DAMAGED SEEDLINGS PROVIDE CLUES TO STAND ISSUES

SITUATION

Stand establishment depends not only on the success or failure of germination, but also on early season stresses. If you notice early stand problems, carefully examine damaged seedlings to discover clues to the likely causes.

FACTORS TO CONSIDER

- Environmental stress
- Seedbed
- Management issues
- Soil condition
- Emergence roadblocks

Healthy young plants like the seedling shown above are essential to help the crop reach its full yield potential.

ACTION PLAN

1. **Understand environmental factors affecting stand.** Soil temperature and moisture are crucial in stand establishment. Cool, wet soils can greatly slow early corn seedling development and predispose seedlings to rot and blight.

2. **Prepare seedbed properly.** Avoid working wet ground and creating cloddy seedbeds, which are a major cause of uneven stands. Check surface residue and adjust equipment as needed to evenly distribute residue.

3. **Monitor factors within your control.** Corn sometimes emerges unevenly due to environmental factors that are out of your control. However, timely planter service and adjustment, as well as appropriate management practices, can help achieve a robust stand. Be mindful of planting depth, speed, and fertilizer and pesticide application.

4. **Scout fields early and often.** After planting, closely monitor fields for soil crust. Use a rotary hoe if a crust prevents uniform emergence. Check for highly compacted or poorly drained soils, as these are prone to root rot caused by pythium and fusarium. These common fungi attack plants and cause damping-off or seedling blight symptoms, especially under wet conditions. Insects also can cause stand issues. White grubs feed on roots, causing plants to appear stunted, wilted, discolored or even dead. Cutworms attack virtually anywhere and can cause extensive crop damage. Often an infested field will have a mixed population of several species of cutworms. Because cutworms vary in their feeding habits, early diagnosis of infestation is essential.

SUMMARY

Few management decisions are as important as those made during planting. Young plants are vulnerable to pests and environmental conditions. Healthy young plants are essential to the crop reaching full yield potential. The primary goal of troubleshooting is to determine and correct the issue before it affects yield. For more information, contact your local Mycogen Seeds customer agronomist or trusted agronomic adviser.

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