

IMPACT

Agricultural and Natural Resources

Virginia Potato Disease Advisory Impact

Potatoes are a major food crop on the Eastern Shore of Virginia, with average annual cash receipts of \$14 million (2011-13).

Disease can severely affect growers' profits. For example, in recent years late blight has caused total loss in several large potato fields in this region.

To help potato growers more efficiently manage disease problems, Virginia Cooperative Extension initiated the Virginia Potato Disease Advisory to provide growers with weather-based disease forecast information. Advisories not only alert growers to periods of risk, they also assist growers in making management decisions, such as when protective fungicide applications are needed.

The VPDA uses sensors that record climatic parameters at six locations on the Eastern Shore. The gathered data are tabulated, and risk values for disease occurrence are generated for each location. These risk values, accompanied by application recommendations, are distributed to potato growers on a weekly basis during the growing season (April-July).

A recent survey of potato growers and crop advisors indicated that:

- 86 percent of respondents use the VPDA.
- 71 percent of survey respondents indicated that the VPDA was helpful in managing potato diseases; 29 percent said it was extremely helpful.
- One grower reported that using the VPDA allowed him to reduce the number of fungicide applications needed to manage the diseases.
- Three respondents said that using the VPDA resulted in increased profits: Two growers estimated the advisory led to increased profitability of up to \$10 per acre, and one grower estimated an additional profit of \$20 per acre. Most growers reported growing more than 300 acres of potatoes in a typical year, so the advisory could lead to up to \$6,000 per year in additional profit for a given grower.

This report was prepared by the Virginia Cooperative Extension IPM impact reporting team.



A focus group of growers provided further proof of the value of the VPDA program to potato growers, as is indicated by the following comments:

"We use it religiously. If it says to spray, we really pay attention and we spray. And it has saved crops."

"Yes, if the numbers [for disease risk] are up, that makes our decisions very easy. It's a service we use constantly."

"It's one of the best things the [Virginia] Potato Board has ever gotten involved in."



For more information, contact your local Extension office or visit us at www.ext.vt.edu.