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Amherst

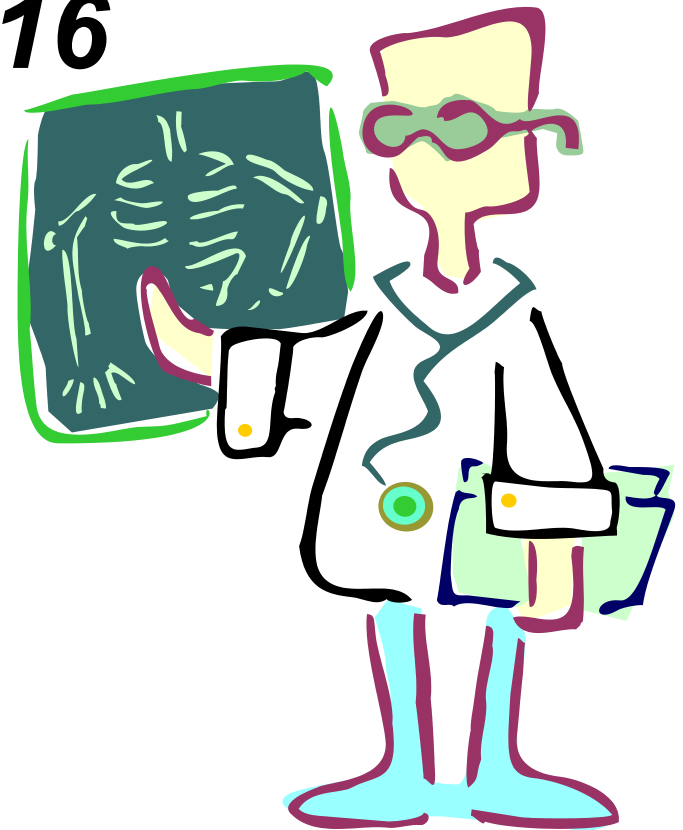
Pesticide Use Review: MDAR State Agency EPA WPS Changes 2016

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Pesticide Use Review

MDAR State Agency EPA WPS changes 2016

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UMass Amherst





MDAR


Massachusetts Department of Agricultural Resources

FIVE Divisions:

- ◆ ADMINISTRATION
 - ◆ AGRICULTURAL MARKETS
 - ◆ ANIMAL HEALTH
 - ◆ CROP AND PEST SERVICES
 - ◆ AGRICULTURAL CONSERVATION and TECHNICAL ASSISTANCE
- 



MDAR - Pesticide Program

- 
- ◆ Pesticide Licensing
 - Private Applicators Certification
 - Allows use of restricted use pesticides
 - ◆ Pesticide Enforcement - Inspections
 - ◆ Zone II issues
 - Intrepid, Bravo, Venom, and Actara
 - ◆ Register pesticide products in Massachusetts

PROTECT THE
WATER SUPPLY



MDAR



◆ Commissioner of Ag Resources

– John Lebeaux

- ◆ Shrewsbury Nurseries
- ◆ Urban Horticulturist in NYC
- ◆ 6 term selectman in Shrewsbury
- ◆ MA Board of Food and Agriculture

NEW



◆ Pesticide Bureau – Pesticide Operations Coordinator

– Steve Antunes-Kenyon



MDAR

- 
- ◆ **Chemist, Environmental Analyst – Zone II**
 - Hotze Wijnja
 - ◆ **Pesticide Enforcement, Field Inspectors**
 - Mike McClean – Sunny Cai
 - Taryn LaScola – Laurie Rocco
 - ◆ **Pesticide Program**
 - Susie Reed, Product Registration Specialist
 - Hoang Vo, License/Certification Renewal

Pesticide Applicators Rules and Reviews



- A **Massachusetts Pesticide License** is required in Agriculture when an individual is going to use a **Restricted Use Pesticide (RUP)**.
- If an individual is using a **General Use Pesticide**, then he/she **does not need** to have a pesticide license. However, that individual would need to be **trained** as a handler to comply with the **Worker Protection Standard**.

Restricted Use Pesticides

□ Actara*

□ Intrepid

□ Bravo*

□ Venom

State restricted because of groundwater concerns

* = possible or probable carcinogens

□ Diazinon

Restricted because of avian and aquatic toxicity concerns

□ Lorsban

Restricted because of mammalian toxicity “Warning”

□ Weedar 64

Restricted because human toxicity concerns “Danger”

□ 2, 4-D Granular

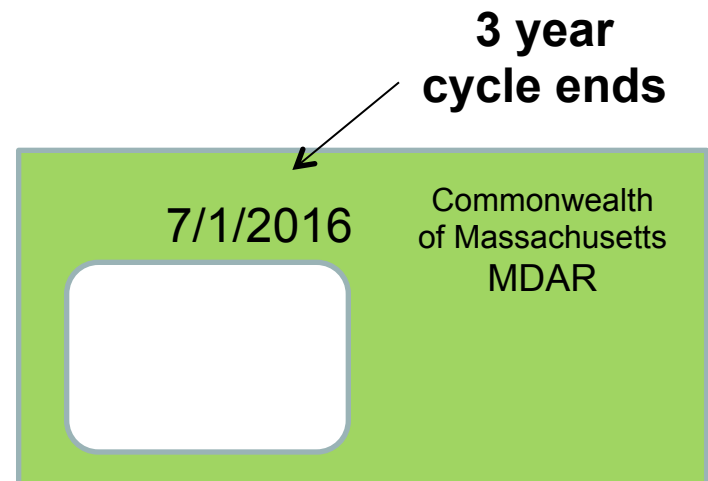
Irreversible eye damage!

RESTRICTED USE COMPOUNDS

- Commercial Applicator Certification (Custom Ag Cat. 33)
 - Restricted use compound for hire on someone else's property
 - Beatons Cran Growers Service, SureCran, Agricare, Firefly
 - Workers under commercial applicator can have only core license
- Private Certification (Cranberries Cat. 30)
 - Restricted use compound on your own property

Private Certification, Cranberries, Category 30

- **Audits** on the increase, up to 40%
- Sent out in April
- 3 year cycle
 - 7/1/2013 - 6/30/2016
 - 7/1/2014 - 6/30/2017

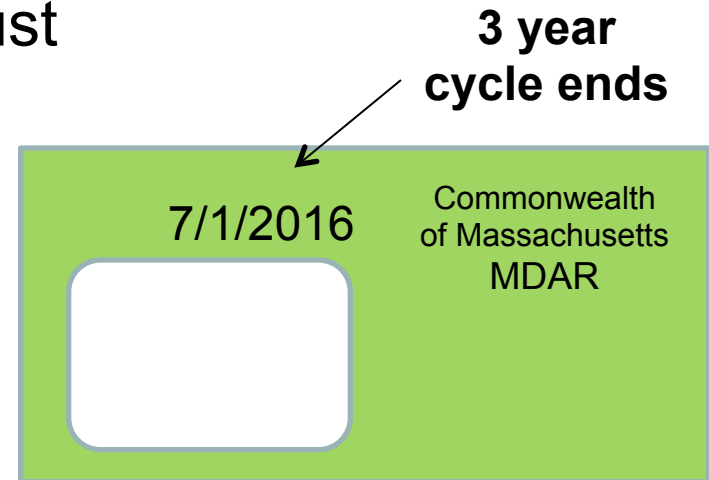


- Need 12 credits in that time
- Must produce documents
- Return by August

Private Certification Cranberries

Audits on the increase Cat. 30

- Sent out April
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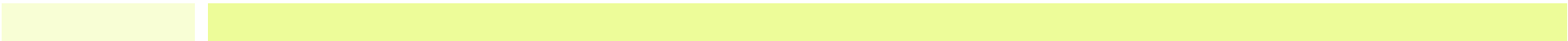
100% of the recent certifications get audits,
then 20-50% going back in time.
(Heavily weighed to recent certifications)

376 cranberry certifications, 191 up for audit 7/1/2015
but only 3% new, 90% over 15 years old

Cranberry Pesticide Exam



- 70% of those who take exam, pass
- New Core Manual instituted, 2014, 250 pages
- Core supplement, revised 2014, 29 pages
- Regulations
 - MA Pesticide Control Act (1978, amended 2000)
 - MA Pesticide Regulations (1979, amended 2015)
- Cranberry Manual, 1999 old version
- Worker Protection Standard (How to comply)

WORKER PROTECTION STANDARD (WPS)

- Federal Rule passed in the 90's
 - Rule to protect workers/handlers on Ag establishments
 - Pesticide Labels indicate that you must follow WPS, which then makes it LAW
- 

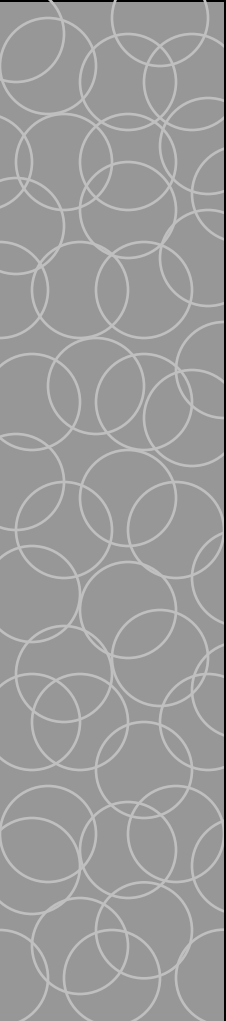


EPA's WPS

- 
- ◆ Worker Protection Standard
 - ◆ protect agricultural workers from the effects of exposure to pesticides
 - ◆ aimed at reducing the risk of pesticide poisonings and injuries among agricultural workers and handlers of agricultural pesticides
- 

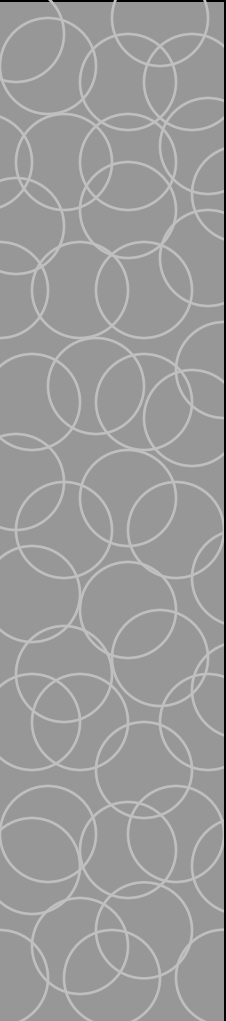



Workers exposed to pesticides?

- 
- ◆ Mixing and loading the pesticide into application equipment, but not restricted use!
 - ◆ Applying pesticides, like roundup
 - ◆ Handling irrigation/chemigation heads
 - ◆ Entering areas where pesticides have been applied to scout, weed, or repair heads, after the REI is up!
 - ◆ Do not need training if you have a pesticides license!

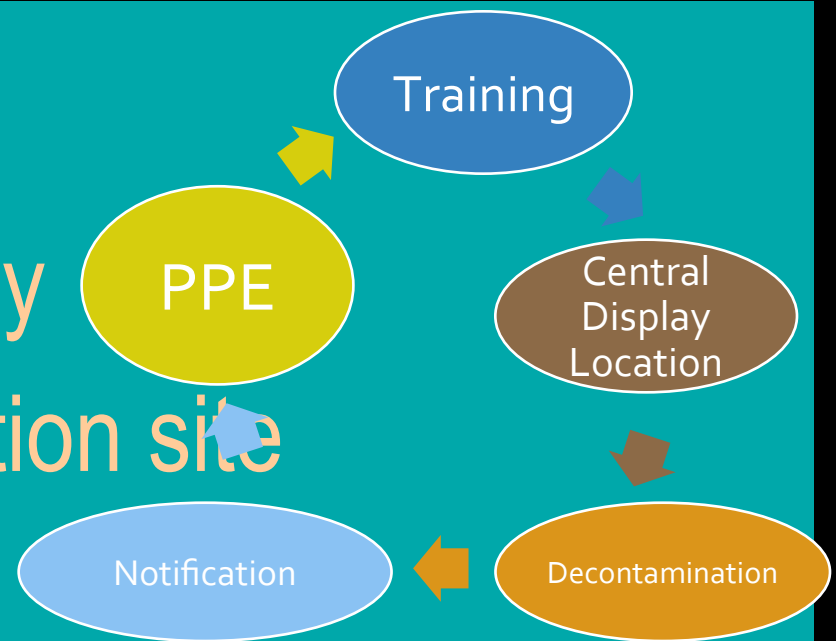


Changes in WPS Trainings

- 
- ◆ EPA is making changes to WPS
 - ◆ Comment period is over, changes being phased in starting in 2017
- 

Five Parts of WPS

- ◆ Training
- ◆ Central display
- ◆ Decontamination site
- ◆ Notification
- ◆ Personal protective equipment



Starting in 2017

- ◆ Training EVERY YEAR, instead of every five years
 - Expanding content of training
 - Keep records for 2 years
- ◆ NO grace period of 5 days, training must be before worker enters area treated with pesticide in last 30 days
 - Before herbicides go on and at harvest ok

TRAINING

OLD WPS

- Must a trained handler, certified applicator OR attended the Train-the Trainer
- Training good for five years
- Record of training, optional
- 5 day grace period before training

NEW WPS

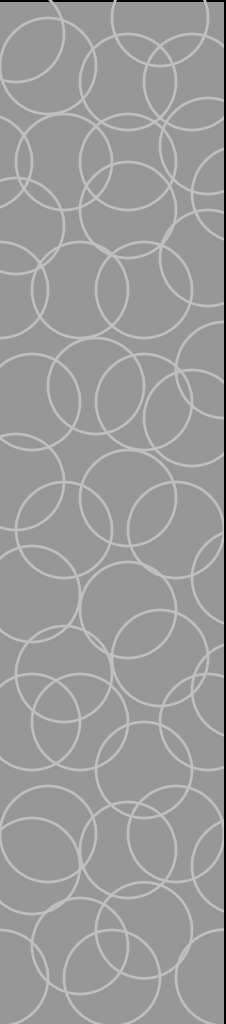
- Must be certified applicator OR attend the Train-the Trainer course
- Training needs to be done annually
- Record of training, required
- Training must be done prior to any entry of areas that are treated or handling of pesticides

*****New Training Content Jan. 2018*****



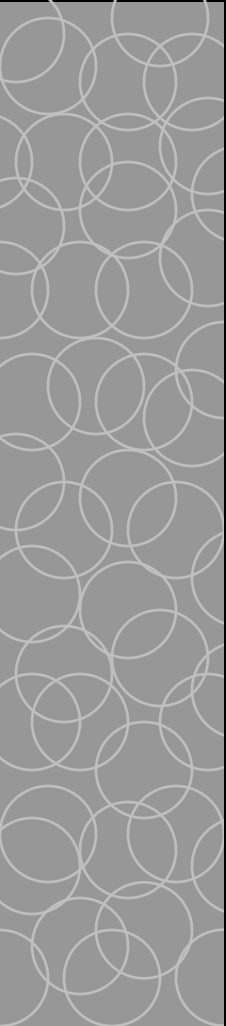


Requirements of WPS

- 
- ◆ Requires untrained workers to be provided basic pesticide information before entering pesticide-treated areas
 - You can do this, word of mouth
 - ◆ Pesticides, protection, signs, washing
 - Then official training within 5 days of working in pesticide-treated areas
 - Still good for 5 years, but will be every year




WPS Trainings 2016

- 
- ◆ At the Cranberry Station Library
 - ◆ Last Wednesday of upcoming months
 - ◆ April 27 2-4
 - ◆ May 25 2-4
 - ◆ June 29 2-4
 - ◆ Send any workers, weeders, scouts, and mechanics. Training good for 5 years!
 - ◆ \$5 cost

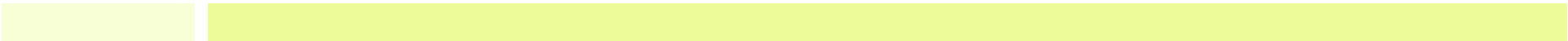


Starting in 2017 NOTIFICATION

- 
- ◆ Application information at central location
 - Must include an SDS (MSDS) with it!
 - ◆ REI 48 hours or greater requires sign posting
 - Diazinon
 - Badge, Champ, Kocide, Nu-Cop - coppers
 - Ridomil, Ultra Flourish – mefenoxams
 - Weedar 64, 2-4 D's

Training Step By Step

2016

1. Determine who needs to be trained or RE-Trained (per five year requirement)
 2. Be sure that trainer has Private Certification License OR has attended the train the trainer course
 3. Use existing training materials
- 
- A decorative horizontal bar at the bottom of the slide, consisting of two segments: a shorter light green segment on the left and a longer lime green segment on the right.

Training Step By Step

2017

1. Provide training to ALL workers/handlers prior to them starting work
2. Be sure that trainer has Private Certification License OR has attended the train the trainer course
3. Use existing training materials
4. Obtain a record of the training:
 - Individual name & signature
 - Trainer name & qualification
 - Date of training
 - Employer Name
 - How training was given

CENTRAL DISPLAY LOCATION

OLD WPS

- Safety Poster
- Application Records:
 - Date, REI, Product Name & EPA Reg#, A.I.

NEW WPS

- New Safety Poster in 2018
- Application records must include start and end time of application
- SDS sheets kept in this area

DECONTAMINATION

OLD WPS

- Running water
- Soap
- Single use towels
- Change of clothing**
- Eyewash**
- If more than ¼ mile from any working area, portable decon. is needed


NEW WPS

In addition to the old requirements:

- Additional Safety Poster must be posted
- Must have enough water for 15 min eyeflush
 - 0.4 gallons per minute for 15 minute or
 - 6 gallons at a gentle flow for 15 min
- Must have enough water for:
 - 1 gallon per worker
 - 3 gallon per early entry worker
 - 3 gallon per handler



Changes in WPS Trainings

- 
- ◆ Requiring water available
 - 1 gallon per worker, 3 gallons per handler
 - ◆ Provide water for decontamination
 - ◆ Eyewash water available
 - ◆ 6 gallons of water available at mix/load sites if product requires eye protection

NOTIFICATION

OLD WPS

- Outside applications, choose to either notify verbally or by posting signs...UNLESS label states to do both
- Inside applications, post signs on entrances to treated areas

NEW WPS

- Outside applications: choose to either notify verbally or by posting signs..UNLESS:
 - Label states to do both
 - If REI is 48 hours or more, MUST POST SIGNS
- Indoor applications: Must post signs on entrances to treated areas UNLESS:
 - REI of 4 hours or less, you can verbally notify

*****READ YOUR LABELS TO ENSURE BOTH IS NOT REQUIRED!*****

APPLICATION EXCLUSION ZONE (AEZ)

NOT IN EFFECT UNTIL 2018!!!!

- 25-100 feet around the application equipment where no one is allowed in during the application
- MOVING ZONE
- Extends beyond the boundaries of the farm and beyond farm employees
- If applicator sees someone within the AEZ, applicator must SUSPEND application.

100ft

- Aerially
- Airblast
- As a spray using a spray quality (droplet spectrum) of smaller than medium (diameter less than 294 microns)
- Fumigant, Smoke, Mist or Fog

25ft


- Not sprayed as any of the 100ft requirements and is sprayed at a height of greater than 12 inches from planting medium using a spray quality of medium or larger



Changes in WPS Trainings





AEZ – Applicator Exclusion Zone

- ◆ No one in area when applying pesticide or the application should stop!
 - ◆ 100 feet from equipment if small particle size
 - ◆ 25 feet from equipment absolutely
- 



Starting in 2018-Age Requirement

- 
- ◆ First time-ever minimum age requirement: Children under 18 will be prohibited from handling pesticides, with an exemption for family farms.
 - ◆ Family includes spouse, parents, foster parents, children, stepchildren, foster children, brothers + sisters
 - ◆ Now in-laws, grandparents, grandchildren, aunts + uncles, nieces + nephews, and 1st cousins!
- 

PPE



NEW WPS is focused on RESPIRATORS

- Medical Evaluation
- Fit Testing
- Fit Test Record
- Respirator Training
- All done annually



Respirators

MUST HAVE NIOSH/MSHA APPROVAL

Sevin Lorsban

- Dust/mist filtering - dusts, powders, mists, and sprays.
TC-21C, N95

Nexter

Bravo Ultrex

Manzate Flowable



DoMyOwnPestControl.com

- Vapor removing - gases and vapors.

- TC-23C - cartridge for organic vapors + prefilter
- TC-14G - canister for organic vapors

Diazinon

and

Imidan





Starting in 2018 - Respirator



If the label of pesticide being used requires a respirator, then...

- ◆ FIT TEST

- ◆ RESPIRATOR TRAINING

- ◆ MEDICAL EVALUATION

Respirators

MUST HAVE NIOSH/MSHA APPROVAL

Sevin Lorsban

- Dust/mist filtering - dusts, fumes, mists, and sprays.

FIT TEST

TC-21C, N95

Nexter

Bravo Ultrex

Manzate Flowable



DoMyOwnPestControl.com

RESPIRATOR TRAINING

- Vapor removing - gases and vapors.

MEDICAL EVALUATION

- TC-260 - cartridge for organic vapors + prefilter
- TC-14G - canister for organic vapors

Diazinon and Imidan



All Pesticides require...

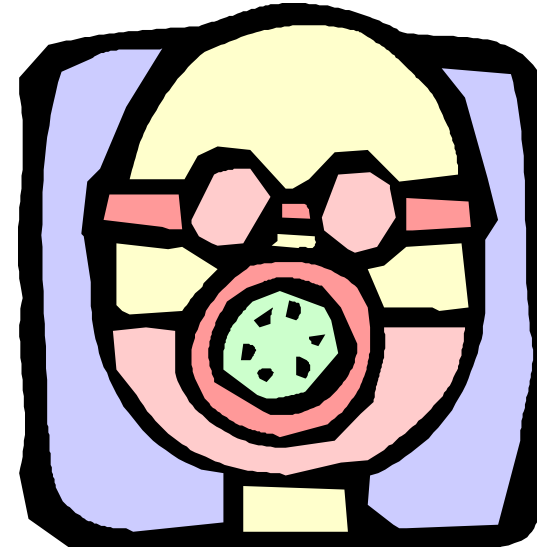
- Long-sleeved shirt and pants
- Shoes and socks
- Chemical resistant gloves

When handling the concentrate of **DIAZINON OR LORSBAN**

- Coveralls over long-sleeved shirt and long pants
- Chemical resistant gloves
- Chemical resistant apron
- Chemical resistant footwear and socks
- A NIOSH approved pesticide respirator (TC-21 C)

All Pesticides Require...

- Long-sleeved shirt and pants
- Shoes and socks
- Chemical resistant gloves




But Dithane and Manzate flowable require...

- A NIOSH-approved respirator with a dust/mist filter with MSHA/NIOSH approval number prefix TC-21C or any N, R, P or HE filter.


All Other Pesticides still require...

- But Imidan requires...
 - Respirator TC-21 C



**May be fatal
if swallowed, inhaled,
or absorbed
through the skin**

- But Nexter requires...
- Respirator TC-21 C
 - Protective Eyewear



**May be fatal
if inhaled
Causes moderate
eye irritation**

Respirators

MUST HAVE NIOSH/MSHA APPROVAL

- Sevin Lorsban
- Nexter
- Bravo Ultrex
- Manzate Flowable



DoMyOwnPestControl.com

- Vapor removing - gases and vapors.

- TC-23C - cartridge for organic vapors + prefilter
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Diazinon
and
Imidan



Respirators

MUST HAVE NIOSH/MSHA APPROVAL

Sevin Lorsban

- Dust/mist filtering - dusts, fumes, mists, and sprays.

FIT TEST

TC-21C, N95

Nexter

Bravo Ultrex

Manzate Flowable



DoMyOwnPestControl.com

RESPIRATOR TRAINING

- Vapor removing - gases and vapors.

MEDICAL EVALUATION

- TC-260 - cartridge for organic vapors + prefilter
- TC-14G - canister for organic vapors

Diazinon and Imidan



INSECTICIDES

% of MA growers using

- Delegate – spinetoram 90%
- Altacor – chlorantraniliprole 85%
- Avaunt – indoxacarb 80% (restricted)*GW
- Diazinon (restricted) 45% **post resp-23c eye**
- Intrepid – methoxyfenozide 35% (restricted)*GW
- Sevin – carbaryl 25%
- Actara – thiamethoxam 9%
- Admire – imidacloprid 6%
- Orthene – acephate 2%
- Pyramite/Nexter – Pyridaben 2% **respirator-21c eye**
- Assail – acetamiprid 1%
- Lorsban – chlorpyrifos (restricted) 1% **respirator-21c**
- Imidan – phosmet 0.3% **respirator-23c**

FUNGICIDES

% of MA growers using

□ Bravo – Chlorothalonils

82%

- Bravo Ultrex respirator 21c eye
- Bravo Weatherstik eye for workers
- Chloronil 720, Initiate 720 eye for workers

*(restricted use)*GW*

□ Indar – fenbuconazole

70%

□ Abound – azoxystrobin

55%

□ Indar – fenbuconazole

70%

□ Manzate – EDBC' s

35% resp 21c

□ Champ – coppers

20% post eye

□ Proline – prothiaconazole

60%

□ Phostrol – phosphites

10%

□ Aliette WDG – fosetyl-al

3%

□ Ridomil - mefenoxam

1% post

□ Ferbam Granuflo

0.3%

HERBICIDES

% of MA growers using

□ Callisto – mesotrione	60%	
□ Roundup – glyphosate	42%	
□ Casoron – dichlobenil	32%	
□ Devrinol – napropamide	18%	
□ Prism, Select – clethodim	8%	
□ Poast – sethoxydim	5%	
□ Stinger – clopyralid	3%	
□ Evital – norflurazon	2%	
□ QuinStar - quinclorac	2%	(MRL issues)
□ 2,4-D granular, weedar 64	0.3%	post eye (<u>restricted use</u>)