

2007

## Pesticide 2007 - Gloves 2007

Carolyn J. DeMoranville

*University of Massachusetts - Amherst*, [carolynd@umext.umass.edu](mailto:carolynd@umext.umass.edu)

Follow this and additional works at: [http://scholarworks.umass.edu/cranberry\\_extension](http://scholarworks.umass.edu/cranberry_extension)



Part of the [Horticulture Commons](#)

---

### Recommended Citation

DeMoranville, Carolyn J., "Pesticide 2007 - Gloves 2007" (2007). *Cranberry Station Extension meetings*. 62.  
Retrieved from [http://scholarworks.umass.edu/cranberry\\_extension/62](http://scholarworks.umass.edu/cranberry_extension/62)

This Article is brought to you for free and open access by the Cranberry Station Outreach and Public Service Activities at ScholarWorks@UMass Amherst. It has been accepted for inclusion in Cranberry Station Extension meetings by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact [scholarworks@library.umass.edu](mailto:scholarworks@library.umass.edu).

# Using the Correct Gloves

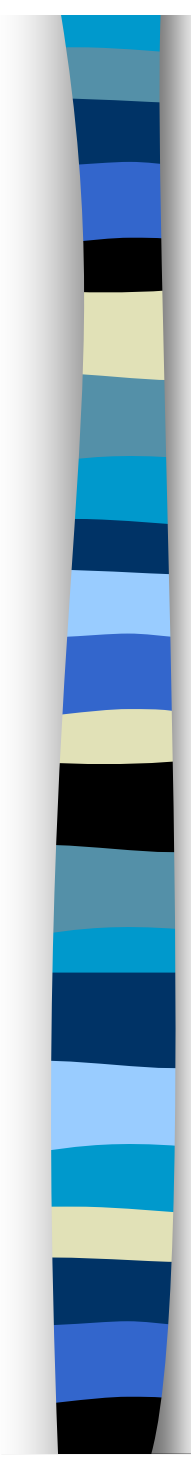
Carolyn DeMoranville  
UMASS Cranberry Station





# Why worry about gloves?

- Studies show that farmers working with pesticides reduced their exposures tenfold when they used the proper gloves.
- Pesticide handlers get the most exposure on their hands and arms.



## Choosing the right glove - label requirements – listed under PPE on the first page of the label.

- Glove type - if not specified (e.g. 'waterproof') use chemical resistant for Category A. Nitrile and barrier laminate are recommended.
- If specified - use the category called for.
- Gloves should be at least 14 mils thick (0.014 inch). Exception is barrier laminate -- Silver shield is 0.004"

## EPA CHEMICAL RESISTANCE CATEGORY SELECTION CHART

*For use when PPE section on pesticide label lists a chemical resistance category*

SELECTION CATEGORY LISTED ON PESTICIDE LABEL	TYPE OF PERSONAL PROTECTIVE MATERIAL							
	Barrier Laminate	Butyl Rubber > 14 mils	Nitrile Rubber > 14 mils	Neoprene Rubber > 14 mils	Natural Rubber* > 14 mils	Polyethylene	Polyvinyl Chloride (PVC) > 14 mils	Viton > 14 mils
A (dry and water-based formulations)	high	high	high	high	high	high	high	high
B	high	high	slight	slight	none	slight	slight	slight
C	high	high	high	high	moderate	moderate	high	high
D	high	high	moderate	moderate	none	none	none	slight
E	high	slight	high	high	slight	none	moderate	high
F	high	high	high	moderate	slight	none	slight	high
G	high	slight	slight	slight	none	none	none	high
H	high	slight	slight	slight	none	none	none	high

*\*Includes natural rubber blends and laminates*



# Cranberry pesticides - which gloves?

## ■ READ THE LABEL

- Look under PPE (personal protective equipment)
- Usually on the first or second page of the label
- All but barrier laminate should be at least 14 mil thick



# Cranberry pesticides - which gloves?

## ■ READ THE LABEL

- Use the class listed or choose based on the description
- If no class listed
  - Waterproof = Class A
  - Any Chemical-resistant = Barrier laminate preferred but any Class A should be ok
  - If specific ones listed, they are the best choice



# Cranberry pesticides - which gloves?

## ■ Herbicides

- Select and Poast – Category G
  - barrier laminate or >14 mil Viton
- all others: waterproof
  - (Category A implied)





# Cranberry pesticides - which gloves?

- Fungicides

- All are stated or implied Category A
- BUT check your label



# Cranberry pesticides - which gloves?

## ■ Insecticides

– Sevin XLR+ -- Category E

- Barrier laminate, nitrile rubber, neoprene rubber or viton

– All other Sevin formulations – Category A



# Cranberry pesticides - which gloves?

- Insecticides

- Diazinon – Category F

- Barrier laminate, butyl or nitrile rubber, or viton



# Cranberry pesticides - which gloves?

## ■ Insecticides

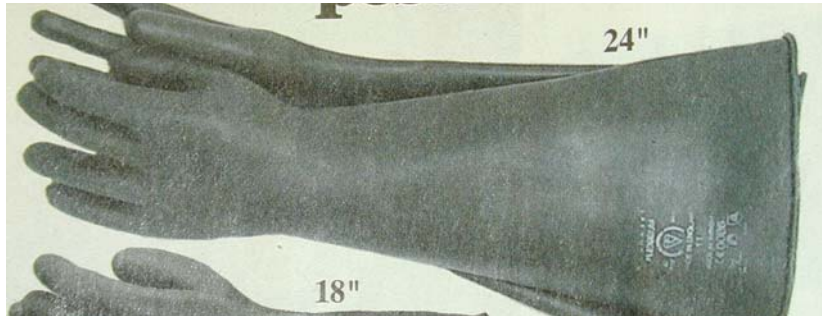
- Lorsban 4E/Nufos 4E – Category G
  - Barrier laminate or viton
- Lorsban 75WG/Chlorpyrifos 4E-AG – Category H
  - Barrier laminate or viton



# Cranberry pesticides - which gloves?

## ■ Insecticides

- Trilogy (neem) – Category C
  - barrier laminate; butyl, neoprene or nitrile rubber; PVC; or Viton
- Spintor: no gloves listed
- all others: waterproof (Category A implied)



Natural rubber



Nitrile



Neoprene



Barrier laminate

NO CLOTH  
CUFFS !!  
No linings !!



## No perfect solutions

- Laminate gloves protect from all categories but can tear and are non-dextrous
- Disposables are easy to work in but not thick enough - all plastic and rubber require >14 mil
- Try thinner gloves over the laminates - get the advantage of both

# No lined gloves - but liners allowed

- All agricultural workers (harvesters, cultivators, pesticide handlers) are permitted to wear separable glove liners beneath chemical-resistant gloves.
  - Workers may choose when to wear the liners.
  - The liners may not be longer than the chemical-resistant glove so that they do not extend outside of the glove.
  - The liners must be disposed of after 8 hours of use, or at the end of the work day, whichever comes first.







# Choosing gloves for fit

- Too loose - lose dexterity
- Too tight - bind hands and may tear more easily
- Assure that pesticide can't run down into the glove
- The glove should be at least 12 inches long (half-way to elbow) but longer if reaching into containers.



# Inspect your gloves

- Leaky gloves are much worse than no gloves - chemical gets in and is trapped near your skin.
- Check for tears, pinholes, and signs of chemical damage - even new gloves!
- Keep a spare pair handy (seal in a zipper bag to keep clean)



# Cleaning your gloves

- Wash the gloves on your hands
- Remove carefully - don't use your teeth!!
- Wash your hands
- If you plan to use again - wash in bucket of heavy-duty detergent solution right away - the jury's out on submerging
- If disposable - cut up before trashing



# All gloves are permeable

- It's just a matter of time.
- Choosing the right material will buy you more time but even the common barrier laminate 4H is rated for only 4 hours of constant exposure.
- The glove may not look any different when it fails.



# When should I dispose of my gloves?

- Make glove replacement a high priority.
- Replace after 5-7 days of use (10-14 if a heavy duty glove).
- Look for signs of wear but remember - it doesn't always show.



# Signs that it's time to dispose of your gloves

- Staining or color change (in or outside)
- Softening, swelling, bubbling
- Stiffening, cracking, surface change
- Dissolving or becoming 'jelly-like'
- Leaking at any time (have a spare handy - wash hands before putting on new ones)

