

Leaf spot on lettuce (*Lactuca sativa*) caused by *Stemphylium solani*, a new disease in Malaysia.

ABSTRACT

In June 2011, lettuce (*Lactuca sativa*) plants cultivated in major lettuce growing areas in Malaysia, including the Pahang and Johor states, had extensive leaf spots. In severe cases, disease incidence was recorded to be more than 80%. Symptoms on 50 plants were initially water-soaked spots (1-2 mm in diameter) on leaves, which then became circular spots spreading over much of the leaves. Main lettuce growing areas infected by the pathogen in the aforementioned states were investigated and the pathogen was isolated onto potato dextrose agar. Fourteen isolates were identified as *Stemphylium solani* based on morphological criteria. To confirm morphological characterization, the DNA of the fungus was extracted from mycelium and PCR was conducted using universal primers ITS5 (5'-GGAAGTAAAAGTCGTAACAAGG-3') and ITS4 (5'-TCCTCCGCTTATTGATATGC-3'), which amplified the internal transcribed spacer (ITS) region of rDNA. The sequencing result was subjected to BLAST analysis, revealing a 99% similarity to other published sequences in the GenBank database (GenBank accession nos. AF203451 and HQ840713). This is thought to be the first report of *Stemphylium solani* on lettuce in Malaysia.

Keyword: Leafspot; *Stemphylium solani*; Eggplant; Malaysia.