New Postharvest Fungicides for Florida Citrus

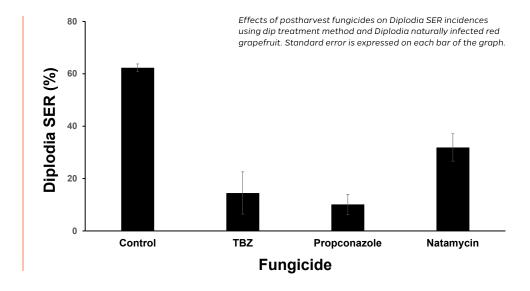
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Summary: Besides causing reduced yields in Florida, huanglongbing has also resulted in more postharvest Diplodia stem-end rot (SER). Two relatively new postharvest fungicides (propiconazole and natamycin) were evaluated over three separate experiments for their effectiveness against Diplodia SER under Florida conditions. Control fruit were dipped in water, and thiabendazole (TBZ) was included as an industry standard for Diplodia SER control. Fruit were dipped for one minute in the solutions, and all fungicides were at aqueous



concentrations of 0.1% (1,000 ppm). The fruit were then degreened with 5 ppm ethylene at 85 °F for three days and then incubated at 75 °F for up to three weeks. Both propiconazole and natamycin significantly reduced Diplodia SER incidences compared to the water control, but propiconazole was more effective than natamycin and similar to TBZ under the test conditions. Therefore, propiconazole could be a good postharvest fungicide for use in Florida citrus to manage not only sour rot and green mold, but also Diplodia SER.

Take Home Message:

- Fruit dipped for one minute in either propiconazole or natamycin before degreening developed significantly less Diplodia SER than fruit dipped in water alone.
- Propiconazole and TBZ both reduced postharvest Diplodia SER better than natamycin.
- Propiconazole and TBZ performed about equally in reducing postharvest Diplodia SER.

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