First report of cabbage soft rot caused by Pectobacterium carotovorum subsp. carotovorum in Malaysia.

ABSTRACT

Cabbage plants with symptoms of soft rot were sampled from commercial fields in Malaysia during the winter of 2010. Disease symptoms were a grey to pale brown discoloration and expanding water-soaked lesions on leaves. Several cabbage fields producing white cultivars were investigated and 27 samples were collected. The bacteria reisolated from rotted cabbage slices resembled P. carotovorum cultural characteristics and could cause soft rot in subsequent tests. PCR amplification with Y1 and Y2 primers, which are specific for P. carotovorum, produced a 434-bp band with 15 strains. Analysis by ITS-PCR and ITS-restriction fragment length polymorphism identified all the isolates as P. carotovorum subsp. carotovorum. This is thought to be the first report of P. carotovorum subsp. carotovorum in cabbage from Malaysia.

Keyword: Cabbage; Pectobacterium carotovorum; Soft rot; Plant disease.