

Late Blight in Southern Idaho – August 7, 2015

Jeff Miller, Miller Research
Phillip Wharton, University of Idaho
Nora Olsen, University of Idaho
Mike Thornton, University of Idaho

We have heard some recent rumors regarding the late blight outbreak in southern Idaho. The purpose of this publication is to re-affirm what is known, what is not known, and to reiterate sound management practices.

- Late blight has been positively confirmed in Bingham, Power, and Minidoka Counties.
- So far, all samples submitted for evaluation have been determined to be the US-23 strain. This strain is sensitive to mefenoxam.
- Many samples which have been submitted for identification in the Magic Valley region have been negative. Miller Research personnel are aware of a couple of cases of misidentification where physiological damage, fertilizer burn, early blight, and gray mold have been wrongly identified as late blight. If there is any uncertainty about disease symptoms, please bring a sample to University of Idaho or Miller Research personnel for proper identification.
- If late blight is present in a field with one or more hotspots spreading from the edge of the field or from several centers within the field (1% overall field infection but locally heavily infected plants 5 - 10%), the immediate area around the infected plant or plants should be destroyed using a herbicide (e.g. Reglone). Fungicide applications should then be made on a 5-7 day interval. If weather conditions are favorable for disease development, the interval should be 5 days. Under hot, dry conditions a 7-day interval may be adequate.
- If late blight is present in a neighboring field, fungicide applications should be made on a 7-10 day interval. If weather conditions are favorable for disease development, the interval should be 7 days. Under hot, dry conditions a 10-day interval may be adequate.
- Some of the most effective fungicides for late blight include Gavel, Zing!, Revus Top, Ranman, Omega, and Zampro. Revus has also been granted a label for use on potatoes in Idaho. It is recommended that Revus only be applied with a protectant fungicide such as chlorothalonil or mancozeb to help prevent the development of fungicide resistance.
- Ridomil Gold SL and Ridomil Gold pre-packs (Bravo, MZ, and Copper) are labeled for late blight control in Idaho. Since the strain identified in southern Idaho (US23) is sensitive to Ridomil, these products can be successfully used for blight control. We do not recommend the Copper formulation due to the fact that copper is relatively weak against late blight. Applications of Ridomil Gold SL need a strong tank mix partner to help avoid the development of fungicide resistance.

- Forum, Previcur, Curzate, and Tanos have limited systemic activity and are more effective than standard protectants.
- Standard protectants such as chlorothalonil and mancozeb have some activity against late blight. Reliance on these products alone will not be adequate if late blight is in the field, as they do not have any curative properties. Tin based fungicides such as Super-Tin, also have activity against late blight, but precautions have to be taken to avoid phytotoxicity .
- Phosphorous acid products (e.g. Phostrol, Resist 57, and Phiticide) result in added tuber protection against late blight. These products are not effective in protecting the foliage.
- Phosphorous acid products are highly effective in protecting healthy tubers destined for storage.