

CULTIVAR EPITHETS—AGAIN!

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The Cultivated Plant Code (ICNCP)-1995

A fellow member of the Azalea Society called one evening, puzzling over the publication of a newly registered four-word cultivar epithet ('Little's Early Light Pink'). Mea culpa! Some time ago I published "Don't name that plant—until you have read this article!" [THE AZALEAN 13(2), June 1991], in which readers were exhorted to follow the rules of the International Code of Nomenclature for Cultivated Plants (ICNCP)-1980. But I later failed to alert readers in timely fashion to the 1995 revision of the Code. One rule in the 1980 Code restricted cultivar epithets to three words. Many readers will recall my illustrating this with Robert Gartrell's experience in naming the azalea 'Nancy of Robinhill': the epithet could not be registered with Robin Hill correctly styled as two words. In registering a new cultivar today, one would not have to resort to the subterfuge of combining words.

Cultivar nomenclature is now governed by a heavily rewritten and expanded "Cultivated Plant Code," the ICNCP-1995 (Trehane, et al. 1995). A new cultivar epithet must be a word or words in a modern language. Personal names and place names are acceptable. (The full name of a cultivar comprises the Latin botanical name, at a minimum the genus name, plus the cultivar epithet; for example, *Rhododendron* 'Treasure'.) The three-word limitation is gone for epithets established on or after 1 January 1996. In its place is a limit of "no more than 10 syllables and no more than 30 letters or characters overall, excluding spaces and demarcating marks." A word to those who had epithets rejected under the three-word rule of the old code: "Whoa!" Those proposed epithets may not be established under the new rule.

A rule change directly affecting the presentation of cultivar epithets is that these must be enclosed in single quotes (or typographic equivalent); for example, 'Sherbrooke'. Double quotes or the abbreviations "cv." and "var." may not be used with cultivar epithets. Also—no change from the 1980 Code but contrary to usage in many nursery catalogs—the multiplication sign (used in Latin botanical names to indicate hybridity) must not appear before a cultivar epithet.

Another issue relating to the presentation of cultivar epithets is their relation to trademarks. First, the ICNCP-1995 makes clear that: "The formation and use of trade-marks are not governed by this Code." Because a trademark is owned by an individual, partnership, or corporation, it is not available for use except as permitted by the trademark owner. In contrast, under Principle 6 of the ICNCP-1995: "Cultivar and cultivar-group epithets must be universally available in all countries for use by any person to denote a particular cultivar or cultivar-group."

This is the key to some of the strange entries seen in nursery catalogs. The ploy is to choose an "ugly" cultivar epithet and then attract customers with a trademark available only to the trademark owner or licensee—or, alternatively, with a trade designation. The cultivar epithet must be in single quotes, and the trademark should be distinguished typographically: an imaginary example for a registered trademark is *Vossia* 'Goopglop' EVENING STAR®. (For an unreg-

The International Code of Nomenclature for Cultivated Plants (ICNCP) is a set of guidelines issued under the auspices of the International Commission for Nomenclature of Cultivated Plants of the International Union of Biological Sciences. Its authority comes not from legal sanction but from acceptance in the scientific and horticultural communities that a particular plant should be identified uniquely by a particular name.

Just as chemistry requires nomenclatural stability and would be a shambles if, for example, the name "oxygen" were to be applied variously to oxygen, nitrogen, potassium, and beryllium, so plant science and horticulture require precise application of plant names. Thus, Principle 5 of the ICNCP-1995 states: "Each taxonomic group of cultivated plants with a particular circumscription can bear only one accepted epithet." Those who work with plants (whether as a vocation or avocation) need to recognize the importance of and observe the codes governing botanical and horticultural nomenclature.

Certain laws, treaties, and international conventions also affect plant nomenclature. Their provisions are complex, and it is not an exaggeration to characterize them as a quagmire. As a lay observer of these matters, I shall call to the reader's attention some points gleaned from articles by experts with experience in the field of patent and trademark names (see references).

istered trademark, the symbol ™ is used.) Trade designations are governed by the Code; their presentation is typographically parallel; e.g., *Astroemeria* 'Statiren' IRENA.

I believe that it is desirable to achieve an appropriate relation between a cultivar epithet and the nature of the plant to which it is applied.

For some agricultural and floristic crops, often from inbred lines or repeatable single crosses between two pure-bred lines, combinations of letters and numbers may be an efficient way to identify cultivars. This rationale can be extended to some breeding stock in the parentage of ornamental plants. Parent plants frequently do not have all the characteristics requisite for a good ornamental but are used in hybridizing to infuse hardiness or some other factor desired in the progeny. Such parent plants should be registered with the appropriate International Registration Authority (see ICNCP-1995) to provide a permanent record of their identity and features. It does seem, however, a waste of good names (all too hard to come by) to require replacement of the breeders' identification codes for plants not being marketed. For ornamental woody plants worthy of being marketed, I believe that a breeder's identification such as "RAM96-12," should not be acceptable as a cultivar epithet. Some sellers would probably find it unsuited for attracting customers. This sort of epithet is likely to elicit a cool rather than warm response from landscape clients and gardeners, and warm response means dollars to sellers. To the detriment of nomenclatural stability, sellers might ignore a cultivar epithet such as "RAM96-12" and turn to trade designations (possibly different from seller to seller). Worse, contrary to the Code, many would probably style them in single quotes in their catalogs. The chaotic result: several de facto names for a clone, the antithesis of an important objective of the Code.

Other ICNCP rules dealing with presentation of cultivar epithets have been made more explicit. Article 17.6. is quoted here, in part because of its special application to Japanese cultivar epithets frequently encountered: "Each word of a cultivar epithet must start with an initial capital letter unless linguistic custom determines otherwise. Exceptions are words after a hyphen; conjunctions and preposi-

tions other than those in the first word of the epithet; and the particle 'no' in transliterated Japanese epithet's. "Among the examples cited in the Code are: *Achimenes* 'Show-off', *Malus domestica* 'Beauty of Bath', *Narcissus* 'At Dawning', *Rosa* 'Pompon de Paris', and *Camellia* 'Ama-no-gawa'. If derived from a hyphenated personal or place name, capitalization of the word following the hyphen is retained; e.g., 'Celia Blakeway-Phillips' and 'Baden-Baden'.

Note that in cases involving transliterated Japanese cultivar epithets, the particle "no" is hyphenated before and after the particle; that the following word is not capitalized; and that the components of the epithet (as in the example given above) are not to be combined. The usual capitalization applies to Japanese epithets without the particle "no"; for example, *Hosta* 'Ogon Setouchi'.

Implementation of the ICNCP-1995 rule for the particle "no" is simple if one is presented with a transliterated cultivar epithet in which the particle is shown separately (whatever the capitalization). For example, 'Shinnyo no Tsuki' is readily brought into compliance with the Code by styling it as 'Shinnyo-no-tsuki'. But if faced with something like "Amanogawa" (in a genus other than *Camellia*), how does one determine whether it is correct as presented or whether the elements of "Ama-no-gawa" have been improperly run together? It is the classic question: "How do you unscramble an egg?" For azaleas, the best advice the author can offer with respect to this issue is to start by referring to Appendix D, "Transliteration and Pronunciation of Japanese," and the various plant lists in Fred Galle's *Azaleas*.

The rules for translation and transliteration of cultivar epithets have changed. Now, a cultivar epithet must not be translated into another language if the same alphabet is used. The Code states as an example that the cultivar epithet of kohlrabi *Brassica oleracea*

'Nichtschiessender' may not be translated. For marketing purposes it is permissible to use a translation of the cultivar epithet as a trade designation. Thus, *Clematis* 'Blekitny Aniol' could be shown as *C.* 'Blekitny Aniol' BLUE ANGEL. A cultivar epithet in a modern language using a different script may be transliterated into Latin-alphabet script using pinyin for Chinese, Hepburn for Japanese, McCune-Reischauer for Korean, and U.S. Library of Congress (USLC) for others.

Many other changes are to be found in the ICNCP-1995. New rules are included for "cultivar-groups." The term "grex" may now be used only in orchid nomenclature. The duties and powers of International Registration Authorities (IRAs) have been spelled out, and the concept of "Standards" is introduced: "The Standard for a cultivar is the designated herbarium specimen or equivalent element to which a cultivar epithet is attached . . ." In some cases, illustrations may be designated as Standards (they may include paintings or photographic transparencies); these are often superior to herbarium specimens in delineating the diagnostic characters of a cultivar. Documentation associated with statutory registration or patents may also constitute Standards. The use of Standards is strongly encouraged. The various IRAs may have different practices in regard to documentation of cultivar registration.

The ICNCP editorial committee did yeoman work in preparing the new Code but could not eliminate its complexity. The reader desiring a full understanding should don his armor and enter the lists by purchasing a copy of the ICNCP-1995. In addition to the rules, the volume includes twelve appendices. Among these are guidance for IRAs, a directory of IRAs for various genera and groups of plants, a directory of statutory plant registration authorities, helpful guidance for those composing new cultivar epithets, a list of authors of checklists of ornamental cultivars in many genera, and a glossary.

Nomenclatural Implications of Plant Patents and Trademarks

The patenting of inventions has been possible under U.S. law since 1790. The Constitution (Art. I., Sec. 8., Clause 8) gave to Congress the power "To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." To qualify for a patent, an invention must be new and useful, and must have taken physical form; it should be the result of creative genius, not just the work of a mechanic skilled in the art. Needless to say, there has been a long trail of litigation over the bounds of these requirements, and, on occasion, tension between the views of the judiciary and those of the Patent Office.

It was not until 1930 that new varieties of plants became eligible for patent protection under 35 U.S. Code 161. Plant-protection attorney and former American Rose Society president Gioia explains that plant-patent protection comprises power to exclude others from asexually reproducing the patented plant, as well as excluding them from selling or using patented plants asexually reproduced without the permission of the patent owner (Gioia 1996b). It is available to whomever ". . . invents or discovers and asexually reproduces any distinct and new variety of plant, including cultivated sports, mutants, hybrids, and newly found seedlings, other than a tuberpropagated plant or a plant found in an uncultivated state . . ." Note that a plant in the wild may not be patented, and that asexual reproduction is prerequisite to application for a plant patent.

While patent protection under 35 USC 161 is limited to the plant itself, a broader form of protection, referred to as a "utility patent," is available under 35 USC 101. This section embraces a "new and useful process, machine,

manufacture, or composition of matter, or any new and useful improvement thereof . . ." Under this form of patent, protection may extend to one or more categories of seed, fruit, cut flowers, reproductive material, and other definable characters. Sexually reproducible new varieties may qualify for Certificates of Protection from the U.S. Department of Agriculture.

Originally, plant-patent protection extended for 17 years from the date of issue of the patent. Conforming to obligations assumed by the United States under the General Agreement on Tariffs and Trade, the protection under a patent issued on or after 8 June 1995 begins with its issuance and continues to 20 years from the date of filing of the application. The ICNCP-1995 (Arts. 2.4. and 27.2.) provides that the name under which a plant is patented becomes the cultivar epithet. This became the policy of the U.S. Patent Office in the 1980s, after the United States became a party to the UPOV (Union Internationale pour le Protection des Obtentions Vegetales) convention.

A trademark may be established by use; even if the mark is not registered, the owner has certain rights to its use (Gioia 1996a). The experts recommend formal registration of the trademark with the appropriate governmental authority to enhance the owner's ability to take legal action against infringement. As noted above, an unregistered trademark should be followed by the symbol TM (and a federally registered trademark by the symbol ®).

Federally registered trademarks now are issued for a 10-year term, with renewal for additional 10-year periods available indefinitely. "Common-law" trademark rights have no fixed term, but may be lost through nonuse. These rights can be lost, moreover, if the trademark owner fails to take action to suppress infringement. For example, "ASPIRIN" was at first a trademark of the Bayer Company, but absent an enforcement program became a generic term for the compound.

The issuance of patents and trademarks by governmental authorities may result in duplication of cultivar epithets listed in the registers of International Registration Authorities constituted under the ICNCP. Although the officials who issue patents and register trademarks seek to avoid duplication, the scope of their searches and the time and effort that can be devoted to searching are limited. A factor that narrows the scope of name-checking is the confidentiality of a patent application.

A further consideration is the lack of a common view of the relation of cultivar epithets, patent names, and trademarks on the part of applicants for protected status, plant-protection attorneys, and the officials administering the statutory processes. This lack may proceed from a genuine misunderstanding of relevant laws, of controlling legal authorities, and of the benefits of accepting a "one plant, one name" rule—or it may be driven simply by applicants' desire for a profitable outcome.

Some Pro's and Con's

The view of these matters from the standpoint of a large commercial nursery company is set forth in an article by Conard-Pyle's chairman of the board (Hutton 1992). Plant patents and trademark protection are seen as benefiting both producer and consumer. With such protection, the substantial costs of plant breeding, propagation, promotion, and marketing can be recovered gradually by the owner of the patent and trademark. Prices can be set lower and distribution may consequently be wider than in an unprotected situation where the originator of a new plant variety has only one to three years before competing growers have propagated and begun marketing a plant. The industry view, as expressed by Hutton, is that trademarks may be used not only as identification of the producer but also for identification of an individual plant cultivar.

From a different viewpoint, Longwood Gardens' curator of plants points out that the marketing of plants under patent names and trademark names turns on its head the basic principle that a plant should have only one correct name (Darke 1992). A trademark, he holds, should identify only the producer; for example, Conard-Pyle's STAR® roses include many cultivars identified by the STAR® trademark as being the product of Conard-Pyle. This use of trademarks can benefit buyers, who by experience will associate product quality with the trademark and hence with the producer. (The Darke article discusses additional convolutions of the patent and trademark system and should be consulted by interested readers.)

No doubt, the correct citation of the name of a trademarked, patented cultivar is cumbersome; e.g., *Ilex* 'Mesog' CHINA GIRL®, Plant Patent No. 4878. Each element is, however, necessary. 'Mesog', as the cultivar epithet, will fix the identity of the plant in references freely available for use in all countries—an important consideration to gardeners and scientists alike. The correct presentation of the trademark alerts all encountering the plant to the fact that "China Girl" is a trademark. Finally, inclusion of the patent number is a warning that the plant must not be asexually propagated without license from the patent owner during the period of the patent.

One reason why many believe trademarks should be restricted to their original function of identifying the origin of a product is that creation of both a cultivar epithet and a trademark name for the same plant causes confusion in secondary marketing as well as among final buyers. Whether deliberately or inadvertently, those publishing nursery catalogs and labeling plants for sale sometimes present plant-specific trademarks as cultivar epithets. This may lead to confusion in the horticultural and scientific literature regarding the identity of a cultivar.

Using the example of a trademarked, patented plant given above ('Mesog'), we may set forth several consequences of the present state of affairs:

- While the patent is in effect, the firm owning the patent may exclude others from propagating of the clone. As trademark owner, it also controls the use of the name CHINA GIRL®.
- After expiration of the patent, others may propagate and sell the plant—but only under the cultivar name 'Mesog'. CHINA GIRL® remains the property of the trademark owner until abandoned. Of course, many buyers will probably be seeking "China Girl," not "Mesog."
- For a given cultivar, different trademarks may be used in different sectors of the market.
- To complicate matters further, when a trademark is associated with a specific cultivar, the owners of the trademark are not precluded from changing the plant to which they apply the mark.

To those advocating nomenclatural stability, the last two possibilities are a horror. If the identity of a plant is to be preserved, the cultivar epithet and the trademark must appear together on labels and in catalog entries. Then, whatever trademark may be applied, the cultivar epithet provides a unique identifier for the plant (assuming that the rules of the Cultivated Plant Code are followed!).

References

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The ICNCP-1995 may be available in the United States from booksellers specializing in botanical and horticultural works, or possibly from plant society sales operations. It is available from RHS Enterprises, Ltd., RHS Garden, Wisley, Woking, Surrey GU23 6QB, United Kingdom. RHS Enterprises accepts Access/Mastercard/Visa/Amex credit cards (supply card number and expiration date; delivery address must be that of cardholder).

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