

## Home Garden Vegetables

Weed Control Recommendations for 2008

## 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.

	Chemical Name And Trade Name	Amount Per	
Crops	(rate per acre)	1000 Sq. Ft.	Comments
		PREEMERGENCE	
Asparagus (established)	trifluralin		Apply to weed-free soil anytime from 6
Broccoli (transplants)	PREEN GARDEN	Coarse and medium	weeks before up to planting. If bedded
Brussels sprouts	WEED	soils: 1 lb.	culture is used, apply after beds are formed
(transplants)	PREVENTER	Fine soils: 1.33 lb.	Trifluralin must be thoroughly incorporate
Cabbage (transplants) Cauliflower	1.47 % granules (34-68 lb.)		into the soil to a depth of 1 to 1.5 inches.  To achieve this depth, set incorporating
(transplants)	(31 00 10.)		equipment to cut 2 to 3 inches deep.
Celery (transplants)	TREFLAN 4EC	Coarse and medium	Incorporate immediately after
Collards	(1-1.5 pt.)	soils: 0.75 T.	application for best results. However,
English peas	1 /	Fine soils: 1.125 T.	incorporation may be delayed up to 8 hour
Irish potatoes			after application. Controls crabgrass,
Kale Lima beans			goosegrass, fall panicum, foxtails,
Mustard greens			barnyardgrass, signalgrass, seedling johnsongrass, sandbur, Texas panicum,
Okra	TREFLAN 5%	Coarse and medium	annual bluegrass, bromegrass, junglerice,
Peppers (transplants)	Granules	soils: 0.25 lb.	stinkgrass, carpetweed, chickweed, Florida
Soup beans	(10-15 lb.)	Fine soils: 0.33 lb	pusley, lambsquarter, pigweed, knotweed,
Southern peas	,		purslane, and henbit.
Tomatoes (transplants)			
Turnip greens			
Field corn	atrazine		Spray soil surface immediately after
Sweet corn	AATREX 80 W or	Coarse and medium	planting or up to 3 weeks after planting,
	ATRAZINE 80 W	soils: 2T.	provided weeds are no taller than 1.5
	(2.5 lb.)		inches. <b>DO NOT</b> plant fall vegetables in
	AATREX 4L or	Coarse and medium	areas treated with atrazine. Thoroughly til soil before planting any spring crop other
	ATRAZINE 4L	soils: 2T.	than corn. Must have 0.75 inch of rainfall
	(2 qt.)		or irrigation within 5 days after application
			Atrazine is a RESTRICTED USE
	AATREX 90DF or	Coarse and medium	pesticide. Controls crabgrass, Florida
	ATRAZINE 90DF	soils: 1.5 T.	pusley, Florida beggarweed, pigweed,
	(2.2 lb.)		teaweed, annual morningglory, sicklepod. lambsquarter, ragweed, smartweed, and
			cocklebur.
		POSTEMERGENCE	
Asparagus	sethoxydim		Controls actively growing grass weeds.
Brussels sprouts	POAST 1.5	1 77	Unsatisfactory results may occur if grasses
Cabbage	(1.5 pt.)	1 T.	are under moisture stress at time of
Cantaloupes Cauliflower	plus	nluc	treatment. Does not control sedges (nutgrass) or broadleaf weeds. A repeat
Collards	plus	plus	application at 1 pint per acre to perennial
Cucumbers	Crop Oil Concentrate		grass re-growth will be necessary for best
Dry beans	(2pt./A)	1.5 T.	result. See label for pre-harvest interval for
Eggplants	· • /		different vegetable crops. Under condition
Garlic			of high temperature and high humidity,
Kale			some speckling or spotting may be
Mustard greens Onions			observed on vegetable foliage. A crop oil concentrate MUST be added to spray mix
Peppers			to achieve grass control. Sethoxydim
Potatoes			controls crabgrass, barnyardgrass, foxtails
Pumpkin			goosegrass, junglerice, Texas panicum, fal
Squash			panicum, annual ryegrass, and signalgrass
Southern peas			Johnsongrass and bermudagrass can be
Sweet potatoes			controlled with repeat treatments.
Tomatoes			

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## 2008IPM-1307

**For more information,** call your county Extension office. It is listed in your telephone directory under your county's name.

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 or 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.

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