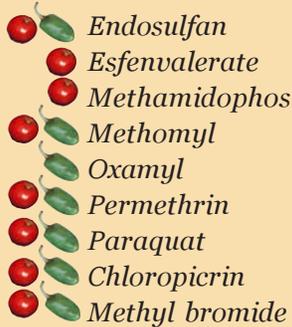




CHEMICAL CONTROL: Restricted Use Pesticides

These active ingredients account for over 95% of the restricted or exclusively labeled "Danger" pesticides employed in Florida tomato and pepper production.



The reduction in use of the restricted use and "Danger"-labeled pesticides is believed to be due to strong adoption of integrated pest management (IPM) principles by Florida tomato and pepper growers, working in conjunction with Extension agents and professionals.

Figure 12. Fumigants are applied through specialized equipment that integrates it into the soil and covers with a mulch. Photograph by: Fred Fishel.

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Reduced Use of Restricted and Danger-Labeled Pesticides in Florida Tomato and Bell Pepper Production (1992-2004):

REDUCTION IN PESTICIDE USE:

Tomato

Pesticide use values for 2004 compared to peak usage data for the period 1992 through 2004 demonstrate a 75% reduction in the application of restricted or "Danger"-labeled insecticides in fresh market tomato. This value was 31% for the herbicide paraquat, while the value for fumigants was 17%.

Pepper

Pesticide use values for 2004 compared to peak usage data for the period 1992 through 2004 demonstrate a 56% reduction in the application of restricted or "Danger"-labeled insecticides in bell pepper. Paraquat use was reduced by 89%. Fumigant use (35% reduction) was mainly influenced by rate reduction, rather than reduction of use.

The impetus for reduction in use has come mainly from the methyl bromide phaseout that is occurring under the Montreal Protocol on Substances that Deplete the Ozone Layer. The use of methyl bromide will continue to decline, until it is completely phased out as an agricultural pesticide. However, its use may well be supplanted by methyl iodide or other fumigants, which would likely carry the restricted use status and "Danger" labeling.

REDUCTION IN RESIDUES:

Tomato

Increased IPM adoption and reduced spraying of these ingredients is reflected in a 50% decrease in methamidophos residues (from 0.016 PPM to 0.008 PPM) in fresh market tomato from the period 1997-1998 to 2003. These values are far from the tolerance in tomato for methamidophos (1.0 PPM).

Pepper

Increased IPM adoption and reduced spraying of these ingredients is reflected in a 58% decrease in methomyl residues (from 0.019 PPM to 0.008 PPM) in bell pepper from the period 1999 to 2003. These values are far below the tolerance in bell pepper for methomyl (0.2 PPM).



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