

Presenting Names of Hybrid Plants

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A flurry of well-meant but erroneous information appeared on the Yahoo Azalea Group email list (azaleas@yahoogroups.com) during April 2013. At issue were the correct presentation of the Latin scientific name for a species believed to be of hybrid origin and sometimes designated as a nothotaxon (hybrid taxon) and the epithet for a hybrid cultivar. In question were the species *Rhododendron obtusum*, the cultivar 'Coral Bells', and inclusion of the term "Kurume."

In the Edinburgh Revision of *Rhododendron* subgenus *Tsutsusi*, Chamberlain and Rae (1990) listed *R. obtusum* in the category of "Doubtful or Incompletely Known Taxa." They cited its type, a plate published in *Edward's Botanical Register* in 1846 (see figure 1. on pg. 41). The plant portrayed was sent from Shanghai to the garden of the Horticultural Society of London by Fortune in 1844. Chamberlain and Rae (1990) stated that *R. obtusum* comprised cultivated selections of, or hybrids between, *R. kiusianum* (in which they have included *R. sataense* Nakai as *R. obtusum* var. *sataense*) and *R. kaempferi*; and also, that "Kurume azaleas are believed to have originated from the same species."

Planchon's *R. obtusum* (1854) was based on *Azalea obtusa*, the name chosen by Lindley (1846a) to describe the azalea sent to London by Fortune in 1844. The choice of the epithet was probably suggested by the leaf form: Lindley's Latin description began with "*A. obtusa; foliis pilosis oblongis obtusis* [with leaves hairy oblong obtuse] . . ." His English description began with the following:

This charming shrub may be regarded as the gayest of all the Chinese [sic] Azaleas in cultivation. It is a little bush, with very blunt leaves, both smaller and narrower in proportion than we find upon the species already in our gardens, and also smaller flowers, of the most glowing red.

In the text accompanying the plate from *Edward's Botanical Register* now accepted as the type for the name *R. obtusum*, Lindley (1846b) commented that

the pale red color of the corollas in the plate can be attributed to the portrayal of a young plant grown from a cutting. The entry for *R. obtusum* in the *Flora of China* (Fang Mingyuan 2005) describes the corolla as "red to pink or reddish"—illustrating the danger of basing the description of a species on the characteristics of a single plant.

In Wilson and Rehder's *A Monograph of Azaleas* (1921), Wilson devoted sixteen pages to discussion of *R. obtusum* and its many forms. The discussion began with the comment that "it is always unfortunate when a selection or garden form has to do duty as the type of a species." Wilson noted that "under the name of 'Kirishima-tsutsuji' this plant has for centuries been grown in Japanese gardens" and that Kaempfer had mentioned it by that name in 1712. Wilson observed that Lindley's plate portraying *A. obtusa* shows "the obovate, rounded, obtuse, mucronate summer leaves of the previous year and two [sic] newly developed elliptic-lanceolate, acute spring leaves." (New growth shown in the plate consists of two shoots, each with two leaves.) This prefaced twelve lines of text devoted to discussion of the dimorphic nature of leaves in the evergreen azaleas. For a brief discussion of dimorphic leaves in evergreen azaleas, including a long quotation from Wilson, see Voss (2009).

It is evident that *R. obtusum* is a problematical species. The garden origin of the plant sent to England by Fortune, Lindley's unfortunate use of the summer leaves in describing the new species, and subsequent recognition that plants assigned to this species were selections from, or hybrids between, *R. kiusianum* and *R. kaempferi* suggest that referring to these plants as species *obtusum* is at a minimum undesirable. That said, we must note that the parentage of nearly all of the cultivars associated with *R. obtusum* cannot at this time be positively identified. We are left with a taxonomic horror: a "species" that is a grab-bag of cultivated plants of complex origin largely involving hybridization between two accepted species. For further discussion of *R. obtusum*, see Voss (1999).

How, then, should the assemblage of plants long known as *R. obtusum* be treated? It is tempting to suggest that the offending specific epithet be consigned to limbo, but the ensuing confusion would be counterproductive. A compromise solution is available through the rules of the *International Code of Nomenclature for algae, fungi and plants* (ICN) (McNeill et al. 2012) which governs the Latin scientific names for plants; the *International Code of Nomenclature for Cultivated Plants* (ICNCP) (Leslie 2004); and the *International Rhododendron Register and Checklist*, 2d ed. (IRRC) (Brickell et al. 2004). Although plants brought into cultivation retain the Latin scientific names applied to them in nature, the ICN provides that the nomenclature of special categories of plants used for agriculture, forestry, and horticulture is dealt with in the ICNCP. The International Registrar for *Rhododendron* has indicated that when individual cultivars or assemblages of cultivars are garden varieties, their nomenclature should be governed by rules of the ICNCP. Accordingly, when the IRRC was published, *R. Obtusum* Group was included as an accepted name for “Evergreen azalea: selections of *kiusianum* and hybrids of it with *kaempferi*.”

What problems are raised by some of the Yahoo Group suggestions for dealing with the names *R. obtusum* and *R. ‘Coral Bells’*? Several examples of these suggestions follow:

- Use Davidian’s *R. × ‘Obtusum’*. This contains two errors: (1) the ICNCP prohibits placement of “cv.” or “×” (a lower-case letter x is substituted if the multiplication sign is not available) before a cultivar epithet and (2) ‘Obtusum’ already exists for two other cultivars in *Rhododendron* and thus is not available for plants of *R. obtusum*. Moreover, suggesting the use of a cultivar epithet to replace a specific epithet that represents hundreds of cultivars is singularly inappropriate.
- Use *R. X obtusum ‘Coral Bells’* or *R. obtusum X ‘Coral Bells’*. The preference of professional botanical taxonomists has been to use *R. obtusum*; *R. ×obtusum* often appears in horticultural works. As noted above, ICNCP rules prohibit placement of the mul-

tiplication sign or letter x before a cultivar epithet. Although the ICN and ICNCP specify the use of a lower-case x if the letter is used in place of the multiplication sign, the use of a capital X is a practice followed by the IRRC and the American Rhododendron Society in one circumstance. For example, in the hybrid formula AAA X BBB x CCC, where AAA represents the name of the seed parent and BBB x CCC is the formula for a hybrid pollen parent, the capital X separates the seed parent and pollen parent. Although this treatment is useful in displaying hybrid lineages in the Register, the traditional treatment as *AAA × (BBB × CCC)* should be used elsewhere in compliance with the ICN and ICNCP.

- Use *R. ‘Obtusum Coral Bells’*. Cultivar epithets cannot be created or altered arbitrarily. Under the rules of the ICNCP, a plant may have only one cultivar epithet: the earliest validly established. Throwing a new name for ‘Coral Bells’ into the ring by including the word *Obtusum* is contrary to code rules and would only lead to confusion.

How should ‘Coral Bells’ be presented? Under older practice based on predecessors of the ICN, the name was written as *R. obtusum ‘Coral Bells’* (or, preferably, *R. obtusum ‘Kirin’* (syn. ‘Coral Bells’)). Considering the taxonomic issues inherent in *R. obtusum*, the ICNCP allows us to use a better solution; namely, *R. Obtusum* Group ‘Kirin’ (syn. ‘Coral Bells’). Although it does not denote a formal Group, the term Kurume may convey more focused and useful information than the more inclusive Obtusum Group; thus, *R. ‘Kirin’* (Kurume) or *R. ‘Kirin’* (syn. ‘Coral Bells’; Kurume) could be appropriate.

The ICN rules dealing with hybrids provide that plants that are crosses between two or more taxa (genera, species, etc.) are to be identified by a hybrid formula or a hybrid name. For example, crosses with the hybrid formula (*R. kaempferi × R. macrosepala*)—which is the seed or pollen parent is irrelevant--were named *R. ×transiens* by Nakai in 1922. This hybrid name applies to all plants recog-

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▲Figure 1. *Azalea obtusa* - Plate 37 in *Edward's Botanical Register*

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nizably derived from the specified parents, including filial generations and backcrosses. To identify plants from specified crosses that have horticulturally significant differences, we must name cultivars under provisions of the ICNCP.

References

- Brickell, C.D. et al. 2009. *International Code of Nomenclature for Cultivated Plants*. 8th ed. Leuven, Belgium: International Society for Horticultural Science (ISHS). www.actahort.org/chronica/pdf/sh_10.pdf.
- Chamberlain, D.F. & S.J. Rae. 1990. *A revision of Rhododendron. IV Subgenus Tsutsusi*. Edinburgh Journal of Botany 47(2).
- Fang Mingyuan et al. [incl. D. F. Chamberlain]. 2005. Ericaceae. *Rhododendron obtusum*. P. 448 in Wu, Z. & Raven, P.H. (eds.), *Flora of China*, vol.14. St. Louis: Missouri Botanical Garden Press. www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=242344236.
- Leslie, Alan, ed. 2004. *The International Rhododendron Register and Checklist*, 2nd ed. London: The Royal Horticultural Society
- Lindley, John. 1846a. Azalea obtusa. J. Hort. Soc. London 1:152. www.biodiversitylibrary.org/item/37851.
- Lindley, John. 1846b. Azalea obtusa plate. Edward's Botanical Register, n.s. IX: t. 37. www.biodiversitylibrary.org/item/9069.
- McNeill, J. et al., eds. 2012. *International Code of Nomenclature for algae, fungi and plants (Melbourne Code)*. Koenigstein, Germany: Koeltz Scientific Books. www.iapt-taxon.org/nomen/main.php
- Planchon, J.-E. 1854 [1853]. *Rhododendron obtusum*. In Fl. des Serres Jard. Eur. 9:80.
- Voss, D. H. 1999. *Rhododendron Obtusum Group*. The Azalean 21(2):25-27.
- .Voss, D.H. 2009. *Glossary: Dimorphic and Deciduous*. J. Amer. Rhododendron Soc. 63(2):97.
- Wilson, Ernest Henry & Alfred Rehder. 1921. *A Monograph of Azaleas: Rhododendron Subgenus Anthodendron*. Pp. 29-38. Cambridge: The University Press www.biodiversitylibrary.org/item/116284

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