Discussion

- Q. Muller: Regarding the pre-conditioning period on the fusiform rust disease, what type of weather did you have between the 4-hour period of infection? Will the hot sun dry out the spores of telia on the day following the afternoon rain?
- A. Rowan: The 4-hour period I spoke of is a saturated rainy-type period with temperature near $67^{\circ}F$. It must actually be 4 hours to produce these microbes. Thundershowers commonly occur in the late-afternoon, but it must be at least a 4-hour period for this infection to occur, It can be as hot as $98\text{-}100\,\text{F}$ the next day, as long as there comes a shower again the following afternoon. Even though the spores are active immediately after the second rain begins, it takes 4 hours from the time the spore enters the seedling to infect it,
- Q. Mickelson: Are there any indications by which you can sort out black rots and ship the others without contaminating a plantation?
- A, Rowan: I think you will find that the pathogen can be on the seedling and not cause any rot at all; so if you tried to ship seedlings out by simply removing the black rot-rooted ones you'd no doubt ship some with the pathogen on them and probably ruin a whole plantation.
- Q. Forbes: Have you used liquid Thimet?
- A, Merkel: No, we haven't as yet.
- Comment: Thimet is available in the liquid form. I don't know why more people haven't tried it. It would seem that there would be a larger approach to inject it into the soil program.

Comment: We tried it; it works. You can actually get a commercial outfit to put it out for you. You use about a gallon per tree -- it can be metered out. You get about the same amount of phonate as you do with the crystals. The uptake is quick and there is no runoff; it's a quick job.

- Comment Merkel; Another possibility is spraying it around the base of the tree and letting the bark soak it up.
- Q. Forbes: With the applicator you demonstrated, do you drop the crystals in one place, put them in holes, or how?

 Is it a one shot application?
- A. Bland: The crystals are put in a band around the tree. All we are using now is the 40-gram rate. The length of the hose determines the size of the dose.
- Q. Forbes: Is it a surface application?
- A. Bland: Yes.
- Q. Forbes: How far are you putting this from the tree?
- A. Bland: About 6 inches from the tree.
- Q. King: We are interested in gel methyl bromide. In your nursery, what was the organic content and soil type?

 Did you get any response in high organic content in sandy soil?
- A. Green: We don't have a high organic content in our soil. We feel that we are getting good results, using a 1-acre check plot.