Blueberry I

Moderator: Mike DeGrandchamp, MSHS Board, South Haven, MI

9:00 am	Conserving Wild Bees in Blueberry Farms • Kelsey Graham, Michigan State University
9:30 am	Changing Bee Hive Numbers and Using Pheromones to Increase Blueberry Pollination • Lisa DeVetter, Washington State University Northwestern Washington Research and Extension Center
9:50 am	Fungicide Resistance in Blueberry Diseases (OH 2B, 0.5 hrs) • Tim Miles, Michigan State University (Department of Plant, Soil and Microbiology)
10:10 am	What Have we Learned About Blueberry Stem Gall Wasp • Philip Fanning, Michigan State University
10:40 am	GMOs? GMOs? We don't need no stinking GMOs • Patrick Edger, Michigan State University

Supporting wild bees on your farm

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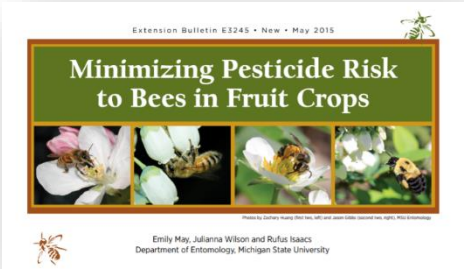
Pollination is an important part of blueberry production, and pollen is moved by bees. Wild bees like bumblebees and other species are a valuable component of the insects on your farm, because they provide this pollination for free. In most commercial farms there are also honeybees brought to the farm, but the wild bees are also contributing to your yields. The guidelines below will help you protect these valuable insects around your farm and will support you getting good pollination each spring.

Best management practices for supporting healthy bees

1. Select reduced-risk pesticide options where possible. You can look up the bee precaution rating for most pesticides at www.ipm.ucanr.edu/beeprecaution

Also see: Minimizing Pesticide Risk to Bees in Fruit Crops (MSU Extension document E3245)



2. Timing sprays.
Use IPM techniques including pest and disease models (www.enviroweather.msu.edu) to time your applications. This can save you money (fewer applications) and reduce risk to bees.

Spray after sunset or before sunrise, or when air temperatures are below 50^{o}F to minimize exposure risk to bees, which forage during the day.

Spray when wind is low to avoid drift.

3. Calibrate your sprayer. Accurate calibration will help ensure proper spray coverage. Better coverage will lead to better pest control, and hopefully, fewer applications.

4. Reduce drift. Using drift reduction technologies, such as air-induction nozzles, can help reduce drift and off-target deposition. This can help improve coverage (more product getting onto the crop) and keep bees safer (less deposition on flowering weeds).

5. Mow flowering weeds in fields. This can reduce bee attraction to flowers that have been sprayed. Mowing dandelions in spring can reduce off-target pesticide deposition on bee attractive plants. Weekly mows will provide the best weed reduction.

Weed control with herbicides or hand pulling of flowers growing up into the canopy bushes (especially in mid to late summer) can also reduce exposure.

Establishing wildflower habitat to support wild bees

For information on bees, wildflower plantings, and more please visit pollinators.msu.edu

Bees need flowers for food throughout the growing season, and you can help support healthy bee populations on your farm by providing a diverse set of floral resources in a wildflower planting.

Information on wildflower plantings: https://pollinators.msu.edu/resources/pollinator-planting/
Native plant recommendations: https://www.canr.msu.edu/nativeplants/

There are many funding opportunities for establishing pollinator habitat. Some examples include:

Farm Bill programs for pollinator conservation

NRCS programs including the Conservation Stewardship Program and the Environmental Quality Incentives Program (EQUIP)

FSA programs including the General and Continuous Conservation Reserve Program (CRP) and the State Acres for wildlife Enhancement (SAFE)

Find more examples and links to program information at: pollinators.msu.edu/resources/

Image from Extension Bulletin E-3360, Establishing Wildflower Habitat to Support Pollinators of Michigan Fruit Crops.