

Michigan Department of Agriculture
& Rural Development's
Approved Training Program for:

EPA SLN No. MI-180001

Post-shuck split application of Bravo Weather Stik (EPA Reg. No. 66222-276) for control of cherry leaf spot on mechanically harvested tart cherries.

Cherry Leaf Spot: A Major Concern of the Cherry Industry:

- Growers have experienced poor control of cherry leaf spot disease in the past few years and are very concerned about resistance management of new fungicides.
- MSU Research has shown that when Bravo Weather Stik (chlorothalonil) is used in a season-long program, the product offers excellent cherry leaf spot control.
- However, due to current label restrictions, applications of Bravo Weather Stik, post-shuck split, are prohibited.

A Possible Solution

- It has long been theorized that the handling and processing tart cherries go through greatly reduces chlorothalonil residues on the fruit and as a result, tart cherries could tolerate shorter PHI's (preharvest interval) than fresh sweet cherries, yet still remain under the tolerances established by the US EPA.
- In 2010 the cherry industry worked with Michigan State University to develop a study they hoped would confirm this theory.
- At different PHI's, MSU compared the residues of fresh picked tart cherries to cherries that were machine harvested and spent several hours on the cooling pad before being delivered to the processor (i.e. the standard industry practice for harvesting tart cherries).

Results ^{a3} of The Study

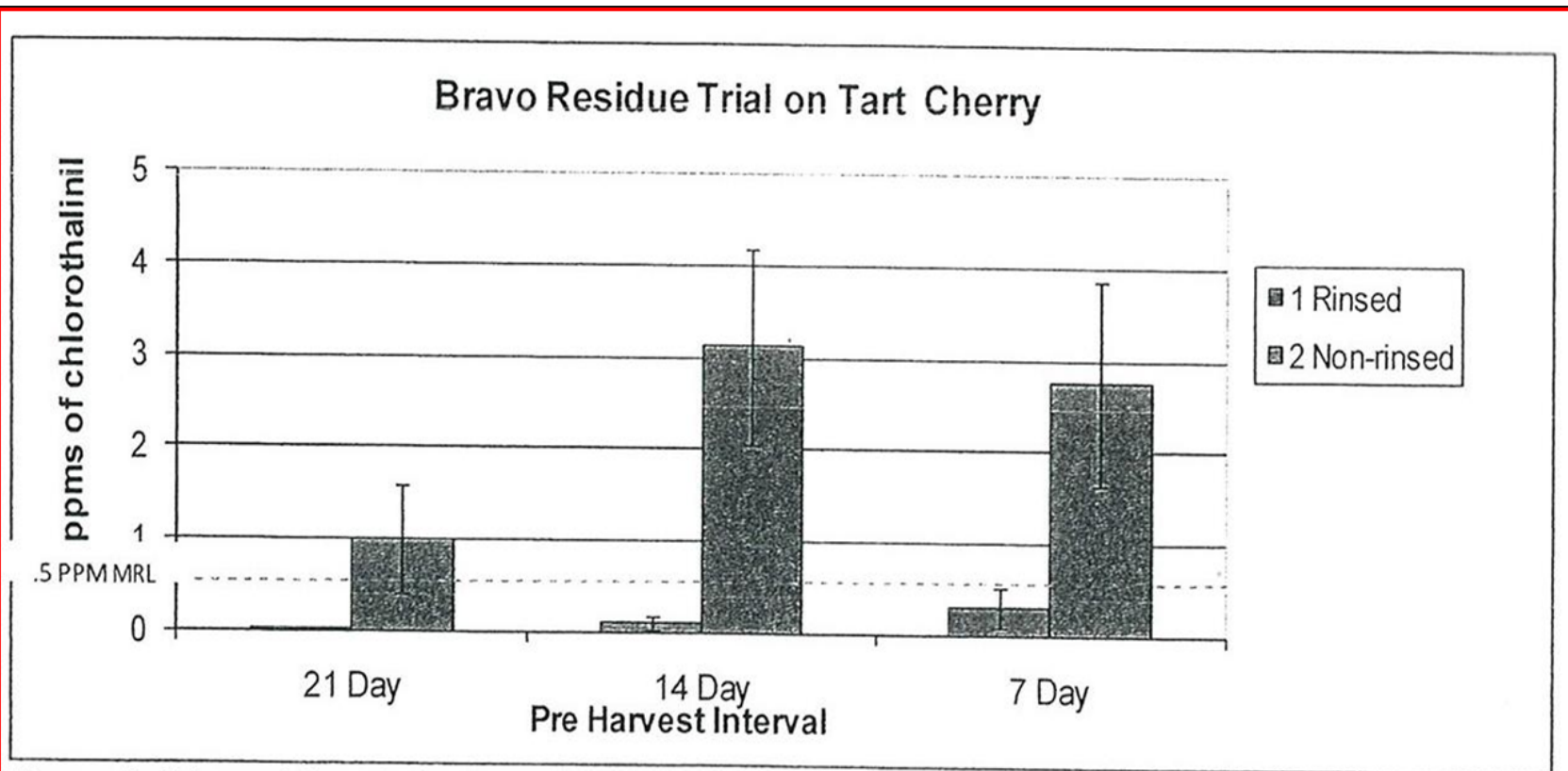


Figure 3. Mean chlorothalonil residue levels (ug/g) on fruit at harvest resulting from 7, 14 and 21 day PHI treatment applications.

Slide 4

a3

the caption mentions ug/g and the figure has ppm. Suggest changing one of them or add a footnote to indicate these are equal.

abbotjo1, 4/3/2012

Discussion of the Residue Study

- MSU's study confirmed that when tart cherries were harvested and handled in water, they had significantly less chlorothalonil residue than freshly picked tart cherries.
- In other words, the practice of harvesting and cooling tart cherries with water helps to reduce potential chlorothalonil residues on the cherries.

A Much Needed Tool

- After much consultation with the US EPA and the Michigan Department of Agriculture & Rural Development, it was determined that the data produced by MSU's study could be used to support a Section 24(c) special local need registration (SLN).
- Under section 24(c) of FIFRA, the Michigan Department of Agriculture & Rural Development (MDARD) issued SLN Registration No. MI-180001, which allows for the post-shuck split application of Bravo Weather Stick to tart cherries.
- To ensure that post-shuck split applications do not result in illegal residues (< 0.5 ppm), the SLN label has some very important use restrictions that must be adhered to.

Details of the SLN

SLN No. MI-180001 allows for the post-shuck split application of Bravo Weather Stik to tart cherries with the following restrictions:

1. The minimum preharvest interval (PHI) is 21 days.
2. Cherries must be mechanically harvested.
3. Cherries must spend at least 2 hours on the cooling pad.
4. The initial flow rate on the cooling pad must be 8-10 gallons of water per minute (gpm). After this initial period the flow rate may be reduced to 4-6 gpm.
5. Rinse water generated during the cooling process must not drain or channel toward aquatic areas.
6. Cherries cannot be used fresh. They must be processed by a commercial processor.

Important Facts You Should Consider Before Making Applications Under this SLN Registration

- Cherries harvested 21 days after your last application of Bravo will have illegal residues.
- To ensure the residues on your fruit are reduced to a legal level (<0.5 ppm), you MUST carefully follow all label directions.
- The cooling pad procedures on the SLN label are key to reducing residues to a legal level.
- Illegal residues not only violate federal law, but they have serious consequences for the grower, the processor, and the Michigan tart cherry industry.

Consequences of Illegal Residues

- Fruit will be destroyed (this includes fruit that has already been processed and is in the channels of trade).
- Fruit CANNOT be used for food, animal feed, or any other animal use.
- Possible enforcement action by Federal and State agencies.
- Possible legal action or law suits by those persons and businesses that are impacted.
- Unwanted negative attention to the tart cherry industry, agriculture, and pesticide use.

A Permanent Solution

- At the IR-4 Minor Crop Food Use Workshop in the Fall 2011, the cherry industry requested and received an “A Priority” for the use of chlorothalonil on tart cherry.
- Cooling pad data generated by MSU was considered in this request.
- For processing uses of tart cherry only.
- Machine harvested tart cherries only.
- The IR-4 request supports a national label so that all U.S. tart cherry growers would have access to this tool post-shuck split.
- The new label is not expected to be available until at least 2019.

You have completed the training program
required for SLN No. MI-180001.

To obtain your Training Affidavit, please return to MDARD's Cherry SLN webpage (www.michigan.gov/cherrysln) and complete Steps 2 and 3.