

Statement of Purpose

The management practices, products, and cultivars discussed in this publication are the research- and experience-based recommendations of the institutions associated with the contributing editors and authors. These recommendations are not exhaustive and other practices and products not mentioned in this guide might also be effective. *Read and follow label instructions before using any pesticide product.*

What's New in 2019?

New and Revised Sections

- The three new tables created last year — Selected Information About Recommended Insecticides (page 54), Herbicides (page 69), and Fungicides (page 79) — have been modified. They are now sorted by trade name instead of common name.
- The Pesticide Information and Safety section has an updated discussion of precautions and signal words.
- The Organic Vegetable Production section has updated contacts for certifiers.
- A new searchable, mobile-friendly version of the *Midwest Vegetable Production Guide for Commercial Growers* is expected sometime in December. Guide your browser to www.mwvguide.org

Disease Management

- An updated discussion of tomato spotted wilt and impatiens necrotic spot viruses is included in the Tomato section (see also the Tomato Insect section).
- An updated discussion of blackleg of potato is included in the Potato section.

Weed Management

- Quinstar 4L® (quinclorac) is added to the Asparagus chapter for postemergence weed control.
- Caparol® (prometryn) is added to the Okra chapter for preemergence weed control.
- Fusilade® (fluzazifop) for postemergence grass control is added for Lettuce, Green Onion and Leeks, and Rhubarb.
- Satellite Hydrocap® (pendimethalin) is added to the Cole Crops and Brassica Leafy Greens, and Dry Bulb and Green Onion chapters for preemergence weed control.
- Poast® (sethoxydim) for postemergence grass control in the Root Crops chapter now includes celeriac and rutabaga among listed crops.
- Shieldex 400® (toppyralate) is added to the Sweet Corn chapter for postemergence weed control.

Insect Management

- A new discussion of cucumber beetle thresholds is included in the Cucurbit section.
- Exirel and Minecto have been added to the Onion section for thrips management.
- The Tomato insect section now includes management suggestions for thrips.
- We have included Lorsban (active ingredient, chlorpyrifos) in the Asparagus, Cole Crops and Leafy Greens, Legume, Mint, and Sweet Corn sections of the 2019 *Midwest Vegetable Production Guide for Commercial Growers*. However, at this writing, the U.S. EPA is in discussions with stakeholder groups concerning possibly revoking tolerances for this product. Check with an Extension specialist or company contact.