

## David L Nieland

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**Subject:** Ph. D. Graduate Research Assistantship, Reproductive ecology of the invasive swede midge

\*Ph. D. Graduate Research Assistantship\*

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\*Reproductive ecology of the invasive swede midge\*

\*Dr. Yolanda Chen, Dept. of Plant and Soil Sciences, University of Vermont\*

\*Position availability: \*January 1, 2015.

\*Support: \*Four years of support are available from the USDA Crop Protection and Pest Management Program and the Department of Plant and Soil Sciences.

\*Position Summary\*: The goal of this research project is to study the reproductive ecology of swede midge, *Contarinia nasturtii* (Diptera: Cecidomyiidae) to identify the constraints for developing a mating pheromone mating disruption system. Swede midge is an invasive insect pest that specializes on Brassica crops, including cole and canola crops. Swede midge has recently caused devastating losses in scattered areas in New York and Vermont, especially among organic Brassica growers.

Cecidomyiidae) to identify the constraints for developing a mating pheromone mating disruption system. Swede midge is an invasive insect pest that specializes on Brassica crops, including cole and canola crops. Swede midge has recently caused devastating losses in scattered areas in New York and Vermont, especially among organic Brassica growers.

Our specific goals are to: 1) Determine whether pheromone variants of the natural stereoisomeric formulation vary in economy and efficacy in disrupting swede midge mating, 2) Determine how temporal and spatial factors within annual cropping systems may influence swede midge reproductive behavior, and 3) Determine the factors that may influence grower adoption of a midge PMD program. By developing an economical and effective PMD system, our long term goals are to develop an effective PMD system that helps to reduce crop losses due to midge damage and reduce adverse effects to human health and pollinators.

\*Requirements\*: A Bachelor's or Master's degree in entomology, biology, behavior, biochemistry, chemical ecology, or related field. Previous experience with chemistry is an additional advantage. Excellent written and oral communication skills. Applicants must meet the requirements of the Graduate College at University of Vermont.

\*Application Procedure\*:

/Official applications/

Official applications should be submitted in an online application portal through the Graduate College (<https://www.applyweb.com/apply/uvmg/menu.html>).

\*Deadline for the receipt of the official application is November 20. \*

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Interviews will be conducted through Skype or in person at the Entomological Society of America Meeting, from November 16-19 in Portland, OR.

/Interest Inquiries/

Email the following: 1) statement of interest in the position and major research interests, 2) CV, 3) GRE scores, and 4) unofficial transcripts directly to [Yolanda.Chen@uvm.edu](mailto:Yolanda.Chen@uvm.edu).

Lab Website: <http://blog.uvm.edu/yfanslow/>

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