## Characterization of Pectobacterium carotovorum causing a new soft rot disease on okra in Malaysia.

## **ABSTRACT**

Dark brown, necrotic pods with extensive water-soaked lesions caused by plant pathogenic bacteria were found on okra plants in different fields in Malaysia in 2010. PCR amplification of the pectate lyase (pel) gene and amplification of the 16S–23S rRNA (ITS) with G1 and L1 primers produced 434-, 535- and 570-bp fragments, respectively. From the similarity between the results of biochemical tests and their equivalency with standard bacteriological sources, PCR-based pel gene, and RFLP analysis of the ITS-PCR products, all isolates were identified as Pectobacterium carotovorum. This is the first report of P. carotovorum in okra from Malaysia.

**Keyword:** Vegetables; Lady's fingers; Bacterial soft rot; Identification.