http://ipm.osu.edu/fruit/index.html



Newsletter Extension



Fruit ICM News

Volume 7, No. 50 December 26, 2003

In This Issue:

Calendar

New Year's Resolutions for Ohio Fruit Growers Summer Red Raspberries Spring 2003 Evaluation Black Raspberry (*Rubus occidentalis*) Cultivar Study 2003

Calendar

January 21-23, 2004: Ohio Fruit & Vegetable Growers Congress, Ohio Roadside Marketing Conference, & Ohio Christmas Tree Association Winter Meeting, SeaGate Convention Centre and Radisson Hotel, 410 Jefferson Avenue, Toledo. For more information contact Tom Sachs at Ohio Fruit Growers, 614-246-8292, e-mail growohio@ofbf.org. Check out the web site at http://www.ohiofruit.org.

February 26, 2004: Ohio Fruit Growers Society Committee Meetings, (Tree Fruit, Small Fruit, Program, Forward Phase, Juice, & Public Affairs), Best Western, Wooster, Ohio. Contact Tom Sachs at 614-246-8292, growohio@ofbf.org, or http://www.ohiofruit.org.

February 26, 2004: Ohio Apple Operating Committee Meeting, Best Western, Wooster, Ohio. Contact Tom Sachs at 614-246-8292, growohio@ofbf.org, or http://www.ohioapples.org.

New Year's Resolutions for Ohio Fruit Growers

Source: Ted Gastier, Huron County Extension

For your careful consideration as you plan for the 2004 season, "As a grower of safe, abundant fruit, I resolve to:

- Register today for the Ohio Fruit & Vegetable Growers Congress, Ohio Roadside Marketing Conference, & Ohio Christmas Tree Association Winter Meeting. You will save money by registering by January 5, 2004. A registration form can be found in the November 2003 issue of Today's Grower. (In case you misplaced the magazine, you can register online at: http://www.ofbf.org/ofgs/ofgswebengine.nsf/\$LookupFilesType/2004 preregistration.pdf/ \$File/2004 preregistration.pdf.
- Plan future peach plantings so that I can maintain an adequate level of pest management in later

varieties without compromising pre-harvest intervals on earlier varieties. (During 2003, late season Oriental fruit moth control was difficult where early, mid-, and late-season peaches where intermingled. This was a particularly difficult challenge in P-Y-O blocks).

- Remember that codling moths overwinter as mature larvae in tightly constructed silken cocoons located principally under loose bark on the tree trunk and larger limbs. Cocoons may also be found in other places in the orchard, such as piles of wood, brush, posts, and occasionally in coarse mulch, such as weed stalks and corn cobs. In addition, larvae overwinter in stored baskets or crates that have held cull fruit and in the walls of packing sheds and other buildings adjacent to the orchard.
- Plan to control San Jose scale with a single application of Esteem 35 WP at half-inch green.
- Recognize that bacterial spot of peach can be a serious problem on certain varieties in localized areas in certain years. The disease is favored by stormy, rainy weather during June and July. It has caused the most damage in areas where the soil is sandy and where the sand is blown by strong winds. Planting cultivars that are resistant to bacterial spot provides the best control.
- Recognize the importance of spray coverage for pest management in tree fruit. I will remember that the upper portions of my standard trees need to receive adequate coverage, especially for codling moth management.
- Use pheromone traps to monitor codling moth populations to help assure season-long control. This may mean keeping my sprayer available longer than I have in the past.
- Recognize that even if I'm busy with peach harvest, I will maintain an adequate apple pest management program.
- Become more aware of the environmental impact quotients of control materials that I had been using and move toward "softer," friendlier products.
- Consider using mating disruption for peachtree borer and lesser peachtree borer.
- Enjoy more time with my family. (Take them along to the Congress, for starters!)

Summer Red Raspberries Spring 2003 Evaluation

Source: OSU South Centers Horticulture, Soil and Water programs and Dr. Richard Funt OSU - Columbus http://southcenters.osu.edu/hort/data/2003/summer_reds.pdf

Eight varieties of summer-bearing red raspberries [Lauren, Emily (formerly JAM-2), PCA-B4, PCS-1, PCS-2, MDJ-W4, NAN-5, OAM-W2] were planted on 2 foot spacing in May 2000 at the Van Meter farm (3902'N, 8302'W) in the Scioto River Valley. Plots were replicated four times (Figure 1) except Lauren. Soils at the site are predominantly Huntington silt loam. Average temperatures range between 32 to 75F and relative humidity ranges between 79 to 93%. The mean annual rainfall is approximately 36 inches plus or minus 8 inches, with about 40% of the precipitation falling between May and September. Drip irrigation was installed and is used to maintain adequate soil moisture. Recommended pest control measures were followed to control weeds, insects, and disease.

Figure 1. Plot map of summer red raspberry planting.

North

| PCS-1 | OAM- W2 | PCS-1 | X | PCS-1 |
|--------|------------|------------|------------|------------|
| X | NAN-5 | X | PCA-B4 | PCS-2 |
| MDJ-W4 | Emily | MDJ- W4 | NAN-5 | OAM- W2 |
| PCA-B4 | PCS-2 | PCA-B4 | MDJ- W4 | X |
| Lauren | OAM- W2 | PCS-1 | OAM- W2 | PCA-B4 |
| PCS-2 | NAN-5 | PCS-2 | Emily | MDJ- W4 |
| Emily | Lauren | Lauren | Emily | NAN-5 |

X=Empty plot

Varietal descriptions are based upon the breeders' comments and are not necessarily indicative of what we observe at this site.

- Lauren (USPP#10610) [USDA, Maryland 1997 (Reveille x Titan)] was selected at the Wye Institute as a very large, very early, vigorous and productive spring-bearing red raspberry. It is short chilling and performs well in -20F weather in Minnesota, producing fruit the size of 'Titan', but with more uniform stands in wetter soils. Its flavor was much superior to 'Titan', but like 'Titan', it suffered when experiencing warm spells followed by cold in March or April. Typically, Lauren survives January and February cold very well and can produce if kept cool.
- Emily (USPP#12173) was selected at the Wye Institute as having the firmest, most conic fruit. It is only mildly flavored. It has a longer chilling requirement than 'Lauren', it readily winterkills, and it is susceptible to Phytophthora and overuse of typical residual herbicides.
- PCA-B4 is a species hybrid (*R. stellarcricus*, *R. corchorifolius*, *R. pileatus*, *R. occidentalis and R. strigosis*= *R. x prittsii*) selected for clean foliage, resistance to root rot, and large size. Fruit is flavorful and acceptably firm (arising from soft parents).
- PCS-1 is a very vigorous and productive early fruiter. It has good-flavored, moderate-sized fruit.
- PCS-2 is a very vigorous and very productive late fruiter. It has large and flavorful fruit. PCS-2 canes are clean of fungi, especially in their protracted ripening period.
- MDJ-W4 is a cold-hardy red raspberry selection that has AmosH, NY 817, Skeena, and Titan in its background. It is productive with medium-sized round fruit that is somewhat soft.
- NAN-5 is a small-fruited hybrid with high sugar and high acid. It is productive, purple, cold-hardy, and has good flavor.
- OAM-W2 has conic, large, flavorful species hybrid fruit. OAM-W2 fruit may be somewhat soft,

but the plant has survived - 20 F and lower temperatures. This year plants were pruned the week of April 14, 2003. Rows were narrowed to approximately 22 inches (slightly wider than the recommended width of 18 inches), spent floricanes were removed, dead tips on the current year floricanes were removed, and weak canes were also removed. Nine feet of row in each plot were randomly selected and the number of canes was counted and average height determined. Average cane counts are shown in Figure 2.

Figure 2. Average cane count per yard. A cane count of 16.5 - 18.3 per yard is roughly equivalent to a count of 3-5 per linear foot of row in a narrow (12-18 inch) row.

| T.T | ~4 | L |
|-----|-----|---|
| 1 | Λrt | n |

| 19.33 | 18.33 | 17.66 | X | 16.33 |
|-------|-------|-------|-------|-------|
| X | 15.33 | X | 12.66 | 11 |
| 8.66 | 0.33 | 1 | 22.66 | 15 |
| 10.33 | 3.33 | 8.33 | 6.33 | X |
| 1.667 | 8.66 | 15 | 15.66 | 14.33 |
| 9.667 | 3.33 | 4 | 0.33 | 3.33 |
| 0 | 2 | 1 | 0.667 | 17.33 |

X=Empty plot

Based on these cane counts, we can say:

- PCS-1 has at least an acceptable average cane count in three of the four plots, and one of those is slightly high.
- NAN-5 has the highest stand count in one plot and acceptable levels in a second plot.
- OAM-W2 has acceptable cane survival in one of the four plots.

The average height of canes is somewhat dependent on location in the field, but when averaged across the field they are ranked from tallest = 1 to shortest = 8.

- 1. PCS-1
- 3. (tie) OAM-W2, PCA-B4
- 4. NAN-5
- 5. PCS-2
- 6. Lauren
- 7. MDJ-W4
- 8. Emily- floricanes did not survive the winter, although there are new primocanes developing. Our winter low temperature was measured on January 27 and was approximately 4 F.

Black Raspberry (Rubus occidentalis) Cultivar Study 2003

Source: Shawn R. Wright, Richard C. Funt, and Brad Bergefurd, OSU Extension http://southcenters.osu.edu/hort/data/2003/blk_rasp03.pdf

Introduction

This study was planted to determine the relative yield, harvest season, and fruit characteristics of Mac Black relative to Bristol and Jewel.

Methods

See our 2002 update http://southcenters.osu.edu/hort/data/2002/bberry202.htm for information on experimental design and methods. Recommended pest management practices were followed. The summer was cooler and wetter than normal, therefore the drip irrigation was only run the weekend of July 4th.

Results

Bristol harvest (June 11-June 30) peaked on June 16, while Jewel (June 13-June 30) peaked near June 21. This was approximately one week earlier than last year. Mac Black harvest (June 25-July 11) peaked on June 30. Last year there was not harvest of Mac Black.

In 2002 there was no significant effect of harvest or variety on brix. Average brix across harvest and variety was 10.0. In 2003 there was no significant effect of variety; however, harvest date was significant and brix was consistently lower in 2003 than in 2002.

Average Brix Across Variety 2003

(from chart available at listed Web site)

| Date | 6/11 | 6/18 | 6/25 | 7/1 | 7/11 |
|------|------|------|------|-----|------|
| Brix | 6.5 | 5.3 | 3.4 | 6.5 | 6.8 |

The cooler and wetter than normal weather had an effect as can be seen in the chart. As the weather began to warm and dry in late June, Brix increased to early season levels. Percent marketable fruit was consistently over 85 percent; however, loss due to birds increased later in the season.

Average total yield per plant for Bristol was 484 grams, for Jewel was 348 grams, and for Mac Black was 110 grams.

Marketable Yield Per Plant in Grams

(from chart available at listed Web site)

| Date | Cultivar | | |
|------|----------|-------|-----------|
| | Bristol | Jewel | Mac Black |
| 6/11 | 111 | - | - |
| | | | |

| 6/18 | 287 | 149 | - |
|------|-----|-----|----|
| 6/25 | 81 | 174 | 10 |
| 7/1 | 5 | 25 | 75 |
| 7/11 | - | - | 25 |

The Ohio Fruit ICM News is edited by:

Ted W. Gastier Extension Agent, Agriculture Tree Fruit Team Coordinator Ohio State University Extension Huron County 180 Milan Avenue Norwalk, OH 44857

Phone: (419)668-8210 FAX: (419)663-4233 E-mail: gastier.1@osu.edu

Information presented above and where trade names are used, they are supplied with the understanding that no discrimination is intended and no endorsement by Ohio State University Extension is implied. Although every attempt is made to produce information that is complete, timely, and accurate, the pesticide user bears responsibility of consulting the pesticide label and adhering to those directions.

Copyright © The Ohio State University 2003

All educational programs conducted by Ohio State University Extension are available to clientele on a nondiscriminatory basis without regard to race, color, creed, religion, sexual orientation, national origin, gender, age, disability or Vietnam-era veteran status.

Keith L. Smith, Associate Vice President for Ag. Adm. and Director, OSU Extension.

TDD No. 800-589-8292 (Ohio only) or 614-292-1868

| Back |