

How *Cornus* 'KN30-8', Venus® Hybrid Dogwood Made It to Europe®

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BACKGROUND

Realistically, Dr. Elwin Orton should stand here and make this presentation to you, as all the honor goes to him.

I am really happy having been invited and would like to thank you all, especially my friend Susanne Lucas. I am here to let you know how *Cornus* 'KN30-8', Venus® hybrid dogwood made it from Rutgers University to Germany.

"The best service you can render a culture is to add a new plant to its horticulture."

The quote by Thomas Jefferson (Hatch) is exactly what Dr. Orton did.

Many of you will remember that Dr. Orton has worked successfully with many species of holly (*Ilex*) since 1960. In 1965, he also started assembling many different cultivars of three major species of large-bracted dogwood (*Cornus florida*, *C. kousa*, and *C. nuttallii*) to add another project to his program of inter- and intra-specific hybrids of woody ornamentals. The generation cycle in such plant material can be frustratingly long but by 1990 and 1991, the now well known five F1 interspecific hybrids of his Stellar® Series (*C. kousa* × *C. florida*); i.e. Aurora®, Celestial®, Constellation®, Ruth Ellen®, and Stellar Pink®, had been patented and introduced to commerce. During the same time period, Orton successfully crossed plants of *C. kousa* with plants of *C. nuttallii* and named two of the hybrids as members of Rutgers University's Jersey Star® Series of hybrid dogwood; namely, 'KN4-43', Starlight® and 'KN30-8', Venus®. 'KN4-43' is an F1 interspecific hybrid of *C. kousa* 'Simpson's No.1' × *C. nuttallii* 'Goldspot'. 'KN30-8' resulted from a backcross of [*C. kousa* f. *chinensis* × *C. nuttallii*] × [*C. kousa*] so, loosely speaking, is genetically $\frac{3}{4}$ *C. kousa* and $\frac{1}{4}$ *C. nuttallii* and, as would be expected, is more winter hardy than 'KN4-43'.

From that day on it was dogwoods. Dogwoods were here to stay. Nobody at that time was much aware that the *Cornus florida* f. *rubra* started to have massive problems with anthracnose and mildew, especially on the East Coast.

Dr. Orton worked with the dogwoods for 16 years. It was a long period of time but not much if you consider that Venus® hybrid dogwood is not the result of a seedling selection, as most of our flowering dogwoods are, but a true hybrid. Venus® hybrid dogwood is a cross between *C. nuttallii* and *C. kousa* var. *chinensis* and then backcrossed with *C. kousa* var. *chinensis* again; or say: East meets West (Fig. 1). There is also *C.* 'KN4-43', Starlight® hybrid dogwood pp#16,293, another one with less *C. kousa* var. *chinensis* blood. And Dr. Orton believes it is less hardy since the buds are more exposed. Starlight® hybrid dogwood flowers a good week earlier and has a more upright shape.

WOLFGANG EBERTS AND VENUS® HYBRID DOGWOOD

After 29 years of breeding and extensive testing, when Dr. Orton was satisfied with the outcome, he gave trial plants to Don Shadow, which must have been



Figure 1. *Cornus Venus*® hybrid dogwood with Dr. Orton and Wolfgang Eberts.

around 2002. In those days I was still deep in my interest of bamboo, even had a position on the Board of Directors of the American Bamboo Society, and came to a meeting in New Orleans.

If you always do what you always did you will always get what you already got: So, I went up to Tennessee to visit Don Shadow's nursery.

After letting me choose some of his wonderful arrowheads, he got me in his pickup and off we went. Several times Don would slow down, lower the window and give orders to his men working. But one time, he came to a full stop and we got out of the truck. Don showed me his new dogwood, a dogwood he had received from Rutgers. Vigorous growth, shiny leaves. Don told me it had bracts three time the size (Fig. 2) of what we normally know. Woooah! This was in August, not a single flower was to be seen. Only by listening to Don's description, I became fascinated. Don't ask me what happened then but something within me must have made a "click." It was not in my head and it was not me, I had no control over it. I repeat: not a single flower. It is like judging the beauty of a woman when she is just getting out of bed in the morning.

You need more than just good eyes. Back home in Germany, I called Rutgers and found out they had contacts with Andre Briant, a French nursery at the time with a plant hunter traveling the globe. The good news, no contract was signed yet.

I told them that I was interested in getting the license and it worked out. I met Dr. Orton for the first time; we got along very well with each other, the people in the University office typed up a contract. We discussed it, made a few changes, looked it over again and then signed.

Then I received the first plants. I knew from the beginning that we could not do the grafting ourselves. We had found a nursery in Belgium to do it for us. At the beginning, the road was quite bumpy; I remember the first winter our plastic greenhouses were torn to pieces by a storm. Then we had quality problems and switched

to a German grower. He is near Westerstede Oldenburg; he grafts in August on *C. kousa* var. *chinensis* understock, the latter having been potted earlier in spring (Fig. 3). We receive our 2.5-inch liners 7 months later, by the end of March.

When you grow a plant, you can compare it with the bringing up of a child.

Everything should be perfect from the beginning. When you buy a new car, especially if it is a European one, you don't want to bring it back to the dealer. What do you need when you introduce a new plant? A banker as a friend, lots of endurance, passion, and good contacts to the press and to television.



Figure 2. Close-up of flower of Venus® hybrid dogwood.



Figure 3. Production of Venus® hybrid dogwood.

In the meantime we had plants growing to a good size. We went to a plant fair in the Netherlands and got our first gold medal. You can imagine Dutch nurserymen coming up to us and showing their interest. We soon found out they were mainly after getting a sublicense from us, which of course we denied. The news of the gold medal quickly spread amongst professionals in all of Europe.

We needed partners in the various European countries to grow our Venus® hybrid dogwood, that took us a while but now it works well.

A good instrument to prevent cheating is our numbered color tags. When a contract nursery gets our 2-L starter plants, the tags go with the shipment and we take a note of the numbers. While the plants are cultivated, in 7.5-L containers mostly, the tags don't need to be on.

When Venus® hybrid dogwood is shipped to garden centers (the final destination) they need the tag. The tag also indicates the planting instructions. No matter where we see a plant, with the number on the tag we can backtrack its origin. In July we were in the north of Scotland, very windy place, in fact the color tags had blown off but the white string remained.

We have no restrictions when it comes to markets. Vannucci, Pistoia (Italy) our best customer, can sell his plants to the U.K., to France, etc. In fact most of Vannucci's plants come back to Germany.

When we knew that we would participate at the Chelsea Flower Show, we worked hard on luring Dr. Orton and his wife, Portia, over for a visit. It was a hard job but we finally succeeded. Several weeks prior to the show two men came to choose which plants would be on display. In mid May 2010, Dr. Orton and his wife came. Elwin was thrilled to see his baby having grown into a beautiful teenager. All four of us flew to London.

The Chelsea Flower Show, no doubt, is the finest plant show on Earth. Again we were awarded a gold medal. Getting a gold medal at Chelsea is like getting the gold medal at the Olympic Games. Back in Baden-Baden, Dr. Orton confessed that this was a true highlight, some of the best moments he has had in his life. At home we had organized another event with press people, the mayor, city council, etc.

Sales started to increase, also due to the spread of the news on the internet and various articles appearing in magazines and newspapers.

The plant is one of the best novelties we have seen in years. You can introduce a new *Hibiscus*; a *Rhus typhina* 'Baltiger', 'Tiger Eyes'® staghorn sumac PP#16185; a new red *Magnolia* from New Zealand; the *Echinacea* Tomato Soup PP #19,427; but Venus® hybrid dogwood beats them all. Talking "tomato soup," a good brand name is very helpful when you introduce a new plant. Thank you, Elwin, well done!

Venus, the Greek Goddess, or one of the brightest planets in the sky, is also called the morning star or the evening star. We call her the "Diva."

I was asked to give some figures. What I can say is we paid more than \$20,000 to U.S.A. lawyers and therefore agree with Shakespeare who in his play King George VI said: "Let's kill all the lawyers." The cost with CPVO (Community Plant Variety Office) in Angers, France, was considerable, too. So far, we have paid \$84,000 in royalty to Rutgers. That includes both Venus® hybrid dogwood and Starlight® hybrid dogwood.

SUCCESS WITH THE PUBLIC

We had professional and other garden magazines write about Venus® hybrid dogwood, we helped with pictures and text. When you have a real sensational product the media will jump on it.

This spring we have taken several platforms, places where a lot of plant interested people come to, just to make Venus® hybrid dogwood known. Quite an effort and you do not always see an immediate result, more likely it is an investment in the future. One such event was EUROPA-PARK, sort of a Disneyworld. We had 150 6-ft high plants there. Venus® hybrid dogwood, the Diva, was also presented at PalmenGarten in Frankfurt, at Wilhelma in Stuttgart, and on Mainau Island in the Lake Constance (Konstanz). Most of the time, Venus® hybrid dogwood was there for official openings and with good press coverage. If you think that this big mouth German is bragging, go ahead and Google, find out yourself. Südwestrundfunk (SWR) TV station announced in their breaking evening news “Baden-Baden has snow in May” showing the pictures of fully blooming Venus® hybrid dogwoods.

German National Garden Exhibit 2011 Koblenz, was our highlight this spring. It was overwhelming to see how Venus® hybrid dogwood conquered the hearts of the visitors.

On two weekends Wibke and I answered questions of thousands of visitors. The frequently asked questions were:

- Is it winter hardy? Yes.
- When does it flower? Mid-May!
- For how long will it flower? 2 to 3 weeks.
- Does it get diseases? No, it does not.
- How high will it grow? 20 to 30 ft.
- Can you prune it? Yes, you can — and you can even put branches in a vase when you cut these at the right moment.
- What soil does it require? A well drained and slightly acid soil.
- Do you plant it in the sun or shade? Sun or part shade is good, not under a tree.
- Can Venus® hybrid dogwood stay in a pot on the terrace? Yes, it can, at least for a couple of years.

Besides having to answer the same questions all day long, we handed out 8,000 postcards to a great public. One of the nicest compliments we received comments like, “just getting to know this wonderful new plant — seeing was worth the trip to Koblenz.” Koblenz will close this weekend and instead of reaching 2 million as projected, 3.3 million visitors came.

Talking compliments: a lady from Luzerne Switzerland called: Their VENUS blooming in front of the house, no fence between the road and the front door. A man rang the doorbell at 6.30 on a Sunday morning; the husband got up and went to the front door. The person bowed and asked the owner for the name of the plant. In order to avoid such disturbance in the future the lady wanted to know if they could transplant it to the backside of the house. I agreed, however suggested she just leave it where it is and put a big sign up: *Cornus* Venus® hybrid dogwood.

We found out that a branch cut at the right moment and put in a vase will hold 2 weeks. If a few high-class florists will appreciate the value of Venus® hybrid dogwood there will be an extra market for it. Venus® hybrid dogwoods can also be of interest for “Rent a Plant” gardeners.

We had Venus® hybrid dogwood at a prominent spot in town, when they were gradually fading we exchanged them unnoticed and put plants we had kept in the cool storage. That made a flowering period of 6 weeks instead of 3 weeks.

Making publicity for such a unique plant when it is flowering is so easy. Plant lovers cannot hold back their fascination. If we would be in New York City we would

put 30 full flowering 6-ft high plants at the beginning of High Line Park and again 30 at the end of it. Can you imagine what impact that would provoke? Wibke would stand on the one side, give away postcards and answer questions and I would do the same on the other end. Of course we would not charge, we would do it for free. Who doubts that we would get permission?

Cornus Venus® hybrid dogwood has good chance with the mail-order business, also.

I say to my people: If we can't grow a plant better, in a more sustainable manner, then why grow it at all? The big challenge is the setting of flowering buds at an early stage. We haven't quite discovered that trick but we are getting better. You have to be friends with Venus® hybrid dogwood and you will find it very cooperative.

So now, I tell Elwin, you have to work on a red one! What I hear then is: don't you worry. Considering the time it took him to bring out Venus® hybrid dogwood Dr. Orton will be close to 100 years of age. If Portia watches and prevents her husband from climbing up (and falling off) the garage roof, there is good chance we will get there.

Dr. Orton is realistic and has handed his research over to Dr. Tom Molnar. The latter and our company Eberts Baumschule will be together with my son Frederic.

***Cornus Venus*® hybrid dogwood Features.**

Description: *Cornus Venus*® hybrid dogwood is an improved dogwood hybrid with superb resistance to anthracnose and powdery mildew. Venus® hybrid dogwood explodes in early spring with large, 6-in. pure-white blooms with green centers. This Rutgers in production has clean foliage and a fast-growing, full, low-branching habit. *Cornus Venus*® is part *C. kousa* × *C. nuttalli* (the Pacific dogwood) and part *C. kousa*. Plant this cold-hardy creation as a specimen in good well-drained soil. Grows 25 ft H × 25 ft W in full or part-sun.

Hardiness Zones: 6 to 8

Sun/Shade

Preference: Partial

Soil Condition

Preference: Moderate

Special Attributes: Disease resistant, fall foliage color, frost tolerant

Plant Height: 20–35 ft

Bloom Time: Early spring

Flower Color: White

Foliage Color: Dark green

Fall Color: Orange

Plant Uses: Specimen, Urban Park, Border

Awards Won: 2007 Pennsylvania Horticultural Society Gold Medal, U.S.A.

2007 Plantarium, Netherlands

2008 IPM Essen, Germany

2009 Grower of the Year Award, Most Success New Plant, U.K.

2010 Royal Horticultural Society, Chelsea Show Gold Medal, U.K.

LITERATURE CITED

Peter Hatch, Director of Gardens and Grounds, Monticello. <www.pbs.org/jefferson/archives/interviews/Hatch.htm>