

***Cornus* 'KN30-8' Venus®**

Wolfgang Eberts

There is no doubt that the flowering dogwoods are among the most beautiful ornamental trees and shrubs. Gerd Krüssmann, co-founder of the IDS, once wrote that if he had to decide to grow just one species of the large-bracted dogwoods, his choice probably would be *Cornus nuttallii* as he considered it the most beautiful plant. In those days *Cornus* 'KN30-8' Venus® did not exist.

The genus *Cornus* has a wide range, some grow in the wild in Europe, such as *Cornus alba* or *Cornus sanguinea* but they are not very showy. *Cornus mas* has little yellow flowers in late winter and in some areas, the small cherry-like fruit is made into delicious jam in the late summer. There are *Cornus* that have their origin in China, Japan, and Korea; others such as *Cornus florida* and *C. nuttallii*, come from America. *Cornus florida* and their descendants come from the East Coast of the US and could be found in almost every American front yard for decades. This has changed since in the 1970s as these plants were attacked by a new disease organism (*Discula destructiva*) that causes dogwood anthracnose. This causes the leaves and branches to dieback and sometimes the tree consequently died. Not much could be done and in some areas powdery mildew also became a serious problem. These facts caused a considerable decline of the demand for these flowering dogwoods. In Europe, except for a few areas such as in the vicinity of Lake Como, many nurseries preferred to not sell *Cornus florida* f. *rubra* any more, rather than have to replace it several times for their customers. Unfortunately the other beauty, *Cornus nuttallii*, originating from the West Coast (Oregon, British Columbia) was also attacked by the disease, perhaps not to the same extent as *Cornus florida* f. *rubra* but still enough to be a problem.

The only dogwoods that continued to grow happily were *Cornus kousa* and *Cornus kousa* subsp. *chinensis*. To a certain extent, even though they are of a different colour, they replaced *Cornus florida*, and landscape architects on the East Coast were reluctant to plant *Cornus florida*. About 30 years ago, Dr Elwin Orton, of Rutgers, The State University of New Jersey, began work on a breeding programme of *Cornus*. He brought East and West together long before the World economy went in that direction, by hybridizing *Cornus kousa* with *Cornus nuttallii*. The mix was three-quarters *Cornus kousa* and one quarter *Cornus nuttallii*: 'KN30-8' Venus®, to be exact, is a backcross hybrid (*Cornus kousa* × *Cornus nuttallii*) × an unrelated *Cornus kousa*. This process was a very long one, it took him many years of hard work and painstaking selection since he had to wait until his resulting seedlings grew old enough to bear flowers and set viable seed. This process, so Dr Orton told me, took an average of eight to nine years. The first generation hybrid dogwoods do not produce a great deal of viable seed. In their raspberry-like fruit, they often have just one good kernel of seed which is imbedded in a white and fairly sweet pulp.

Dr Orton has found a wonderful and very efficient way of cleaning the seed. He puts the whole fruit in his mouth, chews on it and soon finds the seed.



He then takes the little kernel between his thumb and index and spits out the rest. Isn't that a great method? The seed overwinters and germinates the next spring. All of this work is thoroughly documented in Dr Orton's handwritten books which he keeps in his greenhouses. From the beginning the idea was to get a healthy dogwood with superb winter hardiness, disease resistance, and good flowering. That goal has been reached.

There are many good reasons why Dr Orton's Venus® has been awarded the Pennsylvania Horticultural Society's 2007 Gold Medal. The first is its hardiness which is of great importance to ensure good growth in the less privileged climate zones. In that respect, 'Venus'® is very good. It has 4 to 5 bracts which as a total bloom often reach 15cm in diameter. The actual flowers are tiny greenish-yellow buds. The colour of the bracts, which are the most attractive characteristic of 'KN30-8', changes from a greenish white to a creamy white at its peak. It flowers rather late, much later than the *Cornus nuttallii* but about one week before *Cornus kousa* subsp. *chinensis*. The duration of the blooming is much longer than that of other varieties. The dark green leaves of 'KN30-8' are fully developed when it blooms, however there is hardly any green to be seen under



Left and far left, Cornus 'KN30-8' Venus ® flowers and autumn foliage.

the mass of white flowers. When *Cornus nuttallii* flowers in mid-April, the leaves have not started to grow; this only happens when it has finished flowering.

If one cuts a branch of Venus® and puts it in a vase, one will be surprised to see it last for almost three weeks. Apparently adding a spoonful of sugar helps too. 'KN30-8' Venus® is a strong grower, it can grow up to 8m, therefore one should not feel bad when cutting a branch for the vase. When one has limited space available, or when one wants to keep the plant lower, pruning is indeed a must and should be done in mid-June, immediately after flowering. This allows the new shoots to develop the necessary flowering buds before the

autumn. If one does the pruning too late, one risks that the new shoots have not enough time to form new flowering buds in the same season. Early growth of 'KN30-8' is of rather upright habit, yet it grows to form a round tree.

An unexpected added value is the beautiful autumn colour, it changes from green to yellow, to fire red and to deep purple. The leaves are very glossy. There are usually not many fruits but those that one finds are of a good size. This new rising star amongst the ornamental trees grows well and sets flowering buds at a young age. A plant 1.50 meters high can count 100 buds and more.

There is another new hybrid of the same series, 'KN4-43'. It is also patented and will be distributed under the name of Starlight®. The latter is an F₁ hybrid and has flower buds in which the "true" flowers are much more exposed, and thus, less frost tolerant. As such, it might be better for the more southern European countries.

As with all dogwoods 'KN30-8' Venus® prefers a rather loamy and well-drained soil, preferably with a pH slightly on the acid side. When the soil is a very chalky one, dig a much larger hole and add several bags of rhododendron soil or peat moss. That should do.