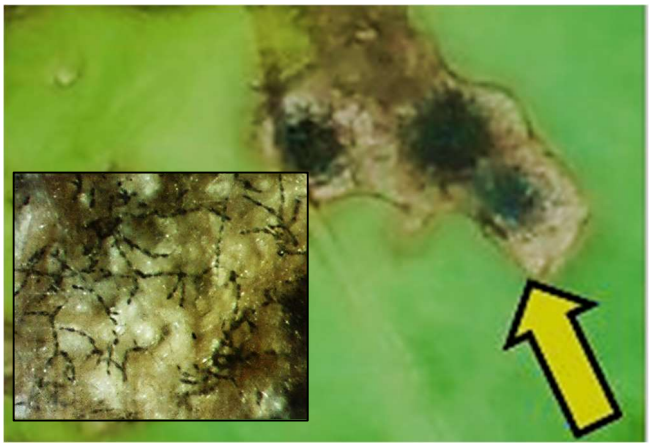
Spot the spot – a guide to foliar diseases of sugar beet

Cercospora leaf spot

Optimal temperatures 77-95°F. Favored by high humidity >90-95%.

Spots circular 3-5 mm with reddish purple to brown borders. Black pseudostromata in center of lesions and silver, white to gray spores in humid conditions.

Alternaria leaf spot



Favored by temperatures 60-80°F and high humidity >90%.

Spots irregular or angular 2-10+ mm. In high humidity, velvety dark black or green sporulation seen in center of spots. (Photo credit: D. Bublitz and L.E. Hanson)

Bacterial leaf spot (*Pseudomonas* sp.)

Favored by temperatures 50-77°F. Large dark spots to spreading lesions with yellow margins, often seen on leaves in contact with the ground. (Photo credit: M.F.R. Khan et al. and R.M. Harveson)

Phoma leaf spot

Favored by temperatures 60-90°F. Spots 1-2 cm with dark concentric rings. Spherical black pycnidia can form within the rings.

Harveson, Robert M., Linda E. Hanson, and Gary L. Hein, eds. Compendium of beet diseases and pests. St. Paul, MN: American Phytopathological Society, 2009.

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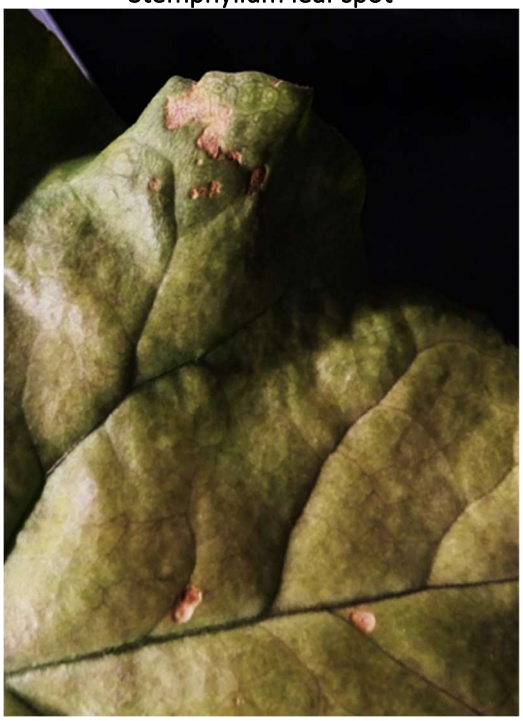
Anthracnose (*Colletotrichum* sp.)

On adult leaves and petioles, lesions are circular and with darker rings. Under magnification, dark black, spiky fungal acervuli characteristic of *Colletotrichum* spp. (Photo credit: L.E. Hanson)

Stemphylium leaf spot



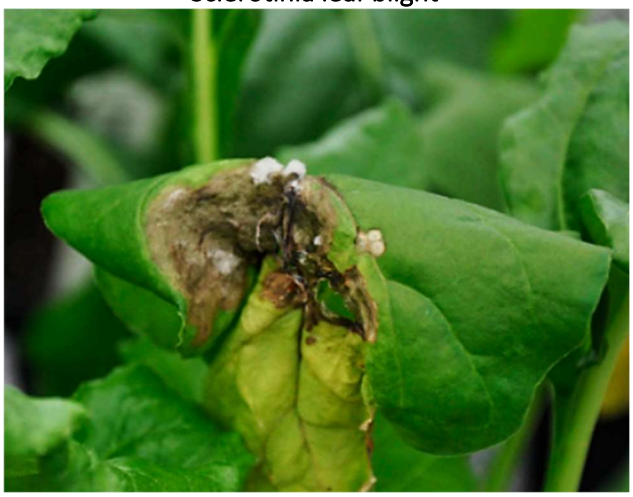
Spots small brown with larger necrotic patches. (Photo credit: L.E. Hanson)

Ramularia leaf spot

Favored by temperatures 63-68°F.

Spots angular 4-7 mm typically larger than Cercospora leaf spots. (Photo credit: M. Putnam, Oregon State University).

Sclerotinia leaf blight



Favored by cool (68-77°F), humid, shaded conditions.

Light brown to black necrotic leaf lesions with grayish centers. In high humidity, white mycelia may appear and over time black sclerotia may form. (Photo credit: M.F.R. Khan et al. 2020).

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