



Newsletter Extension

Fruit ICM News

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Calendar

Sept. 17-19: Farm Science Review, Molly Caren Agricultural Center, London, OH. Crops are ready to harvest and exhibitors are waiting in line for Ohio State University's 2002 Farm Science Review. The Review, an agricultural trade show, sold out of exhibitor space far in advance, with 574 commercial exhibitors featuring everything from machinery to seed to work clothes. The Review also showcases education experts and farm and conservation agencies.

Fall Herbicide Applications for Strawberries

Source: Bruce Bordelon, Purdue University, Facts for Fancy Fruit - 02-11 August 7, 2002

A number of herbicides can be used on strawberries during late summer and fall to prevent weed germination, kill emerged weeds, and provide residue control until the following spring. The key set of weeds you need to control during this period are fall germinating winter annuals such as chickweed and shepherds purse. You may also need to control wheat, oats, or rye that come from seed in the straw mulch that you apply for winter protection.

Devrinol (napropamide) is a preemergence herbicide. Because it can inhibit rooting of daughter plants, it should be applied after early forming daughter plants have rooted. Late forming (after late August) daughter plants do not contribute to yield, and Devrinol can be applied before these plants root. Devrinol

must be applied before winter annuals and small grains emerge. Devrinol provides excellent control of small grains and some winter annuals such as chickweed. Devrinol must be moved into the soil by cultivation or water after application.

Dacthal (DCPA) is a preemergent herbicide that can be used in new plantings or immediately after renovation. It provides good control of many grasses and some broadleaves such as purslane and lambsquarter. Like Devrinol, it must be applied before weeds emerge.

Sinbar (terbacil) is primarily a preemergent herbicide, but it has some postemergence activity against small susceptible weeds. Fall applications of Sinbar should only be applied after the strawberries are completely dominant. If Sinbar is applied to actively growing strawberries, injury can occur. Cultivars differ in tolerance to Sinbar. In general, less vigorous cultivars have greater injury. Applications are most effective when applied to the soil and activated by rainfall or irrigation. Sinbar provides excellent control of many winter annual weeds. Fall applications of both Devrinol and Sinbar will persist to the following spring.

Poast (sethoxydim) is a postemergent, grass active herbicide. The grasses must be actively growing. Thus, Poast should be applied in late summer or early fall before plants become dormant. Also make sure that you scout your fields to determine which grass weeds are present. Summer annual grasses, such as foxtails and crabgrass, will be killed by fall frosts and do not require Poast applications for control. Poast is more effective against annual than perennial grasses. Poast can be used in the fall to suppress perennial grasses such as quackgrass, control early emerging small grains, and kill winter annual grasses such as wild oats and downy brome. Poast must be applied with a crop oil.

A systemic, postemergence broadleaf herbicide, **2,4-D**, can be applied to control some winter annuals when strawberries are dormant. 2,4-D provides good control of many mustards and shepherdspurse, but is not very effective against chickweed. The herbicide should be applied to actively growing weeds. Be careful of 2,4-D drift causing injury to non-target plants.

Gramoxone Extra (paraquat) can be applied as a directed spray between strawberry rows, using shields to prevent contact with strawberry plants. Gramoxone is a nonselective herbicide, so it will kill or severely injure strawberries it contacts. Gramoxone is a restricted use pesticide and is extremely toxic to animals, including humans. It provides excellent control of annual grass and broadleaf weeds. Gramoxone does not extensively translocate in plants so it does not control perennial weeds. Weeds should be actively growing when Gramoxone is applied.

In conclusion, there are a number of herbicide options that can be used on strawberries during the fall. Select herbicides that will control problem winter annuals and small grains. Herbicides such as Devrinol and Sinbar can provide residue weed control until spring. Adapted from an article in the Illinois Fruit and Vegetable News by John Masiunas.

When to Harvest Pears?

Source: "Growing and Using Fruit at Home", Ohio State University Extension Bulletin #591. (Thanks to Hal Kneen, Meigs County Agent, for sharing this homeowner question.)

Pears should be harvested before they are tree ripe. However, they must not be picked too green or they will shrivel in storage and have a poor flavor. Helpful guides as to the right time to harvest pears include

observation of the color of the fruit skin, corking of the lenticels, and general finish. Lenticels (small spots on the fruit surface) are white on green on immature pears. When the lenticels become brown in color, the fruit can be picked and will ripen satisfactorily off the tree. Pears ready for harvesting also become more rounded and develop a waxiness on the skin. Pears ready to harvest will separate easily from the tree spur with an upward twist of the fruit.

For further ripening for quality development off the tree, most varieties of pears should be ripened at 60-70 degrees F and a relative humidity of 80 to 85 percent.

Ohio Drought Watch: August 31, 2002

Source: http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/regional_monitoring/palmer.gif

State District	Situation
Northwest	Moderate drought
North-central	Moderate drought
Northeast	Moderate drought
Central Hills	Moderate drought
Eastern Hills	Severe drought
South	Moderate drought
Southwest	Moderate drought
Central	Moderate drought
Southeast	Moderate drought

The USDA Topsoil Moisture chart indicates that 84% of the state is experiencing short to very short topsoil moisture conditions as of September 1, 2002.

Source: http://www.cpc.ncep.noaa.gov/products/monitoring_and_data/topsoil.html

Black Raspberry (*Rubus occidentalis*) Cultivar Study

Source: Shawn R. Wright, Christie Welch, Lynn Miller and Richard C. Funt, <http://www2.ag.ohio-state.edu/~prec/hort/data/2001/bberry201.htm>

Introduction

Two varieties of black raspberry are commonly grown in Southern Ohio. Bristol [1934, NYFTA, Geneva, NY (Watson Prolific x Honeysweet)] produces a fruit that is medium-large and firm, with good flavor and glossy skin. It is a good yielder and mildew tolerant, but susceptible to anthracnose. Jewel [1973, NYFTA, Geneva, NY. [(Bristol x Dundee) x Dundee]] produces fruit that are also large and

firm, with good flavor and glossy skin. The plant is vigorous, erect, resistant to anthracnose, and widely adapted. The fruit ripens after Bristol, though both varieties are considered early season, ripening in mid-June in Southern Ohio. Mac Black is another variety that growers have expressed an interest in because it will allow them to extend their picking season for approximately 10 days beyond what is possible with the early varieties. This study was planted to determine the relative yield and harvest season of Mac Black relative to Bristol and Jewel.

Growers often wonder if it is advantageous to harvest the "baby crop" the second year from planting or if it is better to allow the plants to establish themselves and begin harvesting the third year. We can't say what the effect will be on the long-term health of the planting, but the following information on production should be useful.

Tissue cultured Bristol, Jewel, and Mac Black raspberries (*Rubus occidentalis* L.), obtained from Nourse Farm®, were planted at the Ohio State University South Centers (Piketon, OH) on June 15, 2001. Eight plants of one variety were randomly assigned to an individual plot. Final size of raised bed plots was 0.5'x3'x15' (HxWxL) with a rounded crown. Initial plot preparation occurred on June 11, 2001 and included plowing, disking, and rototilling to a depth of 10 inches. Composted yard waste was broadcast at a rate of 2 tons/acre on the entire plot and then disked to incorporate it. Fertilizer was broadcast using a Viacon spreader after mixing at the rate of 145 lbs per acre P_2O_5 , 91 lbs per acre K_2O , 0.5 lbs per acre boron, and 5 lbs per acre zinc as recommended following soil testing. Landscape fabric (A.M. Leonard's tightly woven polypropylene 5oz. fabric needle punched and UV stabilized, and 98.7% opaque to light) was applied over the plot rows, and planting holes 2.5 ft. on center were cut with a propane torch. There is 3 ft. between plots. Plants were hand planted and watered in using Peter's 9-45-15 @ 0.5 oz/gallon water. Drip irrigation tubing was installed over the landscape fabric and plants were irrigated as necessary. Recommended pest management practices were followed to control weed, disease, and insect pressure. The inter-row area (8") was mowed as needed.

Results

A late frost (May 22, 2002) had an effect on fruit production. Ninety-one percent of the blossoms of Jewel and 81 percent of the blossoms of Bristol were killed. Only 18% of the blossoms of Mac Black were killed. However, Bristol produced more blossoms per plant (an average of 1131) than Jewel with an average of 834 blossoms per plant. Mac Black produced an average of 189 blossoms per plant. However, even with a low percentage of blossom loss to frost, Mac Black only yielded 4 fruit from 24 plants. This may be partially attributable to slower establishment of Mac Black than the other cultivars initially. Lack of fruit set in all varieties may be attributed to several factors including predation, physiological factors, and lack of successful pollination.

Peak harvest of Bristol was around June 21st, one week earlier than Jewel. Jewel should be about a week earlier than Mac Black.

Fruit Observations & Trap Reports

Insect Key

AM: apple maggot
CM: codling moth
ESBM: eye-spotted budmoth
LAW: lesser apple worm
LPTB: lesser peachtree borer
OBLR: obliquebanded leafroller
OFM: oriental fruit moth
PTB: peachtree borer
RBLR: redbanded leafroller
SJS: San Jose scale
STLM: spotted tentiform leafminer
TABM: tufted apple budmoth
VLR: variegated leafroller

Site: Waterman Lab, Columbus
Dr. Celeste Welty, OSU Extension Entomologist

Apple: 8/28 to 9/04/02

RBLR: 88 (up from 36)
STLM: 138 (up from 115)
CM (mean of 3 traps): 10.3 (down from 12.0)
TABM: 9 (down from 11)
SJS: 12 (up from 9)
VLR: 2 (down from 7)
OBLR: 6 (up from 4)
AM (sum of 3 traps): 7 (down from 11)
LAW (mean of 3 traps): 13.3 (down from 14.7)

Peach: 8/28 to 9/04/02

OFM: 0 (down from 5)
LPTB: 1 (down from 9)
PTB: 2 (down from 8)

Site: Wayne County Source: Ron Becker, IPM Program Assistant

Apple: 8/28 to 9/04/02

STLM: 828 (up from 218)
CM (mean of 3 traps): 5.8 (down from 7.8)
RBLR: 16.7 (down from 16.8)
AM (sum of 3 traps): 7.7 (down from 22.5)

Peach: 8/28 to 9/04/02

OFM: 0.0 (down from 0.5)
LPTB: 0.8 (up from 0.5)
PTB: 0.3 (down from 1.0)

Notes: Most of the peaches are picked. We are still finding light red mite populations in most blocks. Codling moth and apple maggot trap catches finally seem to be heading down.

Site: East District: Erie & Lorain Counties

Source: Jim Mutchler, IPM Scout

Apple: 8/27 to 9/03/02

CM (mean of 3 traps): 2.2 (down from 5.9)
STLM: 22 (down from 835)
SJS: 0 (down from 40)
AM (sum of 3 traps): 0.1 (down from 7.8)
OFM: 39.0 (up from 25.3)
RBLR: 30.6 (up from 26.8)
LAW (mean of 3 traps): 13.3 (down from 19.7)

Peach: 8/27 to 9/03/02

OFM: 2.3 (down from 3.7)
RBLR: 23.3 (up from 22.0)
LPTB: 9.7 (down from 16.7)
PTB: 3.3 (down from 4.3)

Site: West District: Huron, Ottawa, Sandusky Co.

Source: Gene Horner, IPM Scout

Apple: 8/27 to 9/03/02

CM (mean of 3 traps): 6.7 (up from 3.0)
STLM: 18.0 (down from 24.0)
SJS: 59 (up from 1.8)
AM (sum of 3 traps): 3.3 (down from 8.0)
OFM: 2.8 (same as last week)
RBLR: 14.3 (down from 32.8)
OBLR: 1.5 (down from 3.0)
LAW (mean of 3 traps): 6.3 (up from 2.3)
ERM (infested leaves per 25 leaf sample): 0.9 (down from 1.6)

Peach: 8/27 to 9/03/02

OFM: 18.0 (up from 11.8)
RBLR: 24.6 (down from 40.8)
LPTB: 3.6 (down from 4.8)
PTB: 0.0 (down from 3.4)

Beneficials present - lacewings, banded thrips, predatory mites

Terminal Market Wholesale Fruit Prices August 28, 2001

Source: Chicago http://www.ams.usda.gov/mnreports/HX_FV010.txt

Detroit http://www.ams.usda.gov/mnreports/DU_FV010.txt

Pittsburgh http://www.ams.usda.gov/mnreports/PS_FV010.txt

	Chicago	Detroit	Pittsburgh

Columbus	2.13	3.72	27.40	27.15	86.0	83.8	66.3	63.2	76.1	73.5
Dayton	0.87	3.49	24.58	27.83	86.0	82.3	65.5	62.2	75.7	72.3
Fremont	3.31	3.35	24.72	23.79	84.0	81.9	60.3	59.3	72.1	70.6
Kingsville	1.76	4.40	25.09	24.20	79.0	79.0	60.7	60.0	69.9	69.5
Mansfield	3.14	4.60	26.96	30.09	83.1	79.6	62.1	58.9	72.6	69.3
Norwalk	2.73	3.46	27.79	24.59	82.5	79.9	63.4	57.9	73.0	68.9
Piketon	1.00	3.60	26.02	30.30	86.9	83.2	64.1	61.2	75.5	72.2
Toledo	1.22	3.19	20.02	22.60	85.3	81.0	63.1	60.6	74.2	70.8
Wooster	1.97	3.72	23.67	23.67	86.4	82.0	60.5	57.9	73.4	70.0
Youngstown	4.13	3.43	29.89	25.64	83.3	79.3	59.7	57.5	71.5	68.4

Temperatures in degrees F, Precipitation in inches

Records set: August 1st - Mansfield 93F, Wooster 98F; 3rd - Mansfield 93F

Record tied: August 2nd - Wooster 98F, 3rd - Wooster 98F, 13th - Cleveland 95F,

Table Created by Ted W. Gastier, OSU Extension from National Weather Service, OARDC & Local Data

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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.

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