



# Home Garden Vegetables

## Weed Control Recommendations for 2011

### WEED CONTROL

Good weed control may determine to a large extent the success of your home garden. Weeds compete with the crop for soil moisture, sunlight, space, and plant nutrients. They compound disease problems and serve as hiding places for insects. Also, weeds may prevent dusts and sprays from thoroughly covering your garden plants, resulting in poor pest control.

Weeds can usually be divided into two groups—grasses and broadleaf weeds. Grasses are multistemmed plants with fibrous root systems. Once grasses become established, they are difficult to control without injuring the vegetable crops. Grasses are very competitive in gardens and make harvesting difficult. Many broadleaf weeds grow upright and have taproot systems which make them easier to pull than grasses; therefore, the vegetables receive less injury.

**Preventive Weed Control.** New weed seed may be brought into a garden on plows or tillers that have been used in weedy areas. Poultry litter, compost and manures sometimes contain troublesome weed seed. Weedy hay used for mulch may bring an number of new weed problems. Occasionally, home-saved vegetable seed may also include some weed seed.

Most of the weed problems in the garden are homegrown problems. That is, they come from weed seed produced in the garden in years past. Season-long weed control to prevent weeds from reseeding should be a basic part of any weed control program. Controlling weeds by preventing them from making a seed crop may be a long-term process, but in the end it is the only sure way to control this problem.

**Mechanical Weed Control.** Historically, gardeners have used hoeing, plowing, hand-pulling, and mulching to control weeds. Mechanical control methods used on a regular and continual basis provide good weed control for serious gardeners. This usually means frequent light cultivations with a plow and hoe to destroy weeds in the two- to four-leaf stage. A few minutes spent destroying the flush of weeds that usually emerge after every rain is much more effective than hours or days spent trying to destroy established weeds.

Many gardeners have too large a garden to control weeds in the time available for that task. A few well-managed rows may produce greater yields of higher-quality vegetables than a larger area tended in a slipshod manner.

Mechanical weed control gives immediate results. There are no problems of uniform application, drift, and residues as with chemicals. Weeds may be controlled mechanically under

a wide range of soil moisture conditions, and very little skill is required. Also, mechanical methods may be used as often as needed. Mechanical weed control is the most practical approach to weed control in small gardens. The greatest weakness of mechanical methods is the lack of residual control.

**Mulching.** Mulch can be a valuable asset in controlling weeds in perennial and long-season crops like asparagus, strawberries, tomatoes, and peppers. Six inches of pine straw or 3 inches of leaves or well-decomposed sawdust will help suppress most weed problems. Mulch also helps keep the soil surface cool and cuts down the evaporation of soil moisture. Many gardeners clean-cultivate and mulch heavily to control weeds later in the season in crops like tomatoes, peppers, and okra because late cultivation could damage these large, spreading plants.

Mulch gradually decomposes during the season, and sometimes this may cause plants to develop a slightly yellow cast. A light application of about 1 pint of ammonium nitrate per 100 feet of row will usually correct this problem. Additional mulch may be added as needed when the older material settles or decomposes. At the end of the season, the mulch can be turned under or incorporated to add organic matter to the soil.

**Chemical Weed Control.** There are very few herbicides labeled and available for use in the home garden. These herbicides are discussed in the following table. These herbicides control only annual grasses and, in some cases, small-seeded broadleaf weeds. They usually do not give acceptable control of most broadleaf weeds.

You may choose to use a herbicide to control grasses in the garden. However, you must be prepared to rely on hoeing, plowing, hand-pulling, and/or mulching to control broadleaf weeds that escape chemical treatment.

**Summary.** Because of the high variability among vegetable crops, weed problems, cultural practices, and soil types, no step-by-step weed control system has been devised. Using a combination of herbicide treatment, mechanical weed control, and mulching—capitalizing on the best features of each of these practices—is the best approach to weed control in the home garden.

**Precautions.** Always follow the manufacturer's directions printed on the label for handling and use. Store and discard containers properly.

<b>Home Garden Vegetables Weed Control</b>			
<b>Crops</b>	<b>Chemical Name And Trade Name (rate per acre)</b>	<b>Amount Per 1000 Sq. Ft.</b>	<b>Comments</b>
<b>PREEMERGENCE</b>			
Asparagus (established)	trifluralin		Apply to weed-free soil anytime from 6 weeks before up to planting. If bedded culture is used, apply after beds are formed. Trifluralin must be thoroughly incorporated into the soil to a depth of 1 to 1.5 inches. <b>To achieve this depth, set incorporating equipment to cut 2 to 3 inches deep. Incorporate immediately after application for best results.</b> However, incorporation may be delayed up to 8 hours after application. Controls crabgrass, goosegrass, fall panicum, foxtails, barnyardgrass, signalgrass, seedling johnsongrass, sandbur, Texas panicum, annual bluegrass, bromegrass, junglerice, stinkgrass, carpetweed, chickweed, Florida pusley, lambsquarter, pigweed, knotweed, purslane, and henbit.
Broccoli (transplants)	PREEN GARDEN	Coarse and medium soils: 0.75-1.0 lb.	
Brussels sprouts (transplants)	WEED PREVENTER	Fine soils: 1.5 lb.	
Cabbage (transplants)	1.47 % granules		
Cauliflower (transplants)	(33-65 lb.)		
Celery (transplants)	TREFLAN 4EC	Coarse and medium soils: 0.75 T.	
Collards	(1-1.5 pt.)	Fine soils: 1.125 T.	
English peas			
Irish potatoes			
Kale			
Lima beans			
Mustard greens			
Okra			
Peppers (transplants)			
Soup beans			
Southern peas			
Tomatoes (transplants)			
Turnip greens			
Field corn	atrazine		Spray soil surface immediately after planting or up to 3 weeks after planting, provided weeds are no taller than 1.5 inches. <b>DO NOT</b> plant fall vegetables in areas treated with atrazine. Thoroughly till soil before planting any spring crop other than corn. Must have 0.75 inch of rainfall or irrigation within 5 days after application. Atrazine is a <b>RESTRICTED USE</b> pesticide. Controls crabgrass, Florida pusley, Florida beggarweed, pigweed, teaweed, annual morningglory, sicklepod, lambsquarter, ragweed, smartweed, and cocklebur.
Sweet corn	AATREX 80 W or ATRAZINE 80 W (2.5 lb.)	Coarse and medium soils: 2T.	
	AATREX 4L or ATRAZINE 4L (2 qt.)	Coarse and medium soils: 2T.	
	AATREX 90DF or ATRAZINE 90DF (2.2 lb.)	Coarse and medium soils: 1.5 T.	
<b>POSTEMERGENCE</b>			
Asparagus	sethoxydim		Controls actively growing grass weeds. Unsatisfactory results may occur if grasses are under moisture stress at time of treatment. Does not control sedges (nutgrass) or broadleaf weeds. A repeat application at 1 pint per acre to perennial grass re-growth will be necessary for best result. See label for pre-harvest interval for different vegetable crops. Under conditions of high temperature and high humidity, some speckling or spotting may be observed on vegetable foliage. A crop oil concentrate <b>MUST</b> be added to spray mix to achieve grass control. Sethoxydim controls crabgrass, barnyardgrass, foxtails, goosegrass, junglerice, Texas panicum, fall panicum, annual ryegrass, and signalgrass. Johnsongrass and bermudagrass can be controlled with repeat treatments.
Brussels sprouts	POAST 1.5		
Cabbage	(1.5 pt.)	1 T.	
Cantaloupes			
Cauliflower	+	+	
Collards			
Cucumbers	Crop Oil Concentrate		
Dry beans	(2pt./A)	1.5 T.	
Eggplants			
Garlic			
Kale			
Mustard greens			
Onions			
Peppers			
Potatoes			
Pumpkin			
Squash			
Southern peas			
Sweet potatoes			
Tomatoes			
Watermelons			

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**For more information**, contact your county Extension office. Visit <http://www.aces.edu/counties> or look in your telephone directory under your county's name to find contact information.

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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.

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

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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.

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