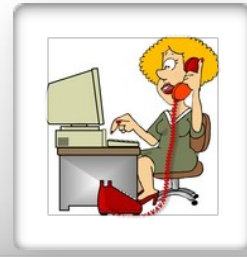


From the VCE- Bedford Master Gardener

HELP DESK



*A Bedford Area Master Gardener Association (BAMGA) newsletter column
Editor: LindaE, VCE Master Gardener Volunteer, Help Desk Coordinator
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The following are some questions that have been addressed by Master Gardeners either at the Bedford VCE Office Help Desk or at local on-site events in October within the past few years.

QUESTIONS:

1. We received a call from a gentleman who stated he had moss on the roof of his house and wanted to know what was causing it and some suggestions on how to get rid of it, or what to do.
2. A client called in and wanted information on pruning pear trees.
3. A few years ago at the Apple Harvest Festival, a couple stopped by the Master Gardener's booth and wanted some advice on whether or not they should have their soil and water tested. They stated they had just purchased a house built in 1933 and were concerned about soil and water contaminants.

ANSWERS:

1. Generally speaking, moss on roofs is caused by too much shade and/or moisture. The initial recommendation given to the client was to "spray with a 10% bleach solution and repeat." However, after further research I have concluded the answer doesn't seem to be that simple.

Overhanging tree branches and limbs should be cut back or removed. Leaves and other debris on the roof and in the gutters also should be removed. Sunlight will prohibit the growth of moss and removal of debris and other organic material that might accumulate on the roof will deprive moss of the nutrients required for growth.

If branch, limb, or tree removal is not practical, then alternate techniques might prove effective. Such options include: gently brushing or raking the moss off the roof; nailing copper, zinc, or aluminum flashing to the roof shingles; or the use of zinc sulfate, zinc chloride, and yes, even a bleach solution. However, all of these have some negative and potentially toxic impacts on surrounding plants, water, and invertebrates. [1] [2]

In the long-run I am not sure what the most effective method is. Perhaps the best advice is when in doubt, call in a professional!

2. Pears can be grown throughout much of North America because they tolerate a wide range of climatic conditions. That said, commercial production is largely limited to the west coast states



because of the bacterial disease known as fireblight [*Erwinia amilovora*], which can kill pear trees. It should come as no surprise, then, that the humid conditions in the eastern U.S. favor development of fireblight.

The good news is that there now exist several pear varieties that possess varying levels of fireblight resistance, making pear production possible in the east. Because fireblight does have the potential to devastate pear plantings in the eastern United States special practices should be considered to minimize and control fireblight infection.

Before figuring out how to train and prune a pear tree, the grower must determine the type of tree and its typical growth pattern. There are two types of pears that can be grown in Virginia: European (*Pyrus communis*) and Asian (*Pyrus serotina*). The two types differ in their height at maturity, growth habits, number of blossoms per cluster and fruit set, timing and harvesting of mature or ripe fruit, and fruit storage.

Once the type of tree is determined, the training and pruning of branches follow one of three different methods: the Central Leader; the Open Center or Open Vase; or the Modified Central Leader.

For more information on growing and pruning pears in Virginia, please see the following VCE publications:

Growing Pears in Virginia [3]

Training and Pruning Apples Trees [4]

Physiology of Pruning Fruit Trees [5]



3. After extensive conversation with the client, we recommended that a water / well test should be done by a commercial water testing company. And because of the age of the house and the fact that Virginia Tech does not test for lead contaminate in the soil, the client was also advised to have a soil test done by a commercial company that could also check for lead or other soil contaminants.

REFERENCES:

[1] <http://county.wsu.edu/king/gardening/mg/factsheets/Fact%20Sheets/Moss%20on%20Roofs.pdf>

[2] <http://inspectapedia.com/roof/ShingleMoss.htm>

[3] <http://pubs.ext.vt.edu/422/422-017/422-017.html>

[4] <http://pubs.ext.vt.edu/422/422-021/422-021.html>

[5] <http://pubs.ext.vt.edu/422/422-025/422-025.html>

(All websites accessed September 19, 2014)

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 County Extension Office: (540) 586-7675 / **Email:** Help Desk @ BedfordMG@vt.edu

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

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