A SPRAY PROGRAM FOR CITRUS TREES

R. H. Linderman, Lake Wales

For several years before the appearance of the Tractor Sprayer, I had been considering the exclusive and frequent use of Lime Sulphur solution on our citrus trees but the cost with the old type mule-sprayer was prohibitive. With the perfection of the tractor and truck sprayer, I started four years ago to spray with Lime Sulphur solution on the following schedule.

On or about January 15th, or the dormant period, we spray our Grapefruit trees at a strength of one gallon of Lime Sulphur solution to 25 gallons of water. I consider this application, and at this strength, very beneficial as a reasonable control of scab in this high ridge section. Our orange trees are usually sprayed at this time also, but at the more usual dilution; that is, one gallon of Lime Sulphur to 40 gallons of water. All subsequent applications are at this same strength. I should state that while the dilutions of material are stated in terms of the liquid form we are applying dry lime sulphur, using two pounds as the equivalent of one gallon.

Our next application is made when about three-fourths of the bloom has shed and all varieties are sprayed.

General applications are made at about seven-week intervals throughout the summer until about the first of September. We find that usually one spraying after this date will keep our fruit bright until the dormant application, the following January. We are careful to make the application in July at a time when scale crawlers are most easily killed.

This is the schedule we have followed for three years and we are so well pleased with results that we have started this year with the same program.

I believe that with these regular applications of Lime Sulphur we have greatly improved the texture and color of our fruit and have reduced scale to such an extent that we have not found it necessary to apply any oil spray. This year, I believe our fruit is more free of melanose than that in groves that have not had as many applications of Lime Sulphur solution.

A few words regarding costs might be interesting.

We have just completed our bloom spray at a cost of .0214 per tree. This cost represents tractor-sprayer, labor, material and supervision at approximately cost. The total spraying cost for 1932 was .12 per tree. Different grove caretaking organizations have various methods of charging for their spraying operations; that is, some spray at cost plus a certain fixed fee, or the spraying is charged for on the hourly basis, so I am hoping that these figures will not cause any misunderstanding to anyone.

The groves at Mountain Lake are nearly all in one group so there is practically no lost time in our spraying operations but we do have quite a distance to haul water and this is, of course, charged to the operation. We always spray with a pressure of from 400 to 450 pounds and the liquid goes on the trees in the form of a fog rather than a spray. This is particularly important during the hot summer months to avoid burning the fruit. The last spraying was applied in 628 hours and this represents the spraying of approximately 3 trees in 1 minute. We are caring for 117,940 trees ranging from nine to eighteen years in age. Our equipment consists of 5 tractor-sprayers of 300 gallons capacity each, and one truck-sprayer of 200 gallons.

We have been asked to demonstrate our spraying operation for your friendly criticism after the concert at the Singing Tower this afternoon and we will be only too glad to answer any questions, that we can, at that time.