Preplant Site Preparation: Before Planting Brambles, Control Perennial Weeds

Controlling perennial weeds before planting brambles is important to minimize competition between the crop and weeds during the establishment and later years of production. Uncontrolled weed growth in the planting also exacerbates disease problems in brambles by maintaining high moisture levels on foliage and stems of the crop and reducing (minimizing) air movement through the plantation. Wild brambles, such as wild blackberry, serve as a source of disease innocuous to the crop and must be completely eliminated from the field and immediate surroundings prior to planting.

Quackgrass, Canada thistle, wild brambles and field bindweed spread and reproduce mainly by underground root stocks or rhizomes. A plowed and disked 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. When used in combination with tillage, glyphosate (Roundup Ultra or Touchdown) applied directly to perennial weed foliage before plowing and planting is the most effective means to control most perennials. Herbicide application must be timed correctly and the right rate used. The following treatments will provide the best control of perennials and will control emerged annual weeds as well.

Quackgrass and many broadleaf perennial weeds are best controlled with fall applications. Do not plow after harvest. Quack grass (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 quack grass in sod ground, use Roundup Ultra at 1 to 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 Ohio Fruit ICM News February 18, 1999

days (72 hours) before plowing, but generally don't delay plowing more than seven days. Quack grass 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 quack grass 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.

Dandelions and some other broadleaf weeds 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). However, the risk of damaging sensitive vegetable or fruit crops with 2,4-D drift or spray-tank residue is high!

Canada thistle can be treated in the flower bud to flowering in late spring or during the rosette to flower 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 before a killing frost and when Canada thistle regrowth reaches the flower bud stage or is at least 10 to 12 inches high. Apply Roundup Ultra at 2 to 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.

Field 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.

"Brambles" refers to the collective group of wild Rubus species, including several wild blackberries, etc. Brambles are persistent, and more than one season of control measures may be required to completely eradicate them. Use a foliage and stem treatment of 2,4-D and 2,4-DP (various factory formulated mixes available) at a rate of 2 to 4 quarts per acre of product in 100 gallons of water. Apply at any point from the time leaves are completely mature until plants start to go dormant, being sure to completely cover all foliage and canes.

Spot sprays or wiper applications of Touchdown or Roundup Ultra can be used to control small patches of perennials in most crops after emergence or transplanting. The risk of localized crop injury is very high, thus these treatments should be applied by skilled operators.

**Weed Management in Established Plantings**

**Immediately After Planting**

Apply Devrinol 50-DF at 8 pounds per acre soon after planting, once the soil has settled around the plants and before seedling weeds emerge. It can control most grasses from seed and some broadleaf weeds from seed. May require irrigation or shallow mechanical cultivation to activate the herbicide if rainfall does not occur. Devrinol 50 DF can also be applied in the fall to freshly tilled ground to control winter annual weeds. In fruiting years, do not apply this product after first bloom.
Apply simazine at 0.5 pounds a.i. per acre after planting, once the soil has settled around the plants. Simazine is most effective if applied before weed emergence and controls annual broadleaf weeds emerging from seed. Generally with simazine, avoid pH above 6, very light, sandy soil and soils with less than 2% OM. In subsequent years, use 1.0 pounds a.i. per acre. Various formulations are available, and product rates for use in the planting year are provided.

Drexel Simazine 4L, Princep 4L and Riverside Simazine 4L: apply 1 pint per acre.

Drexel Simazine 90DF, Caliber 90 and Riverside Simazine 90DF: apply 0.55 pounds per acre.

Apply Surflan A.S. at 2 to 6 quarts per acre after planting and before seedling weeds emerge. Length of control varies with rate used. Surflan controls a number of annual grasses and broadleaf weeds emerging from seed. A 0.5 to 1 inch of rain or irrigation is required within 21 days to activate the herbicide. Surflan can be used in subsequent years as well.

Research in Ohio shows pre-emergent dandelion control by mixing 1.3 pounds per treated acre of Galley 75DF with Surflan. Galley also controls several other broadleaf weeds.

**Controlling Emerged Grasses**

Apply Fusilade DX at 1 to 1.5 pints per acre to emerged annual grasses 2 - 8 inches tall. A non-ionic surfactant or crop oil must be added to the spray tank. Perennial grasses are sensitive, but time of application is species specific (information provided on the label). THIS PRODUCT REGISTERED FOR PLANTING YEAR ONLY.

**Controlling Emerged Weeds**

Apply dichlobenil at 4 pounds of a.i. per acre to established plantings in the late fall or winter, but before any growth commences in the spring. Apply the herbicide in a band under the row to give the desired weed-free zone. Be careful to adjust the rate used to account for the band width. Dichlobenil controls many emerged annual and perennial grasses and broadleaf weeds. Two products are available:

Casoron 4G applied at 100 pounds per treated acre, or Dyclomec 4G applied at 100 pounds per treated
Importance of Fruit in Your Diet

Source: Linda Boeckner, Extension Nutrition Specialist, Panhandle Research & Extension Center, Univ. of Nebraska

Nationally, Americans eat about ten servings of fruit and juices each week, far fewer than the USDA's recommendation of two to four servings each day.

Fruits are good sources of the mineral potassium, as well as vitamins A and C. Potassium works in combination with sodium to contract and expand muscles, maintain water balance between cells, and transmit nerve impulses. Fruits high in potassium include bananas, oranges, grapefruits, tomatoes, apricots, and pineapples.

Nearly two-thirds of the vitamin C in our diets comes from fruits. Citrus fruits such as oranges, grapefruits, or lemons are the best sources of vitamin C, but berries are also good sources. Vitamin C helps form the collagen that gives structure to bones, cartilage, and muscles. Vitamin C also helps our bodies absorb iron from foods.

Deep yellow fruit, such as apricots or cantaloupe, are good sources of beta carotene. Beta carotene converts to vitamin A inside the human body. Some research hints at a possible link between beta carotene and prevention of certain types of cancer. While these studies are not yet complete, the evidence encourages us to add beta carotene from food sources to our diets.

Include fruits as a part of your meals or snacks throughout the day. Remember, fruit juices are also part of the fruit group. Drink them as a single juice or a blend of juices. Juices should be labeled 100 percent fruit juice, not fruit-ades of fruit drinks. Of course, whole fruits are higher in fiber than fruit juices. The variety of colors, shapes, and flavors found in fruits can add interest and nutritional value to any meal.

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