Rutgers Cooperative Extension
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GREEN ONION AND LEEK
INTEGRATED WEED MANAGEMENT FIELD GUIDE

Season Prior to Planting Green Onions or Leeks

Procedure	HOW TO SAMPLE	USE OF THIS INFORMATION	ADDITIONAL NOTES
Analysis of Soil Texture, Cation Exchange Capacity, Organic Matter and pH	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 by mechanical analysis and for analysis of Cation Exchange Capacity (CEC), organic matter (OM), and pH.	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.	Mechanical analysis generally only needs to be done once unless there is significant erosion or changes in cropping patterns. CEC and pH should be analyzed annually. Organic matter analysis should be done every 5 - 10 years.

Scout once prior to harvest of current crop to determine weed potential for next season's onions or leeks.

Weeds	Sampling	Threshold	Notes
Zero Tolerance Weeds (ZTW) = Nightshades, Horsenettle, Yellow Nutsedge, Morning Glory, Jimsonweed, Common Cocklebur, Canada Thistle, Common Milkweed, Hemp Dogbane, Bindweed spp., Johnsongrass, Bermudagrass, Quackgrass (277, 1326)*	Scout field in a zigzag pattern. Sample 10 random locations 1 square yard in size or 10 ft. of row, whichever pattern best suits existing conditions. Map the location of these weeds.	Presence	See "Postharvest Perennial Weed Control" for treatment options in the fall. **(292)**
Summer Annuals Galinsoga, Common Cocklebur, Jimsonweed (277, 1326)	Scout as outlined above for the presence of existing weeds. Potential weed problems are best identified by a non treated weedy check. Identify the weeds, count # of each species. Note whether specific weeds are scattered throughout the field or predominate in one area of the field.	Number of weeds per 10 ft. of row or 1 sq. yd. < 1 weed = very light 1-4 weed = light 4-10 weeds = medium 10-100 weeds = heavy > 100 weeds = very heavy	Untreated check provides the most reliable information about weed potential for the coming year.

Pre-planting 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. **(292)**

Fall Seeded Green Onions or Leeks

Three Weeks After Emergence or Transplanting

Weeds	How to Sample	When	Threshold
Zero Tolerance Weeds = Nightshades, Horsenettle, Yellow Nutsedge, Morning Glory, Jimsonweed, Common Cocklebur, Canada Thistle, Common Milkweed, Hemp Dogbane, Bindweed spp., Johnsongrass, Bermudagrass, Quackgrass **Summer Annuals (SA)** **(277, 1326)**	In a zigzag pattern, scout 1 sq. yd. in 5 random locations and 10 ft. of row in another 5 random locations. Identify species, count # of each weed species. Map location of zero tolerance weeds. Determine whether weeds are predominantly within the row or between rows.	Once approximately 3 weeks. after transplanting.	**# weeds/10 ft. row or 1 sq. yd.** **Action** ZTW: Presence Control required. SA: < 0.25 weed None 0.25 - 1 weed Control may be required > 1 weed Control required Whether weeds are within the row or between the row determines if cultivation will be an effective control.
All Weeds **(277, 1326)**	Same as above.	1 week after control measures are implemented from the 3 week scouting.	This information is used to evaluate how well controls worked.

Late Winter - March

Weeds	How to Sample	When	Threshold
Winter Annuals **(277, 1326)**	In a zigzag pattern, scout 1 sq. yd. in 5 random locations and 10 ft. of row in 5 random locations. Identify species, count # of each weed species. Determine whether weeds are predominantly within the row or between rows.	Approximately 6 weeks after emergence or trans-planting.	**# weeds/10 ft. row or 1 sq. yd.** **Action** < 0.25 weed None 0.25 - 1 weed Control may be required > 1 weed Control required Whether weeds are within the row or between the row determines if cultivation will be an effective control.

Preharvest

Weeds	Sampling	Frequency	Notes
All Weeds **(277, 1326)**	Sample 1 sq. yd. in 5 random locations and 10 ft. of row in 5 random locations.	Once prior to harvest.	If weeds are present that will interfere with the harvesting operation, some form of control needs to be implemented.

Spring Planted Green Onions or Leeks

Three Weeks After Emergence or Transplanting

Weeds	How to Sample	When	Threshold
Zero Tolerance Weeds = Nightshades, Horsenettle, Yellow Nutsedge, Morning Glory, Jimsonweed, Common Cocklebur, Canada Thistle, Common Milkweed, Hemp Dogbane, Bindweed spp., Johnsongrass, Bermudagrass, Quackgrass **Summer Annuals (377,1366)**	In a zigzag pattern, scout 1 sq. yd. in 5 random locations and 10 ft. of row in another 5 random locations. Identify species, count # of each weed species. Map location of zero tolerance weeds. Determine whether weeds are predominantly within the row or between rows.	Once approximately 3 wks. after trans-planting.	**# weeds/10 ft. row or 1 sq. yd.** **Action** Zero Tolerance Weeds: Presence Control required. Summer annuals: < 0.25 weed None 0.25 - 1 weed Control may be required. > 1 weed Control required Whether weeds are within the row or between the row determines if cultivation will be an effective control.
All Weeds **(377, 1366)**	Same as above.	1 week after control measures were implemented from the 3 week scouting.	This information is used to evaluate how well controls worked.

Six Weeks After Transplanting

Weeds	How to Sample	When	Threshold
Zero Tolerance Weeds **Summer Annuals**	In a zigzag pattern, scout 1 sq. yd. in 5 random locations and 10 ft. of row in another 5 random locations. Identify species, count # of each weed species. Map location of zero tolerance weeds. Determine whether weeds are predominantly within the row or between rows.	Once approximately 5 -6 weeks after transplanting.	**# weeds/10 ft. row or 1 sq. yd.** **Action** Zero Tolerance Weeds: Presence Control required. Summer annuals: < 0.25 weed None 0.25 - 1 weed Control may be required. > 1 weed Control required

Preharvest

Weeds	Sampling	Frequency	Threshold	Notes
Summer Annuals	Sample 1 sq. yd. and 10 ft. of row in 10 locations.	Once prior to harvest.		If weeds are present that will interfere with the harvesting operation, some form of control needs to be implemented.
Perennial Weeds	Scout for these weeds while scouting for the above mentioned weeds.	Once prior to harvest.	Presence	This information is used to determine if a fall treatment is required to control perennial weeds. See "Postharvest Perennial Weed Control" for treatment options. **(292)**

***Bolded numbers in parenthesis indicate sources of additional information found in the Mid-Atlantic 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. These field guides are meant to be used as guidelines. As such, they should be validated on a small acreage 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.