FUSARIUM WILT (Fusarium spp.)

Pathogens causing potato wilt include soil-borne bacteria and <u>fungi</u> for example *Verticillium*, *Rhizoctonia solani* and *Fusarium spp*. In South Africa Fusarium oxysporum is the most important fungal <u>pathogen</u> associated with potato wilting. The disease can cause serious losses for the potato producer.

Disease symptoms



Infected plants appear in mid-season when they become lighter in colour, followed by wilting, yellowing and the rolling of bottom leaves. *Fusarium wilt* differs from bacterial wilt in the sense that the wilting of the latter is more severe. Sometimes the growing points can show a purple discolouration. A general sign of infection is the occurrence of <u>aerial tubers</u> in the leaf axils. The result is early death of the plant.

The <u>cortex</u> of roots as well as the plant stems may show a cork-like rotting and when the stems are cut, typical browning of the <u>vascular</u> bundles can be seen.

Tubers derived from infected plants can also be infected and typical dry rot symptoms of the stem end can be seen. Sometimes no symptoms are visible when tubers are lifted, but the <u>pathogen</u> can be present in the vascular bundles and rotting usually occurs in storage.

Optimal conditions for disease

The disease is promoted by hot, dry conditions when as high as 100% infection can occur.

Other Hosts

The cultivated potato is the only known natural host.