Rutgers Cooperative Extension

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SNAP BEAN (PROCESSING) INTEGRATED WEED MANAGEMENT FIELD GUIDE

Year Prior to Planting Snap Beans

PROCEDURE	HOW TO SAMPLE	USE OF THIS INFORMATION	ADDITIONAL NOTES
Analysis of Soil	Using a county soil map, identify the different	With this information an integrated weed	Mechanical analysis generally only needs to be
Texture, Organic	soils in the field. Take a sample from each area	management program can be designed using	done once unless there is significant erosion or
Matter, and pH	where soil types differ. Submit to lab for	cultural and/or chemical controls for each soil	changes in cropping patterns. CEC and pH should
	mechanical analysis of texture and analysis of	type in a field. Soil type and pH differences	be analyzed annually. Organic matter analysis
	Cation Exchange Capacity (CEC), organic	within a field affect rate of application,	should be done every 5 - 10 years.
	matter (OM), and pH.	carryover and other interactions.	

Pre-harvest of Prior Year's Crop

Scout once before the crop is harvested to learn the potential weed problems for the snap bean crop the following year.

Weeds	Sampling	Threshold	Notes
Horsenettle	Scout field in a zigzag pattern. Sample	presence	Select control measures to eradicate these perennials for the next
Groundcherry	10 random locations 1 square yard in		cropping season. See "Postharvest Perennial Weed Control" for
Yellow Nutsedge	size or 10 ft. of row, whichever pattern		treatment options.
Canada Thistle	best suits existing conditions. Map the		Plant fall cover crop.
Common Milkweed	location of these weeds.		
Hemp Dogbane			
Bindweed spp.			
Johnsongrass			
Bermudagrass (277, 1326)*			(292)
Summer Annuals,	Scout as outlined above for the presence	Number of weeds per 10 ft.	Untreated check provides most reliable information for planning
Black Nightshade,	of existing weeds. Potential weed	<u>of row or 1 sq. yd</u> .	the weed control strategy for the coming season. Plant fall cover
Hairy Nightshade,	problems are best identified by a non	< 1 weed = very light	crop to control winter annuals.
Common Cocklebur,	treated weedy check. Identify the weeds	1-4 weed = light	
Jimsonweed	and count # of each species. Note	4-10 weeds = medium	
	whether specific weeds are scattered	10-100 weeds = heavy	
	throughout the field or predominate in	> 100 weeds = very heavy	
(277, 1326)	one area of the field.		

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Production Year

Pre-planting Decisions

- 1. From the information obtained from prior year's scouting, select recommended control options for those weeds.
- 2. Use the map locating perennial weeds to determine if fall treatment eliminated those weeds.
- 3. Consider using the stale seedbed technique to eliminate germinating weed seeds from top inch of soil.
- 4. Match preplant incorporated and preemergence herbicide rates to soil type and percent organic matter in each field. (292)

Late Unifoliate to First Trifoliate Leaf (two to three weeks after planting)

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

Prebloom Stage: Third Trifoliate to Pre-Bud (five to six weeks after planting)

Weeds	Sampling	Frequency	Thresho	ld
ZTW (See above) Summer Annuals	Sample 1 sq. yd. in 5 random locations and 10 ft. of row in another 5 random locations. Note whether these weeds are predominantly within the row or between rows. Map presence of ZTW.	Once, 5- 6 weeks after planting.	# weeds/10 ft. row or 1 sq. yd.ZTW::PresenceSummer Annuals:< 0.25 weed0.25 - 1 weed> 1 weed	<u>Action</u> Control required. None Control may be required. Control
(277, 1326)			Cultivate if weeds are predominant	

Pre-Harvest

Weeds	Sampling	Frequency	Threshold	Notes
Horsenettle, Groundcherry,	Scout one square yard in 5 random locations	Once, prior to	presence	Weeds that will interfere with harvest must be eliminated.
Black Nightshade, Hairy	and 10 ft. of row in another 5 random locations	harvest.		Otherwise wait until after harvest and treat these weeds in
Nightshade, Yellow Nutsedge,	in the field. Map location of these weeds.			a fall cleanup program. See "Postharvest Perennial Weed
Canada Thistle, Common				Control" for treatment options.
Milkweed, Hemp Dogbane,				
Bindweed spp., Johnsongrass,				
Bermudagrass				(292)
Annual Weeds	Scout for these weeds while scouting for the	Once, prior to	presence	Weeds that will interfere with harvest must be eliminated.
	above mentioned weeds.	harvest.	-	

*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.