

## **10/20/06 Canker Treatment Observations – John Gose – Lykes Bros.**

Several notes on Canker treatments we have used.

In a Vernia Block Canker was discovered in May of 2006 and the treatment was as follows:

- May 2006 Champ DP Copper at 2.8 pounds per acre
- June of 2006 Serenade Max at 1.0 pounds per acre
- July 2006 Serenade Max at .6 pounds per acre and Kocide 2000 at 3.0 pounds per acre
- September 2006 Serenade Max at .6 pounds per acre and Kocide 2000 at 3.0 pounds per acre
- October 2006 Serenade Max at .6 pounds per acre

These are young trees and were sprayed with a home made large volume sprayer. This is work in progress but it appears the Canker is being altered and inspections have shown the lesions remaining do not have the same characteristics that other blocks have. I will be better able to update this coming spring. We have found out recently that the addition of Nutri-Phite Magnum might help move these products into to the surrounding tissue of the stomata and possibly help prevent infection. Controlling Citrus Leaf Minor is a very important step to controlling Citrus Canker and we also have added several insecticides along the way for that.

I found out through DPI inspectors about a grower who was using Oxi-Date once a month on a young tree block. The inspectors flagged infected trees early in 2006 and went back in August 2006. They found a significant reduction in lesions and in some cases trees which were flagged earlier in the year did not have any lesions at all. I will try to find out more information on this.

In our nursery we have battled Xanthomonus Bacterial Spot for many years. This disease is very similar to Canker especially in the nursery setting. I found out about a grower in Brazil that also has a nursery and what he was doing to control Bacterial Spot in his nursery and Canker in his grove. He was using a non ionic form of Copper Sulfate. He believes that the non ionic form allows the copper to enter the outer tissue of the stomata and prevent infection. He was making applications at very low rates every 45 days in his nursery and had very good results. We started using a non ionic Copper Sulfate in the spring of 2005 and were making applications every month at the rate of .625 pounds per acre. The product we use is Nortrace Copper manufactured by Loveland Chemical. It is a 20% Copper Sulfate. In the spring of 2006 we had the highest bud live we have had in six years and I attribute that to the copper applications. Bottom line here is we do not have much Bacterial Spot lesions in the nursery and you really have to hunt to find any.

Any program we start will take some time for results and we must be patient.

John Gose, Lykes Brothers