

Bacterial wilt of *Kaempferia galanga* L. caused by *Pseudomonas solanacearum* (Smith) Smith¹

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ABSTRACT

Pseudomonas solanacearum is reported for the first time causing bacterial wilt of *Kaempferia* (*Kaempferia galanga*) from Kerala, India.

Key words : bacterial wilt, *Kaempferia galanga*, *Pseudomonas solanacearum*.

Kaempferia ('Kacholam') (*Kaempferia galanga* L.) is cultivated throughout the plains of India for its aromatic rhizomes. During September 1994, a few plants of *K. galanga* were found showing wilt symptoms at Athiyodi in Kozhikode District of Kerala State, India. The initial symptoms appeared as water soaked lesions on petioles and spread to all leaves resulting in death of the plant. The rhizomes when cut open transversely exuded ooze profusely. The rhizomes and roots of affected plants exhibited varying degrees of rotting.

The pathogen was isolated on nutrient agar. The isolates were further restreaked on triphenyl - tetrazolium chloride medium and light pink centered colonies were maintained on Yeast Glucose Carbonate Agar in sterile distilled water at 4°C in refrigerator. Koch's postulates were proved on healthy plants with a bacterial suspension of 10⁸

cfu/ml. Based on morphological, cultural and physiological characters (Sands 1990) the pathogen was identified as *Pseudomonas solanacearum* (Smith) Smith. Further, the strain was characterized as *P. solanacearum* biovar 3 on the basis of differences in biochemical reactions (Hayward 1964). Even though the pathogen has been reported on a number of Zingiberaceous hosts, this is the first report of the pathogen on this plant.

References

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