

The Horticultural Nomenclature of Ferns

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For many years it has been recognised that many of the names used for fern variants did not conform to the internationally accepted rules of nomenclature. Early in 1987 a discussion paper by the author was circulated amongst interested members of the British Pteridological Society Committee, in which proposals were made for a policy that would be in accord with the rules.

In July 1987 a meeting was held at Wisley to discuss these ideas. Those present were Jim Crabbe, Jimmy Dyce, Clive Jermy, Barbara Parris, Martin Rickard and the author. After considering the alternatives it was agreed that the proposals should be adopted as the Society's official policy and the paper that follows is based closely on the original document.

HISTORICAL NOTES

The propensity of ferns to produce individuals showing aberrant frond shapes has attracted the attention of alert botanists for several centuries. Fine illustrations of crested and other variants of lady fern (*Athyrium filix-femina*) and hartstongue fern (*Asplenium scolopendrium*), for example, may be found in the pages of Dalechamp's *Historia Generalis Plantarum* (1586) and Plukenet's *Phytographia* (1691-6). Only in the nineteenth century, however, did gardeners develop a taste for such plants. As has been well recorded elsewhere (Allen, 1969, for instance) this period saw also a transition from the introduction to cultivation of wild finds to the deliberate sowing of spores with the intention of raising new variants. Since human nature contains a trait that desires the labelling of everything, there was a rapid proliferation of names applied to these variations. Inevitably, large numbers of names were coined, often in the most imprecise way, before people began to appreciate the need for a more systematic approach.

At that time, the only option available was to give such variations botanical status by using the category *varietas* (more often rendered as 'variety' or 'var.'), or occasionally *forma* (f.). The same approach was applied more generally to variants of other plants leading, for example, to the proliferation of extended Latin names used for dwarf conifers. This policy was less than logical in that a geographical variant occurring over a substantial area and breeding quite true to type would be given the same status as a 'one-off' variation (what botanists often refer to as a 'monstrosity'). The latter might be quite sterile, or not true-breeding, and thus incapable of perpetuating itself over several generations.

Although not widely adopted until considerably later the category of cultivar (cultivated variety) was established in 1918 (McClintock, 1966). A cultivar may be defined as an assemblage of plants of similar appearance, that owes its continuing existence and increase to the intervention of man. It is worth stressing that a cultivar may include more than one clone - much depends on the circumscription of the individual cultivar. A common misconception about cultivar names (e.g. Hoshizaki, 1975: 122, but by no means confined to fern authors) is that they are appropriate only to plants that originate in cultivation. This is not true, however, the significant point being that they are maintained by the actions of man in cultivation,

irrespective of the mode or place of origin. A large number of cultivars of ling (*Calluna vulgaris*), for example, originated as sports or seedlings in the wild, but there is no doubt that, in cultivation, they are best treated as cultivars, since such chance occurrences do not persist and increase in the wild state. Exactly the same principle applies to the majority of fern variants.

It is not always easy to define a dividing line between botanical and horticultural names, but in most cases there is probably little point in giving botanical status to an individual variant that does not propagate itself in the wild state. In the fern world, even sports of apomictic species, such as *Dryopteris affinis*, which breed true in cultivation, seldom if ever manage to establish themselves in the wild beyond a single generation. They do, however, accord neatly with the definition of cultivar given above. It is increasingly commonly accepted that the great majority of fern 'varieties' in our gardens are, regardless of their origins, most appropriately regarded as cultivars. Because of the risk of confusion with the botanical term *varietas* (= variety), it is desirable to use the more precise term cultivar for these man-made or man-sustained variants.

Whilst there is as yet no formal scheme of classification for fern cultivars, the basis of such a system was evolved by Kaye (1968) from the proposals put forward for specific genera by Dyce (1963) and Kaye (1965). Very recently this was elaborated by Dyce (1987) and it is logical to try and integrate Dyce's system of classification with any modern system of nomenclature, which is what is proposed in this paper.

THE RULES OF NOMENCLATURE

The naming of plants, at both botanical and horticultural levels, is governed by two sets of internationally accepted rules - the *International Code of Botanical Nomenclature (ICBN)* and the *International Code of Nomenclature for Cultivated Plants (ICNCP)*. Each is periodically revised, but the basic rules remain constant.

The great majority of names now used for variants of British ferns have never been applied in a systematic fashion. Many of these 'names' are perhaps better regarded as brief descriptions and, since some conform to neither Code, they have no validity as either botanical or horticultural epithets and are thus illegitimate. This is particularly true of numerous names proposed for new cultivars in various British Pteridological Society publications in recent years, but there is no good reason for this state of affairs to continue, as there is an alternative that should be acceptable to all concerned.

Under Article 27a of the Cultivated Plant Code, new cultivar names created on, or after, 1st January 1959 may not be in Latin or part-Latin form. This rules out, for example, the coining of a name like 'Plumosum Smith'. It is therefore necessary for recent cultivar names to be in a modern language, and they are often descriptive or commemorative. In the context of ferns, this appears at first sight to mean that we lose the useful link with the accepted schemes of varietal classification referred to above. However, there is a way out of this difficulty that retains conformity with the ICNCP whilst retaining the most useful descriptive elements from the earlier style of name.

THE CULTIVAR GROUP

As mentioned above, many of the names used in Britain for fern cultivars are no more than descriptions, but it is desirable to retain a descriptive element in the naming of new cultivars

as far as possible, whilst trying to ensure conformity with the appropriate Code - the *ICNCP*. Fortunately, in Article 26 of its 1969 edition, the *ICNCP* introduced the useful but as yet underused concept of the cultivar group. Sensible use of this Article appears to be the key to the establishment of a practical, logical and (under the *ICNCP*) legitimate system of nomenclature for fern cultivars.

Article 26 of the *ICNCP-1980* says:

'When a species... includes many cultivars, an assemblage of similar cultivars may be designated as a group. This category is intermediate between species and cultivar. It is not an essential part of the full cultivar name. If used between the specific name... and the cultivar name, the name of the group is placed within parentheses (round brackets).'

The Code gives examples of its use based on former botanical epithets that are no longer recognised, such as *Rhododendron cinnabarinum* (Concatenans group) 'Copper', as well as purely descriptive ones like *Lolium perenne* (Early group) 'Devon Eaver'. The style of the group name is not defined in the Code, but the examples given suggest that the rules for cultivar names should apply. In other words, a group name may be based on a legitimate name at another taxonomic level (e.g. var. or cultivar) so that, in some circumstances, Latin names may be used.

The potential for the extension of this principle to fern names is clear. The great majority of cultivars can be said to fall into one or other of a limited number of types, as defined in Dyce's classification referred to above, which thus forms a sound basis for a system of nomenclature that is legitimate under the *ICNCP*.

The group system adopted here is not an obligatory one, in that not all fern cultivars need to be referred to a group and, as stated in Article 26, the group name is not an essential part of the full cultivar name - it is a useful but optional appendage. Nevertheless, many fern growers will wish to indicate the group with the cultivar name because of its link with the scheme of cultivar classification. Whilst new groups may be created as needed the divisions of Dyce's scheme should accommodate the majority of cultivars, regardless of the genus. It is proposed that a nomenclatural panel be formed within the Society to agree on appropriate group names providing the best possible combination of the desirable features of the old names and conformity with the International Code.

EXAMPLES OF ITS USAGE

Three cases have to be considered separately: new cultivars; recently, but invalidly, named cultivars; and early 'varieties' now regarded as cultivars.

New cultivars

The use of the proposed system for new cultivars should present no problems: such plants would be given 'fancy' names (i.e. in a modern language) in accordance with the Code. Each cultivar name must be unique within its species (or preferably, genus) to avoid the risk of confusion or ambiguity. In addition, such cultivars could be attributed to the appropriate cultivar group. A hypothetical example:

Asplenium trichomanes 'Royalty'; if it were a crested form, it could also be cited as: *Asplenium trichomanes* (Cristatum group) 'Royalty'. It would not then be permissible to use the name 'Royalty' for another cultivar of *A. trichomanes*.

Recently but invalidly named cultivars

Several names published in recent BPS publications, and no doubt in nursery catalogues also, are illegitimate. Unfortunately, there is no option but to rename these plants, but use of the group system would make this comparatively painless, since those invalid names that incorporate Latin descriptive terms would often fall into the equivalent cultivar group. The examples below do not represent formal transfers or new names: they are merely used as illustrations.

Athyrium filix-femina 'Percristatum Coke' (Coke, 1985); this might conveniently become *A. filix-femina* (Percristatum group) 'Philip Coke'; the first name is illegitimate; the second conveys the same information but is legitimate.

Other ferns named in the same article might need to be completely renamed:

A. filix-femina 'Plumosum Cristatum Coke', for example, could become *A. filix-femina* (Cristatum group) 'Coke's Plumose': again, the second is as descriptive as the first but, unlike it, is acceptable under the Code. Since the group name is not an essential part of the plant's name, the names *A. filix-femina* 'Philip Coke' and 'Coke's Plumose', respectively, would be equally acceptable.

An ideal to aim for would be the compilation of a check-list of fern cultivars, in which these and other nomenclatural points could be attended to. In the meantime, it is intended to start a search through the Society's publications for illegitimate names. These will be referred to the proposed nomenclatural panel for renaming as necessary, in liaison with the originators of the plants.

Old cultivars

In general, these would not be affected by this system as the nomenclatural rules applied to older (pre-1959) names are far less rigorous. Some, however, would be more meaningful if accompanied by the appropriate group name. For example, *Athyrium filix-femina* 'Clarissima', itself a euphonious but non-descriptive name, might be placed in the Plumosum group.

CONCLUSION

It is perhaps inevitable that these proposals will meet with some opposition - no-one likes what they may consider to be unnecessary name-changes. However, for various reasons, the issue of fern cultivar naming has to be faced up to. The continued use of names that are not internationally acceptable, because they contravene the Code, cannot be supported and it is a problem that is largely confined to British cultivars.

If an International Registration Authority (IRA) is ever appointed for the ferns, it would apply the ICNCP rigorously. The primary role of IRAs is to ensure uniformity of nomenclature as far as possible and this inevitably means following the Code. The argument sometimes put forward, that ferns should be a special case, is not acceptable. Stability and

consistency of nomenclature is in everyone's interests and was the objective behind the establishment of the ICNCP.

The overall result of the system here adopted should be to give fern cultivar naming the international acceptability and legitimacy under the Code that it lacks at present. This may be achieved without losing the useful descriptive element of many of the unacceptable names that have been coined in recent years, and could be added to earlier names that do not at present link the plant to the classification. Hopefully, a system based on the policies adopted here should result in the degree of stability and intelligibility that has for years been lacking in fern names.

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