Naming and trading for cultivars

Chris Barnaby¹

Commercial horticulture and agriculture is reliant on the production of new cultivars. In order that these cultivars, and products from them, can be effectively traded their accurate identification and naming in the market place is important. This is particularly important if the cultivar is subject to or associated with intellectual property such as Plant Variety Rights (PVR) or Plant Breeders Rights (PBR).

Naming for botany and science

The naming of cultivars (nomenclature) consists of two components, the first being the botanical or scientific name and the second is the naming of the cultivar itself. Both of these components have respective sets of rules (codes) governing their correct usage. Botanical names follow a binomial (two name) system of nomenclature which provides the genus and species. There can be ranks below the level of species including subspecies and botanical variety, and many ranks above genus, such as family. Collectively these ranks constitute a classification. The binomial system of botanical nomenclature began with Carolus Linnaeus in the mid-18th century and today is overseen by the International Code of Nomenclature for algae, fungi and plants (ICN), formerly the International Code of Botanical Nomenclature (ICBN). The ICN is periodically reviewed via meetings of the International Botanical Congress held every few years.

Some plant groups have been subject to numerous name changes by botanists, often as a result of molecular studies, in an attempt to more accurately reflect true taxonomic relationships. These changes are required to be formally published under the rules of ICN, before a taxonomic change can be accepted. For the practical commercial user this can be frustrating and challenging. With respect to cultivars, the absence of stability in some botanical names creates problems for aspects of

legislation, administration and database management. Botanical name changes can impact on the checking for suitability of cultivar names for PVR protection; for example where there are two cultivars legitimately with the same name in different genera, then the two genera are recircumscribed into a single genus. Previously the same cultivar name could be used in each genus but now there are two cultivars, illegitimately with the same name in the same genus. Relatively recently a prominent genus level change has been made for the tomato. They were previously classified as Lycopersicon lycopersicum (L.) Karst. ex Farwell (and also Lycopersicon esculentum Mill.), but following reclassification the botanical name for tomato is now Solanum lycopersicum L. var. lycopersicum. This name change affects about 7,500 cultivars.

For many cultivars the botanical name consists solely of the genus with no species name stated. This situation is acceptable in some circumstances such as having uncertain or unknown species information, or a complex breeding history for that cultivar. For example, it is unusual for many modern rose cultivars to be assigned a species due to a long and complex history of breeding that has involved crossing several species.

In most cases the breeder or introducer of a new cultivar does not have any choice regarding the botanical name. It is pre-determined by current usage; the breeder or introducer is only responsible for checking to ensure that the correct name is used. In some cases. where botanical reclassification has occurred, there may be a need for a decision to be made to continue with the former treatment or change to the new one. Several years ago the former genus Michelia was merged into Magnolia, and you will now find cultivars in the market under both Michelia and Magnolia.

The use of two names in commerce for a single genus exists even without recircumscribed botanical names. for example, the name Bacopa is commonly used to sell cultivars belonging to Sutera cordata. Bacopa is an entirely different genus of aquatic plants and there is no botanical or morphological connection between the two. At some point, an error was made when naming the first cultivars of Sutera cordata.

The International Union for the Protection of New Varieties of Plants (UPOV) uses the terminology "denomination class" to describe the botanical name component of a cultivar name. This provides a direct link with cultivated plant taxonomy, which requires that a cultivar name is unique and cannot be repeated in that genus or denomination class. Although a denomination class is usually equivalent to a genus the terminology of denomination class is used because there are exceptions, allowing closely related genera to be usefully grouped within a single denomination class. A number of grass genera are grouped together this way in a single denomination class. For example, it would be confusing to have a brown-top cultivar with the same cultivar name as a fescue cultivar as both could be sold together as a turf seed mixture. Another example is the single denomination class for Petunia and Calibrachoa, taking into account the botanical connection and the commercial use of cultivars from both genera. The UPOV website contains the full list of denomination classes which comprise of more than one genus.

The cultivar name

Following consideration of botanical (scientific) names is cultivar names. The word "cultivar" is a contraction of "cultivated variety" and is used to make the distinction from a formal botanical variety. Plant variety protection and UPOV use the word

Plant Variety Rights Office, Ministry of Business, Innovation and Employment, Private Bag 4714, Christchurch 8140, New Zealand; chris.barnaby@pvr.govt.nz

"variety" in the sense of cultivar, not in the botanical sense. The 1991 **UPOV** Convention defines a variety as a plant grouping within a single botanical taxon of the lowest known rank. The names of cultivars can also be referred to as cultivar epithets or variety denominations.

The system for naming cultivars is overseen by the International Code of Nomenclature for Cultivated Plants (ICNCP) often shortened to the Cultivated Plant Code or even more simply, the Code. The ICNCP is periodically reviewed by the International Union of Biological Sciences Commission for the Nomenclature of Cultivated Plants, with the latest review carried out in 2013. The Code provides a stable and simple system for the naming of cultivars using a list of Articles containing detailed provisions divided into rules. The Code aims to provide a consistent set of rules that are applied internationally. Cultivars protected under plant variety protection are subject to the **UPOV** Recommendations on Variety Denominations and coexist with ICNCP, but go further in several key areas than the Code. For example, it is common practice for a cultivar to be protected in a number of countries or territories and Recommendation 5 states that a cultivar should have the same denomination in all places where plant variety protection has been applied for. This highlights the importance of the same cultivar name or variety denomination being used for that cultivar in all parts of the globe. Associated with the principle of a single global variety denomination, the denomination must be unique to that cultivar, universally applicable and used while under protection and after protection when free in the public domain.

A single, universal cultivar denomination must be able to clearly differentiate that cultivar from others and should not mislead or cause confusion regarding characteristics or identity of the cultivar, or the origin or identity of the breeder. The combination of the use of ICNCP and the UPOV Recommendations create a level of global certainty and consistency regarding cultivar identification.

The responsibility for the selection of a cultivar name or denomination begins with the breeder or introducer. ICNCP is utilised for the voluntary international cultivar registration system and UPOV Recommendations and ICNCP are used in the formal approval process for protected varieties. It is important to recognise that it is not the role of any official or voluntary authority to select a suitable name, only to approve or reject a name selected by the breeder. For the numerous cultivars not subject to any intellectual property or voluntary registration, the breeder or introducer has the greater individual responsibility to select a legitimate name that follows the rules. It should be noted that ICNCP has no rule enforcement provisions and numerous illegitimate cultivar names are known to exist.

The cultivar name or variety denomination is intended to be the only reliable and consistent means of identifying a cultivar worldwide, but for many there also exist one or more commercial synonyms associated with and used to sell the cultivar which in some cases may become a de facto or be seen as alternative cultivar names. It should also be noted that under the rules of priority in the ICNCP, the earliest validly published cultivar name should take priority and any other names are technically illegitimate.

Commercial synonyms of cultivars Commercial synonyms broadly cover all fancy names, selling names, brands and trade designations, as well as registered and common law trade marks. This description for commercial synonyms could also be used to describe trade marks. Registered trade marks are subject to a formal registration system and must conform to provisions under that law. Commercial synonyms have no legally defined status but there may be common law Rights attached, which may be recognised. The use of a commercial synonym may not in itself be enough to provide any Right to exclusive usage.

Commercial synonyms are used to sell cultivars and are an important plant marketing tool. Many plant variety protection schemes recognise this by unofficially holding such information in databases

and permitting the association of a commercial synonym with a variety denomination to sell a protected variety, providing that the denomination is always used and clearly recognisable. National authorities tend to have regulations which require use of the denomination on plant labels in particular but in a broader sense the awareness and knowledge of individual cultivar names or variety denominations in many genera are increasingly only known for official purposes and to relatively few in industry or the public.

The use of commercial synonyms has increased in recent years. To an extent this is understandable when a breeder attempts to satisfy the requirements of plant variety protection (or other official registration) and also the demands of marketing and selling plants of that cultivar. The cultivar may be commercialised in many countries and a name may be successful in one market but a complete flop in another. Add in the complexity of different languages, translation and cultural interpretation, and choosing a cultivar name that meets ICNCP, UPOV Variety Denomination Recommendations and is also a market winner is challenging. A good name goes a long way to sell plants and that is the primary objective of plant producers.

The wider acceptance and use of this alternative name approach across many genera has led to what some have described as nonsense variety denomination and cultivar names, such as alpha numeric combinations, very different from names of twenty years ago. For example, Calibrachoa 'KLEC02073', Agapanthus 'CORAG02BL', Japanese Plum 'Suplumthirtytwo' and Cordyline 'Jel01'. The alternative name approach can lead to problems in correctly recognising cultivars, in particular when the cultivar name or variety denomination name is not used as it should be. Rose breeders were one of the first groups to promote and develop code-like denominations, partly to avoid name duplication in the registration or variety protection process and to address the problem of different roses being sold with the same name. This approach is now entrenched across the horticulture industry with the commercial synonym

used to sell plants and the formal cultivar name or Variety Denomination used only for identification and official purposes. Accurate identification involves the ability to separate and recognise cultivars, and the similarity of some code-like denominations questions whether this is actually achieved. Variety denominations such as 'DBB03', 'DCNCO', 'Gruetib01' and 'Gruetib02' are acceptable under UPOV and the Code, but whether they allow for easy recognition and identification is another question. In many instances, breeders and variety owners themselves do not have familiarity with, or routinely use or recognise, variety denominations for their own cultivars. The alternate name approach can be workable providing the commercial synonym is used together with the cultivar name, but having effectively more than one single global name for each cultivar is not compatible with the ICNCP or the UPOV Variety Denomination Recommendations prescribing or recommending clear and consistent identification.

Consideration should also be given to the nature and usage of the commercial synonym itself, with no official or international code guidance available for the breeder or producer. From a marketing point of view the long term use of the synonym may be desirable and over time could be associated with several cultivars from the same breeder or introducer.

A successful synonym may become closely associated with a single cultivar, with the synonym itself clearly identifying a specific cultivated variety. In such a case, the synonym itself has effectively become the cultivar name. An example is the lavender variety 'James Compton' which is widely known by the synonym 'Fairy Wings'. This may limit the possibility of using the synonym to sell other cultivars from the same breeder and may also rule out the possibility of the synonym being accepted as a registered trade mark. To avoid such a situation, trade mark registration of the synonym should be considered early and care taken regarding how the synonym is used.

The commercial synonym name itself should not have been previously used by the breeder or anyone else as a cultivar name or variety denomination

for a different variety. The use of an existing cultivar name as a commercial synonym to sell a different cultivar may be viewed as misleading and create an element of confusion as to the identity of both cultivars involved.

Trade marks

Along with the use of commercial synonyms as a whole, trade marks have become more common in the market place to sell cultivars. Trade marks are an important business tool and are used by a business to identify goods and distinguish them from those of others. The main function of a trade mark is to identify the origin of goods, and with respect to sale of cultivars, the breeder or producer. However, trade mark use in the sale of plant varieties often identifies the cultivar itself rather than the breeder or producer. Going further, it could be said that some trade marks are used as substitute names for cultivars and clearly identify that cultivar. This situation raises questions regarding correct use and possible validity of the trade mark. It is not uncommon for rose trade marks to effectively be used as the name for the cultivar and many rose growers and buyers would have no idea that the commonly used name is a trade mark and that the rose also has a cultivar name or variety denomination.

The commercial use of synonyms associated with a variety name will continue to be practiced but would be improved by creators of synonyms giving greater consideration to whether a synonym is advantageous at all, and to the short, medium and longer term usage implications for the synonym itself and on the cultivar name or variety denomination. Care should be taken to ensure that the commercial synonym does not become a second cultivar identifier or clearly describe the cultivar. PVR is for a fixed term and if the exclusive use of the synonym is anticipated beyond the term of PVR protection then a trade mark application for the synonym should be made early in the life of the cultivar. There is a risk in applying for a trade mark of the commercial synonym at the end of the PVR period because it is possible that your commercial synonym could be viewed as a descriptor for the variety which will preclude it from becoming a trade mark.

Any use of synonyms should be included in a business's marketing plan and, as with any other business practice, be documented and subject to objectives and goals. The role of the synonym is to sell and market plant cultivars not to specifically identify them, which is the function of the cultivar name or Variety Denomination.

Information sources

Lists of cultivar names for particular genera, such as those maintained by voluntary registration systems. can be found in published books or checklists and on the web but in most cases there is a need to know where to look. These cultivar lists are available for relatively few genera. For a broader approach the UPOV Plant Variety Database (PLUTO) is available on the UPOV website and consists of all cultivated varieties protected in most of the UPOV member states. It is possible to search by genus and denomination and both in combination. You can check a possible cultivar name by entering that name and retrieving an exact or similar match. In addition the database contains the names of cultivated varieties subject to any national official variety registration systems, a common practice in some countries for the marketing of vegetable and agricultural varieties.

Checklist for naming a new cultivar:

- 1. Confirm the genus or, if possible, both genus and species. Check for any botanical revisions that will affect the cultivar.
- 2. Select a suitable cultivar name or variety denomination which clearly identifies the cultivar. Consider if PVR protection or voluntary cultivar registration will occur and whether the cultivar is likely to be globally marketed and protected in the longer term.
- 3. Will the cultivar be sold in association with another name or trade mark? How will the other name be used and for what period? Has the other name been used anywhere else for any purpose? Could the synonym become generic and a de facto second cultivar name?

4. Use the cultivar name or variety denomination to identify the cultivar and include it on labels, product lists and catalogues.

Checklist for applying for a trade mark:

- 1. Is the proposed trade mark name distinctive? Will it identify your goods from those of other traders? A trade mark cannot describe your goods.
- 2. Is it a recognised Variety Denomination or cultivar name in New Zealand? Your trade mark cannot be a variety denomination for a current or expired protected
- 3. Is your trade mark a recognised cultivar name elsewhere? This could also prevent your trade mark from being registered as the overseas cultivar could be known in New Zealand. It could also lead to market confusion regarding the true identity of your cultivar.
- 4. Is it the same or similar to other trade marks? Your trade mark cannot be the same or similar to someone else's trade mark on the

References

- **Explanatory Notes on Variety** Denominations under the UPOV Convention (2012). International Union for the Protection of New Varieties of Plants, UPOV/ INF/12/4.
- Gioia, V.G. (1995). Using and registering plant names as trademarks. Acta Horticulturae 413: 19-25.
- International Code of Nomenclature for algae, fungi and plants (ICN) (Melbourne Code) (2012). Adopted by the Eighteenth International Botanical Congress, Melbourne, Australia July 2011. International Association for Plant Taxonomy, December 2012.
- International Code of Nomenclature for Cultivated Plants (ICNCP) (2004). Seventh edition adopted by the Commission for the Nomenclature of Cultivated Plants. Acta Horticulturae: 647.
- International Code of Nomenclature for Cultivated Plants (ICNCP) (2009). Eighth edition adopted by the Commission for the Nomenclature of Cultivated Plants. International Society for Horticultural Science, Scripta Horticulturae: 10.

- International Convention for the Protection of New Varieties of Plants 1961, 1972, 1978 and 1991 (2006). International Union for the Protection of New Varieties of Plants, Geneva, Switzerland.
- Modern Roses XI, The World Encyclopaedia of Roses (2000). American Rose Society, Academic Press.
- Taxonomy of Cultivated Plants (1999). Edited proceedings of the third International Symposium, Edinburgh, Scotland, July 1998, Royal Botanic Gardens, Kew, United Kingdom.

Websites (accessed November 2014)

PLUTO: Plant Variety Database: www.upov.int/pluto/en/

Trade Marks and Variety Names: www.iponz.govt.nz/cms/pvr/ technical-notes-guidelines/trademarks-and-plant-variety-names

