STEM CANKER / BLACK SCURF (Rhizoctonia solani)

Black scurf and stem canker, caused by *Rhizoctonia solani* affects potato production in virtually all regions of the world, including South Africa. It spoils the appearance of table potatoes and also a limited amount of black scurf is allowed on certified seed potatoes.

Disease symptoms



Black or dark brown <u>sclerotia</u> (Black scurf) develop on surfaces of tubers. Sclerotia may be flat, superficial or large, irregular lumps resembling soil that will not wash off. The tuber skin under such sclerotia is usually unaffected.

The disease has 2 characteristic symptoms, the name black scurf describes the fungus black survival structures (or sclerotia), and looks like soil adhering to the surface of the tuber. The stem canker is the pathogenic stage of the fungus and is visible as sunken, brown lesions on the roots, stems and stolons.

When the stem has been encircled by canker lesions, it can lead to yellowing and upward curling of the upper leaves. If the shoots die before they emerge the stand will be uneven.



Optimal conditions for disease

Infection can occur at any time during the growing season and development of the disease is promoted mainly by cold, wet environmental conditions.

Other Hosts

Rhizoctonia solani is a pathogen of numerous crops and weed hosts. It's selective pathogenicity depends on the strain present.