

# Weed Control Around Poultry Houses and Other Farm Buildings

Research has shown that poultry farms with neat, well-cared-for farm homes, yards, storage facilities, and farm buildings are the most profitable. Farmers who take pride in their farmstead and pay attention to details also manage their poultry houses for maximum performance and top money. Because weeds growing outside the poultry house can affect bird performance, weed control is important to the long-term success of the business.

A weed is any plant growing out of control or growing in a place where it is not desired. Weeds around poultry houses and other farm buildings can harbor pests such as rats, mice, flies, ants, and snakes. Weeds not only detract from the appearance of the farm operation, but they can also interfere with proper air circulation, causing health problems to poultry and other animals. Grass growing close to buildings can be a fire hazard.

Farmers can eliminate problems caused by weeds growing around poultry houses by removing all vegetation in a narrow band along the edges of buildings. To remove weeds, farmers can use:

- Nonchemical methods, such as mowing or cutting.
- Chemical treatment.
- A combination of methods.

Before removing all vegetation from a particular area, farmers should consider the potential

for soil erosion. If buildings are surrounded by steep slopes, some ground cover will be necessary to prevent soil erosion and chemical runoff. Building structure is also a factor because of water coming off eaves. If this runoff is likely to cause soil erosion, some vegetation is needed.

## Nonchemical Control: Cutting And Mowing

Cutting or mowing weeds and grass around poultry buildings helps limit threatening pests. Grass 3 to 4 inches high provides resting places for flies during hot weather. Unmowed grass, tall weeds, and brush provide cover for rats, mice, snakes, fire ants, and litter.

Cutting and mowing can also help control weed growth and prevent seed production of annual weeds which do not reproduce below cutting height. Perennial weeds are more difficult to control since they grow from underground vegetative parts. Repeated mowing for 2 or more years may deplete underground food reserves and control some perennial weeds. However, mechanical removal of all these underground structures to prevent resprouting is impossible; therefore, most perennials will require some chemical control.

## Chemical Control

Clumps of unwanted brush and tall weeds can be spot treated with herbicides—chemicals that control weeds. Herbicides

are generally applied when the weeds are actively growing. However, weed size and environmental conditions will determine the safety and effectiveness of herbicide applications.

The size of the weeds to be controlled will determine the rate and amount of herbicide needed. Optimum conditions for herbicide treatment are affected by the environment. Weather conditions too hot, cold, dry, or wet can limit effectiveness, delay applications, and prevent control.

All successful weed control programs start with the identification of the pest. Proper identification is important to select an effective herbicide.

## Selectivity Of Herbicides

Herbicides can be either selective or nonselective. Selective herbicides affect only certain kinds of plants. For example, some herbicides control only grass weeds. Other herbicides control only broadleaf weeds and brush. The herbicide triclopyr is selective because it controls broadleaf weeds, but not grasses.

Nonselective herbicides control both grass and broadleaf weeds. Glyphosate is a nonselective foliar-applied herbicide that is rapidly tied up on contact with mineral soil. Glyphosate is available in several concentrations under the trade names ROUNDUP, RATTLER, and JURY.

Prometon is the active ingredient in total vegetation control products such as PRAMITOL and PROMETONE. This chemical lasts for long periods in the soil and can injure turf or gardens downslope of application site or can injure trees and shrubs with roots in the treated areas.

## **Timing Of Herbicide Application**

Proper application is necessary for the success of any herbicide treatment. Soil-active herbicides should be applied uniformly over a given area. Foliar-translocated herbicides should be applied uniformly to the foliage of vegetation at the proper time. Both soil and foliar-active herbicides require proper timing and good coverage for effective performance.

Preemergence herbicides are applied to the soil and are absorbed by the seed or by the roots or stems of tiny seedlings before the plants emerge from the soil. Postemergence herbicides are applied after weeds have emerged from the soil. Postemergence herbicides generally act through the foliage of the plant. Some herbicides that are used for preemergence weed control can also control small, actively growing emerged weeds. See the table for a description of preemergence and postemergence herbicides.

## **Preventing Injury To Nontarget Vegetation**

The major sources of herbicide injury to off-site vegetation are from spray drift and volatility. When injuries occur, the damage is near the area treated and might have been avoided by a more careful application.

One important factor herbicide applicators should be aware of at all times is spray drift: the movement of airborne spray particles from the target area. Foliar-active herbicides can be injurious if the spray moves to nontarget plants near the treatment area. The amount of drift depends primarily on droplet size (the smaller the droplet the longer it takes to reach the ground), the wind velocity, and the height above the ground that the spray is released. Herbicides should be sprayed only when wind speed is less than 3 MPH. The danger to nontarget plants, both on and off site, should always be considered.

Volatility refers to the tendency of a chemical to vaporize or give off fumes. Vapor drift may damage susceptible plants or reduce the effectiveness of the herbicide treatment through loss. Chemicals differ in volatility. The herbicides listed in the table are not classified as volatile formulations. Herbicides should be applied when there is little or no wind, when daily temperatures are less than 90°F, and when ventilation fans are off.

## **Protecting Groundwater**

Groundwater protection is a major concern with herbicide use. Pesticides may move (leach) through the soil to groundwater. When herbicides are applied to the soil, soil texture and organic matter play a key role in herbicidal activity. Herbicides tend to leach more readily in coarse-textured sandy soils with low organic matter content. Herbicides that are highly soluble in water have increased leaching potential. Leaching can be minimized by proper herbicide selection, use rate, timing, and method of application. Herbicides that

break down slowly have a greater potential for soil leaching. In general, herbicides that are highly water soluble, relatively persistent, and not readily absorbed by soil have the greatest potential for soil leaching. High water tables are especially vulnerable to contamination by herbicides due to the relatively short distance between the soil surface and groundwater. The potential for groundwater contamination is great in areas with coarse-textured soils and high water tables. In these sensitive sites, herbicide use should be limited.

## **Applying Herbicides Safely**

The most important step in safe application of herbicides is reading and following label directions. Each herbicide has specific application information on the label. These application instructions—as well as disposal directions—should be followed carefully. In addition, equipment should be properly calibrated. Following directions and calibrating equipment provides best weed control results and also minimizes the possibility of groundwater contamination.

## **Conclusion**

By following the recommendations in this publication, farmers can protect themselves, their flocks, and the environment while enhancing the farmstead appearance and promoting a more efficient operation.

## Preemergence And Postemergence Herbicides

Product	Weed	Rate	Comment
<b><i>Preemergence</i></b>			
prometon PRAMITOL 25E	Susceptible weeds —goosegrass —goldenrod —plantain  Hard-to-kill weeds —johnsongrass —wild carrot —dallisgrass —bermudagrass	4-6 gal./A. in 50-100 gal. water/A. 1-1.5 pt./1,000 sq. ft. in 2-3 gal. water  7.5-10 gal./A. in 50-100 gal. water/A. 22-29 fl.oz./1,000 sq. ft. in 2-3 gal. water	Product is useful in areas where total vegetation control is desirable. Labeled for use around farm buildings. May inhibit plant growth for 1 or more years. Product should not be used in the root zone of desirable plants.  Application should be made before weeds emerge or when weeds are small and actively growing. Rate is dependent on climatic conditions, soil type, weeds present, and stage of growth. Higher rates are used when application is made to heavy soils, under heavy rainfall conditions, when hard-to-kill weeds are present, or when longer residual control is desired.
diuron KARMEX DF	General weed control	5-15 lb./A. 2-6 oz./1,000 sq. ft. in 4 gal. water	Product is effective in situations where bare ground is desired. Degree of control and duration of effect will vary with rate applied, soil texture, and rainfall conditions. Labeled for use to control vegetation around farm buildings.  Best results are obtained when application is made to soil shortly before weed growth begins. Existing top growth of weeds should be removed prior to making application to soil. Application to control small actively growing weeds should be made when daily temperatures exceed 70°F. A nonionic surfactant should be added at the rate of 1 to 2 quarts per 100 gallons of spray mix. Continuous agitation is needed during application to keep herbicide in suspension. Product should not be used on sand, gravelly soils, or exposed subsoils.
<b><i>Postemergence</i></b>			
imazapyr CONTAIN 1EC	Susceptible grasses and broadleaf weeds  Moderately sensitive weeds  More tolerant perennial weeds, brush, and trees	4-6 pt./A. 1.33 fl.oz./1 gal. water = 1% soln.  6-8 pt./A. 2 fl.oz./1 gal. water = 1.5% soln.  8-12 pt./A. 2.67 fl.oz./1 gal. water = 2% soln.	Product controls most annual and perennial grasses, broadleaf weeds, and brush around farm buildings. Spray should not be applied near desirable plants or within the root zone of such plants. Product should not be applied if it is likely to move off site in runoff water.  For maximum activity, especially on perennials, postemergence treatment should be made to actively growing weeds. For consistent results, foliage of vegetation to be controlled must be uniformly covered with the spray solution. Application should not be made to the point of runoff. The residual nature of this product will provide preemergence control of many weed species.
<b><i>Table continued on next page</i></b>			

## Preemergence And Postemergence Herbicides (*continued*)

Product	Weed	Rate	Comment
<b>Postemergence</b>			
glyphosate ROUNDUP 4L	Herbaceous annual and perennial weeds	1-5 qt./A. 1.25-2.5 fl.oz./ 1 gal. water = 1-2% soln.	Product provides postemergence foliar control of actively growing herbaceous weeds. Best control of perennial weeds is obtained when treatment is made at late growth stages approaching flowering or maturity. Several products sold under other trade names contain the same active ingredient. These products usually require the use of a non-ionic surfactant in all spray treatments. Label of the appropriate product will contain additional information.  A 0.5% nonionic surfactant (2 quarts per 100 gallons of spray mix or 4 teaspoons per gallon of water) should be added when spot treatments are made with hand held equipment or when application is made in spray volumes greater than 25 gallons per acre. The higher rate per acre within the rate range on the label should be used when weed growth is heavy or dense or when weeds are growing in an undisturbed area.  Roundup does not provide residual control of problem weeds. Uniform and complete spray coverage is necessary for best results. Spray should not be applied to the point of runoff.
triclopyr GARLON 4  GARLON 3A	Herbaceous broadleaf weeds and susceptible woody plants	1-4 qt./A. 3 qt./100 gal. water = 0.75% soln.  0.33-1.5 gal./A. 1 gal./100 gal. water = 1% soln.	Product provides postemergence control of many herbaceous broadleaf weeds and some woody plants. Uniform and complete coverage of foliage is necessary for best results. Target weeds should be actively growing at time of treatment.  Herbicide provides little or no residual weed control but should not be used within the root zone of desirable trees and plants. High rates may injure or kill perennial grasses.
A.=acre; fl. oz.= fluid ounce; gal.=gallon; lb.=pound; oz.=ounce; pt.=pint; qt.=quart; soln.=solution; sq. ft.= square feet			

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Use pesticides **only** according to the directions on the label. Follow all directions, precautions, and restrictions that are listed. Do not use pesticides on plants that are not listed on the label.

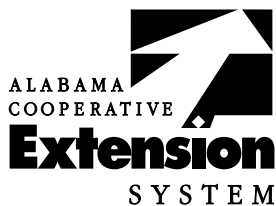
The pesticide rates in this publication are recommended **only** if they are registered with the Environmental Protection Agency and the Alabama Department of Agriculture and Industries. If a registration is changed or cancelled, the rate listed here is no longer recommended. Before you apply any pesticide, check with your county Extension agent for the latest information.

Trade names are used **only** to give specific information. The Alabama Cooperative Extension System does not endorse or guarantee any product and does not recommend one product instead of another that might be similar.

**For more information**, call your county Extension office. Look in your telephone directory under your county's name to find the number.

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