

Leaf, Stem and Head Diseases

DIAGNOSIS

Diagnosing a disease in a crop from a vehicle is impossible.

Stunting or color changes in the crop indicate a need to inspect at close range, but by the time these gross changes are obvious, it may be too late to control the disease.

You must walk into the crop and inspect the plant from the crown to uppermost leaves, as many diseases only develop on specific plant parts.



DIAGNOSIS

Root and crown diseases are generally hidden because the symptoms are underground or at the soil surface. Often the only visible symptoms are poor crop growth or stunting. In some cases there is a brief period where obvious top symptoms, such as bleached heads or premature death of the plant, occur shortly before the crop ripens.

To diagnose root and crown diseases you need a digging implement, a small knife and a bucket with water or access to running water. Plants showing poor growth should be dug with at least 3 to 4 inches of the root system. Loose soil can be gently knocked off the roots and the roots washed free of the remaining soil.

Healthy roots on a growing plant are whitish, fleshy and intact with regular branching. The subcrown internode between the seed and the crown should be white or cream after scratching off the papery covering. The crown and tiller bases, when split, should be cream to yellow on a mature plant. Any browning, blackening or redness on the roots, subcrown internode or stem base is an indication of a diseased plant.



Root and Crown Diseases