## First report of Spiroplasma citri (-Induced) associated with periwinkle lethal yellows in Southeast Asia.

## **ABSTRACT**

Madagascar periwinkle, Catharanthus roseus, plants grown in Malaysia were observed with symptoms of premature abscission of buds and flowers, reduction in leaf size, chlorosis of the leaf tips and margins, general chlorosis, and stunting and plant death. The presence of Spiroplasma citri was demonstrated in the symptomatic plants using specific antisera, PCR analysis and nucleotide sequencing. The same symptoms were induced on healthy periwinkles approximately 2 weeks after side grafting.

**Keyword:** Periwinkle; Phytoplasmas; Spiroplasma; Crop.