# Vegetable Crop Update

_A newsletter for commercial potato and vegetable growers prepared by the University of Wisconsin-Madison vegetable research and extension specialists_  

**No. 18 – September 17, 2023**

## In This Issue:
- Potato production and harvest updates
- Potato and tomato early blight and late blight disease updates – _DSV 18 threshold surpassed in Antigo WI area_
- Cucurbit downy mildew updates

## Calendar of Events:
- **November 28-30, 2023** – Midwest Food Producers Assoc. Processing Crops Conference, Kalahari Convention Center
- **January 9-11, 2024** – Wisconsin Agribusiness Classic, Alliant Energy Center, Madison, WI
- **January 21-23, 2024** – Wisconsin Fresh Fruit and Vegetable Growers Conference, Kalahari Resort, Wisconsin Dells, WI
- **January 25-26, 2024** – Organic Vegetable Production Conference, UW Madison Division of Extension (Online)
- **February 2-3, 2024** – Organic Vegetable Production Conference, UW Madison Division of Extension, Alliant Energy Center, Madison, WI
- **February 6-8, 2024** – UW-Madison Div. of Extension & WPVGA Grower Education Conference & Industry Show, Stevens Point, WI

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Overall, Wisconsin and the Upper Midwest were hot and dry through most of August. However, growers were able to catch up with good irrigation management, and spotty rainfall events could keep potato crops in good conditions. For example, the >1.2” of rainfall event on August 14th and 15th supplied a decent amount of moisture to the soils. Warm days and cool nights in August greatly helped the tubers to achieve their bulking potential as much as possible.

Looking back, the state has been dry and hot most of this growing season. With good irrigation management practices, the soil moisture was kept at good levels, and didn’t cause any substantial leaching risk. On the flip side, more irrigation water could mean higher nitrogen credits from irrigation water, if groundwater nitrate-N levels were high. Our calculation so far is that our full season potatoes in the K field (33.3 ppm of nitrate-N in the well) at Hancock have received 22.65” of irrigation water and a total of 173 lb/acre of extra N just from the groundwater. This high amount of extra N could cause confounding effects on our nitrogen trial this season. I will keep everyone posted once we harvested those research plots.
For commercial production, this season’s potato crop is in good to excellent condition, which should be associated with above average yields with a larger size profile, similar to 2022. Average yield is estimated to be 430 cwt/acre. In particular, more yellows and less reds were planted this year, yields of early-season yellows have been above average, and those of reds have been close to or slightly below average. For early-season russets such as Caribou, yields and size profile were reported to be ideal. Full-season harvests are ongoing, besides the hot conditions that shut down most of the operations in early September, conditions were almost ideal and potatoes look good going into storage.

According to USDA, growers are expected to harvest 500 more acres in 2023, which is estimated to be 870,000 cwt more potatoes than last season. If ideal conditions continues, we should see a 3.1% increase of total production compared to 2022. Happy harvest!

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**Early blight of potato/tomato.** Accumulations of P-days this past week were between 35-66 across the state of Wisconsin. In all locations and all planting dates, potato fields have surpassed the threshold and should continue to receive fungicide applications for early blight management depending upon the time-to-harvest of the field

**Late blight of potato/tomato.** Accumulations of Blitecast DSVs were low with a range of 1-6 this past week in the 7 sites detailed in our table, below. The Antigo location did surpass the threshold of 18 DSVs this week with a total of 20 as of 9/16. Prevention of late blight should still be considered even this late in the season since airborne sporangia can move into fields (despite senescing foliage) and make their way down to tubers in the soil to create tuber infection. Late season application of mancozeb can be helpful in limiting tuber blight. Fungicides for the management of late blight in tomato and potato crops are provided: https://learningstore.extension.wisc.edu/products/commercial-vegetable-production-in-wisconsin. A specific list
Cucumber Downy Mildew. The Cucumber Downy Mildew forecasting webpage (https://cdm.ipmpipe.org/) is not forecasting the movement of the pathogen, but the group is offering reporting of findings of cucumber downy mildew from the US. To date, there have been no reports of downy mildew here in WI. We should be considering preventative treatment of cucumber and melon crops here due to the likelihood of the disease resulting from clade 2 downy mildew. https://vegpath.plantpath.wisc.edu/2023/08/28/update-15-aug-27-2023/