

BACTERIAL BLIGHT OF *FICUS ELASTICA* (aka Rubber Tree)

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1. Pathogen

Bacterial Blight (*Xanthomonas* sp.) on *Ficus elastica* (Rubber tree)

Xanthomonas is a bacterium that attacks several economically important ornamental crops. The pathogen enters plants through wounds or natural openings such as stomata or hydathodes. Young tender foliage is most susceptible and depending on the time of infection blight can develop on the entire plant.

In other *Ficus* species:

To date Bacterial blight by *Xanthomonas* has been reported on *Ficus elastica* 'Burgundy', 'Robusta', and 'Cabernet', *F. benjamina* and *F. microcarpa* 'Green Island'.

2. Symptoms

Bacterial blight can move systemically, causing severe leaf blight. Initial symptoms are small, water-soaked, circular lesions with irregular borders near the leaf margin. After 1 or 2 weeks these lesions expand covering large portions of the leaf area. Eventually, the lesions turn brown or necrotic, resulting in premature leaf drop.

3. Detection & Diagnosis

Bacterial blight caused by *Xanthomonas* should be submitted to the plant diagnostic lab for confirmation. Contact your local UF/IFAS Extension office for more information.



TOP: *Xanthomonas* blight on *Ficus elastica*; BOTTOM: Initial water soaked lesions showing on the borders of younger *F. elastica* plants. Photo credit: E. Vanessa Campoverde



4. Control & Management

Previous to recent outbreaks of *Xanthomonas* on *F. elastica*, the plant was relatively easy to grow, requiring minimal use of pesticides for disease management.

Sanitation and prevention are the most important strategies for managing diseases caused by bacteria. Once the bacterium is established in a nursery it can be very difficult to eradicate.

- Closely monitor plants when temperatures range from 26–30°C (78–86) °F. The disease has been more prevalent during the summer.
- Scout for early symptoms on leaves between tender and older plants.
- Space plants to allow good air movement in the canopy and
- Irrigate plants early enough in the day, so that the foliage is dry in the evening.

5. Literature

- Campoverde, E. V., and A. J. Palmateer. 2011. "A Severe Outbreak of *Xanthomonas* on *Ficus elastica* in South Florida." *Proc. Fla. State Hort. Soc.* 124: 321–322
- Chase, A. R., and R. W. Henley. 1993. "Susceptibility of Some *Ficus* Species and Cultivars to *Xanthomonas*." *Southern Nursery Digest* 27 (6): 20–21.
- Chen, J., R. J. Henny, and D. B. McConnell. 2002. "Development of New Foliage Plant Cultivars." In *Trends in New Crops and New Uses*, edited by J. Janick and A. Whipkey, 466–472. Alexandria, VA: ASHS Press.

Did you know?

Bacterial diseases are generally less aggressive than most plant diseases caused by fungi, but once established they can be very difficult to control!

BELOW: Disease progress caused by *Xanthomonas* on younger *F. elastica* plants. Photo credit: E. Vanessa Campoverde



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