



December 20, 2011

Second Septoria Treatment Recommended

California Citrus Exporters:

The California Citrus Quality Council (CCQC) is contacting you to provide important information about the treatment of oranges bound for Korea. UC Riverside's Jim Adaskaveg has been tracking temperatures and rainfall in the San Joaquin Valley and is recommending below that the industry make a second application to control Septoria spot.

Below is a summary of the NAVEK forecasting for the risk of Septoria spot. As of Dec. 18 we have had greater than 30 hours when temperatures were less than or equal to -1C in Fresno and Tulare Counties, with Kern County closely behind at approximately 27 hours. Dr. Adaskaveg has indicated that the industry is experiencing a significant amount of cold weather that causes rind injury to fruit or "Ice mark damage" that will be susceptible to *Septoria citri*. We have had some precipitation, but in all three counties the accumulation is below the threshold of 31 mm. Still, we are in the approximate 20-26 mm range (using rounded numbers) for the three counties and with just a little rain (4-10 mm or a rain of 4/100 of an inch) we will be in a high risk situation of a category three.

According to Dr. Adaskaveg, the table does not diagrammatically show this, but Tulare is in a yellow alert (Category 2) and Fresno and Kern Co. are close behind (a green stage or category 1). He expects that by the end of the year we will have enough rain to be in the RED alert stage. Thus, Dr. Adaskaveg is suggesting that a second application should be planned in early to mid-Jan. with the first break after any rainfall in the next 2-3 weeks.

Dr. Adaskaveg suggests that in addition to copper, growers can use copper alternatives for the first time. He is suggesting Quadris Top be used based on efficacy results and that Korea has established MRLs for the components of this product, which are 1 ppm for azoxystrobin and 1 ppm for difenoconazole. According to Dr. Adaskaveg, **preharvest** use of azoxystrobin and difenoconazole should not exceed the 1 ppm MRLs. If growers use Quadris Top for this application CCQC recommends packinghouses conduct residue testing before lots are exported to ensure that packed fruit meets the MRLs. Service companies should be able to conduct the residue testing without difficulty.

CCQC has been working with the Foreign Agricultural Service and Syngenta to try to establish a higher MRL for azoxystrobin and fludioxonil, so these fungicides can be used as **postharvest** treatments without exceeding the MRLs. We are expecting Korea's Food and Drug Administration to increase the MRLs shortly. Meanwhile, CCQC recommends that the industry exercise caution in the use of these fungicides.

Please contact me by telephone at (530) 885-1894 or via e-mail at jcranney@calcitrusquality.org if you have questions or need additional information.

Summary of Risk Assessment Model for Septoria Spot of Oranges in California - 2011-12 Season

Numerical Risk Model for forecasting Septoria Spot

| Hrs with T< -1 C | Precipitation (mm) | | | | |
|------------------|--------------------|-------|--------|---------|---------|
| | 31-60 | 61-90 | 91-120 | 121-150 | 151-180 |
| <10 | 0 | 1 | 2 | 3 | 4 |
| 10-20 | 1 | 2 | 3 | 4 | 4 |
| 21-30 | 2 | 3 | 4 | 4 | 4 |
| >30 | 3 | 4 | 4 | 4 | 4 |

Timing of Second Application (1st application Oct. 15 - Dec. 18)
Oct 15 to

| County | Date | Hrs <- 1 | Range | Pp (mm) | Pp Range | RISK |
|--------|--------|-------------|-------|---------|-----------|------|
| Fresno | 4-Dec | 7.3 | 5-9 | 19.0 | 12.5-22.7 | 0 |
| Tulare | 4-Dec | 8.0 | 1-7 | 25.5 | 23-27.9 | 0 |
| Kern | 4-Dec | 5.7 | 5-7 | 19.0 | 13.7-26 | 0 |
| Fresno | 11-Dec | 38.3 | 34-41 | 19.2 | 12.6-23.1 | 1 |
| Tulare | 11-Dec | 40.5 | 15-64 | 25.6 | 23-28.1 | 2 |
| Kern | 11-Dec | 26.0 | 25-28 | 19.0 | 13.7-26 | 1 |
| Fresno | 18-Dec | 43.0 | 38-48 | 19.5 | 12.8-23.5 | 1 |
| Tulare | 18-Dec | 51.5 | 18-83 | 25.8 | 23.1-28.3 | 2 |
| Kern | 18-Dec | 27.3 | 27-28 | 19.8 | 13.8-28 | 1 |