

Cole Crops

Black Leg

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Identification and Life Cycle

Black leg of brussel sprouts, broccoli, and cauliflower is caused by the fungus *Phoma lingam*. The disease occurs sporadically in the High Plains during extended periods of cool, moist weather. Infections often start at or below the soil surface when seeds are exposed to contaminated crop debris. The disease damages the water-conducting tissues, resulting in blackened streaks in stems. The pathogen survives between susceptible hosts in crop debris, contaminated seed, and soil.

Plant Response and Damage

Black leg can cause lesions on leaves and stems, above or below the soil. Infected stems have a characteristic semi-dry, blackened rot with small black fungal fruiting bodies (pycnidia) covering the infected area. Affected plants are often stunted and wilt. Blackened streaks are apparent when stems are cut in cross-section.

Management Approaches

Biological Control

No biological control strategies have been developed for black leg.

Cultural Control

Plant seed free from the black leg pathogen. Practice a three-year or longer rotation to non-hosts. Deeply incorporate crop residues after harvest to reduce pathogen survival.

Chemical Control

Fungicides are most effective when used in combination with cultural control strategies. Fumigation provides effective control of black leg, but is rarely economical in the High Plains.

Product List for Black Leg:

Pesticide	Product per Acre	Application Frequency (days)	Remarks
Iprodione—not all formulations available are listed			
Rovral	2 lb	--	Direct sprays toward base of plants; Maximum of 2 applications per season; 0 day PHI
Rovral 4F	2 pts	--	Direct sprays toward base of plants; Maximum of 2 applications per season; 0 day PHI

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Categories: Cole Crops, Disease, Black Leg

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