

Field Facts: Rhizoctonia

Rhizoctonia is a soil-borne fungus that can cause root rot, stem rot, damping-off and, in some cases, leaf blight.

- **Common names:** Rhizoctonia, Rhizoctonia root rot
- **Scientific name:** *Rhizoctonia solani*
- **Symptoms:** Plants wilt during midday and stems rot at the soil line with brown to reddish-brown lesions.
- **Conditions for development:** Soil-borne pathogens can overwinter in crop residue and grow when optimum environmental conditions are met. Rainfall followed by cool and then warm, humid conditions are most favorable for infection. Rhizoctonia does not require extremely wet conditions in order to cause disease.

FAST FACTS

- Rhizoctonia, Pythium and Fusarium are the most common causes of seedling disease, resulting in poor emergence, low stand counts and poor vigor.
- These soil-borne pathogens can cause seed rot, seedling rot, discolored seedlings, stunting and post- or preemergence damping off.
- Rhizoctonia attacks below-ground parts of the corn seedling, including the seed, mesocotyl and developing roots. Infection is not limited by soil temperature or moisture. Aerated soil can enhance infection, leading to increased crown and brace root rot on slopes and sandy soil.
- Symptoms of Pythium, Fusarium and Rhizoctonia seedling blights are very similar. Submitting samples to county extension personnel or to a plant disease diagnostic laboratory can help determine the cause of the symptoms in your crop.



Corn root and lower stalk damage from *Rhizoctonia solani*.

CONTROL TIPS

Rhizoctonia, can be managed through a combination of approaches.

1. **Cultural Practices:** Crop rotation and improved drainage can help control the spread and impact of crop seedling disease.
2. **Seed Treatments:** Choose an option with strong protection against Rhizoctonia, like Lumiscend™ Pro fungicide seed treatment.



Rhizoctonia hyphae spreading towards an untreated corn seed in a petri dish assay. The top two seeds were treated with Lumiscend Pro fungicide seed treatment.

Lumiscend™ Pro

FUNGICIDE SEED TREATMENT

Specially formulated	3 active ingredients	Yield advantages
Protects against damping-off and seedling blight, as well as seed and root rot caused by Rhizoctonia, Pythium and Fusarium.	Includes ethaboxam, metalaxyl and inpyrfluxam in a flowable liquid suspension. Inpyrfluxam is a new Group 7 active ingredient that provides systemic protection against Rhizoctonia.	Across all environments, Lumiscend Pro fungicide seed treatment delivers a consistent 1 bu/A yield advantage, ¹ while in higher disease environments, the advantage jumps to 3 bu/A in multiyear trials. ²

¹ Data from Corteva Agriscience seed applied technology 2020 - 2021 replicated research all head-to-head comparisons using the same mid-rate IST in 50 locations.

² Data from Corteva Agriscience seed applied technology 2020 - 2021 replicated research head-to-head comparisons at all 16 responsive locations using the same mid-rate IST.

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