

## Fenamiphos Use Facts and Phaseout<sup>1</sup>

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*This document describes general uses of fenamiphos, addresses specific label requirements regarding its use in Florida, and provides a description of the products phaseout.*

Fenamiphos is an organophosphate insecticide/nematicide used to control pest nematodes and insects in a wide variety of vegetable, field and fruit crops, including citrus. In non-food crops, it has some approved uses on turfgrass, ornamentals and industrial sites. In the United States, nearly 300,000 acres are treated with almost one million pounds annually. Originally designed to be used during World War II as a human nerve gas, its now manufactured and marketed by Bayer CropScience under the trade name, NemaCur<sup>®</sup>. It is commercially available in both dry and liquid formulations in varying concentrations. Fenamiphos is a Restricted Use Pesticide due to high acute toxicity and toxicity to wildlife.

The U.S. Environmental Protection Agency (EPA) has assessed the risks of fenamiphos and prepared an Interim Reregistration Eligibility Decision (IRED) document for this pesticide ([http://www.epa.gov/REDS/fenamiphos\\_ired.pdf](http://www.epa.gov/REDS/fenamiphos_ired.pdf)) The IRED identifies risk mitigation measures needed

to reduce risk, as well as data needed to better characterize risks. Bayer CropScience has requested voluntary cancellation of all existing fenamiphos registrations rather than committing to develop additional data.

Fenamiphos residues in food do not pose risk concerns; however, exposure to shallow water tables (less than 50 feet deep) and extremely vulnerable soils do pose risk concerns. Extremely vulnerable soils are defined as, “hydrologic soil group A soils that are excessively drained and predominantly sand or loamy sand such as soils in the suborder psammits” (EPA 2002) These classifications and soil taxonomy refer to USDA definitions. Therefore, all use of fenamiphos in areas with extremely vulnerable soils and shallow water tables were phased out May 31, 2005. Use on all other soils will cease effective as of May 31, 2007.

Although fenamiphos is not used in residential settings, golf course uses could lead to golfer exposure from residues on treated courses. EPA feels that the watering-in of fenamiphos following its application according to label directions adequately protects golfers from exposure.

1. This document is PI-93, one of a series of the Pesticide Information Office, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Original publication date January 2006. Visit the EDIS Web Site at <http://edis.ifas.ufl.edu>.

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**The use of trade names in this publication is solely for the purpose of providing specific information. UF/IFAS does not guarantee or warranty the products named, and references to them in this publication does not signify our approval to the exclusion of other products of suitable composition.**

For manufacturing-use products only, all sale and distribution by Bayer CropScience of existing stocks will be prohibited effective May 31, 2007. Sale and distribution of existing stocks by persons other than Bayer CropScience may continue until May 31, 2008. Use of end-use products in the channels of trade may continue until depleted, except where prohibited on the label. A summary of the fenamiphos phaseout is itemized in the following table.

### **Additional Information**

Buttler, T., W. Martinkovic, and O.N. Nesheim. 2003. Factors influencing pesticide movement to ground water. UF/IFAS EDIS Document PI-2. <http://edis.ifas.ufl.edu/PI002>.

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Environmental Protection Agency. 2002. Interim Reregistration Eligibility Decision (IRED): Fenamiphos. EPA 738-R-02-004. [http://www.epa.gov/REDs/fenamiphos\\_ired.pdf](http://www.epa.gov/REDs/fenamiphos_ired.pdf)

Fishel, F.M. 2005. Pesticide toxicity profile: organophosphate pesticides. UF/IFAS EDIS Document PI-50. <http://edis.ifas.ufl.edu/PI087>.

Nesheim, O.N. 2003. Management practices to protect surface water from agricultural pesticides. UF/IFAS EDIS Document PI-22. <http://edis.ifas.ufl.edu/PI014>.

Nesheim, O.N. 2003. Use management practices to protect ground water from agricultural pesticides. UF/IFAS EDIS Document PI-1. <http://edis.ifas.ufl.edu/PI001>.

**Table 1.** Summary of fenamiphos phaseout.

<b>Date</b>	<b>Action</b>
May 31, 2005	Use in areas with extremely vulnerable soils and shallow water tables cancelled.
May 31, 2007	Use on all soils cancelled
May 31, 2007	Sale and distribution of existing stocks by Bayer CropScience cancelled
May 31, 2008	Sale and distribution of existing stocks by persons other than Bayer CropScience cancelled
Until depleted	Use of end-use products in the channels of trade, except where prohibited by the label