Moderator-Paul Burgevin, Burgevin's Reporter-Paul G. Gaertner, Roses Incorporated

Q. What's new in the field of rose insect control? A. (Dr. Naegele) Resistant red spider mites are still the number one problem. The materials used should aim at absolute control as the best means of preventing build-up of resistance. This means a thorough job. If you are getting good control with present materials, stay with it. Keep the temperatures up and give two treatments close together. No one material is going to be the final answer.

Chlorobenzilate 10% and 10% Systox in aerosol is probably the best control for Aramite and phosphate resistant spider strains.

Aramite followed in 2 days and 5 days by dithio is working well and should be tried before giving up on Aramite.

Rose Growers on the West Coast are using 25% chlorobenzilate wettable powder with better results than we have had here. It is important to make two applications within a week.

A. Norman Wright: I used a 25% wettable chlorobenzilate and octomethyl (OMPA) and had excellent control. The second application was made in 8 to 10 days.

A. Jim Colprit: I had similar results at first. I also used another system, alternating Aramite and Ovotran--two applications of each in sequence.

A. Dr. Naegele: It is important the plants be kept clean rather than to allow large populations to build up.

Q. Is it possible to go back to some of our older insecticides and achieve satisfactory results?

A. Dr. Naegele: I do not believe this is of much use although it hasn't definitely been disproven.

Q. Is Ovotran being used?

A. Ovotran doesn't seem to be used extensively any more due to leaf drop. However, it is still effective against red spider.

Q. Which is the best, Aramite-dithio combination as a spray or an aerosol?

A. Dr. Naegele: Cornell has used the aerosol but dithio sprays probably would work except for toxicity and odor. Aramite spray and dithio bomb is a good combination.

Q. Has octomethyl (OMPA) been tried on pipes?

A. Dr. Naegele: Not to our knowledge. It probably would not be effective where phosphate resistance is present.

Q. What is the status of the work with clay peat mixtures?

A. The end of eighteen months shows an increase in production where the peat-clay and clay soils have been used. This is probably due to lower organic content with the resultant decrease in bacterial competition for soil oxygen and nutrients.

Q. Is there any value of mulches in the saving of water?

A. No. None is apparent. On mature plants it may help prevent the compaction of the soil but will not save water. Most of the water is lost through the leaves.

Q. In the peat and clay mixture could field soil be substituted for the clay?

A. Probably, but the results would not be as good as using clay since the organic content would be increased.

Q. Was there any trouble found in keeping the phosphate levels up? A. No troubles were found. The nutrients were added in liquid, using the separate chemicals for 15-30-15 when phosphate was needed. Tests so far have all been on constant water level.

Q. What are the symptoms of water logging or lack of oxygen in the soil?

A. The symptoms are very difficult to describe and not very specific but most often show as a mild chlorosis and a general decrease in growth. Oxygen starvation may be responsible for the occasional chlorosis seen when the nutrient levels appear to be adequate.

Q. Were there any problems encountered in fertilization?

A. No. The usual practices were adequate in keeping the nutrient levels and pH levels at the proper point. The pH started out around 5 and is now somewhat higher.

Q. What kind of clay was used?

A. The clays used were the sub-soil clay which was run through a shredder then mixed with fibrous peat moss.

Q. Was Krilium beneficial in these experiments? A. The use of Krilium was not beneficial in these tests.

Q. Is there any benefit from mixing corncobs with the soil?

A. Corncobs are of no value mixed into the soil. They may be of some benefit as a mulch in preventing compaction due to watering.

Q. Has oxygen content of soils been measured in commercial ranges?

A. No.

Q. Have organic fertilizers been used in the clay-peat tests?

A. No. Since the use of organic fertilizers would upset the purpose of the clay-peat soil method.

Q. What effect does pH have on the growth of roses? A. The major effect of pH is on the effect of the availability of iron, phosphorus, etc. rather than on the plant directly. Good roses can be grown over a wide range of pH as long as other plant nutrients are present in sufficient amounts.

Q. Is there any new method of controlling powdery mildew?

A. Marlin Rogers: Nothing new and startling. About the same things are still being used as before. Careful humidity and temperature control are very important as well as sulphur on the heating pipes. As a preventative, use sulphur frequently in the minimum possible amounts. A small amount every few days rather than heavy applications at longer intervals.

A. Iscothan, Mildex, Karathane are all the same thing and are the best corrective material so far. It is hoped that greater purification will reduce the tip burning and the blueing.

A. The quantity and type of spreader seems to be a big factor in the damage caused by Iscothan. Surprisingly, increasing the amount of certain types of spreaders such as Triton X-100, Tween 20, reduces the blueing of flowers. With Dreft and Grasselli spreaders, increasing the amount of spreaders increased the amount of blueing. Tween 20 is not being used commercially so far. There is no data on cost as yet. Tween 20 is used at 1 to 3,000 dilution with the fairly hard water found here in Ithaca. It will vary according to water hardness. All of these, of course, are preliminary findings. A. No tests have been made on roses with syringing immediately after Iscothan to reduce the negative effects.

Q. How can we control nematodes? A. Watt Dimock: Steam sterilization and concrete bottom beds are the best methods of control. The best way is to avoid them.

A. Sterilization in open-bottom beds will not give complete control due to re-entry from below. Possibly there is a resistant stage of nematodes in a very dry soil. Soil should be quite moist for a week or more before steam sterilization. A. Methyl bromide does not kill nematodes in-

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