## **QUESTION BOX**

## MODERATED BY RALPH SHUGERT AND BRUCE BRIGGS

**RALPH SHUGERT:** Question for Mark Bricker. Your have touched a nerve! Why, given the tremendous nursery industry in Ohio, does the City of Columbus have to compete with private industry?

**MARK BRICKER:** The problem the city has run into the last few years is it has to put everything out to bid. Low bid wins. If we bid for a specific tree we often receive another in its place so the city is not receiving what it wants. With the pot-in-pot production we are growing what we want for our streets. We are really not competing with you because we are growing plants that we often can not get.

**RALPH SHUGERT:** Question for Mark Bricker. How are finished trees pulled out of the ground?

MARK BRICKER: I pull them with my two arms. We have a Low Boy and our rows are on 15 ft centers. I go down the rows and pull them out and place them on the Low Boy. The trees are premarked as to their final location before lifting.

**ROGER FICK:** In the state of Illinois a public works director had a similar problem. They obtained an ordinance that allowed municipalities to enter into a 10-year contract for the purpose of obtaining shade trees. In this group there are villages awarding contracts 5 years in advance for specific species.

**MARK BRICKER:** The City of Cincinnati does not have a nursery and it contract bids for plants.

**RALPH SHUGERT:** Question for Dave Thompson. Do you wax the *Acer palmatum* summer grafts?

**ALAN JONES:** No he does not. They callus very quickly during the summer, in 2 to 3 weeks. That is one of the advantages of grafting at that time.

**BRUCE BRIGGS:** What soil type do *Trillium* species need? Do they need some "real" soil in a container mix?

**LEO BLANCHETTE:** It depends on the species. In a container I find that *Trillium grandiflorum* does best at a pH of about 7 to 7.5. *T. erectum* likes a more acidic soil. Your really have to look at where they grow in the wild.

**STEPHANIE SOLT:** I just use a soilless medium, but have not researched soil requirements.

**BRUCE BRIGGS:** Question for Leo Blanchette. Has the speaker attempted wounding *Hosta* to promote eye development?

**BILL BARNES:** You can do several things with hosta. You can decapitate them and spray them with 2000 ppm of benzyladenine to stimulate bud break. When buds break fertilize heavily to stimulate bud growth. When the shoots are 3 to 4 inches long cut the shoot off, place it under mist and it will root in about 5 days, do not use hormone treatment.

**BRUCE BRIGGS:** Question for Joerg Leiss. You mentioned that propagation by root cuttings of *Phlox paniculata* can help reduce powdery mildew problems. Could you elaborate on this further?

**DICK BIR:** Joerg lives in a much cooler place and his comment on not seeing it in Europe is also related to the optimum temperature for growth of the organism.

CHARLES HEUSER: He also pointed out to me that he received more moisture on his leaves and that washed the spores off.

**DICK BIR:** It is humidity not rainfall that is the problem. I know one individual who washes down his phlox to reduce the mildew and it works.

**DAVE BAKKER:** One year we had a very wet summer and we had no mildew on roses. The rain washed it off. In the fall the rain stopped and mildew developed.

BRUCE BRIGGS: Question for Leo Blanchette. How do you overwinter the notched pieces of trillium crowns?

**LEO BLANCHETTE:** The notch is made on the top half of the rhizome with one notch on one side and one on the other just behind the shoot. The notch is very small. The rhizomes are then grown on.

**RALPH SHUGERT:** Question for John Bakker. Can you subdivide your large propagation facility for smaller quantities of specialty crops? I understand you can vary bottom heat, but what about top temperature, humidity, watering, shading, or sun?

**DAVE BAKKER:** Yes. All the misting lines are zoned, heat lines are zoned, and we can use drop sheets to divide the greenhouse in additional spaces.

**RALPH SHUGERT:** Question for John Bakker. With your new technological propagation facility in place for the past 4 years, do you feel you have reached a level of profit where this facility has paid for itself with improved rooting percentage, growth, savings on labor, etc. Also do you have data that supports its success?

**DAVE BAKKER:** Yes we do. As an example, because the greenhouse opens up we do not have to do any shading in the field when we plant them out — that is a labor savings that runs into the thousands of dollars because we no not have to move screens.

**RALPH SHUGERT:** What are the advantages and disadvantages of Nurticote? Does anyone incorporate slow-release fertilizer into their propagation medium?

**DAVE BAKKER:** We have found in our northern colder conditions that it does not work well; however, in Florida they love it. It is a temperature factor.

**GAIL BILLINGSLEY:** In the winter time, no; however, in the summertime yes we use it with our softwood cuttings. We direct stick in 2½ to 4-inch pots and use Nutricote 18N-6P-8K (type 140 to type 180). The temperatures in our houses in the summer run around 85 to 90F.

**BRUCE BRIGGS:** What herbicides can and can not be used on rootstocks for conifer grafting?

**BRUCE BRIGGS:** I know in the west we have had some problems with Surflan on peaches. I can not answer on conifers.

**BRUCE BRIGGS:** Has anyone had consistent success rooting *Daphne cneorum* 'Eximia'? What about growing it on in containers?

**BRUCE BRIGGS:** We have rooted it. Cuttings should be taken off of mature plants with hard wood in late August to September. Soft cuttings just do not root. *Daphne* ×*burkwoodii* 'Carol Mackie' can be rooted from softwood cuttings.

**RALPH SHUGERT:** Question for Charles Tubesing. Can you recommend hardy yellow magnolias that will grow in the Ottawa area (Canadian Zone 5a)

**CHARLES TUBESING:** I would recommend the *Magnolia* × *brooklynensis* types such as 'Yellow Bird' and 'Ultimate Yellow'.

**RALPH SHUGERT:** Question for Charles Tubesing. There was a magnolia in the auction several years ago named 'Goldfinch', where does it fit? Which cultivars would you consider commercially available? Which would you recommend propagators work on?

CHARLES TUBESING: 'Goldfinch' is a Savage hybrid, upright in habit, and with light yellow flowers. It is one of our earlier flowering yellow types.

As for the cultivars to grow, I would recommend 'Elizabeth', 'Yellow Lantern', 'Butterflies', and 'Gold Star'.

**RALPH SHUGERT:** Question for Mark Bridgen. With *Pulmonaria*, what propagation medium is used, how deep are the root cuttings buried, and what is the moisture level?

**MARK BRIDGEN:** For our research purposes we use Metro Mix 360, and place the root pieces 1 inch deep.

**RALPH SHUGERT:** Question for Mark Bridgen. With *Pulmonaria* root cuttings is there any preventive fungicide program and what are typical response times?

**MARK BRIDGEN:** They respond in 4 to 8 weeks. We typically use a fungicide dip with root cuttings.

**BRUCE BRIGGS:** Question for Brian Decker. How do you remove the needles from spruce scions without damaging the scions?

**GEORGE OKKEN:** With spruce grafts we just use the back of the knife and scrape them off. Keep the scraping to a minimum and as light as possible.

**BRUCE BRIGGS:** What causes dieback in *Juniperus scopulorum* 'Wichita Blue' and what is the answer for control?

**RALPH SHUGERT:** The control was benlate, but we don't have it any more. Cleary® 3336 with three applications 20 days apart. If you prune it off, disinfect after each cut.

**BRUCE BRIGGS:** Is anyone in the room using a system where by you have something in the water that will kill fungi and water molds before they germinate. You want something like Clorox but which is not toxic to plants and can be constant in the water.

GEORGE OKKEN: We treat all our wood benches with copper napthanate every year.

**BILL BARNS:** The best thing that I know is ozone generators that inject ozone into the water lines. It interacts with the water and controls this problem.

**BRUCE BRIGGS:** In the west some work is being done with ZeroTol® (common name = hydrogen dioxide) that looks promising.