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AsCOHR NEWS

Advisory Sub-Committee on Orchid Hybrid Registration

From the Registrar

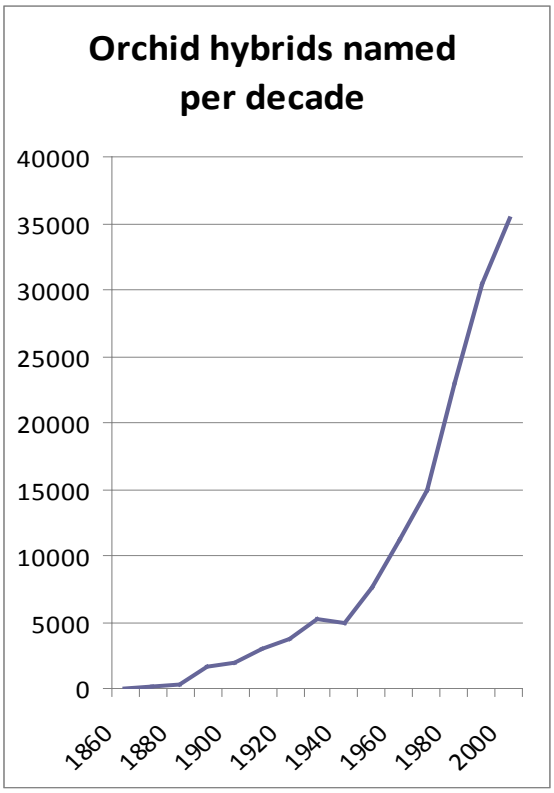
In this issue we look at some hybrid registration statistics, explore a Victorian masterpiece – *The Orchid Stud-Book* – and consider the value of cultivar names in grex registration.

Photo: Janet Cubey

Registration statistics

During January 2012 the number of entries in the International Register of Orchid Hybrids passed the 150,000 mark. By mid August 2012, the total number of entries had reached 152,600.

Each entry represents a grex name. The naming of orchid hybrids using the grex name system (greges or grexes, meaning a flock of seedlings) began with the flowering of *Calanthe* Dominii in 1858. For the next few years one or two new hybrids flowered most years, until by the end of the 1860s 30 were known. By the end of the 19th century, 2002 hybrids had been named. This activity grew steadily each decade, with the exception of the 1940s, until 18,743 had been reached in December 1949. During the 1950s, 7,590 new hybrids were added, compared with 35,338 for the first decade of the 21st century.



Rolfe & Hurst: *The Orchid Stud-Book*, 1909

Work is in progress to incorporate all the names and other data contained in *The Orchid Stud-Book* into the Register. These data will become accessible online in due course. Why is this 103-year-old book still of interest, and why are these extra data being added to the Register?

Two Victorian orchid enthusiasts – Robert A. Rolfe (1855–1921), an orchid botanist at the Kew Herbarium, and Charles C. Hurst (1870–1947) – compiled an annotated catalogue of all known orchid hybrids produced up to the end of 1907. Their work was published in 1909 as *The Orchid Stud-Book*. For each hybrid it provides basic information on parentage, originator and name, as does *Sander's List of Orchid Hybrids*. However, it differs in several important respects.

Unlike *Sander's List*, it provides comprehensive references to horticultural publications, including other works on orchid hybrids such as Stein's *Orchideenbuch*, Bonhof's *Dictionnaire des Orchidées Hybrides*, and Hansen's *The Orchid Hybrids*, as well as papers in the RHS *Proceedings* and the *Journal of the Linnean Society*. This coverage includes orchid items in *Gardeners' Chronicle*, *The Orchid Review*, *Revue horticole*, *Gartenflora*, *American Florist*, and the *Journal de la Société nationale d'horticulture de* »

Julian Shaw

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Robert A. Rolfe (1855–1921) founded *The Orchid Review* in 1893, supporting it financially for the first 28 volumes. His 1909 *Orchid Stud-Book*, produced jointly with the geneticist Charles C. Hurst, gathered together and arranged systematically all the information on orchid hybrids published up to that time. He was awarded the Veitch Memorial Medal, the Victoria Medal of Honour and an Honorary Fellowship of the Royal Horticultural Society.

The Orchid Stud-Book, 1909 (cont.)

France, among many other periodicals. The scope extends to sales catalogues and illustrations; even John Day's Orchid Drawings at Kew are included. In all, 65 literature sources are documented, of which at least 46 are serial publications.

These references provide ready access to the relevant literature scattered across varied publications, many of which do not have a comprehensive index. Hence Rolfe & Hurst's work has become a valuable key to the past.

With typical botanical thoroughness all known names are accounted for, and synonyms are listed, even including published typographical errors such as x *Laeliocattleya* Wylamiana (*Gard. Chron.* 1902(2): 183), a misprint for Mylamiana.

Detailed notes are also provided where necessary on such matters as disputed parentage, discrepancies between records, and the authors' own investigations.

As a result, Rolfe & Hurst's work includes many names and even some hybrids omitted from *Sander's List*. It has become apparent that, at times, the compilers of *Sander's List* were selective rather than comprehensive in their scope. In the belief that the Register should be as comprehensive as possible in its function as a nomenclator, and that its usefulness as a research tool would be enhanced, these additional data are being included.

One source of discrepancies between *Sander's List* and *The Orchid Stud-Book* is the nomenclatural principles employed by the compilers. During the process of integrating the two sources several points of interest have emerged, including Rolfe & Hurst's frequent use of replacement names, method of Latinisation, general removal of titles, and general non-acceptance of formulaic names. Rolfe & Hurst evidently developed quite strict ideas on hybrid names. Of course one should remember that most of this occurred before the arrival of formally agreed international codes of nomenclature for plants. While the *International Rules of Botanical Nomenclature*, published after the Vienna Congress in 1905, contained a recommendation on how to form names commemorating persons, there was as yet no code of nomenclature for cultivated plants, and the concepts of cultivar and grex had yet to emerge.

The most frequent source of divergence between the two sources was Rolfe & Hurst's use of replacement names. While the compilers of *Sander's List* were either horticultural or secretarial in their training and hence quite readily accepted people's names unamended for use as plant names, Rolfe & Hurst were botanical in their approach. This resulted in Latinisation of personal names even when applied to artificial hybrids. It is interesting to note that the method of Latinising modern names frequently differed between the two sources. For example: *Sander's List* Aitchisoniae, Rolfe & Hurst Aitchisonae, both replacements for Mrs Aitchison; and *Cattleya* Edwardii, *Sander's List*; *Cattleya* Edwardi, Rolfe & Hurst. These differences probably arose because there was no universally agreed method of Latinising modern names: in botanical use, for instance, there does not appear to have been a formal recognition of a preferred method till the 1905 Code. »

The Orchid Stud-Book, 1909 (cont.)

Rolfe & Hurst usually removed titles in grex names; thus *Paphiopedium* Lord Roberts (above; FCC 1899, painted by Nellie Roberts) was renamed Robertsii in the *Orchid Stud-Book*.

It appears to have been Rolfe & Hurst's editorial policy to remove the definite article when it preceded an epithet; hence *Paphiopedilum* The Baron was changed to *Paph.* Baron. Titles were also usually removed; thus *Paph.* Madame N. Danerval (1897), later renamed Monsieur Danerval (1898) by the originator, was changed by Rolfe & Hurst to *Paph.* Danervaliae, using the feminine ending, presumably because the name Madame N. Danerval predated Monsieur Danerval by one year. Elsewhere, *Paph.* Lord Roberts was replaced by Robertsii, and *Paph.* Miss Fanny Wilson by Wilsonae. Even royalty fared no better, *Paph.* King Edward VII becoming Edwardianum in Rolfe & Hurst.

Formulaic names were generally replaced, although *Paph.* Druryo-Hookerae was accepted, perhaps pragmatically since Hooker was Director of Kew, where Rolfe was employed, while Druryo-Rothschildianum was replaced by Cooksoni, a name based on the originator, and Druryo-Villosum, although not predated by another epithet, was replaced with Winnianum. The name *Paph.* Calloso-bellum predates Woottonii, but Woottonii was accepted in preference.

Rolfe & Hurst also took the initiative in providing names for several unnamed hybrids known to be in cultivation, usually basing the epithet on the originator either as an eponym or toponym. The unnamed hybrid of *Paph. charlesworthii* x *villosum*, first shown in 1902, was named Wrigleyi in 1909; while the unnamed hybrid between *Paph.* Aureum x *callosum* (1905) was named Altrinchamense in 1909.

Names viewed as inappropriate were also modified. *Paph.* Annamense was replaced by *Paph.* Whitefieldense, Rolfe & Hurst commenting, "The specific name is changed, *annamense* being misleading for a hybrid of garden origin." (*Annamense* implies the plant originated from Annam, now part of Vietnam.)

In *The Orchid Stud-Book* dates given after a name (as opposed to dates of literature references) apply to the date on which the hybrid first flowered, rather than the date of nomenclatural establishment. Hence the bibliographic references are particularly valuable from the standpoint of nomenclature. Also the order in which parentage is cited tends to be alphabetical, rather than seed parent first.

Duplicated names of hybrids – homonyms – were also a problem, but on nothing like the scale encountered today following the realignment of generic boundaries to follow the scheme proposed in *Genera Orchidacearum.* For example, consistency with *Genera Orchidacearum* required the transfer to *Cattleya* of Acis (1902, Mendelii x *tenebrosa*), formerly in x *Laeliocattleya*, which created a homonym with *Cattleya* Acis (1911, *dowiana* x Maroni). Largely as a result of this reclassification, there are currently about 1,000 pairs of homonyms marked in the Register.

Rolfe & Hurst would rename a hybrid to avoid homonyms. Hence *Paph.* Leeanum x Romulus, originally named Norma in 1900, was renamed Olbia in 1909, because of an earlier use of the name *Paph.* Norma (1895) for *Niobe* x *spicerianum*.

Julian Shaw

Further reading

Parkinson, P.G. (1975). The International code of botanical nomenclature: an historical review and bibliography. *Tane* **21**: 153–173 (available at www.thebookshelf.auckland.ac.nz/docs/Tane/Tane-21/23%20The%20International%20Code%20of%20Botanical.pdf).

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(page 4)

"All too often the cultivar epithet is regarded as of little significance and omitted from applications to register grexes. For many it is a last-minute, hurriedly invented word tagged onto a label when a plant is submitted for judging, with little or no thought as to whether in fact there may be already a valid cultivar or Group name for the plant."

Photo:
Andy Paradise

Cultivar names – are they relevant to grex registration?

Perhaps because of the focus on grex names in orchids, all too often the cultivar epithet, or clonal name as it is sometimes called, is regarded as of little significance. Consequently it is often omitted from applications to register grexes. For many it is a last-minute, hurriedly invented word tagged onto a label when a plant is submitted for judging, with little or no thought as to whether in fact there may be already a valid cultivar or Group name for the plant. In the case of hybrids, the cultivar epithet is often crucial in tracing the parentage.

Take for example the well-known Japanese orchid *Neofinetia falcata,* which as an orchid has one of the longest histories in cultivation, since at least the early 1800s. Recently the use of varietal and cultivar names for this plant was questioned by an AOS judge who noted the following names in the AOS awards system, as examples:

- *Neofinetia falcata* var. Benisuzume 'Liberty Hill'
- *Neofinetia falcata* var. Shutennou 'High Five'

Here the epithets Benisuzume and Shutennou are treated as varieties and 'Liberty Hill' and 'High Five' as cultivar epithets or clonal names.

Is this a valid approach? The query was referred to Japanese orchid expert Munekazu Ejiri, who kindly explained that names such as 'Benisuzume' and 'Shutennou' are cultivar names, since they are applied to solitary individuals found in nature, sometimes many years ago, and subsequently propagated by division. They are not valid as botanical varieties, and it evidently bears repetition that variety and cultivar are very different concepts, which are not interchangeable. Hence in these above examples 'Liberty Hill' and 'High Five' are superfluous assignations that should not have been created. If they were unintentional renamings, as appears to be the case, they should be regarded as synonyms; had they been deliberate replacement names, they would be regarded now as trade designations.

Munekazu Ejiri noted additionally that some *Neofinetia* nurseries also sell home-raised seedlings, but these are indicated on the label as such, usually by ['Shutennou' x self]. These seedlings are strictly not 'Shutennou', since although of similar appearance they are not of the same clone. Individual seedlings may be assigned a new cultivar name or collectively the whole batch of seedlings could be assigned to a Group, in which case Shutennou Group would be an acceptable possibility.

Traditional Japanese Gei names, more or less equivalent to Group names, are also used in *Neofinetia*. Cultivated clones are placed into Groups according to such characters as type of leaf variegation, type of leaf shape (upright, straight, curved and so forth), markings at leaf base, and type of root tip. Floral characters are rarely used at Gei level, since the focus of appreciation in Japan is usually the foliage.

Names of cultivated *Neofinetia* fall into two further categories within Japan. Cultivar names registered with the Japan Fuki Ran Society are regarded as higher grade (more desirable »

"Cultivar names are often of critical importance in identifying the actual parentage. For example, what was once treated as a variety or sometimes a cultivar of *Cymbidium parishii* as var. *sanderae* is now recognised at species rank as *Cymbidium sanderae*. Only by tracing the information on parental variety or cultivar provided on the original application forms can the grexes be assigned to correct parentage, as either progeny of *Cymbidium parishii* or *Cymbidium sanderae*."

Above: *Cymbidium sanderae* (FCC, 1904), painted by Nellie Roberts (RHS, Lindley Library).

Cultivar names (cont.)

and officially recognised clones) and are known as Fuki Ran names. While cultivar, or perhaps vernacular names, of clones that are not officially registered are called Fu Ran names, Fu-ran being the general Japanese vernacular name for *Neofinetia falcata*.

New types of *Neofinetia* discovered either in the wild or among seedlings have to be propagated vegetatively for several years to assess stability. If the distinguishing characteristics prove to be stable, application for cultivar name registration can be made to seek formal recognition from the Japan Fuki Ran Society.

In the case of hybrids, including grexes, varietal names and sometimes cultivar names are often of critical importance in identifying the actual parentage. For example, what was once treated as a variety or sometimes a cultivar of *Cymbidium parishii* as var. *sanderae* is now recognised at species rank as *Cymbidium sanderae*. Only by tracing the information on parental variety or cultivar provided on the original application forms can the grexes be assigned to correct parentage, as either progeny of *Cymbidium parishii* or *Cymbidium sanderae*. This problem is further complicated by the questionable decision made long ago to accept only species as grex parents and hence elevate the grex to species rank, compounding the illusion "that varieties are not important".

The plot thickens with the introduction of *Cymbidium parishii* 'Emma Menninger' as a grex parent. 'Emma Menninger' is in fact a colchicine-converted tetraploid clone of *Cymbidium parishii* var. *sanderae*, made by the late Don Wimber. Hence all *Cymbidium* hybrids with 'Emma Menniger' as a parent really belong in the 'derived from *Cymbidium sanderae*' camp. (Incidentally, according to Phillip Cribb (pers. com., 2008), the plant usually grown as *Cymbidium parishii* is correctly called *Cymbidium sanderae*.)

Even more critical is the situation surrounding the use of cultivar names in the *Dockrillia* group of *Dendrobium*. Several entities used in hybrid breeding and named only as cultivars or varieties are now accepted at species rank. Hence what was once regarded as *Dendrobium teretifolium* could be one of the following:

- var. *aureum* (= *Doc. dolichophylla*, *Den. dolichophyllum*)
- var. *fairfaxii* (= *Doc. fairfaxii* , *Den. fairfaxii*)
- var. *fasciculatum* (= *Doc. calamiformis* , *Den. calamiforme*)
- 'Black Pam' (= *Doc. fuliginosa* , *Den. fuliginosum*)
- 'Fiery Glow' (= *Doc. convoluta* , *Den. contextum*)

What is the bottom line? Please take infraspecific names seriously, and use cultivar or variety names if known, when applying for hybrid registration.

Julian Shaw