



TOMATO INFO

Blackmold Fungicide Program

FIELD NOTES: Unexpected rainfall on September 8 in our Sacramento Valley may have been spotty, but in some areas, the amount was considerable. At our UC Cooperative Extension office in Woodland, rainfall during the evening measured 0.51 inches.

Blackmold, the ripe fruit rot caused by *Alternaria alternata*, will be the most concern.

All the available fungicides for blackmold control are preventive materials. An initial application made the day following substantial rainfall provides little benefit in protecting the red ripe fruit. Our field tests over the years indicate a single application 4 to 6 weeks ahead of harvest is sufficient to provide economically effective blackmold fruit rot protection. Under higher disease pressure conditions, a program of an initial application around 6 weeks before harvest followed by a second application 2 to 3 weeks later provides some additional protection.

Should a fungicide be applied after rainfall? Several approaches are reasonable.

- No fungicide application is warranted if harvest is within ~10 days or sooner.
- No further application is needed if an effective fungicide was applied within ~2 weeks (Bravo/chlorothalonil, Dithane, Quadris, Cabrio, etc). Sulfur is not an effective blackmold control material.
- Candidate fields for treatment would especially be fields scheduled for harvest 3 weeks or later (near end of September or later). Those late fields still have substantial green fruit that are less susceptible to infection and worth protecting.

Application method should provide good spray coverage. While airplane applications aren't hampered by wet soil conditions, ground sprayers are a better choice. Waiting a few days may not be so critical after a rain event, since many of the ripe fruit may already be infected.

Since the blackmold fungicide program is about 50% effective in reducing blackmold, when blackmold rot levels are about 15%, the reduction in rots to 8% may well lead to a manageable harvest. There has not been a clear superior product over the years, although Bravo® (chlorothalonil) has consistently performed well. Timing is probably more important in controlling this weather-driven pathogen.

A timely harvest is beneficial. Ripe fruit that has been on the vine for an extended period is more prone to infection. Varieties differences in susceptibility are expected.

For powdery mildew control: the sulfur dust that has been a top performer may not deliver the level of mildew control with our cooler and especially wetter weather conditions.

Be aware that late blight also favors rainy conditions with lingering high humidity and mild temperatures. This pathogen is very aggressive and can develop rapidly.

Let's hope for drying windy conditions and no further rain until harvest is completed.

Submitted by,

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