Patricia D. Hastings

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Sent: Friday, September 24, 2004 2:07 PM
Subject: Alert: Swede midge, Contarinia nasturtii detected in NY

Courtesy of Carl P. Schulze, Director, Division of Plant Industry, New Jersey Department of Agriculture. Anyone suspecting the presence of this insect should contact the NJDA at (609) 292-5440.

FOR INFORMATION; DA- 2004-36; September 23, 2004
SUBJECT: **Presence of the Swede midge, Contarinia nasturtii (Kieffer) in the United States**

TO: STATE AND TERRITORY AGRICULTURAL REGULATORY OFFICIALS

On September 20, 2004, two Cecidomyiidae specimens from Niagara County, New York, were confirmed as *Contarinia nasturtii* (Swede midge). These males were trapped in experimental pheromone traps that Cornell Cooperative Extension Service is field-trialing in North America with the Swiss Federal Research Station for Horticulture. **These are the first detections in the United States. The Swede midge has been a known pest of crucifers in Canada since 2000; although, it probably had established in Ontario several years before it was identified.**

The **Swede midge (also known as the cabbage midge or crown gallfly) is a Eurasian pest of crucifers**. "Blind heads" on broccoli, cabbage, cauliflower and other crucifers are typical of Swede midge infestation. Swede midge larvae damage the terminal growing points of crucifers, causing disruption or cessation of growth in these tissues. In older plants, Swede midge larval feeding can cause twisted or missing broccoli or cauliflower heads, split terminals, swollen tissue, and crinkled heart leaves or other distortions. Plants infested as seedlings produce no marketable yield. Symptoms may mimic molybdenum deficiency, hormonal herbicide damage, genetic variability, heat stress, and frost damage. Swede midge damage can resemble other common conditions in these crops, such as mechanical cultivation wounds or feeding by other pests, and leaves a typical “corky” scar.

Adults are 1.5 mm brownish flies similar to the over 60 other Contarinia species in North America. In Ontario, Swede midge adults emerge continually from the end of May until the middle of September and apparently produce three to five overlapping generations in a season. The eggs hatch within three days and the larvae live for up to 14 days. Then they drop to the ground to pupate in the top 5 cm of soil. New adults emerge approximately 14 days later. The Swede midge over winters as a larva in the soil; some may stay in the soil for more than one winter making long-term crop rotation important.

Swede Midge New Pest Response Guidelines are completed in draft and are due for publication shortly. A pest alert describing the Swede midge is available on the APHIS website (http://www.aphis.usda.gov/ppq/ep/swedemidge.html). This information is available for dissemination to industry and the public, as well as for use by state regulatory agencies. APHIS is coordinating with the New York State

Department of Agriculture and Markets to conduct surveys for symptoms and the presence of life stages that may demonstrate establishment, to define the areas that may be affected by this pest, and to develop an appropriate regulatory response. Current Federal regulations to prevent introduction from Canada restrict the movement of live plants of the family Brassicaceae (Cruciferae) and associated soil.

/s/ Paul R. Eggert for
Richard L. Dunkle
Deputy Administrator, Plant Protection and Quarantine

Swede Midge
Links from the APHIS Site:

- USDA
  http://www.fas.usda.gov/scripts/gd.asp?ID=145683715
- Cooperative Agriculture Pest Survey/ National Agricultural Pest Information System
  http://ceris.purdue.edu/napis/pests/swmdg/index.html
- North American Plant Protection Organization (NAPPO), http://www.pestalert.org/Detail.CFM?recordID=77
- HYPP Zoology Page:
  http://www.inra.fr/Internet/Produits/HYPPZ/RAVAGEUR/6connas.htm
- Cornell University News Release
  http://www.news.cornell.edu/releases/Feb03/SwedeMidge.bpf.html
- Cornell University Cooperative Extension IPM Fact Sheet:
  http://www.nysipm.cornell.edu/factsheets/vegetables/#crucifers
- Ontario Ministry of Agriculture and Food
  http://www.gov.on.ca/OMAFRA/english/crops/facts/03-035.htm
- Canadian Food Inspection Agency:
  http://www.inspection.gc.ca/english/sci/surv/data/connase.shtml
  http://www.inspection.gc.ca/english/corpaffr/newcom/2002/20020529e.shtml

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