

Bacterial Blight of Mendioka (Cassava) **(*Xanthomonas campestris* pv. *manihotis*)**

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On the leaves of mendioka, or cassava, this bacterial disease causes angular spots with a water-soaked appearance when seen from the underside. These spots are commonly seen along the veins and also along the margins and tips of leaves. The spots can become numerous and develop into large dead areas on the leaves. Infected leaves eventually wither and die. Older leaves are more susceptible, so defoliation progresses upward along the stem. This premature defoliation results in loss of yield because, without leaves, the fleshy roots do not get a chance to grow to normal size. When infected cuttings are used for planting, the young developing shoots show signs of water stress; first they wilt, and finally they die back.

Bacterial blight spreads from one place to the other through infected cuttings or through infected seed. Since cuttings are the most common method of propagation for this crop, they are considered to be the most common method of disseminating the disease. Once bacterial blight has been introduced into a field, it will spread within the field to other mendioka plants by rain splashing and by contaminated roots. It is possible also that people or animals brushing against the leaves while they are wet could spread the bacteria from infected to healthy plants.

Control

Bacterial blight has been successfully controlled in several areas throughout the world where it once was a serious problem. To do so, the following steps are recommended:

- Start planting toward the end of the rainy season.
- Obtain cuttings from healthy plants.
- Prepare cuttings only from older wood (basal portion of stem).
- Surface-sterilize cutting tools by dipping them in 10% bleach solution between cuts.
- If bacterial blight is suspected to be present in a mendioka field, it may be advisable to eradicate the disease by destroying all infected plant refuse after harvest. Also deep-plow the field and keep it free of weeds for six months.
- Cuttings taken from infected plants may give rise to new development of the disease. Pull out and destroy any cuttings that have wilted shoots (unless it is due to drought) because they are most likely infected.
- As with all bacterial diseases that affect the leaves of plants, avoid brushing up against wet leaves of diseased



Leaf spots caused by bacterial blight are angular.

plants and then against healthy plants because this may lead to contamination and spread of the disease.

- Introduction of new cultivars or varieties of mendioka from outside sources should only be done through importation of meristem cultures and never through importation of cuttings. This requires phytosanitary certificates and is subject to territorial and federal regulations.

For additional information, consult an Extension Agent at your local land grant institution.

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