

ABSTRACT

Studies on a new bacterial disease and other diseases of anthurium in Trinidad.

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A new bacterial disease was first seen on imported *Anthurium andreanum* Linden hybrids cultivated in Trinidad in October, 1989. Isolation and biochemical tests were conducted to identify this organism. Pathogenicity and inoculation studies were conducted on a Dutch hybrid. A survey was undertaken to investigate the occurrence of diseases on both the local and imported hybrids cultivated commercially in Trinidad and in particular to determine the distribution of this new bacterial disease.

The organism identified was a *Pseudomonas* species, a non-fluorescent pseudomonad. Symptoms of bacterial leaf spot were characterized by angular, water-soaked lesions along the leaf margins, veins and spathes, developing into large dark-brown to black necrotic areas. Lesions were surrounded by bright, narrow, chlorotic halos on the leaves and dark brown or purple necrotic areas eventually becoming black on spathes. Systemically infected plants developed a general yellowing of the leaves which eventually resulted in death.

This new bacterial disease was found on seven out of thirty-four farms investigated: two located at Gran Couva in the Caroni county and five (three at St. Augustine, one at Wallerfield and one at Carapo) located in the St. George east county. Typical symptoms were found only on imported Dutch and Hawaiian hybrids. Other diseases found only on imported hybrids were bacterial blight and bacterial wilt. Anthracnose was the most common of all diseases on the farms. Pseudocercospora leaf and flower eye spot disease was seen mainly on local hybrids and on one farm with Dutch and Hawaiian hybrids. Anthurium decline was found mainly on Dutch and Hawaiian hybrids.