

The University of Maryland Extension Agriculture and Natural Resources Profitability Impact Team proudly presents this bi-weekly publication for the commercial vegetable and fruit industry.

Issue #1 March 18, 2010

Strawberry & Tree Fruit Spring Observations from WyeREC

By Michael Newell
Horticultural Crop Program Manager

Strawberries

It's been a tough 09/10 for the annual plasticulture growers in our region. Reports of poor plug size and cooler fall temperatures made for smaller plants going into the winter. Extreme winds in December and January made it difficult to keep floating row covers on the fields (come see mine in the tree). If row covers were not applied and your plants were not covered by snow, significant foliage damage occurred.

Using row covers longer into the spring in an attempt to gain ground on smaller plants going into the winter has not been a proven method. By using row covers to push spring growth, we generally see earlier flowering but not always an increase in yield. However with the unusual growing year we are having, it may be beneficial to leave the row covers on for a few more weeks. This will mean being ready for freeze protection once flowering begins. If you plan to leave the row covers on for a while, you may want to look under the row covers at several areas of the field to scout for any aphid or mite activity and treat as needed.

A standard sanitation practice is to clean off dead plant material before new growth begins. This helps reduce disease inoculums. With plant size being smaller this spring, we do not want to be overly aggressive and possibly remove leaves that can still function. If this clean-up process is not as complete as in years past, we may need to be a little more aggressive with the fungicide program this season. **DO NOT FORGET TO BEGIN FUNGICIDE SPRAY AT 10% BLOOM FOR GRAY MOLD CONTROL.** This will be more important if sanitation procedures are not as complete.

Spring fertigation isn't usually started until we see new leaves emerging from the crown. Depending on



your soil type and fall fertility management, your program may differ, but at WyeREC we rarely apply more than 30 lbs of additional nitrogen in the spring. The first nitrogen application is done at leaf emergence. Leaf petiole sampling for analysis is the only proven method to know what is going on in the plant. When enough new fully expanded leaves are produced, sample and adjust subsequent nitrogen and potassium application rates. Applying spring fertilizers through the drip can be done at every irrigation or weekly. These timings coupled with bi-weekly leaf-petiole analysis provide for the most efficient use of fertilizers. At the very least, a split application of the total amount of spring fertility required can be effective.

This is a good time to check that your frost/freeze protection methods are in place. If you are using sprinkler irrigation, is your pump ready? Do you have enough of the correct nozzle types? Are you prepared to irrigate in heavy winds and/or lower than average temperatures? Is your frost alarm or weather forecasting service up to date? If you are using floating row covers, do you have enough? Are they in good shape?

Tree Fruit

Winter temperatures did not get low enough to damage fruit trees in our area. At this time it is generally considered safe to begin pruning most fruit trees. I always prune the earliest flowing fruit trees last, just in case we get a late freeze event.

It is not too late to apply dormant oil at the full rate to help control mites and scale insects. Using dormant oils had become less popular over the years because many of the pesticides we had available to us controlled these pest during the growing season. More recently, many of the broad-spectrum materials are becoming less available to the grower and available materials are becoming more specific in what pest they will control. Oils are somewhat less expensive than other pesticides and there is little evidence that resistance can develop from its use. Using this



dormant application for the initial control of mites and scale can also reduce the chances of over-using other products that may be more prone to resistance problems.

For those pome fruit growers who have been waiting for a "free" copy of MaryBlight v.7 for Windows, it is now available at this website:

<http://www.caf.wvu.edu/kearneysville/Maryblyt/index.html>

For those who do not know what MaryBlight is.....? MaryBlight is a predictive computer model used to schedule sprays for the disease Fireblight. The user enters basic information such as temperature, rainfall and stage of plant growth and the model informs the user about chances of infection. There is also a forecasting section that growers can use to predict infections several days in advance.

Although the program is free, there is no support offered if you have difficulties getting the program to run on your computer. If you want or need technical support to use this program, you may need to buy the program from a reputable source (ie...pay retail).



Spray Programs for Multi-Tree Fruit Orchards

By R. David Myers
Extension Educator

Many local orchards are composed of multi-tree fruit combinations producing for fresh market apples, peaches, pears, plums, nectarines, and cherries. Aggressive fruit tree spray programs are required to achieve high quality fruit. These multi-tree fruit orchards create many spray management challenges for the achievement of good pest control in accordance to label guidelines.

Therefore, the following multi-tree fruit orchard spray program for the control of major tree fruit pests and diseases may offer some assistance: **Labeled as noted in 2010 for All Tree Fruit – Pomes: Apples & Pears Stones: Peaches, Plums, Nectarines, and Cherries.**

2010 Spray Guide Available for download at:
[Spray Guide for Multi-Tree Fruit Orchards, 2010](http://anearundel.umd.edu/files/MultiTreeFruitSpraySheetMyers2010.pdf)
<http://anearundel.umd.edu/files/MultiTreeFruitSpraySheetMyers2010.pdf>



Spray Programs for Multi-Small Fruit Plantings

By R. David Myers
Extension Educator

Many local farms are composed of multi-small fruit combinations producing for fresh market blackberries, raspberries, blueberries, strawberries and grapes. Aggressive fruit spray programs are required to achieve high quality fruit. These multi-small fruit plantings create many spray management challenges for the achievement of good pest control in accordance to label guidelines.

Therefore, the following multi-small fruit spray program for the control of major small fruit pests and diseases may offer some assistance: **Labeled as noted in 2010 for All Small Fruit – Strawberries, Brambles: Blackberries, Raspberries, Blueberries, and Grapes.**

2010 Spray Guide Available for download at:
[Spray Guide for Multi-Small Fruit Plantings, 2010](http://anearundel.umd.edu/files/MultiSmallFruitSpraySheetMyers2010.pdf)
<http://anearundel.umd.edu/files/MultiSmallFruitSpraySheetMyers2010.pdf>

Fumigant Laws & Options

By R. David Myers
Extension Educator

Since the addition in 1992 of methyl bromide to the Montreal Protocol, an international treaty established to regulate ozone depleting substances, a number of replacement fumigants and fumigation practices have been developed.

Recently, a number of new fumigants have been marketed that may be applied through trickle irrigation systems. Farmers that utilize fumigants will be required to become certified and develop fumigation management plans that incorporate appropriate field buffers and rates; Neighbor notifications are also required. For further understanding of fumigant laws and options go to: [Fumigant Update](http://anearundel.umd.edu/files/FumigantUpdateLaw2010Myers.pdf)
<http://anearundel.umd.edu/files/FumigantUpdateLaw2010Myers.pdf>



Fumigant Options

Product	Disease	Nematodes	Weeds	Soil Injected	Chemigation
Methyl Bromide (MB 100%)	yes	yes	yes	yes	no
BRO-MEAN C-50 (MB 50% + CP 50%)	yes	yes	yes	yes	no
TELONE II (DP 97.5%)	yes	yes	no	yes	no
TELONE C-17 (DP 81% + CP 16.5%)	yes	yes	no	yes	no
TELONE C-35 (DP 63.4% + 34.7%)	yes	yes	maybe	yes	no
TELONE EC (DP 93.6%)	yes	yes	no	yes	yes
IN-LINE (TELONE DP 60.8% + CP 33.3 %)	yes	yes	no	yes	yes
VAPAM HL (MS 42%)	yes	yes	yes	yes	yes
K-PAM HL (MK 54%)	yes	yes	yes	yes	yes
MIDAS 98:2 (IM 97.9%+ CP 1.9%)	yes	yes	yes	yes	no
MIDAS 50:50 (IM 49.9%+ CP 49.8%)	yes	yes	yes	yes	no
MIDAS 33:67 (IM 32.9%+ CP 66.7%)	yes	yes	yes	yes	no
MIDAS 25:75 (IM 25%+ CP 74.6%)	yes	yes	yes	yes	no
MIDAS EC Bronze (IM 49.9%+ CP 44.8%)	yes	yes	yes	yes	yes
MIDAS EC Gold (IM 32.9%+ CP 61.7%)	yes	yes	yes	yes	yes

R. David Myers
Extension Educator
myersrd@umd.edu



Southern Maryland Vegetable & Fruit Meeting Thursday, April 15, 2010

Anne Arundel County Police
Southern District Station
35 Stepney Lane, Edgewater,
Maryland



Bayside Bull Catering

New Date & Location

Make plans to attend the **Southern Maryland Vegetable and Fruit Production Meeting** on Thursday, **April 15, 2010**. This year the meeting will be held at a **New Location!** Make plans to attend the all day event from 8:00 a.m. to 4:00 p.m. at the **Anne Arundel County Police Southern District Station** located at 35 Stepney Lane, Edgewater, MD. This meeting will provide **Private Applicator Recertification & Nutrient Management Voucher Recertification**. Speakers will provide IPM updates and present on a broad range of production topics.

Also meeting sponsors will showcase their products and services, and state vegetable organization leaders will be present to recruit and answer your questions. Please attend and make this meeting the best ever. For full conference details, contact Dave Myers, Extension Educator, Anne Arundel County Extension Office at 410 222-6759. **Please register no later than April 13, 2010.**



Western Maryland Research & Education Center • 18330 Keedysville Road • Keedysville, Maryland 21756-1104
Phone 301.432.2767 x344 • Fax 301.432.4089 • E-mail jfiola@umd.edu

The UME Grape Team has scheduled a **"New Grape Grower Workshop."** Please mark your calendars!

The **"New Grape Grower Workshop"** will be held on the **Eastern Shore in Queen Anne's County on March 26, 2010** at the **Chesapeake Community College**. To register contact Shannon Dill at 410-822-1244 or email to: sdill@umd.edu

Joseph A. Fiola, Ph.D.
Specialist in Viticulture and Small Fruit
University of Maryland
Western MD Research & Education Center
18330 Keedysville Rd, Keedysville, MD 21756-1104
301-432-2767 ext. 344; Fax 301-432-4089
jfiola@umd.edu
<http://grapesandfruit.umd.edu>



Thanks for partnering with University of Maryland Extension, and supporting our programs.

Vegetable & Fruit Headline News

A bi-weekly publication for the commercial vegetable and fruit industry available electronically in 2010 from March through September on the following dates: March 18; April 1 & 15; May 6 & 20; June 3 & 17; July 8 & 22; August 5 & 19; September 2 & 16.

Published by the University of Maryland
Extension Agriculture and Natural Resources
Profitability Impact Team

Submit Articles to:

Editor,
R. David Myers, Extension Educator
Agriculture and Natural Resources
7320 Ritchie Highway, Suite 210
Glen Burnie, MD 21061
410 222-6759
myersrd@umd.edu

Article submission deadlines for 2010: March 17 & 31; April 14; May 5 & 19; June 2 & 16; July 7 & 21; August 4 & 18; September 1 & 15.