



## About Dicamba Problems and Opportunities with DriftWatch *(continued)*

How did commercial vegetable fields fare this year with unwanted herbicide contamination? There were a handful of fields affected in the bootheel by dicamba. There was a serious incident of drift to a vegetable field in Boone County, not related to dicamba, but from a typical pre-plant burndown in a nearby field. While the wind was light, the nozzles used created smaller droplet size, better suited for applying fungicides or insecticides, than herbicides (which should be larger, to reduce risk of spray drift). So overall, not too bad for vegetable growers nearby produce auctions.

It is unknown now what the various Departments of Ag across the country are going to do about use of dicamba on Xtend soybeans. Many came out mid-summer with additional restrictions and subsequent off target movement still occurred. MU's Kevin Bradley has recommended that Missouri go back to using dicamba at a timeframe and in a manner when it has been used "successfully" in the past. This would be during April and May, as with typical corn production. With the unknown about future dicamba use, can you do anything? Yes, consider registering your farm with DriftWatch. It will help companies that do spraying aware that you produce sensitive crops.

Are other Amish and Mennonite growers affiliated with produce auctions registered with DriftWatch? **Yes!** This program is active in Indiana and in the northern part there are *several hundred Amish or Mennonite farms registered.*

There are also some growers nearby Rich Hill and the North Missouri Produce Auction who registered. They had their county extension center assist with the computer. You might ask, since my neighboring row crop farmer knows what I grown, isn't that good enough? Well, this is a changing situation. With the increasing complexity (and liability) of applying these newer products (e.g. dicamba products), many growers are contracting this out to contractors and other certified applicators (e.g. MFA). These companies use DriftWatch to be aware...the message from a farmer, to the company clerk, to the person mixing and sending out the sprayers, to that spray operator **may not get thru**. However, once you are on the DriftWatch mapping system, they will or should be. Also, remember that many pasture and hay crop farms are smaller and will contract out their spring herbicide applications, which coincide with early plantings of many vegetables.

Is it free? Yes. Who pays for this program you might ask? Chemical companies and others in the business of making money applying products, because 'they want to know where you are so they don't accidentally harm you'. The only 'catch' is that you need to acknowledge that your farm location will be posted on a website used for DriftWatch, BeeWatch, or FieldWatch. For more information or to register, go to: <http://www.fieldwatch.com/>.

### What is DriftWatch & How to Sign Up

DriftWatch is a specialty crop registry that places farms, crop plantings and apiaries on a website map. Pesticide applicators may consult this map prior to applying to fields. Companies hired to apply pesticides are HIGHLY likely to consult this map, and many private farmers do. The map is available to anyone who visits the site. The map for beehives or apiaries is called BeeWatch and commercial applicators register in FieldWatch. All three are administered under 'FieldWatch'. Their mission is to "*develop and provide easy-to-use, reliable, accurate and secure on-line mapping tools intended to enhance communications that promote awareness and stewardship activities between producers of specialty crops, beekeepers and pesticide applicators.*"

FieldWatch, Inc. is a non-profit company created to develop, expand and continue to innovate the DriftWatch Specialty Crop Site and BeeCheck Apiary Registry. It began at Purdue University (Indiana) and has expanded to a national collaboration. Nine Midwestern states take part, including IA, IL, IN, KS, MO, MN, NE, & WI. It is free and voluntary to register your farm.

Normally one must do this online. However, an option is provided for those who don't use the internet. This is being provided to you in this newsletter mailing. Please find the following, **if you would like to register:**

- A form to complete (front and backside) and mail in.
- A pre-addressed envelope to mail the form.
- A second form, for you to complete (as the mailed copy) and keep for your record.
- A third form, which has been completed, as an example, of a typical vegetable farm selling to a produce auction.

Regarding the farm map you will need to provide, hand drawn is fine. Your farm can be located with a street or 911 address, and the aerial view (generally) can easily locate field borders. Do your best to draw a neat map with reasonably approximate distances and the individual inputting the information will take it from there. Thanks to FieldWatch for being willing to do this.

# 5 Years Later – Are Blackberries a Viable Option?

By Patrick Byers

Several years ago I wrote an article urging expansion of blackberry production to meet market demand. Much has changed, however, in the past 5 years. Today I'm still a strong proponent of expanded blackberry production, though with several caveats. Let's take a look at the recent past, and discuss the practices that can help farmers realize blackberries as a viable and profitable option.

A major issue for blackberry farmers in Missouri is spotted wing drosophila (SWD), a devastating invasive insect pest first identified in Missouri in 2013. SWD larvae are present in ripe fruit at harvest, causing a rapid breakdown of fruit and loss of quality. By 2015 SWD was widespread in the state, and farmers now recognize this pest as among the greatest challenges to profitable blackberry production. In fact, all facets of blackberry production must focus on management of this pest if profitable production is to be realized. At present, primary management consists of properly timed insecticide sprays to protect the ripening fruit.



Blackberries showing leakage, the result of breakdown of SWD infested berries. Photo by Patrick Byers, at a farmers market in July 2015.

## So what are the keys to successful and profitable blackberry production, in the face of SWD?

Gone are the days of marketing wild-harvested blackberries. Wild blackberries are a very attractive host plant for SWD, and wild harvested fruit will have high levels of infestation. Similarly, marketing fruit from minimally managed plantings is a risky proposition, as effective control of SWD requires system-wide attention to detail.

A positive development is the availability of early ripening thornless cultivars such as 'Natchez', 'Osage', and 'Ouachita' that offer large firm fruit that, if handled properly, can be transported and have a marketing window of 5-7 days. These cultivars ripen a portion of the crop in June and early July, before SWD numbers build to the high levels found later in the summer and fall. Lower numbers of adult SWD often equate to less pest pressure, which improves the effectiveness of the spray program.

Farmers should carefully consider the realities of primocane fruiting cultivars and SWD in Missouri. This type of blackberry ripens fruit from late July through frost. SWD numbers are high at this time, and excellent control is necessary to produce fruit suitable for marketing.

The benefits of trellising are many – separation of primocanes and floricanes, support to improve management efficiency, and with systems such as the rotating cross arm (RCA) trellis, the potential to overcome environmental risks (cold temperature damage to canes, solar injury to fruit). Of overriding interest today, however, is the need to develop a plant architecture that allows for effective coverage of fruit with protective insecticides. The RCA trellis, and to a lesser extent the V trellis, exposes the fruit on the outside of the plant, which allows for excellent spray coverage. The fruit on untrellised plants is buried within several layers of leaves and shoots, greatly reducing the effectiveness of insecticide sprays.

Organic blackberry production can be challenging in the face of SWD management. Two OMRI-approved insecticides are currently labeled for SWD, Entrust and Pyganic. Management of insecticide resistance with SWD requires using alternating sprays of insecticides with different modes of action. Unfortunately, while Entrust is quite effective as a SWD control, Pyganic is only rated as fair in controlling this pest. Thus, organic farmers do not have good options as far as an effective insecticide spray program.

SWD management extends to harvest and postharvest handling. Overripe fruit or fruit dropped on the ground is very attractive to SWD. Remove this fruit at harvest time, and destroy. Ripe fruit must be harvested promptly, and placed under refrigeration as soon as possible to destroy any eggs present on the berries. Farmers are urged to monitor for the presence of larvae in the fruit with a sugar or salt immersion test at each harvest.

Additional information on SWD management is available from Lincoln University's IPM program. The website <http://www.lu-ipm.net/management.html> includes information on SWD identification, monitoring, and management.



## Two 'Official' Food Safety Trainings Set- Dec. 13th & 14th

By James Quinn

The long awaited Produce Safety Alliance (PSA) Grower Training for the Food Safety Modernization Act (FSMA) is finally being offered. There will be back-to-back trainings, both from 8:30 AM until 5 PM with the cost of \$50. The 1st will be at [Morgan County Seeds](#) on Dec. 13th and the 2nd on Dec. 14th at the [Vernon County Fairgrounds](#) (Nevada, MO). To get a registration form, contact Tammy Roberts at Bates County Extension Center, 1 N. Delaware, Butler, MO 64730 or call 660-679-4167.

**An alternate method for registering is available.** James Quinn will be at the Central Missouri Produce Auction's annual business and educational meeting, Friday Dec. 8th. Individuals may fill out a registration form there and pay by check (no cash please).

**The trainings are restricted to 50 attendees.** If these fill, we will offer additional trainings in late winter. Reimbursement of the cost for transportation is possible when several growers come together, like in a van. The reimbursement will be made from Bates County Extension Center and may take a few weeks, but the ride is free if your driver accepts this.

**Confused if you need this training?** In brief, produce auction growers or other growers who use brokers (e.g. distribution centers like those around Rich Hill) who sell more than \$25,000 annually of fresh produce will eventually have to take this training. However, [growers with annual produce sales of between \\$25K and \\$250K will have until Jan. 2020 to comply.](#) Some vegetables are exempt from being covered by the law, but still contribute to the annual sales total. These are produce items that are never eaten raw, such as pumpkins, potatoes and sweet corn.

I will be giving a short presentation at the CMPA meeting on December 8th and joined by a representative with the Missouri Department of Agriculture (Bart Hawcroft). MDA is being contracted by the FDA to implement this program, which includes inspections. I will be there from about 8:30 AM to 2 PM so will be also available for personal questions.

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The Missouri Produce Growers (MPG) bulletin is published by the University of Missouri and Lincoln University with federal funding support from the USDA NIFA (National Institute of Food and Agriculture) CPPM – Extension Implementation Program. Current and back issues are available at <http://ipm.missouri.edu/mpg>. Mention of trademarks, products, or vendors is included as a convenience to the reader, and does not imply endorsement or discrimination against similar products or services not mentioned.