



Physoderma and Corn in the Northern States

Over the years, Physoderma has from time to time wreaked havoc on crops across the US, causing severe cases of stock rot and ear drop. The following is a brief introduction to the disease. Physoderma is a fungal disease. It is a fungus just like Northern Corn Leaf Blight, anthracnose and Gray Leaf Spot. They feed on the plant tissue and destroy it, allowing that tissue to rot and die. A good fungicide is the only defense the corn plant has against these diseases.



These leaf diseases cause the hybrids to die prematurely, leaving the stalks weak and vulnerable to lodging.

Physoderma starts by showing up as dark brown spots on the leaves' midrib. The Physoderma fungus spores settle and multiply utilizing rain droplets on the leaves' midrib as a source of moisture and migration. The spores continue to migrate and settle in at the leaf collar region of the plant, allowing the fungus to infect stalk node, propagating stalk rot.

In the pictures below, you will notice the red to blackish ring around each of the plant stalk nodes. This is the point where the Physoderma fungus has infected the plant. The Physoderma fungus begins to restrict nutrient flow to the upper leaves and plant tissue. In some cases, as shown in the picture, it has restricted nutrients to the ear, reducing the fill to the kernels, mimicking drought conditions.

When spores settle around the leaf collar region it also infects the ear shank and begins to rot, as shown in the pictures:

