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**Randy C. Ploetz**Phytopathology, December 2015, Volume 105, Number 12, Pages 1512-1521  
(doi: <http://dx.doi.org/10.1094/PHYTO-04-15-0101-RVW>)

## Review

## Fusarium Wilt of Banana

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Banana (*Musa* spp.) is one of the world's most important fruits. In 2011, 145 million metric tons, worth an estimated \$44 billion, were produced in over 130 countries. Fusarium wilt (also known as Panama disease) is one of the most destructive diseases of this crop. It devastated the 'Gros Michel'-based export trades before the mid-1900s, and threatens the Cavendish cultivars that were used to replace it; in total, the latter cultivars are now responsible for approximately 45% of all production. An overview of the disease and its causal agent, *Fusarium oxysporum* f. sp. *cabense*, is presented below. Despite a substantial positive literature on biological, chemical, or cultural measures, management is largely restricted to excluding *F. oxysporum* f. sp. *cabense* from noninfested areas and using resistant cultivars where the pathogen has established. Resistance to Fusarium wilt is poor in several breeding targets, including important dessert and cooking cultivars. Better resistance to this and other diseases is needed. The history and impact of Fusarium wilt is summarized with an emphasis on tropical race 4 (TR4), a 'Cavendish'-killing variant of the pathogen that has spread dramatically in the Eastern Hemisphere.

*Additional keywords:* cooking banana, dessert banana, East African Highland bananas, *Fusarium oxysporum* species complex, plantain.

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