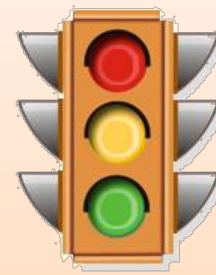


Adjusted Pre-harvest Intervals to Comply with the Maximum Residue Limits of U.S. and Selected Export Markets for Five Insecticides Registered for Use in Managing Late Season Pests in Michigan Tart Cherries in 2015

Altacor® (chlorantraniliprole)							
INTENDED MARKET	Time before harvest						
	1 mo.	28 days	21 days	14 days	10 days	7 days	3 days
USA	Green	Green	Green	Green	Yellow	Red	Red
EU	Green	Green	Green	Green	Yellow	Red	Red
Australia	Green	Green	Green	Green	Yellow	Red	Red
Canada	Green	Green	Green	Green	Yellow	Red	Red
China	Green	Green	Green	Green	Yellow	Red	Red
Israel	Green	Green	Green	Green	Yellow	Red	Red
Japan	Green	Green	Green	Green	Yellow	Red	Red
Korea	Green	Green	Green	Green	Yellow	Red	Red
Mexico	Green	Green	Green	Green	Yellow	Red	Red
Taiwan	Green	Green	Green	Green	Yellow	Red	Red



Key to colors used in charts:

RED means that the product *should not be used during this time* either because of EPA label restrictions or due to a high risk of exceeding MRLs for a given market.

YELLOW means that the product *should be used with caution during this time* given all the variables (e.g. tank mixes, application methods and calibration, use of adjuvants, environmental conditions post-application, and post-harvest handling) that can impact the time it takes for a residue to degrade in order to meet the MRL for a given market.

GREEN means that the product is *likely to be safe for use at this time* with low risk of residues remaining at harvest that would exceed MRLs for a given market.

Purpose & Methods: This tool was developed to aid Michigan tart cherry growers in selecting materials to manage key pests close to harvest *with a particular market in mind*. Selected markets have been included, some of which have more restricted maximum residue limits (MRLs) or tolerances than required by the US for particular materials. The MRLs used to develop this tool come from those published by Bryant Christie, Inc. as of May 2015. The data used to determine whether a longer pre-harvest interval would be necessary for a given market and its published MRL, are based on *a single application made near the legal PHI for each material tested*, in replicated trials conducted at Michigan State University orchards and laboratories. Residue analysis followed a generally accepted standard protocol known as the QuECHERS method on *rinsed* tart cherries.

Danitol® (fenpropathrin)							
INTENDED MARKET	Time before harvest						
	1 mo.	28 days	21 days	14 days	10 days	7 days	3 days
USA	Green	Green	Green	Green	Green	Green	Yellow
EU	Red	Red	Red	Red	Red	Red	Red
Australia	Green	Green	Green	Green	Green	Green	Yellow
Canada	Green	Green	Green	Green	Green	Green	Yellow
China	Green	Green	Green	Green	Green	Green	Yellow
Israel	Green	Green	Green	Green	Green	Green	Yellow
Japan	Green	Green	Green	Green	Green	Green	Yellow
Korea	Green	Green	Green	Green	Green	Green	Yellow
Mexico	Green	Green	Green	Green	Green	Green	Yellow
Taiwan	Green	Green	Green	Green	Green	Green	Yellow

Exirel™ (cyantraniliprole)							
INTENDED MARKET	Time before harvest						
	1 mo.	28 days	21 days	14 days	10 days	7 days	3 days
USA	Green	Green	Green	Green	Green	Green	Yellow
EU	Green	Green	Green	Green	Green	Green	Yellow
Australia	Green	Green	Green	Green	Green	Green	Yellow
Canada	Green	Green	Green	Green	Green	Green	Yellow
China	Red	Red	Red	Red	Red	Red	Red
Israel	Green	Green	Green	Green	Green	Green	Yellow
Japan	Green	Green	Green	Green	Green	Green	Yellow
Korea	Green	Green	Green	Green	Green	Green	Yellow
Mexico	Green	Green	Green	Green	Green	Green	Yellow
Taiwan	Red	Red	Red	Red	Red	Red	Red

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Delegate® (spinetoram)							
INTENDED MARKET	Time before harvest						
	1 mo.	28 days	21 days	14 days	10 days	7 days	3 days
USA	Green	Green	Green	Green	Green	Yellow	Red
EU	Green	Green	Yellow	Yellow	Yellow	Yellow	Red
Australia	Green	Green	Green	Green	Green	Yellow	Red
Canada	Green	Green	Green	Green	Green	Yellow	Red
China	Red	Red	Red	Red	Red	Red	Red
Israel	Red	Red	Red	Red	Red	Red	Red
Japan	Green	Green	Green	Green	Green	Yellow	Red
Korea	Green	Green	Yellow	Yellow	Yellow	Yellow	Red
Mexico	Green	Green	Green	Green	Green	Yellow	Red
Taiwan	Green	Green	Green	Green	Green	Yellow	Red

Imidan® (phosmet)							
INTENDED MARKET	Time before harvest						
	1 mo.	28 days	21 days	14 days	10 days	7 days	3 days
USA	Green	Green	Green	Green	Green	Yellow	Red
EU	Green	Green	Green	Green	Green	Yellow	Red
Australia	Green	Green	Green	Green	Green	Yellow	Red
Canada	Green	Green	Green	Green	Green	Yellow	Red
China	Red	Red	Red	Red	Red	Red	Red
Israel	Red	Red	Red	Red	Red	Red	Red
Japan	Green	Green	Green	Green	Green	Yellow	Red
Korea	Green	Green	Green	Green	Green	Yellow	Red
Mexico	Green	Green	Green	Green	Green	Yellow	Red
Taiwan	Green	Green	Green	Green	Green	Yellow	Red

Disclaimer: The authors of this tool cannot guarantee that any of these MRLs have not changed since May 2015, therefore, the user assumes all responsibility for its use subsequently. We also cannot guarantee that a material listed for use here in Michigan is registered for use outside of Michigan (material registration status is determined by the USEPA and State Governments where 'special uses' are concerned). Users outside of Michigan are cautioned to consult with their local extension service to determine what is allowable. We also make no guarantees that any of the products listed will be effective against a particular pest. Finally, given all of the variables that can affect degradation rates – in particular the use of adjuvants and tank mixes, environmental conditions post-application, and post-harvest handling – we cannot guarantee that if a product is used according to these charts, it will not leave residues that exceed tolerances for the selected market.