

Michigan's 4th Organic Food and Farming Reporting Session
Friday March 4, 2011
Kellogg Conference Center in East Lansing, MI
1:00 p.m.-5:00 p.m.
Sponsored by Michigan State University

Registration for Organic Posters by Graduate Students

Posters will be limited to 46" length x 46" width. These posters can be on past or on-going research or outreach that includes organic agriculture production and marketing systems.

This Application is due by **February 17, 2011** at 5:00 p.m. Send a PDF of your poster to include in the compendium by **February 17, 2011**.

Name Nathaniel J. Walton
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Poster Title Codling moth management using organically approved formulations of entomopathogenic n

Which category does this information represent? Please ✓

<input type="checkbox"/>	Organic Animal Management	<input checked="" type="checkbox"/>	Organic Fruit	<input type="checkbox"/>	Organic Soil Health
<input type="checkbox"/>	Organic Field Crops	<input type="checkbox"/>	Organic Marketing	<input type="checkbox"/>	Organic Vegetables
<input type="checkbox"/>	Community Engagement	<input type="checkbox"/>	Outreach Programming	<input type="checkbox"/>	Economics

Please submit this completed application by **February 17, 2011**.

Please submit a PDF of your poster no later than **February 24, 2011**. Email complete application to sorrone@msu.edu.

For questions call Vicki at (517) 353-3542 or (517) 282-3557.

Abstracts: (300 Words or Less) Include Title & Author(s)

Codling moth management using organically approved formulations of entomopathogenic nematodes in apple orchards
 Nathaniel J. Walton and Matthew Grieshop

Entomopathogenic nematodes are microscopic insect parasites that can be applied with water using conventional sprayers and can kill their insect hosts within only a few hours after infection. The codling moth (*Cydia Pomonella* [L.]) is a serious insect pest of apples worldwide and is of critical concern in organic apple production. Codling moth larvae pupate and overwinter in silk cocoons in soil litter and on tree trunks or branches. Entomopathogenic nematodes have potential for management targeting codling moth larvae since they actively search out hosts in protected locations.

National Organic Program approved formulations of entomopathogenic nematodes are now commercially available for management of a variety of pests, but their effectiveness in the context of organic apple orchard management practices is relatively untested. We have been evaluating the entomopathogenic nematode species, *Steinernema feltiae* (Filipjev) at two Michigan organic apple orchards to test its effectiveness for codling moth management under different application timings. We have also used laboratory bioassays to determine the impact of commonly used organic fungicides on this nematode's ability to kill insect hosts. We present the results of these studies and discuss how application timing, fungicide use, and non-target impacts influence the effectiveness of entomopathogenic nematodes for pest management in organic apple orchards.