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Eastern NY Commercial Horticulture Program

Berry News

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Regional Updates:

Regional Updates - Very cool temperatures across the entire region arrested bud development during the past two weeks. A bit of extra time to finish pruning and early season sprays.

North Country—Clinton, Essex, northern Warren and Washington counties

Berry phenology: Blueberry —dormant

Pest focus— Insect stem gall, Botrytis blossom and twig blight, Fusicoccum Canker, Phomopsis Canker, Scale Insects

Capital District—Albany, Fulton, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, southern Warren and Washington counties

Berry phenology—dormant

Pest focus— Insect stem gall, Botrytis blossom and twig blight, Fusicoccum Canker, Phomopsis Canker, Scale Insects

Mid-Hudson Valley—Columbia, Dutchess, Greene, Orange, Sullivan and Ulster counties

Berry phenology: Blueberry—bud swell in most locations

Pest focus— Insect stem gall, Botrytis blossom and twig blight, Fusicoccum Canker, Phomopsis Canker, Scale Insects



Blueberry prunings at Ingalls Blueberry Hill farm in Cooperstown, NY

Serving the educational and research needs of the commercial small fruit, vegetable and tree fruit industries in Albany, Clinton, Columbia, Dutchess, Essex, Fulton, Greene, Montgomery, Orange, Rensselaer, Saratoga, Schoharie, Schenectady, Sullivan, Ulster, Warren and Washington Counties

Bramble Pruning Tips

Written by Marvin Pritts, Cornell University
Dept. of Horticulture, edited by Laura McDermott

Primocane (fall bearing) raspberries:

- Cut the canes as close to the ground as possible, at about one-inch, in mid to late winter so that buds will break from below ground level.
- Collect the cut canes and burn or compost them to help control diseases.
- Allow all the canes in a 12-18 inch wide band to grow. Leaving all the canes that come up in this area to grow will increase yields, but not decrease fruit size.
- A T-bar trellis (Figure 1) is sometimes used to help support the crop. Wooden or metal posts, approximately seven feet long, with a three foot cross arm are used. The ends of the cross arms have a screw eye to hold baling twine. Each T-shaped post is set into a hole in the center of each row and holes are placed 25-30 feet apart within the rows. A three foot section of PVC pipe can be set into the holes immediately after they are dug to prevent them from collapsing. Before harvest, T-posts are slid into the PVC-lined holes. The baling twine is strung from pole to pole and pulled tightly to lift canes upright. After harvest, the twine can be cut and posts removed and stored for another year.

Floricane (summer fruiting) raspberries

- Productivity is related to the number of canes. Fruit size decreases as cane numbers increase.
- 3-5 large canes per linear foot of row is the optimal range with a plant row width of 12-18 inches.
- Canes should be pruned after winter injury threat.
- Top canes to the point of the trellis, but below winter injury. Severe topping will increase fruit size but will greatly reduce yield.
- No more than the top 1/4 of a cane should be removed.
- After pruning, tie canes loosely to the trellis wire to prevent wind damage of laterals after bud break.
- Canes should be spaced evenly along the trellis wire, or equally divided and spread between sides of a V-trellis.
- Tipping red raspberry primocanes during the growing season to promote lateral growth is usually

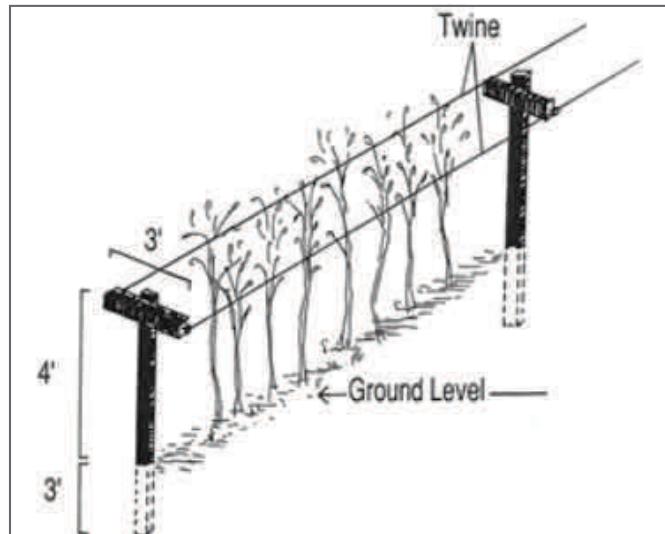


Figure 1. T-bar trellis for use with primocane raspberries.

not recommended in the Northeast as it can slow cane development and makes the plant susceptible to winter injury.

Black Raspberries

- Black raspberries respond well to primocane tipping. As the primocane approaches 32-36", pinch at least 4" off the tip – ideally just above a bud. The tipped cane should be 28" tall. This process may need to be repeated several times throughout the growing season, but will result in many more fruiting lateral branches.
- Mechanical tipping may leave primocanes more susceptible to cane blight infection.
- The long laterals that exist at the end of the first year, should be supported by trellis wires before October since wet snow tends to break them off the main cane. Also, canes are more flexible in early autumn than in late autumn and are less prone to breaking from the crown during trellising.
- Many of the laterals may suffer winter damage. Black raspberries could be pinched higher, but shorter laterals would result and the winter damage would be greater. Laterals are headed back in early spring to remove winter damaged wood and to maintain berry size. The choice of lateral length depends on cultivar vigor and the relationship between crop size and fruit size.

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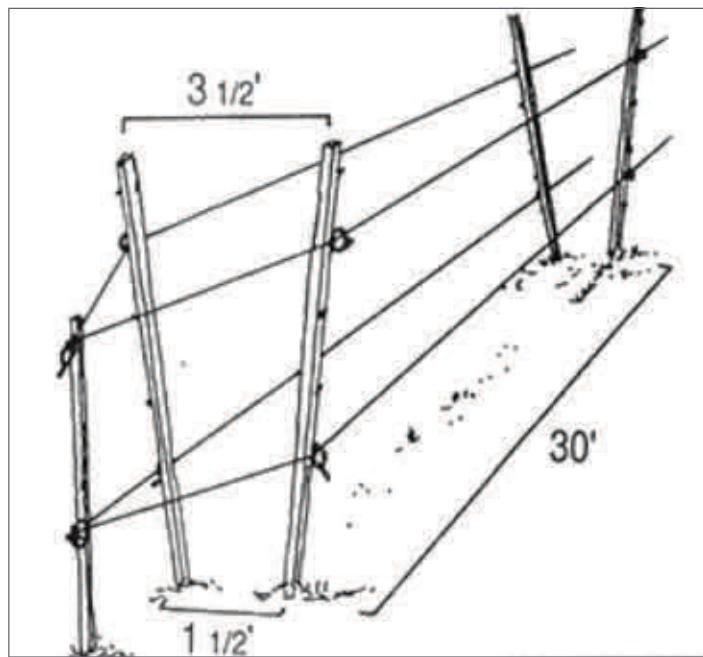


Figure 2. V-Trellis used with floricane raspberries and thornless blackberries.

- Leave 4-6 canes per crown for acceptable yields of large fruit.

Purple Raspberries

- Prune purple raspberries similarly to red raspberries. Purple raspberry primocanes may be tipped, like black raspberries, but wounds can act as entry sites for disease.
- If purple raspberries are not tipped, the canes will grow very tall, and need support from a trellis. Primocanes can be suppressed to control vigor. Some natural branching will occur near the base of primocanes, these may be removed or allowed to fruit.
- If primocanes are tipped, do it when primocanes reach a height of 32 inches. At least 4 inches of tip must be removed. Many lateral buds will break near the top of the cane, and fewer near the base.
- Shorten lateral branches below winter damage in early spring.
- Leave 3-4 fruiting canes per linear foot of row. Purple raspberries respond favorably to primocane suppression but do not respond well to mowing.

Primocane-fruited blackberries

- Summer tipping (prior to flower bud formation when canes are about 3 feet tall) has been found to increase yield by as much as three-fold but it also delays harvest slightly.
- Fruiting them under a high tunnel to extend the growing season may be the best strategy in the northeast.

Thorny Blackberries

- Tip when 3-4 feet high to stiffen canes and cause lateral branching.
- Shorten laterals to 12-16 inches in early spring.
- Thin canes to two per linear foot of row.
- Growers may choose alternate year mowing methods to avoid the difficult task of pruning the thorny canes.

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Figure 3. Rotating Cross Arm Trellis. Courtesy of North Carolina State University. See the trellis at Cornell University's High Tunnel demonstration plot in Ithaca.

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Thornless Blackberries

- First two years of growth is along the ground like a vine. Growers may have to move trailing canes in the direction of the row to allow room for cultivation.
- After two years, canes become more erect and are naturally branched. Thornless blackberry canes are thicker and more flexible than raspberry canes.
- Northern growers must protect canes during the winter. Some growers tip thornless blackberry primocanes at 24 inches so that low growing laterals can be more easily protected.
- In spring, the canes should be tied to a trellis wire 3 feet above the ground.
- Fruiting canes are either shortened to the top trellis wire or woven around the wire. Woven canes should overlap no more than two or three feet with an adjacent plant.

- Lateral branches are shortened to 18 inches.
- Laterals on the lower two feet of cane are removed.
- Thinning canes to 6-8 per hill will maintain acceptable production.
- Partial primocane suppression is recommended for thornless blackberries.
- Thornless blackberries have been grown successfully on the V-trellis. (See Figure 2)
- Fruiting canes are tied to one side of the V and primocanes to the other. Primocanes and floricanes alternate sides of rows across the field, so each row middle is bordered by canes of the same age. This pattern makes spraying and harvesting easier.
- Rotatable cross-arm trellis is being studied at Cornell. This system will allow thornless blackberry canes to be laid on the ground during the winter and covered with row cover for protection.

Still time for Early Season Herbicide Application

In blueberries and brambles, Casoron 4G is labeled to control germinating seeds and seedlings of annual broadleaves, grasses and some perennials. Although the label says it must be applied between Nov 15 and Feb 15, if it is incorporated immediately after application with rainfall, it can be used up until May 1st. Growers should make sure that Casuron is applied before annual weeds germinate and then insure that $\frac{1}{2}$ inch to 1" of rain will move the herbicide into the weed zone when soil temperatures are below 45°F. Casoron CS can be applied a bit later but still needs to be incorporated by rainfall before weed germination; it is also labeled for blueberries that have been established for a full year, as well as blackberry and raspberry before new shoot emergence.

To control problem woody perennials in blueberry plantings over 3 years of age, growers could use Velpar.

This product must be applied before the lower leaves of the bush have fully expanded – avoid contact with leaves during application. Velpar L efficacy varies according to soil type, plant vigor, uniformity of application and amount of rainfall. Because of this, first time use should be limited to small areas. Read the label thoroughly before applying.

There are a number of other early season options including Surflan, Sandea, Aim, Chateau, Princep etc. For rates, proper usage and targeted weeds, please see the 2013 Cornell Pest Management Guidelines for Berry Crops. <http://ipmguidelines.org/BerryCrops/>. Sandea is labeled for blueberries, but at this time not for brambles, although that is expected in 2013. -LGM

2013 Pest Management Guidelines

Contact your local Cornell Cooperative Extension office for availability.

Looking for Cornell Pest Management Guidelines online?
Visit <http://ipmguidelines.org/>

Available upon request

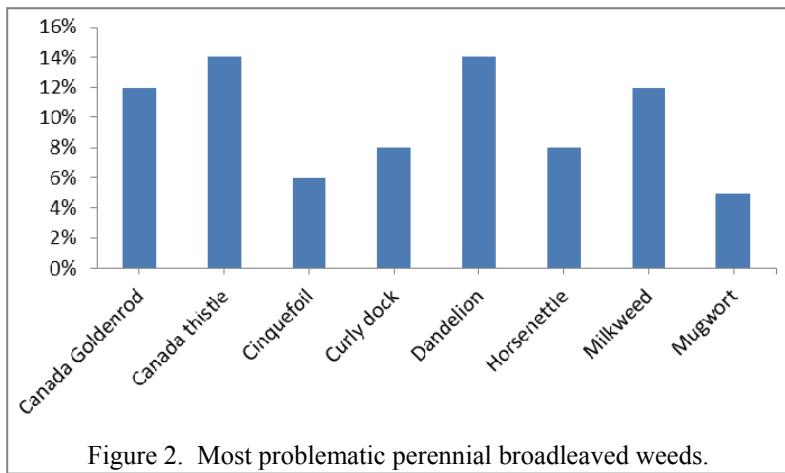
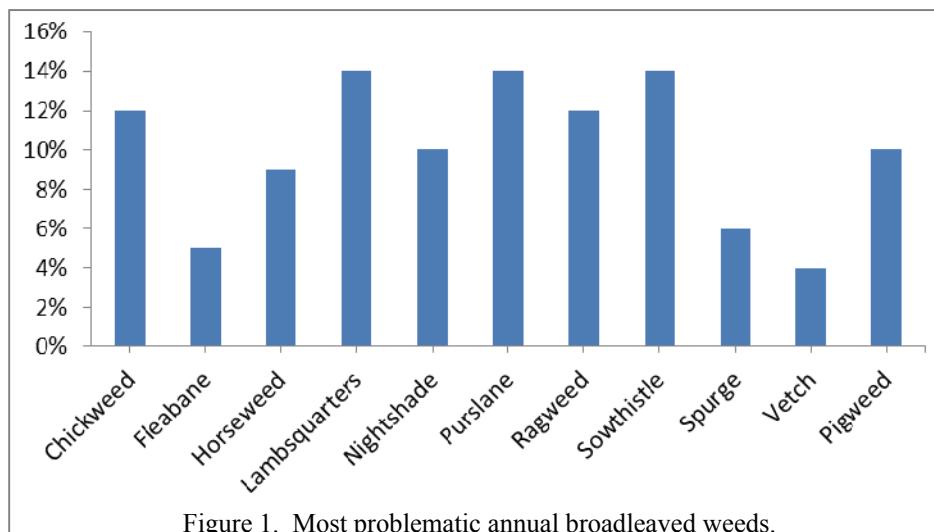
- Guidelines for Commercial Turfgrass
- Guidelines for the Integrated Management of Greenhouse Floral Crops
- Guidelines for Commercial Production and Maintenance of Trees and Shrubs
- Guidelines for Production and Maintenance of Herbaceous Perennials
- Guide for Berry Crops
- Guide for Grapes
- Vegetables
- Tree Fruit
- Field Crops

Small Fruit Weed Control Survey Results

At the recent Hudson Valley fruit school, growers were asked to respond to a survey about their weed management practices. From a group of 64 growers, 39 responded.

When asked what crops they grew, 19% responded they grew blueberries, 21% strawberries, 29% brambles, and 31% grapes.

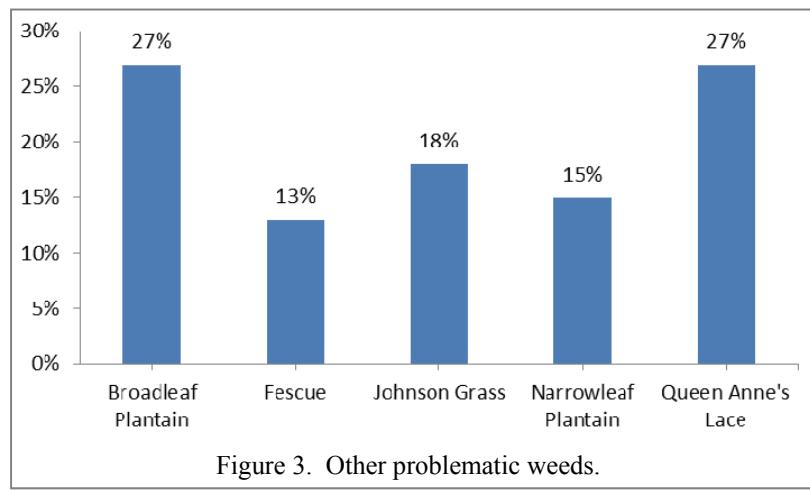
When asked to define their cropping system, 76% replied conventional, 17% organic, and 7% certified natural.



This preliminary data has given me some insight into the problems growers face with weed control. The weeds are already grouped into annual and perennial. Therefore, in an effort to simplify weed control for growers; my next step is to categorize these weeds into smaller groups. They can be grouped by grower response (greatest percent), by their biology (summer annual, winter annual) and growth habit (climbing, creeping). By placing these weeds into smaller groups, it may allow growers to better focus their weed control efforts, allowing them to target a particular group instead of all weeds present in a berry patch. -JMO

Growers were then surveyed about the size of their operation. From the 39 respondents, 26% grow their crop on 4 to 6 acres, 20% on less than an acre, 17% on 1 to 3 acres, 14% on 7 to 10 and 11 to 20 acres, and 9% on greater than 20 acres.

When growers were asked about their current weed control methods, 30% responded they use herbicides. Other methods used almost as equally were: hand weeding (29%) and mulching (25%). For the remaining questions growers were asked to specify which weeds were most problematic to them. The answers are presented here as graphs.



Berry Grower Volunteers Needed for Farm Business Summary Project



Why a berry farm business summary? Berry project team members are building on the Cornell-developed Fruit Farm Business Summary (FFBS), which has helped tree fruit growers improve their return on investment (ROI) for more than a decade. According to a study by Dyson School professor emeritus Gerald White, the FFBS “identifies the business and financial information they (growers) need and provides a framework for use in identifying and evaluating the strengths and weaknesses of the farm business.”

Experience with tree fruit growers using FFBS shows they quickly identify practices that are more costly than state benchmarks and address why their individual costs are higher. Early in the process, growers often make changes that immediately improve their bottom line. Participating growers also learn which components of their operation should be expanded or contracted to improve return on investment (ROI). Participating berry growers should reap the same rewards as their tree-fruit colleagues.

How do I get involved? You may be contacted in the future by an educator in your region and asked to consider being a participant. To volunteer now or to receive more information please contact the project team member closest to you.

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Cornell University
Cooperative Extension
Saratoga County



Promoting Workplace CSA's-Informational Workshop

Thursday, April 4th at 10:00 am at Saratoga CCE, 50 West High Street, Ballston Spa, NY 12020.

Farm fresh foods = healthy employees. Take advantage of workplace wellness programs and host a worksite CSA. Information presented will address employer hosts and farmers that deliver the fresh produce.

A CSA (Community Supported Agriculture) involves consumers and farms. As an employer you would be creating a convenient opportunity for your employees to improve their health by accessing fresh, locally grown foods delivered to your business. As a farmer, you would distribute the shares to the worksites, and tailor the method of distribution to the particular business.

Educational materials will be provided, ideas exchanged, connections made. Farmers, worksite representatives and interested individuals are welcome to attend. For further information and to register please contact Teresa Whalen, Adirondack Harvest Southern Chapter Representative, at 466-5497 or taawhalen@yahoo.com.

Cornell Cooperative Extension and the staff assume no liability for the effectiveness of results of any chemicals for pesticide use. No endorsement of any product is made or implied. Every effort has been made to provide correct, complete, and current pesticide recommendations. Nevertheless, changes in pesticide regulations occur constantly and human errors are still possible. These recommendations are not substitutes for pesticide labeling. Please read the label before applying any pesticide. Where trade names are used, no discrimination is intended and no endorsement is implied by Cornell Cooperative Extension.

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