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2017 Research Report

Fungicide programs for early blight, Septoria leaf spot, and anthracnose when late blight is a risk

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Research Team:

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- Technical assistance from Phyllis May

Highlights/Summary:

- The objectives of this research were to a) evaluate fungicide programs for early blight, Septoria leaf spot, anthracnose, and late blight, b) identify the potential implications of chlorothalonil use being restricted to one application per year, and c) evaluate the efficacy of Group 7 fungicides Sercadis, Aprovia, and Fontelis for management of anthracnose.
- Late blight was the predominant foliar disease in the trial, although early blight and Septoria leaf spot were also present. A series of standard and alternative high and low cost fungicide programs were compared. All fungicide programs except the Alternative High Cost #4, which did not include a late blight fungicide until late season (one application of Bravo), effectively managed late blight, defoliation, and late blight fruit rot. Programs that relied on Manzate Pro-Stick for late blight control were not as effective as programs that included late blight specific fungicides (Orondis Ultra, Zampro, Torrent). When environmental conditions are conducive for late blight development, Manzate Pro-Stick alone may not be adequate for late blight control.
- Most of the alternative fungicide programs provided disease control that was equivalent to Bravo ZN, but represent a higher input cost for growers. Manzate Pro-Stick, which was the Alternative Low Cost program provided foliar and fruit disease control and yield that was equivalent to Bravo ZN. This fungicide may be the most economical alternative to chlorothalonil products such as Bravo, however, this will depend on the results of the upcoming PMRA re-evaluation decision for mancozeb.
- The group 7 fungicide Sercadis was not as effective as Bravo ZN, Manzate Pro-Stick, and Aprovia for anthracnose fruit rot. However, all fungicides tested (Bravo ZN, Manzate Pro-Stick, Sercadis, Fontelis, Aprovia, and A20259) reduced anthracnose compared to the nontreated control.
- A copper product was meant to be included in this evaluation but was not added to the treatment list. This will be added in 2018 if similar trials are completed.

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