

Field Facts: Powdery Mildew

Powdery mildew is a disease that affects a range of plants, including soybeans. In soybeans, this disease is caused by the pathogen *Erysiphe diffusa*. If weather conditions are favorable for disease development, powdery mildew can reduce soybean yield.



Early powdery mildew on soybean leaves. Image: C. Grau

- **Symptoms:** Powdery gray or white patches appear on soybean plants. Symptoms are most obvious on upper leaf surfaces.
- **Geography:** The disease is sometimes found in the midwestern United States. It's relatively uncommon in the United States.
- **Timing:** Mid- to late summer
- **Conditions for development:** Cool, cloudy weather with low humidity is optimal. Cool weather late in the growing season increases the risk for development.
- **Scouting tips:** The disease is most likely to appear during mid-to-late reproductive stages of soybean plants. Pay close attention to scouting during this time. Late-planted beans are at higher risk.
- **Effect on yield:** The disease can have an adverse affect on yield because it can be harmful to plant development. It can cause defoliation in susceptible varieties of soybeans.
- **Management tips:** Choose resistant soybean varieties and apply a fungicide preventively.