



**From the Bedford VCE Master Gardener
HELP DESK**

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*A monthly newsletter column written for Bedford Extension Master Gardeners.
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In April of each year the requests or calls for assistance to the VCE Master Gardeners' Help Desk start increasing in frequency. Our community / clients certainly do keep us on our toes as we research, learn, and strive to answer their questions. The following are some of the more interesting ones we have received over the past few years.

QUESTIONS:

#1 A client brought in an insect sample for identification and recommendations, exclaiming "The insects are everywhere! They are on the brick of the house, in the flower beds, and trees in the yard."



Photo by: William M. Ciesla, Forest Health Management International, Bugwood.org

#2 The caller wanted to know what type of tree she should plant to pollinate a Fuji apple tree.

#3 A client came in and said he had "green grass-like algae the pond" and wanted to know what it is and how to get rid of it.

ANSWERS:

#1 The insect was identified as a “young boxelder bug,” (Hemiptera: Rhopalidae, *Leptocoris trivittatus*). Boxelder bugs normally feed on the leaves, flowers, and seedpods of the boxelder tree or silver maple. Large infestations are usually on the female, or pod bearing, tree. While they may feed on male boxelder trees and other trees and plants, they usually do not build up to such large numbers.

The adult bugs lay eggs in the spring and the nymphs emerge in a few days. The nymphs are small and show more red than adults. These nymphs develop into adults during the summer, then mate and lay eggs, which hatch into the nymphs of the second generation.

Non-chemical control: Boxelder bugs do not feed on household structures, so there is no need for extensive chemical control in the house. The bugs can be cleaned up with a vacuum cleaner. Eliminate hiding places such as piles of rocks, boards, leaves, and general debris close to the house. Repair places where the bugs may enter the house, such as cracks around doors, windows, weatherboarding, and in the foundation.

Chemical control: If the bugs become so numerous, chemical control may be necessary. It is usually best to treat the trees on which the bugs are feeding. See the Virginia Pest Management Guide for the current recommendations for both boxelder bugs on plants and in houses. [1]

#2 The client was advised to use a Golden Delicious for the cross-pollinator. [2]

#3 Without a sample, the grass-like algae were identified as more than likely to be *Filamentous algae* – *Spirogyra*. Filamentous algae are single algae cells that form long visible chains, threads, or filaments. [3] *Spirogyra* has the appearance of very fine bright dark-green filaments which moves with the currents in the water, and is slimy to the touch when attempts are made to collect it. The slime serves to deter creatures which otherwise attach themselves to underwater plants, so *Spirogyra* under the microscope is usually spotless. [4]

Often an indicator of "nutrient enrichment" (actually, over-fertilization because of excess nitrate and phosphate pollution in contaminated storm water runoff), freshwater ponds, ditches, vernal pools, and springs are often choked with tangles of this multicellular alga. In highly fertile waters, when the algae occur in thick mats wide fluctuations in the water of oxygen concentrations (produced during sunny days) and dissolved carbon dioxide (released at night or on cloudy days) can result in rapid changes in the water's pH, causing stress or even death to obligate aquatic organisms such as fish. [5]

Management includes the use of algaecide, mechanical removal, or steepening the sides of the pond to achieve a 3:1 slope. Steepening the sides will eliminate shallow water areas and prevent sunlight from reaching the bottom growing algae. Biological control includes introducing plants to reduce water clarity, grass carp, and reduce nitrogen (runoff) available to pond. [6]

REFERENCES:

- [1] <http://pubs.ext.vt.edu/3101/3101-1525/3101-1525.html> (Accessed March 19, 2013)
- [2] <http://pubs.ext.vt.edu/426/426-841/426-841.html> (Accessed March 19, 2013)
- [3] <http://aquaplant.tamu.edu/plant-identification/alphabetical-index/filamentous-algae/> (Accessed March 19, 2013)
- [4] <http://www.micrographia.com/specbiol/alg/filamen/fila0100.htm> (Accessed March 19, 2013)
- [5] <http://micro.magnet.fsu.edu/optics/olympusmicd/galleries/brightfield/spirogyra.html> (Accessed March 19, 2013)
- [6] http://ohioline.osu.edu/a-fact/pdf/A_3_09.pdf (Accessed March 19, 2013)

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The answers provided herein were based on specific situations and growing conditions.

These recommendations may or may not be appropriate for all circumstances.

For specific recommendations for your particular situation please contact your local Cooperative Extension Office.

Bedford Office Phone: 540-586-7675 / Email: Help Desk @ BedfordMG@vt.edu, all other questions @ scbaker@vt.edu

Websites: www.BedfordAreaMasterGardeners.org and <http://offices.ext.vt.edu/bedford/>

