Why all the fuss about late blight this year?

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Growers across the US and Canada are being inundated with warnings about the danger of potato late blight during the coming season. Pick up a potato publication and you are very likely to see someone from somewhere telling you to be on the lookout for late blight. There are several reasons why we believe the danger for late blight is very high this year. One is the fact that there was a lot of late blight in seed potatoes across the US and Canada last season. Another reason is that serious outbreaks of disease have been traced back to tomato transplants during the last two seasons. The particularly widespread outbreak that occurred in the eastern US during 2009 was traced back to tomatoes.

Tomato transplants have been implicated as the source of several late blight outbreaks in the past, but the situation during the last two years is somewhat different. Over the last two years, the outbreaks have been caused by new strains of the pathogen that seem to be able to move more readily between the two hosts. Infected seed or infected transplants are two of the most important avenues by which the disease gets started. Once established in a particular field, normal irrigation applications and morning dew are more than adequate to keep the disease going. What it requires for significant spread is favorable weather conditions.

The weather, as always, is the wild card in the game. The widespread infestations in southwestern Idaho in 1995 and in Southeastern and Central Idaho in 1997 and 1998 were due mostly to weather conditions that were extremely conducive for late blight spread. As most of you already know, late blight is a disease that requires cool, wet conditions over prolonged periods, conditions that do not occur with any regularity in any part of southern Idaho. Not that this type of weather is unknown. In 1997 and 1998, for instance, we experienced small thundershowers and wind storm activity over the entire southeastern region on an almost daily basis. If this type of pattern should prevail again this year we could be in for a rough ride.

Another reason to pay attention is that late blight of potato is a disease that has so much destructive capability that we simply must take it seriously, even if we haven’t been having very much trouble within the borders of our state. Our view is that we have been extremely fortunate. In several of the previous five or six years, we have had weather conditions that we consider to have been ideal for late blight epidemics. Why, then, didn’t we have any reports of disease? The most likely answer is because we didn’t have any sources of overwintering late blight in the form of infected seed or infected transplants. In 2009, when we did have a reported outbreak of late blight in southeastern Idaho, analysis of the pathogen strain from infected plants indicated that it was predominately one of the new variants, a strain called "US 22." This finding would indicate that the outbreak originated from tomato transplants.

It is always heartwarming to see more fortunate farmers come to aid of a neighbor who is down on his luck due to accident or illness. Pitching in to help get the harvest in or the land worked demonstrates the best type of community behavior. Reporting the fact that you’ve found late blight on your farm comes under the same sort of community behavior. We can’t emphasize enough that late blight is a community problem and it is our responsibility as members of our community to report this disease so that management protocols can be implemented by everyone at risk, nearby or downwind, before the disease progresses to the point that control becomes very difficult or even impossible.

We urge all of you receiving the Idaho Potato Pulse to read the communication on late blight entitled "New Twists in the Challenge of Managing Late Blight" prepared by Dennis Johnson from Washington State University and Philip Hamm from Oregon State University. (attached) These two individuals have more experience working with late blight than anyone else in the Pacific Northwest and the recommendations that they make for management of late blight under dry, irrigated conditions also apply to the Idaho potato production system.

Here’s to a prosperous and late blight-free season.