

Options for Septoria Management

To Minimize Copper Applications and Maintain Lot Eligibility

A revised NAVEK protocol has been developed and in operation for the last three seasons and will be used again for the 2022-23 export season. Growers and packers may apply fungicide treatments based on the same schedule as in previous years with an initial application before Nov. 30th and a second or third application based on the environmental monitoring model described above. Alternatively, they can use the revised NAVEK protocol that could minimize copper applications and maintain eligibility of positive lots as follows:

For NAVEK samples **submitted after January 1**:

- a) Samples **negative** for *Septoria spot* - grower lots are exempt from the second fungicide application, but samples should be re-submitted after 45 days if the harvest is extended;
- b) Samples **positive** for *Septoria spot* - the second application must be made with an anti-sporulation fungicide (e.g., Luna Sensation, Priaxor, Quadris Top) alone or in a mixture with copper. The sample should be re-submitted after fungicide application and within one month before harvest to the NAVEK lab. The check box "**Re-submission after a previous positive**" on the electronic form should be checked. Re-submitted samples will be evaluated for sporulation of the pathogen, and if there is no sporulation, the lot can maintain eligibility and be shipped. If positive for sporulation, then the lot is removed from the program and should be diverted to other markets.

Based on (a) and (b) above, if a second application is not made or the second application is made with an anti-sporulation fungicide, then it is strongly recommended that fruit are treated postharvest with the highest-rated anti-sporulation fungicide Graduate A+ to minimize sporulation of *S. citri* in transit.

Considerations for deciding which management alternative to follow:

Option 1: Make all copper applications based on advisories and submit samples to NAVEK lab

Advantages – simple to manage

Disadvantages – might require multiple copper or alternative applications; positive samples are out for the season

Option 2: Make first copper application and submit NAVEK samples after Jan. 1

Advantages – copper and alternative treatment applications can be adjusted based on disease pressure. This may result in reduced total fungicide applications if the NAVEK sample is negative and may provide an extra chance for positive samples to still be eligible for export provided that an anti-sporulation fungicide is applied before harvest. Overall copper usage can be minimized.

Disadvantages – extra monitoring and submission of samples to NAVEK and fruit lots still can be out for the season if sporulation occurs on NAVEK samples after the second application with an anti-sporulation fungicide.

Revisions to NAVEK

