

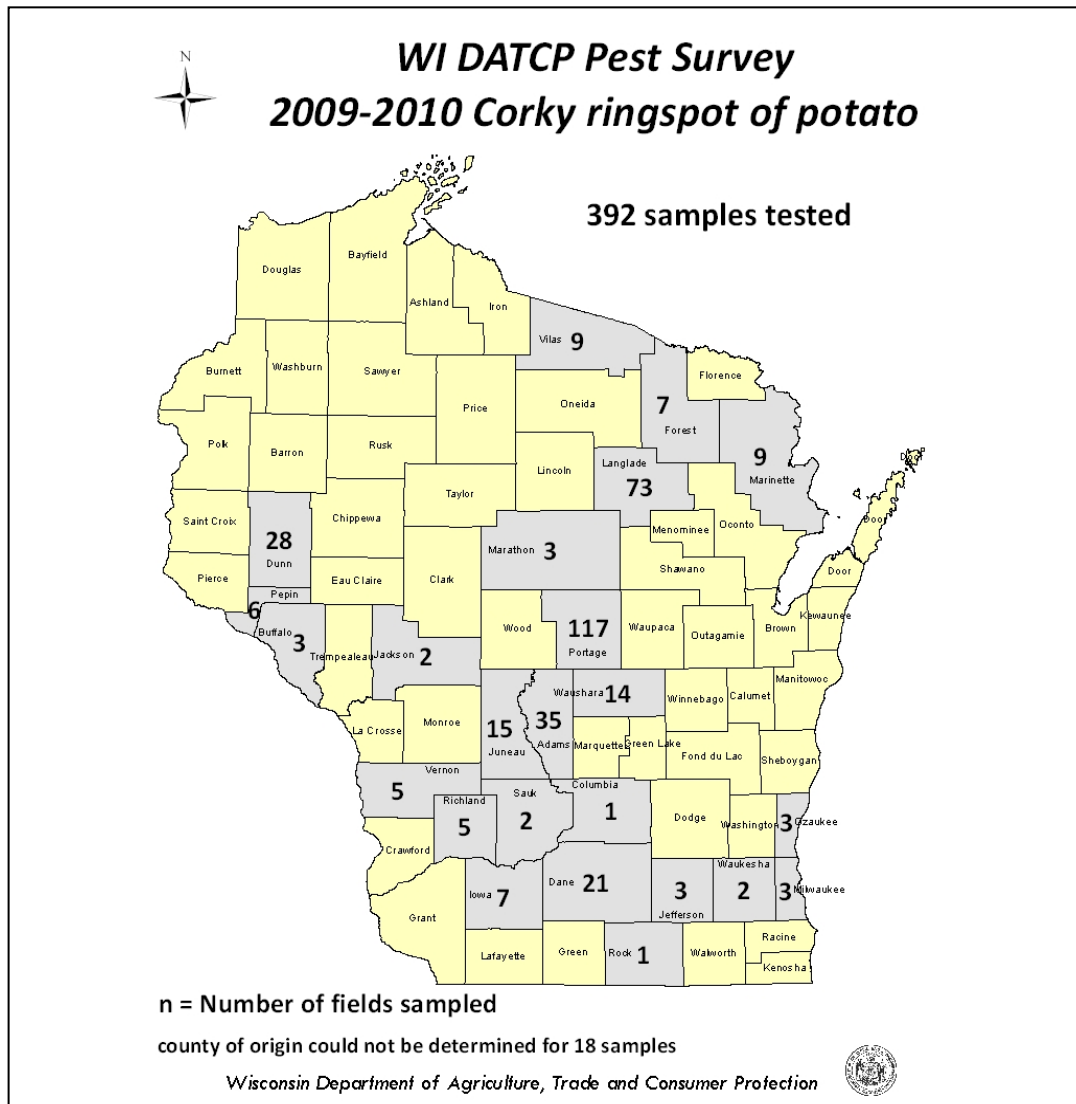
Wisconsin Pest Survey Report

2009 & 2010 CORKY RINGSPOT DISEASE SURVEY OF POTATOES

<http://pestsurvey.wi.gov/>

All major Wisconsin potato growing areas were surveyed for Corky ringspot disease of potatoes over a two year period from 2009 to 2010. Corky ringspot disease is caused by tobacco rattle virus (TRV), a plant virus that affects many food crops and ornamentals besides potatoes. TRV can affect overall tuber quality, storability and marketability. Seed potatoes are subject to phytosanitary regulations that define tolerance limits for internal and external tuber necrosis caused by viruses.

DATCP Fruit & Vegetable Inspectors and staff plant pathologists collected a total of 392 potato tuber samples from 24 counties. Tubers were sampled from fields during fall harvest, from storage facilities during the late fall and spring, and from



farmers markets during the growing seasons. Each sample consisted of at least eight tubers. Potatoes were chosen based on any visible signs of skin blemish. State-wide, 69 sources representing a variety of types of farming operations such as seed, processing and fresh market producers participated in the survey. This includes certified organic and conventional farms.

Number of Potato Samples Tested by Source

Seed	Processing	Fresh Market	Total Number
80	252	60	392

Conventional	Certified Organic	Total Number
320	72	392

Tuber tissue was tested for tobacco rattle virus (TRV), the virus that causes corky ringspot disease in potatoes at DATCP's Plant Industry Laboratory. The test method utilized, RT-PCR or reverse transcription polymerase chain reaction is highly sensitive and very effective in detecting the presence of this virus.

Tobacco rattle virus was confirmed on five farms. 1.5% of a total of 392 samples tested positive for TRV. Three farms had no prior finds of this disease. These three new finds in Adams, Portage and Langlade Counties showed very low infection levels. No corky ringspot disease problems were observed in these fields. Two positive samples were grown on farms in Buffalo and Dunn Counties that had previously experienced losses due to this virus. Several potatoes from these fields showed interior tuber blemishes.

These survey results show that Corky ringspot disease of potatoes is not widespread in Wisconsin which raises hope that prevention is still a valid management strategy for this disease. More information about this disease is available on this website.

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 Reference: D.J. Robinson, Journal of Virological Methods. 1992, 40, 57-66." Detection of tobacco rattle virus by reverse transcription and polymerase chain reaction."