



Vegetable Crop Updates

*A newsletter for commercial potato and vegetable growers prepared by
University of Wisconsin-Madison vegetable research and extension specialists*

September 13, 2026

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Calendar of Events:

December 1-3, 2026 – Midwest Food Products Association Annual Convention & Expo, Processing Crops Conference, Wisconsin Dells, WI

January 17-19, 2027 – Growing Wisconsin Conference for Fresh Fruit & Vegetables, Kalahari, Wisconsin Dells, WI

February 9-11, 2027 – WPVGA/UWEX Grower Education Conference, Stevens Point, WI

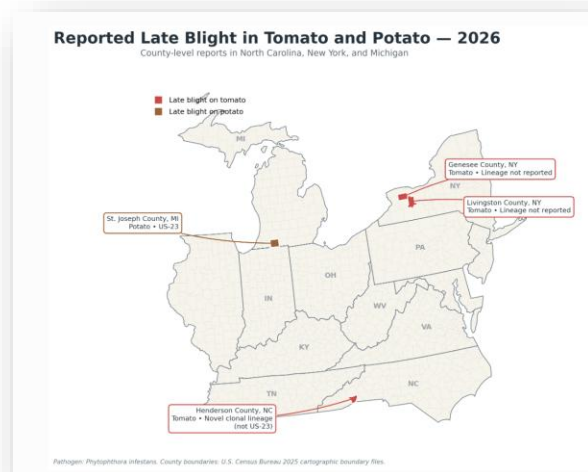
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Current P-Day (Early Blight) and Disease Severity Value (Late Blight) Accumulations will be posted at our website and available in the weekly newsletters. Thanks to Ben Bradford, UW- Madison Entomology for supporting this effort and providing a summary table: <https://agweather.cals.wisc.edu/thermal-models/potato>. A Potato Physiological Day or P-Day value of ≥ 300 indicates the threshold for early blight risk in potato and triggers preventative fungicides. A Disease Severity Value or DSV of ≥ 18 indicates the threshold for late blight risk and triggers preventative fungicide application in potato. Data from the modeling source: <https://agweather.cals.wisc.edu/vdifn> are used to generate these risk values. I've estimated early, mid-, and late planting dates by region based on communications with stakeholders. These are intended to help in determining optimum times for preventative fungicide applications to limit early and late blight in Wisconsin.

Location	Planting Date		50% Emergence Date	Disease Severity Values (DSVs) through 9/12/26 <i>Season total (additional DSVs over past week)</i>	Potato Physiological Days (P-Days) through 9/12/26 <i>Season total (additional P-Days over past week)</i>
Spring Green	Early	Apr 10	May 7	70 (3)	1041 (63)
	Mid	May 5	May 20	68 (3)	969 (63)
	Late	May 16	June 2	68 (3)	873 (63)
Arlington	Early	Apr 12	May 8	41 (1)	1045 (64)
	Mid	May 6	May 23	41 (1)	970 (64)
	Late	May 20	June 4	41 (1)	873 (64)
Grand Marsh	Early	Apr 13	May 9	61 (1)	1011 (62)
	Mid	May 6	May 22	61 (1)	951 (62)
	Late	May 21	June 5	61 (1)	846 (62)
Hancock	Early	Apr 14	May 11	44 (3)	1006 (62)
	Mid	May 10	May 30	43 (3)	891 (62)
	Late	May 23	June 6	42 (3)	837 (62)
Plover	Early	Apr 15	May 12	34 (0)	1003 (61)
	Mid	May 10	May 30	33 (0)	892 (61)
	Late	May 25	June 6	32 (0)	840 (61)
Antigo	Early	May 12	May 29	55 (4)	859 (51)

	Mid	May 25	June 5	63 (4)	815 (50)
	Late	June 8	June 20	52 (4)	703 (50)
Rhineland	Early	May 15	June 6	34 (0)	795 (59)
	Mid	May 28	June 10	32 (0)	758 (59)
	Late	June 9	June 25	27 (0)	662 (59)

Late blight of potato/tomato. Wisconsin potato production regions have accumulated very low Disease Severity Values or DSVs over this past week – just 0-4. All locations are at or surpassing the action threshold of 18. Fields with ≥ 18 DSVs should receive preventative fungicide applications to manage for late blight. A current list of fungicides for management of potato late blight in Wisconsin 2026 is provided here: <https://vegpath.plantpath.wisc.edu/resources/late-blight-fungicides/>.



Late blight in the US 2026. Just one additional county reporting tomato late blight from western NY this past week (now Genesee & Livingston Counties). Earlier this season, isolated confirmations came from tomato in NC, and potato in MI. The NC late blight strain is not one of the known types (scientists had anticipated US-23, but this was not the case). The NY late blight hasn't yet been typed as far as I know. The late blight founds on potatoes in FL back in January was also of a novel type – not the anticipated US-23. This is an interesting time, requiring ongoing support for late blight management and vigilance.

Protecting Winter Squash Quality from Harvest through Storage. As Wisconsin's vegetable season moves into its final harvests, winter squash and pumpkins require careful handling to preserve the quality produced in the field. Fruit that appear marketable at harvest can deteriorate rapidly in storage when rind injuries, immature fruit, field infections, condensation, or poor air circulation favor decay. Careful harvest, grading, curing, and storage management are the most effective tools for limiting losses. Many storage rots begin in the field but do not become apparent until weeks after harvest. Other decay organisms enter through cuts, bruises, broken stems, or injuries caused during harvest and handling. Although the pathogens involved may differ, the most important management practices are broadly similar: harvest mature fruit under dry conditions, minimize injury, keep fruit dry, exclude diseased or damaged fruit from storage, and maintain appropriate temperature and ventilation.

Whenever possible, harvest winter squash after the fruit have reached full maturity. Indicators of maturity include the development of characteristic rind color, a hard rind that resists puncture by a thumbnail, and drying or corking of the stem. Immature fruit generally have softer rinds, lose water more rapidly, and are more susceptible to injury and decay.

Harvest before a hard freeze. A light frost may injure vines without immediately damaging mature fruit, but freezing injury to the fruit can lead to rapid deterioration in storage. Fruit from frost-damaged fields should be evaluated carefully and marketed promptly if there is concern that the rind or underlying tissue was injured.

Dry weather is preferred for harvest. Handling wet fruit increases the likelihood of spreading pathogens and placing free moisture into bins or storage areas. If fruit must be harvested when wet, provide adequate air movement and allow surfaces to dry before packing or placing fruit into storage.

Cut fruit from the vine with a clean knife or pruning tool, leaving a sound stem attached when appropriate for the squash type. Do not lift or carry fruit by the stem. Broken stems create wounds that provide ready entry points for decay organisms. Harvest crews should also avoid dropping, throwing, or overfilling containers. Even when the rind remains intact, impact bruises can damage the tissue beneath it and become visible only after the fruit have been stored.

Storage should be reserved for mature, dry, high-quality fruit. Inspect squash carefully as they are harvested and again before they enter storage. Remove fruit with:

- Cuts, punctures, cracks, bruises, or broken stems
- Soft, water-soaked, sunken, or discolored areas
- Active mold or signs of decay
- Extensive insect feeding or mechanical injury
- Symptoms consistent with *Phytophthora* fruit rot (<https://vegpath.plantpath.wisc.edu/diseases/phytophthora-crown-and-fruit-rot/>)
- Significant sunscald, chilling, or frost injury

Fruit with questionable lesions should not be mixed with sound fruit intended for long-term storage. One infected fruit can produce abundant inoculum and contribute to decay of neighboring fruit, particularly when surfaces are wet or fruit are packed tightly together. Keep cull piles away from production and storage areas. Diseased fruit left near packing areas can serve as a continuing source of spores or bacterial inoculum.

Cure appropriate squash types carefully. Curing can promote wound healing, harden the rind, and improve storage life in several winter squash types. Where recommended for the cultivar, curing is commonly accomplished by holding fruit for approximately 7–10 days under warm conditions—generally around 80–85°F—with good air movement and moderately high relative humidity. Curing is not appropriate for every type of winter squash. Acorn squash, for example, can lose quality and develop undesirable color changes when subjected to prolonged warm curing. Recommendations also differ among delicata, spaghetti, buttercup, butternut, hubbard, and other specialty types. Growers should match curing practices to the squash class and cultivar rather than treating all winter squash alike. Curing will not restore fruit that are immature, frost-injured, or already infected. Diseased fruit may deteriorate more rapidly under warm curing conditions and should be removed beforehand.

Maintain suitable storage conditions. Most winter squash store best near 50–55°F with moderate relative humidity, good ventilation, and minimal temperature fluctuation. Temperatures below approximately 50°F can result in chilling injury in susceptible squash, while warmer conditions can accelerate water loss, respiration, and decay. Excess humidity, condensation, and free moisture favor many storage-rotting organisms. At the same time, very dry air can cause excessive weight loss and shriveling. Avoid placing warm fruit directly into a cool, poorly ventilated room where moisture may condense on the rind. Arrange bins or containers to permit air movement. Avoid placing fruit directly on damp floors or against exterior walls where temperature differences may cause condensation. Storage rooms, bins, and handling equipment should be cleaned before use, and crop debris and decayed fruit should be removed promptly. Inspect stored squash regularly. Early removal of a decaying fruit can prevent leakage, contamination, and direct spread to neighboring fruit. The first inspection should occur soon after storage begins because injuries and latent infections may become apparent during the initial weeks.

Recognizing common fruit rots. Several diseases may contribute to winter squash losses during harvest and storage. Symptoms can overlap, and laboratory diagnosis may be necessary when identifying the cause will affect future management.

Black rot or gummy stem blight may produce dark, irregular, or sunken lesions on fruit. Infections can begin in the field and continue to develop after harvest. Fruiting bodies may appear as small black dots within affected tissue.



Black rot symptoms on butternut squash fruit. Symptoms are typically brown and water-soaked in color and integrity. Sometimes there is a gummy material exuding from the lesions. Photo courtesy of Dr. Gerald Holmes, Bugwood.org.

Fusarium rots often develops at wounds, stem scars, or areas previously damaged by insects or other pathogens. Lesions may be dry or sunken and can develop white, pink, or reddish fungal growth, depending on the species involved.



Fusarium rot on pumpkin fruit causing symptoms of sunken lesions with white fungal growth. Lesions are often on fruit where there is contact with the soil. Photo courtesy of Dr. Tom Zitter of Cornell University.

Bacterial soft rot causes rapidly advancing, soft and frequently wet breakdown. Bacteria generally enter through wounds or tissues damaged by another disease. Warm temperatures and free moisture strongly favor development.



Bacterial spot on spaghetti squash. Note the distinctive lesions which are often pale in the center with brown haloes. Lesions caused by *Xanthomonas* species may remain shallow and under cool and dry conditions, these may not cause internal rot. However, if infected early in fruit development, or if there are warm and wet conditions with other factors further promoting damage, soft rot by other bacterial or fungal pathogens may ensue. Photo courtesy of Purdue University.

Phytophthora fruit rot, caused by *Phytophthora capsici*, may begin as water-soaked lesions that expand rapidly. Under humid conditions, affected areas can develop white, yeast-like or powdery growth. Fruit from infested areas of a field should be handled cautiously because apparently sound fruit may develop symptoms after harvest. Suspect fruit should not be placed into long-term storage.



Phytophthora fruit rot on acorn squash fruit. Infection can result in a water-soaked and soft lesion on fruit with substantial spore production when conditions are warm and humid, as shown in the picture. Photo courtesy of Dr. Mary Hausbeck of Michigan State University.

Plectosporium blight can cause numerous tan-to-white, corky lesions on fruit and stems. Although affected fruit may remain firm initially, severe lesions reduce marketability and may provide opportunities for secondary decay organisms.



Plectosporium symptoms on pumpkin fruit. Note diagnostic tan to white corky and raised lesions on fruit. Stem (petiole and peduncle) tissues can quickly turn dry and brittle. Photo Courtesy to Dr. Dan Egel, Purdue University Extension.

For most storage diseases, there is no curative treatment once decay is established. Postharvest disease management therefore depends heavily on preventing injury, excluding infected fruit, maintaining sanitation, and managing the storage environment.

Use this harvest to inform next season. Record where diseased fruit occurred within the field. Concentration in low or poorly drained areas may be particularly important for *Phytophthora* management. Also note cultivar, crop rotation, irrigation practices, harvest conditions, and the types of lesions observed. When possible, submit representative fruit for diagnosis while symptoms are still developing. A confirmed diagnosis can guide decisions about crop rotation, field selection, drainage, sanitation, resistant or less-susceptible cultivars, and future disease-management programs.

Stored winter squash fruit will perform best when fruit are harvested and stored when:

- i) mature and free from frost injury
- ii) harvested and handled under dry conditions
- iii) fruit are not wounded or diseased
- iv) cure appropriately for the squash type
- v) maintain storage area clean, well ventilated, and near 50-55°F
- vi) inspect fruit routinely and remove decay regularly

The quality of winter squash in December is strongly influenced by decisions made in September. Gentle handling, careful grading, appropriate curing, and attentive storage management can substantially reduce losses and extend the marketing period for a valuable fall crop.

Cucurbit Downy Mildew was reported in new counties of NY and PA this past week (<https://cdm.ipmPIPE.org/>). There were no field disease confirmations from Wisconsin. Fungicide considerations were discussed in a previous newsletter and can be found here: <https://vegpath.plantpath.wisc.edu/2026/07/12/vegetable-crop-update-jul-5-2026/>

More information on the disease: <https://vegpath.plantpath.wisc.edu/diseases/cucurbit-downy-mildew/>