

## EASTERN REGION QUESTION BOX

The Question Box Session was convened at 4:20 p.m. with Ralph Shugert and Bruce Briggs serving as moderators.

MODERATOR SHUGERT: The first question is: does the Society have copies of the early publication, *Propagator*, prior to the bound Proceedings?

RALPH SHUGERT: I have a copy of the meeting held in Louisville, Kentucky in 1929. There are three other Proceedings that are in the Library of Congress. I will be glad to photocopy the copy that I have for the individual who asked the question.

MODERATOR SHUGERT: What cover crops, etc. are used to restore the soil after a B&B or in a field-potted crop? Please outline the steps.

RAY HESER: In the fall we plant winter rye, plow it in, then millet, buckwheat, or a similar crop for the summer, and then back to the winter rye. We use ammonium nitrate to help break down the organic matter.

RALPH SHUGERT: We have a 2 year program with sudan, rye, sudan and rye, for our low organic soils. We try to use an application of animal manure (turkey manure that is available to us) with every cover crop planting.

CLAYTON FULLER: The first step is a soil test to measure the pH, and then lime to adjust the pH if necessary. We also like to use animal manure if we can get it. We start with winter rye, plow it under, and then in the summer plant sudan. The sudan is mowed four times during the growing season with a bush hog when it gets to about 2 ft. We lime again if needed, check the nutrient level, usually add 15:15:15, or 19:19:19 fertilizer. We use Roundup to remove perennial weeds, plow down in the fall, and then we are ready for the spring planting.

FRANK GUOIN: We have lots of composted sludge for improving soils and some of our growers are using it. Apply composted sludge at 100 tons per acre. We recommend tall fescue, not sudan grass, because it contains Johnson grass seed as a contaminant.

MODERATOR SHUGERT: Please have someone explain C.O.P.F.

JOERG LEISS: It is a voluntary contribution fund that promotes plants. Contributions go to support the promotion of plants with some also going to the plant originator.

MODERATOR BRIGGS: How do you deal with moss growing on seed trays—especially those containing seeds that have double dormancy and must be kept in the same flats for 2 years?

KATHY JALKANEN: AgroBrome works, but use it before you get the problem.

JIM CROSS: Maneb just after putting the cuttings in the flat will stop algae and moss buildup in winter.

MARK RICHEY: We had the problem with *Taxus cuspidata* 'Capitata' seedlings in flats. Once established it had to be removed by hand. This past year I increased the pH of the medium to about 7 and have not had any moss.

MODERATOR BRIGGS: How do you prevent damage to bud wood when using Surflan?

TOM SIMPSON: We use the liquid form in September with no problem on crabapples, hawthorns, or pears. It may be the September application is late enough not to cause the problem.

MODERATOR BRIGGS: Question for Ken Roe. Was the herbicide used on boxwood 'Green Velvet' Surflan?

KEN ROE: At planting time we use Treflan at the recommended rate, 6 to 8 weeks later Surflan or Surflan XL, and in the winter use Casoron. We have not seen any herbicide damage with that schedule. However, soil type and herbicide rate must be watched closely to prevent injury. I should also note that boxwood does not do well when cultivated around its roots.

In containers we use OH-2 but only in summer when our polyhouses are not covered. Goal-containing products should not be used when polyhouses are covered. Devrinol is applied for winter weed control and then Surflan XL in February/March.

MODERATOR SHUGERT: If you are growing *Taxus cuspidata* 'Capitata' from seed, do you germinate the seeds and/or grow seedlings on with bottom heat?

MARK RICHEY: Bottom heat is not necessary but we grow them in a polyhouse. The seeds are given 12 months outdoor stratification before spring planting. When germination starts cover the seedlings with saran. The seedlings are allowed to grow in the polyhouse for 3 years.

RALPH SHUGERT: You must stratify taxus seed for more than 7 to 8 months; 12 months is minimum with 13 to 14 better.

MODERATOR SHUGERT: What procedures are used to germinate *Ilex verticillata* seed?

JOERG LEISS: Two years stratification is necessary.

MODERATOR SHUGERT: Question for Richard Munson. If a plant was first registered outside the U.S. under a different name, in the long run does the original name take precedence in the horticultural literature?

RICHARD MUNSON: If registered with an international authority, regardless of country, that name should take precedence.

MODERATOR BRIGGS: Please elaborate on the possibility of IBA being withdrawn from the market.

ED WOOD: Last week, (December, 1988) the largest producer of IBA in Mexico decided to go ahead and work on the registration.

MODERATOR BRIGGS: I'm getting cutting burn from Wood's Rooting Compound at almost every dilution, especially on softer cuttings. Any suggestions?

BRUCE BRIGGS: All I can suggest is that there is a difference between a liquid and powder with regard to active hormone availability, and you need to remember that point. Liquids are much stronger than powders.

ED WOOD: I agree with that point, Bruce. In addition, toxicity problems can result because liquids give better penetration, and at high concentrations the alcohols will cause toxicity problems. The strongest we recommend is 1:5 dilution for hardwoods, while with softwoods a 1:15 or 1:20 dilution is recommended.

BILL BARNES: With any plant it is important to run a concentration gradient to determine how that plant will respond to a hormone. Higher may not always be better.

MODERATOR SHUGERT: What is the shelf life of powdered forms of IBA?

DICK BURR: I believe Mike Dirr published that information in Vol. 36 of the IPPS Proceedings, or at the Southern Nurserymen's Association meeting.

BILL BARNES: Two to four years with no problems.

MODERATOR SHUGERT: What is the procedure for the cutting propagation of *Ilex decidua* and *I. verticillata*.

BILL BARNES: I would use the following: June cuttings, wound, IBA 1000 ppm, mist, and peat:perlite medium. Cuttings will be rooted in 4 to 6 weeks. [Editor's note: *Ilex decidua* is more difficult to root. The following has been reported: early July cuttings (Indiana), 5 to 6 in. long, 7,500 ppm IBA, peat:polystyrene medium, and mist. Cuttings will be rooted in 4 to 6 weeks.]

MODERATOR BRIGGS: Please advise on getting started in tissue culture propagation.

DICK ZIMMERMAN: The first step is to know what you want to propagate, and where you will sell it. Some of the biggest tissue culture labs failed to address those questions to their sorrow. They tried to produce the same crops which resulted in a lot of plants being dumped in Florida. It is not difficult to set up a lab. However, it doesn't do any good to propagate plants if you don't know how they will perform afterwards. We emphasize subsequent performance in our program. Micropropagated plants have to be field evaluated and that takes time. I feel that tissue culture propagation has a lot to offer, and there is a lot being done around the world. There have been problems, but these when investigated are often the result of short cuts.

There are several technical papers in the IPPS Proceedings for those interested in what it takes to set up a lab.

MODERATOR BRIGGS: Is anyone using the polybag in tissue culture propagation?

DICK ZIMMERMAN: Someone in Texas is using it, but I am not sure how wide spread its use is. Available from Carolina Biological Supply, Curtin Matheson, and, I think, AgriStar in Texas. The bags are gas permeable.

MODERATOR SHUGERT: How do you prevent black stem from occurring overwinter on *Vinca minor*?

TOM KIMMEL: Banrot after sticking.

MODERATOR SHUGERT: Does anybody use Zyban on *Euonymus fortunei* 'Emerald and Gold' and 'Emerald Gaiety' for anthracnose and what are the results?

KATHY JALKANEN: Zyban 45 is satisfactory for us.

VOICE: This has also worked well for us when used weekly in the spring.

MODERATOR SHUGERT: Question for Ken Roe. At what time after your boxwood cuttings are stuck do you apply Subdue and at what rate?

KEN ROE: As soon after sticking as possible; mix 2 oz/100 gal water and apply 1 pt/sq ft every 6 to 8 weeks during winter.

MODERATOR BRIGGS: Who has or is now conducting specific research on the effects of herbicide(s) on plant propagation?

DICK BURR: Walt Straud at North Carolina State University has some long term studies. His address is Box 7609, Raleigh, NC.

MODERATOR BRIGGS: What is the relationship between top and root pruning to encourage the most and quickest growth?

CHARLIE PARKERSON: I am very interested in this. We have observed that plants go through growth cycles. Research is beginning to show that if you make a pruning cut and then plant a rooted cutting, the root/top relationship can be upset with a liner. The recommendation is to allow the roots to initiate a growth cycle, then prune the top, and the growth then will come dramatically. I recently fall-planted some juniper liners that were a little leggy. At planting time I pruned the liner tops. The potted liners just flat shut down.

BRUCE BRIGGS: With tissue culture plantlets we have found that you don't cut them back when they are moved. If cut back, allow them 2 to 3 weeks to break bud and grow before transplanting or you will set them back.

TOM McCLOUD: I have observed the same thing with azaleas. Cut them back and let them break bud before transplanting.

CHARLIE PARKERSON: With dormant transplants we have the recommendation to bring the top back into balance with the roots. Is that recommendation true for dormant plants? I'll bet Bill Flemer can answer that.

BILL FLEMER: For us, and we have transplanted millions of trees and tried all methods, a balance between top and root gives the

best results.

MODERATOR BRIGGS: Is it possible to chip bud on root pieces?

JOHN BAKKER: We have done it with roses.

### **Thursday Evening, December 8, 1988**

The Thirty-Eighth Annual Banquet was held in the Shadford/York Rooms of the Omni International Hotel, Norfolk, Virginia.

On behalf of the Society—Eastern Region, a research grant of \$1500 was presented to Professor M. A. L. Smith and M. T. McClellan, University of Illinois. Their proposal was titled "Response of Woody Plant Microcuttings to In Vitro and Ex Vitro Rooting Methods."

John McGuire made the following presentation:

#### **AWARD OF MERIT**

Our recipient has a varied and productive history. He was one of 12 children, so if he is somewhat rotund today perhaps he can attribute it in part to his need to get to the table fast and to appreciate food. He was a talented athlete as a boy and he played semipro baseball against the likes of Clem Labine. He was also a pool shark. I understand he earned his spending money at this craft while attending Providence College.

His parents hoped he would be a priest, but instead he chose to join his brothers in the nursery business in 1946. Once he chose this path he focused entirely on making his company successful. His accomplishments were many. He joined the International Plant Propagators' Society in 1954 and since that time he has served continuously on Society committees. Today he serves on the Nominating Committee. Our recipient was president of our Region; he has been president of his State Association and the New England Nurserymen's Association, and he represented his state as governor in the American Association of Nurserymen.

Our recipient epitomizes the philosophy of the Society, "to seek and to share." I have seen members seek him out during our annual bus tours so they may sit with him to learn from him. He always takes the time to share his knowledge with members, particularly the younger ones.

He has presented numerous talks at our meetings and he has hosted you when you came to Rhode Island. Perhaps you remember him as one of the stars of our video film on grafting. Our recipient was the one with only one thumb.

Seriously though, we have few members who deserve this award more than our recipient for 1988. He has proven himself on every arena of life. He is and has been an active member of his com-