General Session II: Question and Answer Session®

Dieter Louter: Did you girdle all the way around?

Michelle Kong: We went all the way around.

Dieter Louter: Did you use only Hormex #8?

Michelle Kong: Yes.

Dieter Louter: Do you suspect you would getter better and/or faster rooting in a warmer area?

Michelle Kong: Probably.

Richard Criley: How did you apply your rooting compound? Was it to the stem or the medium? Did you apply it to the girdled area or above? When did you apply rooting compound in relation to making the girdle?

Michelle Kong: For the litchi, we waited 3 days after girdling to apply a powder form of rooting compound. We applied it onto the girdled area.

Celeste Whitlow: For the *Arbutus*, I made a girdling incision and immediately used a small paintbrush to apply rooting compound all the way around mainly on the top of the girdled area.

Arne Andersen: Have you looked at any treatments of stock plants to improve rooting?

Joe Coelho: I've done quite a bit of work with stock plants with much of it trial and error just trying to figure out how to grow the plant. I found I could control growth pretty well by controlling irrigation until the soil dries out. I've also considered doing a harvest trial, analyzing the effects of plant growth regulators. One material in particular, Florel, chemically removes flowers so I would analyze that as a treatment for stock plants. The chemical removal of flowers could possibly increase carbohydrates of the cuttings. I've also looked at cutting position, basal versus non-basal. That's not really manipulation of the stock plant, but was analyzed as a stock plant experiment.

Gene Blythe: You mentioned using a thickening agent in your rooting solution. Can you tell us what that was and what concentration you used?

Celeste Whitlow: It was actually provided by the Dip 'N Grow people. It's a polysaccharide-thickening agent. It takes very little of it to thicken solutions.

Gene Blythe: It sounds like you were preparing two-node cuttings of *Thunbergia*. Can you tell us how you prepared them below the bottom node? Do they root along the nodes or on the cut surface of the stem?

Joe Coelho: The cuttings rooted at the cut surface. They are typically two-leaved, single-node cuttings.

Tom Branca: Did you try using only the gel-like thickener on any of the layers?

Celeste Whitlow: Yes. On the layers without any hormone some callus formed, but they did not go on to root. A concentration of 10,000 ppm was too high with 5000–7500 ppm best.

Sheila Bhattacharya: What kinds of temperatures are the *Thunbergia* cuttings exposed to coming from Costa Rica?

Joe Coelho: The box recommends maintaining a temperature between $45-50~^{\circ}$ F (7–10 $^{\circ}$ C). I've requested cutting shipments with temperature records inside the box, but that hasn't happened yet. It's probably most important for orders shipped in the hotter spring months.

John Scholgren: What branch diameter seems to be best for layering *Arbutus*?

Celeste Whitlow: I made layers on branches that ranged in diameter from 4.5 to 16 mm. The best rooting occurred on branches that were between 7 and 12 mm.

Germaine Boivin: Have you made trials with RootShield in the soil mix?

Bill DeVor: We started using RootShield on vegetable transplants. To this day we use RootShield on everything we produce at Greenheart. It's become a standard ingredient in our soil mixes for vegetables, poinsettias, or roses. In the beginning we did a lot of trials, and I was using quite a few fungicide drenches to solve my problems in the beginning. For us, RootShield made a night-and-day difference.

Gene Blythe: Could you repeat the concentration of Rhizopon you use and are there any rose cultivars that do not require auxin treatment?

Bill DeVor: On roses I consider rooting hormone insurance. I think we can root all of them without rooting hormone. On shrubs and landscape selection I would say about half I can root without rooting hormone with the other half requiring it. We use 1000 ppm IBA, Rhizopon AA, the pink label.