

# SPUDSCOOP

**12 September 2020**

Welcome to Spud Scoop for the week ending on September 12, 2020. No late blight has been reported in ND, MN and MB. This week no late blight spores were found in the spore traps. Aphid vectors were down at all locations this week with cooler temperatures slowing down reproduction and movement. With multiple nights of freezing temperatures, potato vines in many areas have died. Because of this we will be ending the spore trapping network and this newsletter for this growing season. The cooler temperatures have provided favorable harvest conditions. Ideal tuber pulp temperature for harvest is 45 to 65 F. Yesterday was 9/11, and as Dr. Ian MacRae said “let’s take a moment to remember those brave individuals who run towards danger in order to safeguard us all.” Have a happy and safe harvest!



## **Blightline**

by Gary Secor

Welcome to the NDSU Potato Blightline for September 12, 2020. Congratulations to everyone in the potato industry in our area. As we continue harvest, still no late blight is not reported in ND, MN or MB. The rain and cooler temperatures are favorable for late blight infection and spread, so continue to watch for any late blight in harvested potatoes. If late blight is found, the best management practice is to dry the potatoes to prevent spread and secondary soft rot in storage. Send suspect late blight samples or photos to us for positive identification. This will be the final regular edition of the NDSU Potato Blightline for 2020. Stay safe and healthy.

# Potato Late Blight Spore Trapping Network

Trap catches from August 31-September 6, 2020

By Andy Robinson and Julie Pasche

This is the tenth reporting period for 2020. This report contains 27 sites reporting for the week of August 31-September 6. The PCR assays to detect late blight spores were conducted in the lab of Dr. Julie Pasche at the NDSU Plant Pathology department. Late blight spore DNA was not found at any locations this week. As the legend in the map indicates, green dots indicate no late blight spores recovered and the gray dots indicate sites not reporting. If you have a spore trap at your farm, please retrieve it from the field so it can be used next year or contact Andy to have it picked up.

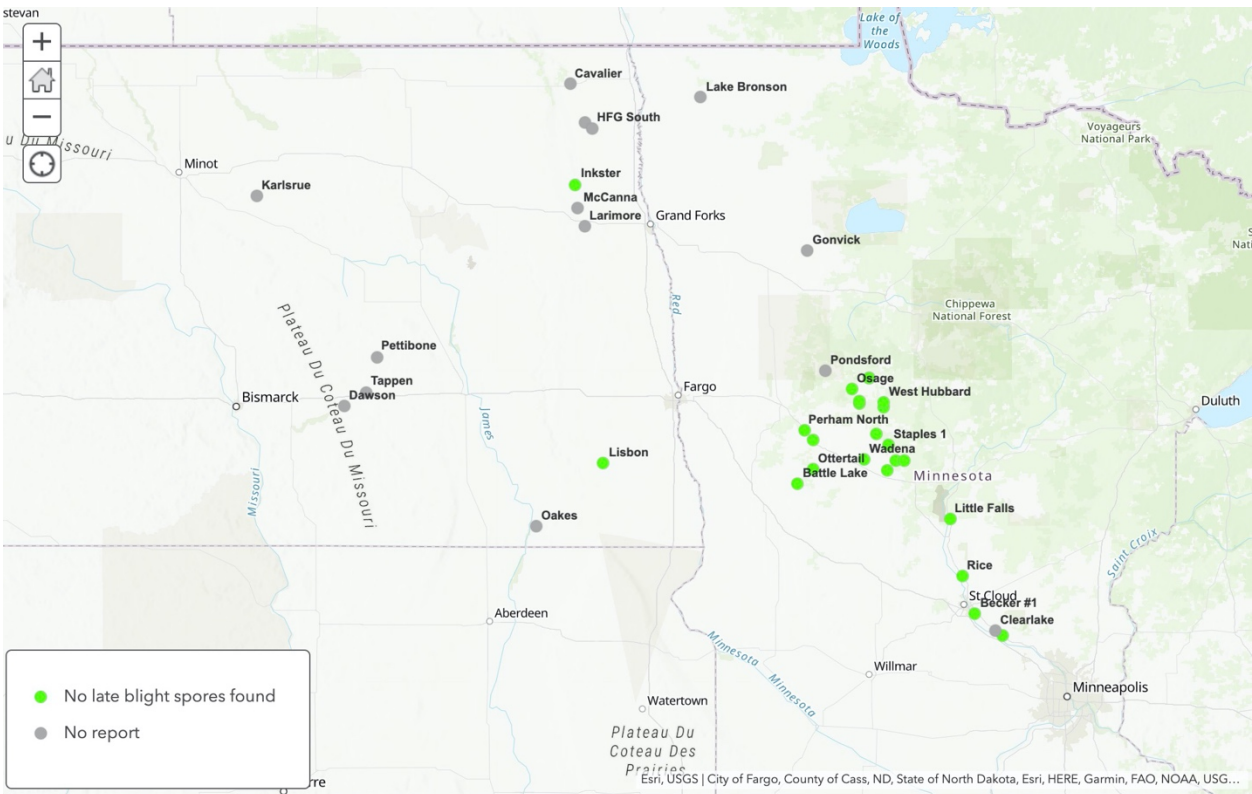


Figure 1. Results of late blight spore traps during the week of August 31-September 6, 2020.

Thank you to the Northern Plains Potato Growers Association, Minnesota Area II Potato Council, J.R. Simplot Company, Cavendish, R.D. Offutt Farms, Syngenta, Sipcam, Bayer Crop Science, BASF, UPL USA, Corteva, and Nufarm for supporting this effort.

## **Aphid Alert**

by Ian MacRae

**Friday, September 11, 2020**

### **Trap Catches Identified to September 11, 2020.**

Aphid vector captures were down at all locations this week; the cooler temperatures slowing down reproduction and movement. There were a total of 63 individual aphids from 11 different species as compared to 172 aphids from 16 vector species last week. Still, there does seem to be several species well represented in the area.

Green peach aphids are still present, 7 being recovered from 4 locations (Humboldt, Sabin and Perham all reported GPA). Soybean aphid numbers are lower this week, as are numbers of small grain aphids. Thistle aphids have decreased but are still present, and buckthorn aphid numbers remain steady as they migrate back to their overwintering host.

Overall, this is an expected week, with the season winding down, many fields already vine-killed and harvest underway. We hope all's going well for everyone in the field.

As today is 9/11, lets also take a moment to remember those brave individuals who run towards danger in order to safeguard us all.

As always, keep on scouting!

### ***Scouting for aphids in potatoes:***

- Select leaves from the lower to mid canopy. Start at the edge of the field.
- Lower, older leaves will have more established colonies and aphids prefer the balance of nutrients found here; aphids are rarely found on leaves in the upper canopy.
- Avoid leaves on the ground or in contact with the soil.
- In seed potatoes there is only a threshold for PLRV (10 aphids/100 leaves), reactive application of insecticides an effective control for PVY.
- The use of feeding suppressing insecticides, such as pymetrozine (Fulfill®) or flonicamid (Beleaf®) and refined crop oils, such as Aphoil and JMS Stylet Oil, at or prior to field colonization by aphids may reduce the transmission of PVY within fields. Some other insecticides, such as clothianidin (Belay®), imidacloprid (Admire Pro® or Provado®), and spirotetramat (Movento®), have also been demonstrated to reduce the transmission of PVY.
- In table stock potatoes, a treatment threshold of 30 aphids /100 leaves should deter yield loss due to aphid feeding.

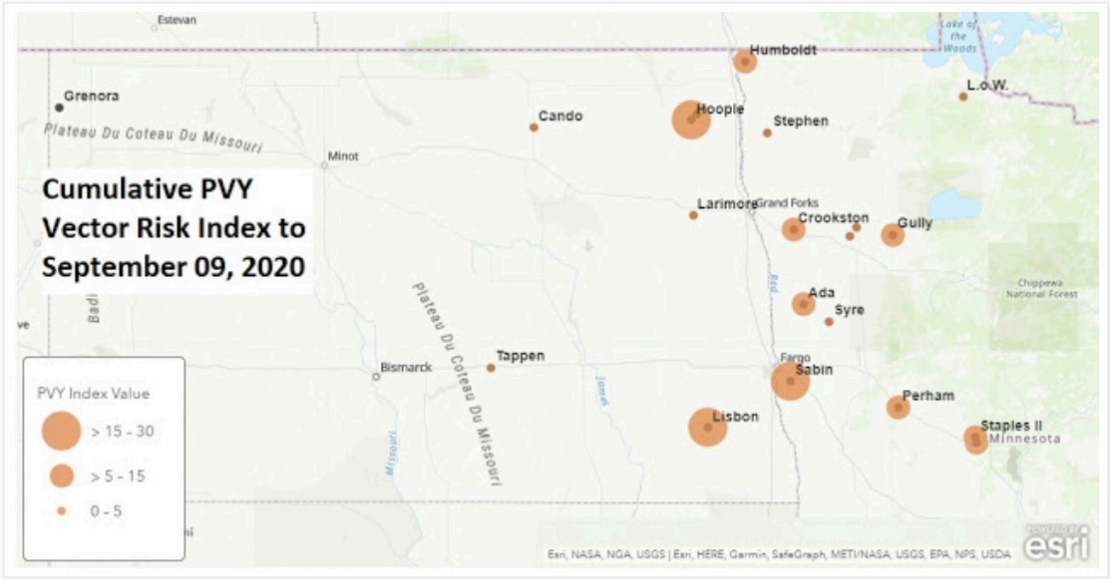
### **The PVY Risk Index Index**

Not all species of aphid are equally efficient at transmitting PVY, some are better than others (green peach being the most efficient vector of PVY). So, the total number of aphids in a trap don't necessarily reflect just how much vector pressure there is at that location. The PVY Vector Risk Index compares aphid numbers, incorporating their relative vector efficiency compared to the Queen of PVY vectors (green peach aphid!). Using averaged reference comparisons from

the literature, we multiply the number of each aphid species captured by its efficiency compared to Green Peach Aphid to more accurately depict risk posed by the species being trapped. We then sum the totals. The PVY-VRI values are presented on the tables below but also on maps comparing current cumulative risk to the total risk from the sample sites of last year (to compare with your local winter grow out results).

Check out all the trap data at: [aphidalert.blogspot.com](http://aphidalert.blogspot.com)

Cumulative PVY Vector Risk Index to September 11, 2020.



Cumulative PVY Vector Risk Index to September 09, 2019 season (for comparison)

