

Happy Halloween

Site Preparation Before Planting Any Crop - Controlling Perennial Weeds Doug Doohan

Perennial weeds such as quackgrass, Canada thistle and bindweed spread and reproduce mainly by underground root stocks or rhizomes. A plowed and disced field may appear to be free of these weeds; however, unless steps were taken prior to tillage to control the underground portions re-infestation is often rapid. Perennials are difficult and costly to control once a crop has been planted. Glyphosate (Roundup Ultra or Touchdown) applied directly to perennial weed foliage before plowing and planting is the most effective means of control. However, herbicide application must be timed correctly and the right rate must be used. Quackgrass and many broadleaf perennial weeds are best controlled with fall applications. Do not plow after harvest. Quackgrass (and most other grasses that might occur in the field) should be at least 8 inches tall when treated. Fall frosts before spraying will generally not affect control provided at least 60% of the foliage is still green when you spray. An extended period of drought just before spraying may adversely affect control.

For long-term control of quackgrass in sod ground use Roundup Ultra at 1 2 quarts per acre or Touchdown at 3.33 pints per acre. Use the 1 quart per acre rate of Roundup Ultra in 5 to 10 gallons of water per acre on land that has been in row crops. The 2 quart per acre rate will provide longer lasting control when spraying sod. After spraying, wait at least three full days (72 hours) before plowing but generally don't delay plowing more than seven days. Dandelions and some other broadleaves are killed more rapidly with tank-mixes of either Roundup Ultra or Touchdown with 2,4-D amine (add 2,4-D at a rate of 1 pint per acre).

Quackgrass may recover somewhat from the treatment if tillage is delayed until the foliage has turned brown. When planning spring applications of glyphosate don't fall plow, simply wait until quackgrass reaches the right growth stage (four to five new leaves in this scenario) and spray. Spring applications will generally not provide good control of broadleaf perennials.

Canada thistle can be treated in the flower bud stage or beyond in late spring or during the rosette to bud stage during late summer or fall. In summer fallow systems tillage should stop in late July and thistles allowed to regrow for at least 5 weeks. Apply Roundup Ultra or Touchdown when Canada thistle regrowth reaches the flower bud stage or is at least 10 to 12 inches high. Apply Roundup at 2 3 quarts per acre in 5 to 10 gallons of water or Touchdown at 2 quarts per acre. Spot sprays of a 2 % solution (0.5 pints in 6 gallons of water) of either herbicide will also be effective.

Bindweed must be treated when it is actively growing and at or beyond bloom. Fall treatment is best but apply herbicides before a killing frost. Apply Roundup Ultra at 3 to 4 quarts per acre or Touchdown at 5.33 pints per acre. Alternatively, spot spray with a 2 % solution of either product.

Water volumes and adjuvants are always questions with glyphosate. Generally, low water volumes of 5 to 10 gallons per acre provide best weed control. If higher water volumes must be used, use the maximum rate for the weed to be controlled. An alternative at high water volumes is to add a non-ionic surfactant at 0.5 % (1 pint in 25 gallons) or ammonium sulphate to the spray mix at 2 to 4 pounds per acre (always add the ammonium sulfate to the water before adding glyphosate).

Wouldn't it be easier just to use less water?

Hard water antagonizes glyphosate activity. Generally, hard water with more than 500 parts per million of calcium or magnesium will reduce glyphosate activity. If hard water must be used, keep the water volume low (5 gallons per acre) or increase the rate of herbicide. Use clean water! Silt, clay and organic substances in water will also reduce glyphosate activity.

Reports on Reactions of Sweet Corn Hybrids To Common Sweet Corn Diseases Are Now Available

Report Authors: Jerald Pataky, P. M. Michner, and N. D. Freeman, Dept. Of Crop Sciences, University of Illinois, Urbana, IL 61801

Common rust, Stewart's bacterial wilt, maize dwarf mosaic - MDM, northern leaf blight - NLB, southern leaf blight - SLB, and southern rust can significantly reduce yields of susceptible and moderately susceptible sweet corn hybrids. Resistance and susceptibility to these diseases differs among commercial hybrids. The level and type of resistance must be known in order to select hybrids for disease management. Since Ohio growers were affected by these diseases last year and in previous years, it is highly advisable to consult these reports when making cultivar selections for the 1998 growing season.

In the 1998 hybrid disease nursery report, the authors evaluated 262 hybrids. Maturity of the hybrids ranged from 60 to 100 days. Standard hybrids with consistent reactions to rust, Stewart's wilt and NLB were included to compare the 1998 trial results to those from previous years. The Reactions report summarizes data from all nurseries since 1984 and lists the reactions of 601 hybrids that are available commercially. Since reactions can vary among years, average reactions based on at least three years of data are more accurate than those based on one or two years. Since 1984, over 1,900 hybrids have been evaluated for disease reactions at the Univ. of Illinois, Urbana- Champaign.

How To Get The Reports:

There are several methods to obtain these reports:

1. 1998 Midwestern Vegetable Variety Trial Report. Each year, these reports are published in this bulletin, from Purdue University. The bulletin is usually available by mid-late December and I will announce when it is ready. This bulletin is also sold at our OH Congress in February.

For those who make early decisions:

2. E-Mail.

I have copies of the reports in MS Word file format. If you work with this file format, I can e-mail them to you as a file attachment. To request the reports, e-mail me at: precheur.1@osu.edu

3. Hard Copies.

I can copy the reports and can mail them to you. The reports are too large to be faxed. My phone number is 614- 292-3857. If I am not in, just leave you name and address.

What's New At The VegNet Web Site

First Look At... Ohio Fruit and Vegetable Congress, Feb. 1999 Complete Truck Crops, Processing Crops and Potato Programs. Visit: "The Talk Between the Rows". In: "Problem Of The Week": Late Blight Warning for OH Greenhouse Tomatoes plus problems from previous weeks.

In The Pumpkin Patch, JULY 1998, My Pumpkins Are Bigger Than Yours Returns, See: Bacterial Wilt, Angular Leaf Spot and Crop Status.

Visit: "The Problem of The Week" For Pictures of...

Septoria Leaf Blight and Phytophthora Blight of Tomato.

Angular Leaf Spot, Buckeye Rot and Phytophthora Blight of Cucurbits.

Timber Rot and Hail Damage.

The Meigs /Washington Vegetable Tour from SE Ohio, (Sweet corn, tomatoes + peppers)

Check Out the New Look of the Tomcast Section (requires your browser to be able to view frames.)

+ A New Tomato Research Report by C. A. Wyenandt, R. M. Riedel, M. Bennett and C. Welty.

From The Vegetable Crops Planner: Links now provided to the National Weather Service Offices in Cleveland and Wilmington, OH. Provides Agricultural Observations, soil temperatures, climate summaries, growing degree days and much more.

1998 Ohio Vegetable Production Guide - Online. Visit: "The Library

Return to Vegetable Crops Homepage Ohio State University Extension

We appreciate very much the financial support for this series of vegetable reports which we have received from the board of growers responsible for the Ohio Vegetable and Small Fruit research and Development Program. This is an example of use of Funds from the "Assessment Program".

Where trade names are used, 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 the responsibility of consulting the pesticide label and adhering to those directions.

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