October 18, 2007 Volume 7 Issue 1

Oregon Blueberry Newsletter

Oregon State University OSU

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Tech Corner

Name change for rabbiteye blueberries

Although quite a few plant species in the *Vaccinium* family bear blue-colored berries, not all of them are called blueberries. Commercially known blueberries in north America are highbush, lowbush, half-high, and rabbiteye blueberries, which are given scientific names as *V. corymbosum, V. angustifolium, V. corymbosum x angustifolium, and V. virgatum* respectively. These scientific names can be used to distinguish commercial blueberries from other *Vaccinium* plants bearing blue-fruited berries. In the case of rabbiteye blueberry, the old name *V. ashei* has now been changed to *V. virgatum* by taxonomists a few years ago.

Several other important commercial blue to black-fruited *Vaccinium* species are *V. myrtillus, V. ulignosum,* and *V. ovatum* and *membranaceum* which have common names like bilberry, bog blueberry, and huckleberries accordingly. Sometimes, these different common names may refer to the same species. For example, *V. ulignosum* may be called bilberry, blueberry, and whortleberry depending on its growing region. Sometimes, this confusion may present a nuisance for retail and marketing of blueberries. But *V. angustifolium, V. corymbosum,* and *V. virgatum* are still the main blueberry species found in today's market place. The only difference is almost all lowbush blueberries are processed, while highbush and rabbiteye blueberries are sold in both fresh and processed markets. With all the breeding work going on, it may well be possible that a super *V. hybrids* possessing all the desirable traits becomes a reality in the near future.

Season Recap

Oregon blueberry industry set another record with a guesstimate of 42 million lbs production in the 2007 growing season. This represents a 20% increase over last year's production. It is believed that much of this production increase is primarily due to the new plantings coming into production. With more and more blueberry acres planted, it may not take long before Oregon surpasses New Jersey as the number two blueberry production region in the nation. For other blueberry production regions, the guesstimated 2007 production for Michigan, B.C., New Jersey, California, and Washington are 90, 68, 60, 16 and 19 million lbs respectively. Because of the freeze damage to the southeast blueberries early in the season, the total cultivated blueberry production in north America could be reduced in comparison to last year. With a low carryover from last season, the price for processed blueberries is expected to remain steady into next season unless a lot of the projected 70 million lbs blueberries from south American countries going to the processed market.

Blueberry extension publications/services

OSU offers insect diagnostic services:
http://www.science.oregonstate.edu/bpp/insect_clinic/index.htm
Blueberry fertilizer guide:
http://extension.oregonstate.edu/catalog/pdf/em/em8918.pdf
Blueberry soil acidification:
http://cropandsoil.oregonstate.edu/newsnotes/0601/soils.html
Blueberry economics:
http://eesc.orst.edu/agcomwebfile/edmat/EM8526.pdf
Blueberry gall midge:
http://eesc.orst.edu/agcomwebfile/edmat/EM8889.pdf

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Resources for new blueberry growers

By Wei Yang

If you are interested in growing blueberries, the first question to ask is not how to grow a better blueberry plant, but how to market your berries. Growing a productive plant isn't often difficult, but to get a good return on your fruits will need some advanced planning and thinking. I hope this quick resource guide will provide you necessary resources to be successful.

Finding the right blueberry markets

There are a few ways to market your berries. Pick your own or U-pick is for small acreage growers who want to operate a family farm without worrying about picking cost. Successful U-pick operations are typically located close to population centers and places where can be easily accessed by the public. Farmers market is another way for small acreage growers to market their berries. However, availability of labor for picking the fruits and transportation logistics need to be first considered. You need also to know which farmers market to get into and the regulations for that particular farmers market. If you are thinking about growing commercially, you will need to find a packer to accept your berries. You need to decide if you want to concentrate on the fresh market or the processed market. It will be helpful to talk with packers and visit a few commercial fields before you get started because the availability of labor or machine to pick your berries may very well limit your operation.

Selecting cultivars and order your plants early

Once you have decided on the blueberry market to sale your berries, next is to choose the right blueberry cultivars for your operation. For small acreage growers, cultivars with good fresh market qualities such as size and sweetness should be considered. You will also need a few cultivars which span the whole summer. Examples for early season cultivars are Duke, Patriot, and Spartan. Cultivars such as Bluecrop, Toro, and Bluegold can be your mid-season varieties, while Brigitta and Darrow can be your late season ones. If you decided to grow commercially, cultivars such as Duke, Liberty, Draper, Aurora, and Legacy are all good fresh market berries and can also be machine picked for the processed market. Cultivars such as Reka and Rubel can be excellent processed berries to be picked by machine. Some rabbiteye cultivars can also be grown in Oregon to capture the very late fresh market. For a detailed description of these and other blueberry cultivars, you can visit the following link at http://www.fallcreeknursery.com/Nursery/VarietyChart/index.htm. Also, you will need to order your plants early to allow sufficient time for delivery due to a tight supply for some cultivars.

Getting started with a soil test

After you have ordered plants, it will be time to have the field ready for planting. A soil test is a must to obtain information about soil pH and organic matter. You can visit the following link for how to take a soil sample for testing at http://extension.oregonstate.edu/catalog/html/ec/ec628/. The ideal soil for blueberries should have a pH between 4.5-5.5 and soil organic matter more than 3%. To lower the soil pH to the desirable range, elemental sulfur is usually used. For a detailed explanation on how to lower soil pH, you can visit http://cropandsoil.oregonstate.edu/newsnotes/0601/soils.html. If your soil is heavy and has low organic matter content, fir sawdust will be needed as a soil amendment during planting. A fir sawdust mulch is often used on top of the planting beds to conserve water and control weeds. So sawdust will need to be purchased prior to planting. Additional nitrogen will be needed if you amend soil with sawdust during planting, a rule of thumb is to mix 7 lbs of nitrogen per unit of sawdust when the beds are prepared. It is also very important to work the soil well and remove any perennial weeds.

Planting date and new planting management

Most growers prefer to plant in the fall before the raining season starts because the raining spring weather often makes planting related maneuvers difficult. Grass middle can be established using a mix of fescue and rye grass right after fall planting. A typical planting spacing is 10 feet between the rows and 3 feet within the rows. About 1452 plants will be needed at this planting density. Irrigation is a must for blueberries because blueberry plant roots lacks root hairs and are sensitive to drought stress. Drip irrigation tends to work better with a fertilizer injection unit in a raised bed production system. Overhead sprinkler system is also widely used by many growers. The use of overhead sprinkler irrigation with fabric weed mat on raised bed is not recommended due to problems in fertilizer application. A detailed blueberry fertilizer guide for young and mature fields can be found at http://extension.oregonstate.edu/catalog/pdf/em/em8918.pdf. Other things to consider are spray licenses and pesticide reporting requirements which can be found at http://www.oregon.gov/ODA/PEST/purs_index.shtml.

Finally, the resources listed below will also help you succeed.

OSU Extension Service (your growing question answered)
Bernadine Strik, extension berry specialist 541-737-5434
Wei Yang, blueberry extension agent 503-678-1264 x 126

Oregon Blueberry Commission: 503-364-2944
Oregon Blueberry Growers' Association: 503-663-6451

General growing guide
http://berrygrape.oregonstate.edu/category/fruit-growing/berry-crops/blueberry/

Blueberry economics
http://extension.oregonstate.edu/catalog/pdf/em/em8526-e.pdf

Blueberry pest management
http://berrygrape.oregonstate.edu/blueberry-disease-control-guidelines/

Oregon farmers market resources
http://smallfarms.oregonstate.edu/farmers-markets

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Blueberry Grower Workshop

- ***Can you make money growing blueberries?***
- ***How much does it cost to plant blueberries?***
- ***What is your cost structure and profit potential?***
- ***What input costs are critical to increasing your profitability?***
- ***How do you assess the cost-benefit of new equipment purchases?***
- ***Would grapes or other alternative crop be more profitable than blueberries?***

The Workshop

These questions and others will be discussed during a computer workshop for ***A Grower's Technology Economic Assessment Model (TEAM)***. This is a hands-on computer workshop which will allow you to explore ideas for changing your business to increase profits by using the **A Grower's TEAM** software program. *This software was designed for PC's, therefore, participants must be familiar operating within the Windows environment and have knowledge of its basic functions*.

A Grower's Technologies Economic Assessment Model (TEAM) is a computer program designed to help producers making long-run decisions when considering implementing technology or evaluating cropping systems at the grower level. TEAM uses previously generated enterprise budgets to establish a base from which producers and others can analyze the potential profitability and feasibility of implementing technologies or planting a cropping system over a 20-year period.

Presenters

Clark Seavert and **Jim Julian**, both from Oregon State University - North Willamette Research and Extension Center, Aurora.

The cost of this workshop is $75 per person.

December 10, 2007

North Willamette Research and Extension Center

Large Conference Room

9:00 AM to 1:00 PM

Participants can register for this TEAM workshop by calling the **NWREC office (503) 678-1264 x110**. Seating is limited and early registration is encouraged.

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OSU Blueberry Pruning Workshop
North Willamette Research and Extension Center
12:30-4:30PM, November 17, 2007

This workshop is for blueberry growers who like to learn how to prune blueberries and/or to refresh their pruning techniques. An in-depth look at the effect of pruning on blueberry plant growth and yield will be examined. Pruning techniques for new and established plantings will be discussed in terms of pruning efficiency and cost. Below is the workshop agenda.

12:30-1:20pm Watching the Blueberry Pruning DVD. We will discuss the techniques demonstrated in the DVD while watching the 'movie'.

1:20-1:50pm Presentation to discuss the physiological effect of pruning on plant growth and yield, including efficiency and cost of pruning techniques for both young and established fields.

1:50-2:10pm Coffee break

2:10-4:30pm Field pruning demonstration and prune real blueberry plants.

Please bring your own pruners and dress to the weather!

Organizer: Wei Yang

Cost: $10 per person.

The workshop will be limited to 40 people. Please register by calling the NWREC 503-678-1264 ext 110. Early registration is encouraged.

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