreciate and share about the natural world around us once you know what’s in a name.

## **RESOURCES:**

- “Appendix 1: Names of Plants.” Norton Brown Herbarium, College of Agriculture and Natural Resources, Department of Plant Sciences and Landscape Architecture, University of Maryland College Park, 2013.  
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<http://www.cnpsci.org/html/PlantInfo/WhyPlantNamesChange.htm>
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[http://bamboo-identification.co.uk/html/dragon\\_head\\_bamboo.html](http://bamboo-identification.co.uk/html/dragon_head_bamboo.html) Author curriculum vitae at [http://bamboo-identification.co.uk/html/about\\_the\\_author.html](http://bamboo-identification.co.uk/html/about_the_author.html).
- “*Hylotelephium spectabile* (Boreau) H. Ohba, showy stonecrop.” USDA Natural Resource Service Plant Database plant profile for “*sedum spectabile*”.  
<https://plants.usda.gov/core/profile?symbol=HYSP9>
- *Horticulture Plant Names Explained: Botanical Terms and Their Meaning*. Stern, W. with forward by McIndoe, A. David & Charles Publishing and Horticulture Publishing, Boston, MA, 2005.
- *Stearn’s Dictionary of Plant Names for Gardeners*. Stearn, W.T., Timber Press, Portland OR, 2002.

Note: some hyperlinks and references in this article have been updated since its initial publication.