Rutgers Cooperative Extension
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FIELD CORN IPM FIELD GUIDE FOR NEW JERSEY

Pre-Planting Decisions

1. Choose locally adapted disease resistant varieties. **(91)***
2. Fertilize and lime according to soil test recommendations. **(1584)**
3. Practice crop rotation. **(91)**
4. Use seed treatments for seedling diseases, seed corn maggot and wireworms. **(91)**
5. Use weed maps for pre-plant herbicide selections. **(938)**
6. Consider Bt corn varieties appropriate for your area for corn borer control. **(91)**

Pre-Planting Scouting:

PEST	Damaging & Monitored Stage	SAMPLING Method	SAMPLING Frequency	THRESHOLD	NOTES
Wireworms **(831, 598, 1582)**	larva	Preferably one bait station/acre but a minimum of 5 bait traps per field, with larger fields requiring more. After 10-14 days, examine bait; count # of wireworms. **(1582,1086)**	Use bait stations 2 - 4 weeks prior to planned planting date. **(1086)**	one wireworm per bait trap. Check to see if wireworms are in one part of field and spot treat if threshold is reached. **(1582)**	Use a 1/2 cup mixture of untreated wheat & untreated shelled corn, soaked overnight, for each bait station. Dig a hole & bury the bait ~ 2" deep. Cover the bait with loosely packed soil, & cover the soil with 18" square pieces of black & transparent plastic anchored on the edges with soil. Mark each station with a flag or stake. **(1086, 1582)**

4 - 5 Weekly Visits from Emergence to 5 - 7 Leaf Stage

PEST	Damaging Stage	Monitored Stage	SAMPLING Method	SAMPLING Frequency	THRESHOLD	NOTES
Cutworms **(142, 831)**	larval	larval	Estimate stand damage by sampling 20 plants in 5 sites.		1-2 leaf corn: 3% cut or 10% with feeding damage 3-4 leaf corn: 5% cut and larvae present	Thresholds maybe more conservative when corn prices are high.
Wireworm **(142, 831)**	larval	larval	Estimate % plants damaged for bait traps for the following year			Species identification is important.
Common Stalk Borer **(831)**	larval	larval	Sample 20 plants in 5 sites. Look for a wilted whorl leaves.	weekly	3% in NJ	
True Armyworm **(182, 1582)**	larval	larval	Sample 20 plants in 5 sites. Look for whorl damage.	weekly	NJ: 35% of plants infested with 50% defoliation and larvae less than 3/4" long.	

PEST	Damaging Stage	Monitored Stage	SAMPLING Method	SAMPLING Frequency	THRESHOLD	NOTES
One Spotted Stink Bug **(831, 367)**	nymph adult	nymph adult	Sample 20 plants in 5 sites. Look for wilted flag leaf	weekly	3% of seedling stand showing injury	Only a problem on late planted, no-till corn.
Weeds **(1582)**	Sample five 1 square yard areas in the field. Count number of weeds.. Record plant species. Map perennial weeds. Note zero tolerance weeds.			weekly, first six weeks after planting	1 weed/square yard zero tolerance weeds: 1/4 weed/ square yard	Zero tolerance weeds: cocklebur, shatter-cane, mugwort, Jerusalem artichoke, nut-sedge, quackgrass, Johnsongrass, milkweed, hemp dogbane, horsenettle, Canada thistle **(884, 338, 479, 480, 766)**

7 Leaf Stage to Silking (**Fields planted after June 1**)

PEST	Damaging Stage	Monitored Stage	SAMPLING Method	SAMPLING Frequency	THRESHOLD	NOTES
Fall Armyworm **(114, 942)**	larva	larva	Sample 20 plants in 5 sites. Look for damage on whorl leaves	weekly	75% of plants with 1 worm or 50% of plants with ≥ worms.	

First to Second Week of July- Southern New Jersey;
Third Week of July - Trenton and north

PEST	Damaging Stage	Monitored Stage	SAMPLING Method	SAMPLING Frequency	THRESHOLD	NOTES
Northern Corn Rootworm (NCR) Western Corn Rootworm (WCR) **(199,476)**	larva	adult	Sample 60 plants in 3 locations. Count # of adult beetles.	Weekly	Treatment threshold for next season: 0.9 beetles/plant	Scout until there are two weeks of declining numbers.

Pre-Harvest

DISEASE	Symptoms	SAMPLING Method	SAMPLING Frequency	THRESHOLD	NOTES
Stalk Rot **(1582)**	Spongy lower stalks	Sample 100 plants in a row in 3 or 4 locations.	Once at end of season.	Harvest fields with highest numbers first.	Pinch the base of the plant between the lower internodes. OR Push the stalk at the ear level 6 - 8" from the vertical. If it breaks between the ear and lowest node, stalk rot is likely present. **(938, 1582)**

***Bolded numbers in parenthesis indicate sources of additional information found in the 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. 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 for additional information or assistance.