- Know who is responsible for labor, materials, and equipment. Foundations, wiring, downspouts, and groundwork are generally not included.
- Expect projects to take longer and cost more than you plan.

LITERATURE CITED

Bartok, J.W. Jr. 1997. Ten ideas to improve your next greenhouse. GMPro. June:44.
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General Session I: Question and Answer Session©

Kristin Yanker-Hansen: Can plants develop resistance to viruses and does the health of the soil help?

Michael Yoshimura: The common rose mosaic virus is not transmitted by any known vector. Plants that contain the viruses started out with the virus. It would not be carried from that diseased plant to other plants. Viruses react like other microorganisms, and their infectability depends on the host and the environment, which determine whether we see symptoms or not. Usually viruses are inhibited, they aren't as active, when temperatures are high so we tend to see rose mosaic virus most often in the springtime when the new leaves are out and then as it gets warmer we tend not to see them as much. Plants do have resistance to these microorganisms. The reaction between the virus and the host will determine the severity of the symptoms. Rose mosaic virus is not a very severe virus. It doesn't apparently harm the plant, and the plant will survive year after year with the virus in it. It doesn't affect the quality or appearance of the flower. Overall, infected plants seem to grow very well. Maintaining healthy plants probably does help the plant, but it's more a case of genetic resistance.

Tom Branca: If we want to propagate virus-infected plants conventionally, is there a distance behind the apical meristem or lateral meristem where the virus is absent so cuttings we take will be virus-free?

Michael Yoshimura: Viruses spread within the plant via plasmodesmata, and those haven't yet formed in the apical meristem. Viruses also move through the phloem, and it hasn't formed yet in the apical meristem either. Depending on the plant species then the virus will get very close to the apical meristem. Usually when you do meristem culture you grow the plant at an elevated temperature to slow down the growth of the virus and hope it gets farther away from the apical meristem and then excise the apical meristem so you can obtain a plant without the virus. Some chemicals (Ribavirin) have been used to slow down the virus.

Tom Branca: What actually makes a species? How do we determine taxonomically what the difference between genus and species is? You said that we can have two plants that look alike phenotypically, but yet genotypically they are somewhat different. From a molecular viewpoint how do you determine what a species is?

Jeff Wong: Genetically speaking, speciation and genetics are somewhat different because if you were going to look at genetics and try to determine species is your genetic code and that of a plant are basically the same. Based on that, then, you and the plant are related. So, genetically, in terms of taxonomic classification you can't really deal specifically with that question.

Margie Friday: Is there puddling on the floor in the propagation facility you showed?

Jeremy Bahne: There is some, but it has been greatly reduced by the compound grading. We haven't grown on those 2 acres of bottom-heat yet in either structure. We have been running water just to see what it does.

Margie Friday: Did you put a finish on your cement?

Jeremy Bahne: It is finished, but it's not a brushed finish. However, it's rough enough that it's not slippery surface when wet.

Don Dillon: Is the weed barrier you mentioned throughout your house, and what surface is underneath?

Jeremy Bahne: In the open sections we used Class II road base. On top of that is 4-mil black plastic and then the weed barrier. Basically, that prevents water from going into that area so you can walk on it and we run equipment over it. In the retractable-shade house there is weed barrier on the side without heat and in the glass greenhouse the weed barrier is just on the aisles and, again, there's Class II road base under that.

Don Dillon: With the black plastic under the weed barrier, how do you get rid of extra water?

Jeremy Bahne: It all runs to the drain. The whole section has a 2% grade to the drain.