

ROOT ROTS

When to look for: Throughout the season

Often root rots are caused by the activity of a number of different fungi and bacteria that attack plants approaching maturity. Generally, the disease cycles are similar, and many of these fungi also cause stalk rots. Root rot organisms can survive on corn refuse and in the soil.

Fusarium Root Rots (many different Fusarium spp.)

Symptoms

Range in appearance from a slightly abnormal browning of the roots to complete destruction of the roots. A pink tinge of the roots could indicate *Fusarium graminearum* infection (cause of *Fusarium* head blight of cereals).

Management

Root rot resistant varieties are hard to produce, due to the difficulty of evaluating varieties of *Fusarium* root rot.

Seed treatments may impact seedling blights, but protection is lost as the roots develop.

Crop rotation appears to reduce the occurrence of *Fusarium* root rot.

Pythium Root Rot (various Pythium fungi)

Symptoms

Infected roots may appear brown to black in colour. Outer portion of the root may be discoloured, while inner portions remain white.

Above ground, plants appear yellowed and stunted.

Management

Improving soil drainage

Use of seed treatments with protection against *Pythium* root rot.



Figure 18. Pythium root rot on corn seedling. Photo provided by Pioneer Hi-Bred.