

## Rutgers Cooperative Extension

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# EGGPLANT INTEGRATED WEED MANAGEMENT FIELD GUIDE

## Year Prior to Planting Eggplant:

If an analysis of soil texture has never been done or when cropping patterns change or significant erosion occurs, obtain a sample in the manner outline below and submit to a laboratory for analysis prior to the year in which you are to grow eggplant.

Procedure	How to Sample	Use of This Information	Additional Notes
<b>Analysis of Soil Texture, pH, Cation Exchange Capacity (CEC), Organic Matter</b>	Using a county soil map, identify the different soils in the field. Take a sample from each area where soil types differ. Submit to lab for analysis of texture (mechanical analysis) and organic matter.	With this information an integrated weed management program can be designed using cultural and/or chemical controls for each soil type in a field. Soil type and pH differences within a field affect rate of application, carryover and other interactions.	CEC may or may not be a standard part of the soil test for analysis of fertility & pH, but soil texture is not. Soil texture is an important part of an integrated weed control program affecting both choice of herbicides and rates used.

## Season Prior to Planting Eggplant:

Weeds	Sampling	Frequency	Threshold	Notes
<b>Annual &amp; Biennial Weeds</b>	Scout field in a zigzag pattern, sampling 10 random locations. Either sample 1 square yard or 10 ft. of row at each location, depending on which scheme works best with the field. Identify the weeds, count number of each species. Note whether specific weeds are scattered throughout the field or predominate in one area of the field.	once in late summer	Number of weeds per 10 ft. of row or 1 square yard: < 1 weed = very light 1-4 weed = light 4-10 weeds = medium 10-100 weeds = heavy > 100 weeds = very heavy	Note whether any herbicide was used in the field during the season. If possible, leave a check plot with no herbicide to learn what weeds are potential problems.
<b>Perennial Weeds, Galinsoga, Common Purslane, or Nightshade species</b> (277, 1326)*	Scout for these weeds with the annual and biennial weeds, but map the presence of these weeds.	once in late summer	presence of perennial or noxious weeds	Review "Postharvest Perennial Weed Control" for information on controlling perennial weeds. (292)

## Preplanting Decisions:

1. Use previous season's weed scouting results and maps to select control strategies. Consult County Extension Agent for weed control options. If choosing chemical control, match preplant incorporated and preemergence herbicide rates to soil type and percent organic matter in the field.

## Planting to Pre-fruit Stage

(three weeks after transplanting)

Weeds	Sampling	Frequency	Threshold	Notes
<b>Summer Annuals</b>	Scout field in a zigzag pattern, sampling 10 locations. Sample 1 square yard in 5 random locations and 10 ft. of row in another 5 random locations. Identify weed species and whether weeds are mostly in the row (those that would be left by cultivation) or between rows (those that would be removed by cultivation). Results of previous year's scouting helps with ID of small weeds at this scouting.	Once 15 - 20 days after transplanting.	<b># weeds/10 ft. row or 1 sq. yd.</b> <0.25 weed = no control required 0.25 - 1 weed = some control may be required. > 1 weed = control required.	This is the most critical time for weed control decisions. Weeds between rows may be cultivated out. Weeds within the row may require an herbicide treatment or hand weeding, depending on species present.
<b>Perennial Weeds: Canada Thistle, Common Milkweed, Hemp Dogbane, Bindweed spp., Johnsongrass, Bermuda Grass, Quackgrass, Yellow Nutsedge, Horsenettle</b> <b>Zero Tolerance Weeds: Ground Cherry, Common Cocklebur, Jimsonweed, Nightshade spp., Galinsoga, Common Purslane</b>	Note the presence of any of these weeds while scouting as outlined above. Map where these weeds are found and whether they appear within the row or between rows.	Once 15-20 days after transplanting	Presence of these weeds.	Galinsoga and common purslane reeroot from cuttings.
<b>All Weeds</b>	Scout in the same manner as outlined above to evaluate how well the weed control strategies implemented after the three week scouting have worked.	1 week after the implementation of weed control measures	Use same thresholds.	Institute controls to bring weed populations under the threshold level.

\***Bolded numbers in parenthesis indicate sources of additional information found in the Mid-Atlantic IPM database by this special reference number.**

Scouting procedures, thresholds, and crop management recommendations have been compiled from a number of sources and may not be valid for all areas within the Mid-Atlantic Region. They are meant to be used as guidelines. As such, they should be validated on small acreages before relying on them. No guarantee of their validity, success, or failure to perform in the field is implied or expressed. Consult your local Cooperative Extension Agent for additional information or assistance.