

Perennial Flowers Workshop Outlines Weed Control And Overwintering

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HERSHEY (Dauphin Co.) —

Both weed problems and overwintering damage can cost the landscape and nursery industry significant dollars each year.

Weeds can choke the growth of desired plants, while not properly overwintering can cause tissue damage to the plants.

Dr. James Sellmer spoke about "Weed Control" and "Overwintering" during a workshop on "Perennial Flowers" held at the Mid-Atlantic Fruit and Vegetable Convention several weeks ago.

Dr. Sellmer is an assistant professor in horticulture at the Pennsylvania State University. He specializes in ornamental horticulture extension, working with extension agents and people in the landscape and nursery industry.

According to Sellmer, the biggest issue that growers face in weed control is that they haven't developed a plan for the weeds around the parameter of their garden or facility.

"A lot of times I get calls from people who have weed problems that have really gotten out of control. They're looking for a silver bullet to get rid of those weeds," said Sellmer. "You got to be really diligent in knowing what weed problems are going to affect your operation."

Growers should take preventive measures against weeds in a crop before the crop is planted. That means coming up with a weed control plan.

"You need to sit down to evaluate your program yearly and determine what weed problems you have," said Sellmer. "Different weeds will grow different years. The drought conditions this year brought new weeds."

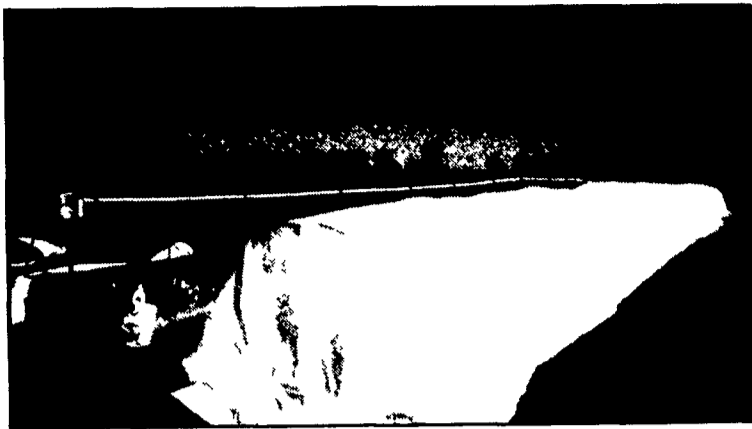
The three-part plan that growers should employ includes eliminating weeds in and around the growing area and killing seeds or vegetative parts before planting, preventing weed control in and around the growing area, and eliminating weeds as they appear.

The weed control methods that Sellmer reviewed during his presentation included both physical methods and chemical applications. The physical methods were cultivating, mowing, mulching, hand pulling, selecting a weed-free growing medium, and planting cover crop. The chemical methods were classified in the following categories — preemergence or postemergence, contact or translocated, selective or nonselective, and fumigants.

"You need to know what weeds are going to impact your production," said Sellmer. "That will allow you to know what practice to use — whether it is cultivating, hand pulling, or chemical use. It will also help you decide which chemicals to apply."

Cultivating is an effective way to prevent weed problems, although it can be time consuming and must be repeated throughout the season. Mowing is most commonly used to control weeds in fields. It is also time consuming and can cause damage to crop plants when equipment operators run on them.

Mulching can be applied to



Excess moisture and animal damage are the two biggest problems in overwintering perennials. Ideal overwintering covers should provide insulation, but allow the grower to check for damage control during the winter.

limit weed growth around high-value crops. It can prevent weeds from seeds that germinate at or near the soil surface. However, a thicker layer of mulch may be harmful to landscape ornamentals and can provide habitat for seeds to germinate.

Hand pulling is used to eliminate weeds that escape preventive measures. A weed-free growing medium, like perlite or peat, can help the grower to avoid weed problems in container-grown plants.

According to Sellmer, total weed control is possible, but can cause problems. "Soil erosion, pesticide and fertilizer runoff, and impassable fields after a rainfall are all associated with total weed control," said Sellmer. Both cover crops and mulching can prevent against these problems.

During his presentation on "Overwintering," Sellmer reviewed factors involved in overwintering. They included fertilization, irrigation, pest control, and the timing of covering and uncovering plants.

"If you're new to the business, you need to consider how much overwintering you need to do," said Sellmer. "It depends on whether you're going into retail or production."

For retailers, traditionally the goal has been to be done selling product and have it out of stock by winter. Those working in production don't expect everything grown to be sold the first year or even the second year. However, Sellmer and his colleagues from Penn State recently conducted a survey of growers in the industry. One of the trends they found was that more retailers are overwintering than in the past.

"You need to consider what plants you're overwintering," said Sellmer. The Penn State study found that growers considered ornamental grasses to be the most difficult perennials to overwinter.

"We did the survey to find out how overwintering is affecting the industry and how the industry is dealing with overwintering issues," said Sellmer. "Based on the study, we are discussing researching ways to better overwinter ornamental grasses. Then we can give growers suggestions."

According to Sellmer, the structures and techniques in overwintering haven't changed over the years. The bottom line is that the system growers choose will affect how they manage it.

He suggested that growers ask these questions about their overwintering systems: Does it

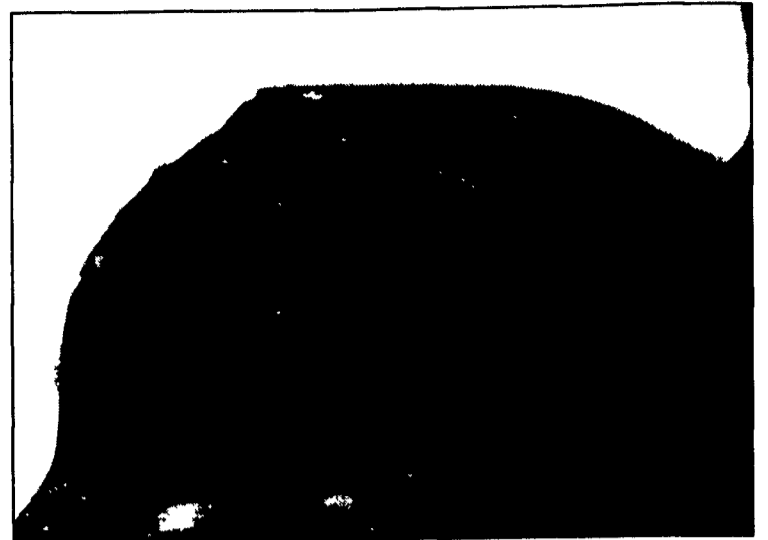
provide adequate protection? Does it reduce moisture loss, thus reducing tissue damage? Is it easy to handle and manage? Can it be adapted to the growth of your stock? Is it economical?

Overwintering systems commonly used in the industry include structureless systems, polyhuts, and polyhouses. According to Sellmer's study, structureless systems are the most popular systems among growers.

Structureless systems involve consolidating plants and surrounding them with kraft paper, bales of straw, white polyethylene film, a thermal blanket, or any combination of these covers.

Although this type of system is the simplest solution, it provides limited protection. Sellmer suggests that any coverings be placed from north to south for best protection.

According to Sellmer, this



Polyhuts are one form of cover used for overwintering perennials. The polyhuts allow for ventilation, irrigation, and secondary, interior covers.

type of system traps in moisture, preventing tissue damage. However, troubleshooting rodent problems or moisture loss is difficult because of the coverings.

Polyhuts are typically five to six feet wide and four feet tall with low hoops and polyethylene plastic coverings. Polyhouses are taller and wider than the polyhuts. Both allow for ventilation, irrigation, and secondary, interior covers.

Sellmer suggests determining the overwintering method based on the plant hardiness. "We have a lot of plant materials, and we don't know how hardy each plant is," said Sellmer. "Plants vary drastically in hardiness."

Other overwintering issues Sellmer spoke about included fertilization, irrigation, pest control, and weed control. Healthy

plants that are "not excessively vigorous" are better able to withstand winter. So Sellmer suggests fertilizing enough to sustain normal growth but not enough to push growth.

Irrigating the growing area to its capacity prior to storage will provide the moisture and humidity to prevent freeze-drying. In hoop systems, growers will probably also need to irrigate during the winter.

According to Sellmer's study, excessive moisture and animal damage caused the biggest losses for growers who overwintered their plants. Sellmer suggests applying bait around houses and taking preventative measures against rodents. He also suggests checking the growing area and getting floor weeds under control before overwintering.

Armchair Shoppers Beware: Home Shopping Poses Some Risks

TUNNAHOCKEN (Wyoming Co.)—Today's technological advances allow consumers to shop almost anytime and anywhere from home. But it's important to know the rules and tools that will protect you from con artists and unprincipled business folks trying to make a fast buck, says a consumer scientist in Penn State's College of Agricultural Sciences.

"While there may be great opportunities for good buys and unusual items, shopping from home does have its risks," says Cathy Bowen, assistant professor of agricultural and extension education. Shopping from home includes online/e-commerce, telemarketing, mail order, door-to-door, yard sales, and flea markets.

"Here are some key points to remember when shopping from home," she says. Know who you are dealing with. "Find out the seller's location and reputation," Bowen says. "What is their street address and phone number? Do they belong to a trade group, or take part in a program such as the Better Business Bureau's program for online merchants at www.BBBOnline.com?"

Protect your privacy. Bowen recommends that home shoppers only provide personal information if they know who is collecting it, why they are collecting it and how the information will be used. Good Web sites should allow you to choose whether and how your personal

information will be shared.

Pay the safest way. "Know the different options for paying and use the one that offers the best protection," Bowen says. When shopping online, thieves can intercept credit card, debit card, or other payment information. Information stored in company databases also may be retrieved by hackers or dishonest employees.

The National Consumers League (NCL) recommends credit cards as usually being the safest way to pay, because you can legally dispute the charges if the product or service is misrepresented or never delivered. You also have limited liability if your card number is stolen or misused. If the company doesn't accept credit cards, NCL says, you might consider using an escrow service that will hold your money until you are satisfied with the purchase.

If you do a lot of shopping on the Internet, Bowen suggests having a designated credit card with a low credit line specifically for that purpose. Know what you are buying. "It's important to get a complete description of the product or service, and all of the terms of the transaction," she says.

"When buying used items, make sure they meet safety standards." When making purchases online, The National Consumers League suggests you print out all of the information for online transactions, including product description, delivery information, privacy policy, warranties and confirmation notices. Think through your purchase.

"Don't act on impulse or because of pressure," Bowen says.

Know who to complain to. "If you have a problem, and cannot get satisfaction from the company, find out what government agencies, industry organizations or other groups can help you," Bowen says. "The Federal Trade Commission offers an online complaint form at <http://www.ftc.gov/ftc/complaint.htm>."

To raise consumer awareness of protection and education efforts being made nationwide, Feb. 14-20 has been set aside as National Consumer Protection Week. This year's theme, "Armchair Armor: Shopping Safely From Home," addresses the growing technological advances and issues that allow today's consumers to conveniently shop from home. For more information, see <http://www.consumer.gov/ncpw>.

