

## ABSTRACT

A screening method for identifying resistance to bacterial leaf spot  
[CA. -*Acidovorax anthurii*] disease in *Anthurium andraeanum* Hort.

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*Acidovorax anthurii* is a recently characterised pathogen of anthurium (*Anthurium andraeanum* Hort.) causing the bacterial leaf spot disease. An island-wide survey of commercial anthurium farms in Trinidad was conducted to determine the prevalence and severity of the disease, and its relationship to agro-climatic factors. The causal organism was isolated from each farm, subjected to Koch's postulates, and 16 of the 22 pathogenic isolates were characterised using morpho-physiological and biochemical tests. The most aggressive isolate was identified for future disease screening studies. Field, greenhouse and laboratory (non-destructive approaches) screening methods were investigated to identify resistance in anthurium cultivars and breeding populations. In the field experiment six cultivars of varying resistance were evaluated over a period of 12 months in a randomised complete block design with four replications in sick plots (25 plants per plot). In the greenhouse experiment one-year-old plants of six cultivars and