

Part 542 – Acronyms

542.2 Plant Nomenclature

The scientific, or Latin, names of plants, both wild and cultivated are formulated and written according to rules governed by the *International Code of Botanical Nomenclature*, July 2005 (Vienna Code). Distinguishable groups of cultivated plants, whose origin or selection is due primarily to mankind, are given epithets (i.e., names, such as cultivar names) formed according to the rules and provisions of the *International Code of Nomenclature for Cultivated Plants*, February 2004. The aim of these codes is to promote uniformity, accuracy and stability in formulating the scientific names of all plants (Botanical Code) and in formulating the cultivar names of agricultural, forestry, and horticultural plants (Cultivated Plant Code). The following text is adapted from these two Codes.

Genus and Species Names

Plant names may include a genus, specific epithet, a name rank below species (such as a subspecies and/or botanical variety), Latin name authorities, and the cultivar or release name. The genus, species, and variety or subspecies names are always italicized or underlined. Authorities should always be included with the Latin name the first time the plant name is used. A scientific plant name may be written in either of the following ways:

Ammophila breviligulata Fern. OR *Ammophila breviligulata* Fern.

Hybrid Names

Validly published hybrid names are signified by the symbol “x” and are not italicized. Hybrids at the generic level are written with an “x” immediately prior to the genus name, such as in the following example:

xElymus colvillensis (Lepage) Barkworth

For a hybrid at the species level an “x” is placed immediately prior to the specific epithet, as in this example:

Quercus xdeamii Trel.

(*Quercus xdeamii* was found to be a product of the cross *Quercus macrocarpa* Michx. *x Quercus muehlenbergii* Engelm.)

Subspecific and Varietal Names

The terms “subspecies” and “variety” are used to designate the first and second divisions of a species. A “subspecies” is a grouping within a species used to describe geographically isolated variants, a category above “variety”, and is indicated by the abbreviation “subsp.” in the scientific name. A “variety” consists of more or less recognizable entities within species that are not genetically isolated from each other, below the level of subspecies, and are indicated by the abbreviation “var.” in the scientific name. These terms are not italicized.

When the subspecies or variety name is the same as the specific epithet (this is called a typical expression), then the authority is included only after the species name, as in the following example:

Cornus sericea L. subsp. *sericea*

When the subspecies name or variety is different than the species name, then both the species authority and the subspecies or variety authority are used, as in the following example:

Cornus sericea L. subsp. *occidentalis* (Torr. & Gary) Fosberg

Abbreviating Scientific Names

When a scientific name is used more than once, it is acceptable to abbreviate the genus name as long as the abbreviated name cannot be confused with other scientific names used in the same text. The authority name does not need to be included in the scientific name after the first time the scientific name is used. For example:

Use *Panicum virgatum* L. the first time, then use *Panicum virgatum* OR *P. virgatum* thereafter.

Plant Cultivars

A “cultivar” is a taxon that has been selected for a particular attribute or combination of attributes, and this is clearly distinct, uniform, and stable in its characteristics that when propagated by appropriate means, retains those characteristics. The cultivated plants covered by the International Code of Nomenclature for Cultivated Plants may arise by deliberate hybridization or by accidental hybridization in cultivation, by selection from existing cultivated stock, or may be a selection from variants within a wild population and maintained as a recognizable entity solely by continued propagation. Cultivar names may be given to the following types of propagated materials: clones, graft-chimeras, seed (as long as the propagated material retains the unique characteristics of the parents), line, multi-line, F1 hybrids, and genetically modified plants.

The words “variety” and “form” are not synonyms for the word cultivars according to the International Code of Nomenclature for Cultivated Plants. The Code considers these terms botanical classifications. The Association of Official Seed Certifying Agencies (AOSCA) considers the terms “cultivar” and “variety” equivalent. Because of the confusion with using the term variety to describe a cultivar, the Plant Materials Program does not consider variety and cultivar synonymous.

Formulating Cultivar Names

The following rules will be used when formulating cultivar names according to the International Code of Nomenclature for Cultivated Plants, 2004:

- Cultivar epithets must be a word or words in the modern English language. Latin word or words which may be considered Latin may not be used unless they are the classical name or an ancient Roman person, or of a place.
- Cultivar epithets may not be repeated within a genus, species or denomination class. A denomination class is a grouping of similar genera. For example, the same cultivar name may not be applied to a species of both *Festuca* and *Lolium*. [Note: the NPMC has lists of denomination classes that are checked when clearing names for new cultivar releases.]
- Cultivar epithets must consist of no more than 10 syllables and no more than 30 letters or characters, excluding spaces and demarcation marks. [Note: the Plant Materials Program limits the length to 30 characters, including spaces and excluding demarcation marks, because of database restrictions.]
- Cultivar epithets may not consist solely of common descriptive words (such as ‘Large’ or ‘Variegated’) in a modern language unless the descriptive word is used with a non-descriptive word (such as ‘Velvet Cream’), or unless the epithet is a recognized name of a color (such as ‘Indigo’ or ‘Majestic Red’).

- Cultivar epithets may not contain the following words: variety, var., cross hybrid, grex, group, maintenance, mutant, seedling, selection, sport, strain, improved, and transformed.
- Cultivar epithets may not contain punctuation marks except for the apostrophe (’), the comma (,), a single exclamation mark (!), the hyphen (-), and the period (.).

Writing Cultivar Names

The full name of a cultivar is the accepted botanical name in Latin form, followed by the cultivar name. Each word of a cultivar epithet must start with an initial capital letter unless it is a word after a hyphen or a conjunction or preposition which is not the first word of the epithet. Cultivar names are indicated by enclosing the name within demarcation single quotation marks (‘...’).

The following are examples of the proper method to write a cultivar name”

Spartina patens ‘Sharp’

Panicum virgatum ‘Cave-in-Rock’

Double quotation marks and the abbreviations “cv.” and “var.” are not to be used within a name to distinguish cultivar epithets. Note that past usage of the abbreviation “cv.” is no longer acceptable. The following methods must **not** be used when writing cultivar names:

Spartina patens “Sharp”

Spartina patens cv. Sharp

Common Names

There is no authority on writing common names for plant species. The commonly accepted convention for common names is all letters in lowercase except for capitalizing the first letter of the parts of a common name which are proper nouns. The following are correct methods of writing common names:

bitter panicum

eastern gamagrass

Utah sweetvetch

Sargent crabapple

References

J. McNeill, F. R. Barrie, H. M. Burdet, V. Demoulin, D. L. Hawksworth, K. Marhold, D. H. Nicolson, J. Prado, P. C. Silva, J. E. Skog, J. H. Wiersema, N. J. Turland (eds.). 2006. International Code of Botanical Nomenclature (Vienna Code) adopted by the Seventeenth International Botanical Congress, Vienna, Austria, July 2005. *Regnum Vegetabile* 146.

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