Dogwood hybrids old and new

Jack Aldridge examines *Cornus* crosses past, present and future

THE SO-CALLED 'BIG-BRACTED' dogwoods are some of the most decorative members of the genus *Cornus*. The four most important garden species are *C. florida* and *C. nuttallii* from North America (subgenus *Cynoxylon*) and *C. kousa* and *C. capitata* from Asia (subgenus *Syncarpea*). Great variation has resulted in a large number of named selections and there are also a handful of hybrids between them which are popular flowering trees.

Here I review the origins, nomenclatural status and merits of these hybrids, old and new.

Deciduous North American hybrids

The Pacific dogwood, *Cornus nuttallii* is one of the most striking of all the bracted dogwoods. It is unfortunately difficult to please; often slow to establish, shy-flowering and short-lived in gardens. When plants that have done service as *C. nuttallii*, have proven to be more amenable to UK cultivation, these have often turned out to be hybrids with the closely related *C. florida*.

These are mostly just as spectacular as *C. nuttallii*, with similarly large inflorescences, to 15cm across, borne on bare branches in late spring. Four-bracted inflorescences (six in true *C. nuttallii*) betray *C. florida* as the other parent, each bract recurved with a notch at the tip. Individually the bracts are larger, obovate and more overlapping in their arrangement. Rich autumn colour in orange, red or pink also marks the *C. florida* influence. Unlike true *C. nuttallii*, the hybrid is not known to have a sporadic second flowering in autumn, nor do they set fruit. Easier to cultivate, they are also much longer-lived UK garden plants.

It is not known where or when this hybrid first arose in cultivation but it seems likely it occurred more than once. The oldest accession at Royal Botanic Gardens, Kew, identified as *C. florida* × *C. nuttallii* was received from the Chenault nursery in France (as *C. nuttallii*) in 1925, while several others planted in the 1950s are known in Britain and Germany from multiple sources.

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***Cornus* 'Norman Hadden' now has a hybrid binomial as does C. 'Ormonde' (inset and over).**

Although its introduction post-dates these older plants in Europe, it is known that the same cross was made in British Columbia by nurseryman Henry M Eddie. Of the progeny raised, only one seedling survived a flood on Eddie's nursery, which was named 'Eddie's White Wonder'. Now probably the best known of this group on both sides of the Atlantic, it fulfils what Eddie set out to achieve: to combine the most desirable characteristics of both

species and create a plant with large flowers and excellent autumn colour. It was first introduced to Britain in 1963, when it was planted in the Valley Gardens, Windsor Great Park.

'Ormonde' (inset) was propagated from another plant at Kew that had made a fine specimen near to the Main Gate, where it was labelled *C. nuttallii*. Dr Keith Ferguson identified it as a hybrid, although its origin is unfortunately unrecorded. Having been highly regarded for many years, it was given a clonal name, which refers to a former royal residence that stood in the Old Deer Park, Richmond. It is now represented in several gardens, including an excellent specimen in the Pinetum at RHS Garden Wisley.

Other named selections in circulation include 'Ascona' which was distributed as *C. nuttallii* via the Dutch nursery trade, before it was given a clonal name by HJ Grootendorst, Boskoop. Its origin is unknown, but the name suggests it may have originated in a garden in Ascona, Ticino, Switzerland.

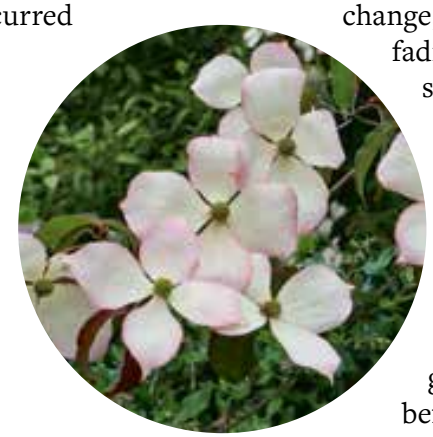
'Dorothy' was selected at Bucholz »

***Cornus* 'Ormonde' (above) is a North American hybrid while C. 'Kenwyn Clapp' (below) has Asian parents.**

Nursery, Oregon, and more resembles *C. florida* than the others mentioned, with somewhat smaller inflorescences, but superb red autumn tints. It is now available in Europe.

'Cobhay Titan' was singled out for its vigour as a seedling at Junker's Nursery, Somerset. Robust and reliable, with large inflorescences, it is a worthy recent addition to this suite of cultivars.

'Pink Blush' is the closest to a pink-bracted selection, and even here the bracts only fade to the palest pink at maturity. It occurred as a seedling of *C. nuttallii* at Handy Nursery Co. in Boring, Oregon, where the pollen parent is presumed to be a *C. florida* f. *rubra* growing nearby. While a good plant, there is certainly scope for improvement using some of the new red-pink selections of *C. florida* now available.



Semi-evergreen Asian hybrids

Plants belonging to another group of hybrids are also widely planted. These involve the two most common Asiatic species, deciduous *Cornus kousa* and evergreen *C. capitata*. Most have occurred as spontaneous seedlings in gardens and all make beautiful, small trees of graceful, spreading habit, eventually wider than tall.

Their main flowering display is later than typical *C. kousa*, usually at their best in July, like *C. capitata*. Bract shape also shows the *C. capitata* influence being more obovate than lanceolate, as in *C. kousa*. The bracts undergo a significant colour change; emerging green, they open white fading to cream, before taking on shades of pink – sometimes a very deep pink – by the end of summer.

The foliage is intermediate between the two parents and generally semi-evergreen, depending on conditions. Good autumn colour *can* develop over an extended period, turning from green through gold to butter yellow before leaf fall, usually around December, but it is unreliable. Plants growing in more shade rarely colour at all, while

in milder areas the foliage will often persist until spring before dropping. Even if autumn colour cannot be guaranteed, prolific crops of red fruit hanging from the branches on long pedicels provide a reliable autumn spectacle.

The first known occurrence of this hybrid was in plantsman Norman Hadden's garden at West Porlock, Somerset. The two self-sown seedlings, eventually determined as *C. capitata* × *C. kousa*, were propagated and distributed in the 1960s. The first of these was named 'Porlock', followed later by 'Norman Hadden'. While the latter is arguably the better known of the two, it is thought that much of the cultivated stock grown under that name is in fact 'Porlock', owing to a mix up of names early on. With few differences to distinguish the two clones, the only accurately labelled plants are those of known origin. 'Norman Hadden' can reliably be applied to the plant at Knightshayes, Devon, and its traceable vegetatively propagated progeny.

Other seedlings determined as *C. capitata* × *C. kousa* include 'Gloria Birkett' which occurred among a batch of *C. capitata* seedlings raised by Mark Fillan when working at Spinners Nursery, Hampshire. Singled out by Kevin Hughes for having distinctive foliage it proved to be a floriferous selection with larger individual bracts, aging from cream to pink. It was named by the late nursery owner Peter Chappell for a close friend and customer.

'Kenwyn Clapp' is another hybrid seedling, found in a private garden in Plymouth. It was subsequently named for the garden owner and propagated by Junkers Nursery, Somerset, who valued its attractive pink flushed foliage. This character is picked up in the bracts, which can turn a deeper pink than others of the same parentage.

Less common selections include 'Jerry Mundy', a seedling found in its namesake's garden, propagated and sold by MacPenny's Nursery, Dorset, for many years. Another is 'Conwy', selected by Tim and Rachael Lever from seedlings raised from a plant of 'Norman Hadden' at Aberconwy Nursery, North Wales.

'Soleil Rouge' has possibly the richest bract colour of all, turning a saturated red-pink when grown in optimum conditions. It is likely this intensity is inherited from one of its parents, *C. kousa* 'Miss Satomi', along with excellent, reliable autumn colour. A relatively recent selection, it was named »

***Cornus* 'Gloria Birkett' (left) with late-season pink bracts; *C.* 'Soleil Rouge' (right) has very richly coloured bracts.**

LE DUIGOU

Cornus* x *rutgersensis **Ruth Ellen (left) and C. x *elwinortonii*** **Venus (right) are the products of deliberate crosses.**

by Liliane Le Duigou of Jardins de Treuscoat in Brittany and is now being distributed by Minier Nurseries, France.

Breeding with purpose

Not all hybrid dogwoods are chance seedlings. The first major hybridization programme involving *Cornus* was instigated by Dr Elwin Orton at Rutgers State University, New Jersey, in the 1960s. His breakthrough work combined characteristics of the American *C. florida* and the Asian *C. kousa* to create the first intersectional hybrids in the genus, later named *C.* × *rutgersensis*.

For the American market, it was a winning formula; visually they are akin to their much-loved native *C. florida*, while *C. kousa* brought improved disease resistance (in particular to the devastating dogwood anthracnose, *Discula destructiva*) and better stress tolerance. In Europe, they serve a similar purpose in providing an alternative to *C. florida* where it cannot be grown well, flowering abundantly before leafing out in late spring. Marketed as the Stellar Series, among them are some truly outstanding landscape plants. They make large spreading shrubs, sometimes putting on growth at the expense of flower in their early years, but the results are worth the wait. Aurora ('Rutban'), Celestial ('Rutdan'), Ruth Ellen ('Rutlan') and Stellar Pink ('Rutgan') are among the best.

Later, Orton went on to produce more complex hybrids involving *C. nuttallii* and *C. kousa*, with even more impressive results. *Cornus* × *elwinortonii*, or the Jersey Star Series, can lay claim to having the largest bracts of all dogwoods.

Venus ('KN30-8') is truly a sight to behold in early June, when it absolutely commands attention. Starlight ('KN4-43') is not nearly as well-known but deserves to be. Its performance has been impressive and it is the perfect alternative to *C. nuttallii* where that species can't be grown well. Both have exceptional autumn colour and tolerance to heat and drought, in addition to the disease resistance for which they were bred.

Exploring new possibilities

Recently introduced evergreen species also present exciting potential for interesting new hybrids. *Cornus hongkongensis*, for example, has proven to

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be of variable hardiness, needing a sheltered position to perform at its best in cultivation. Hybrids may be hardier but retain its glossy, bronze-flushed, evergreen foliage, elegant weeping habit, longer, later flowering period and reportedly better heat tolerance. Those discussed here are available in Europe or North America, but their hardiness hasn't yet been fully tested.

'Iturraran' is one of two self-sown seedlings that occurred at the foot of the only plant of *C. hongkongensis* growing at the eponymous Iturraran Botanical Garden in Basque Country, northern Spain. The pollen parent is thought to have been a nearby *C. capitata*, from which it inherits its large, soft yellow bracts; these make for a satisfying contrast with its burgundy-red juvenile growth. The original has made a very fine tree, with a neat, upright habit. 'Pagoeta' is a sister seedling.

'Parc de Haute Bretagne' is thought to be a hybrid of *C. hongkongensis* × 'Norman Hadden', which was found in the garden of the same name in Brittany. Again, *C. hongkongensis* contributes excellent foliage qualities, with attractive bronze-pink young growth throughout the season. It is a new introduction from Minier Nurseries, France.

'Blooming White Tetra' is another newly available cultivar in Europe, raised in Japan by Hagawira Toshihiro. Although attributed to *C. kousa*, its semi-evergreen nature suggests a hybrid with another evergreen species, which appears to be *C. hongkongensis*. While they cannot yet be properly evaluated, young plants have excellent foliage, with colourful young growth later turning deep orange-red in autumn, over a long season. 'Blooming Merry Tetra' and 'Blooming Pink Tetra' are variations on the same theme.

This is just a flavour of the feast to come. With more genetic material available than ever, the possibilities for future crosses are excitingly endless and endlessly exciting. O

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***Cornus* 'Iturraran' is thought to be a cross between *C. hongkongensis* and *C. capitata*.**

Old dogwoods, new names

Jack Aldridge and Susyn Andrews provide two new hybrid names in *Cornus*

IN PREPARING THE upcoming revision of *Cornus* for IDS Trees & Shrubs Online, the need for a name for two significant hybrid combinations (discussed in the accompanying article) was recognized and are published here. While in gardens these plants will likely continue to be known by their cultivar epithets (e.g. *Cornus* 'Eddie's White Wonder'), these new names uphold a long-standing tradition within the genus of referring cultivated hybrids to nothospecies, whether they occurred spontaneously (as for *C.* × *arnoldiana*) or artificially (as for *C.* × *elwinortonii*).

Given that most material grown as 'Norman Hadden' is actually the sister clone, 'Porlock', the new hybrid name *Cornus* × *haddenii* provides a means of identifying taxa that cannot be reliably attributed to one of the two cultivar names, while still honouring their origin.

***Cornus* × *transamericanus* J. Aldridge & S. Andrews hybr. nov.**
(***C. florida* × *C. nuttallii***)
Holotype: cultivated tree (*Cornus* 'Ormonde') at Royal Botanic Gardens, Kew, Surrey, UK, 26 October 1971, **WSY**.

Small tree to 8m, with descending branches, looking most like *C. nuttallii* in general appearance. Inflorescences show intermediate characteristics between both parent species: typically 4-bracted (as for *C. florida*, whereas *C. nuttallii* is usually 6-bracted) with occasional additional bracts; opening pale yellow, turning white. Bracts large, obovate; each overlapping (not overlapping in either parent species); notched at outer tips (as for *C. florida*). Flower buds partially enclosed by bracts in winter, (fully enclosed for *C. florida* or exposed for *C. nuttallii*). Leaves deciduous, turning bright red-pink or orange in autumn (as for *C. florida*; autumn colour rarely produced in *C. nuttallii* in Britain). Fruit not reported. Flowering from mid-May to early June, before leaves emerge.

Etymology: Named to reflect the meeting of two species in this cultivated hybrid which in nature occur separately in eastern (*C. florida*) and western North America (*C. nuttallii*).

***Cornus* × *haddenii* J. Aldridge & S. Andrews hybr. nov.**
(***C. kousa* × *C. capitata***)
Holotype: cultivated tree (*Cornus* 'Porlock') at Underway, Somerset, UK, 18 June 1968, N Hadden, **WSY**.

Small to medium tree to 12m of spreading habit, recalling a large *C. kousa* in general effect. Inflorescences 4-bracted, borne on long pedicels in great profusion. Bracts intermediate between parent species, more obovate than lanceolate (lanceolate in typical *C. kousa*); emerging pale green, opening white fading cream to pink, occasionally deep pink, over an extended period. Leaves semi-evergreen (evergreen in *C. capitata*, deciduous in *C. kousa*); can turn yellow or gold in autumn over several months, or remain evergreen until shed in spring, depending on climate and growing conditions. Fruits September to October, red, large (closer in size to those of *C. capitata*), held on long, slender peduncles (as for *C. kousa*). Flowering in July, usually later than cultivars of *C. kousa*.

Etymology: Named to honour plantsman Norman Hadden (1888–1971), who discovered the first known hybrid seedling of *C. kousa* × *C. capitata* in his garden at West Porlock.

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