Spiroplasma citri: a wide host range phytopathogen.

ABSTRACT

Spiroplasmas are helical motile filamentous, wall-less and culturable mollicutes. Thirty six spiroplasma species have been identified. Only S. citri, S. kunkelii and S. phoeniceum have been identified as plant pathogens. Spiroplasma citri, the causal agent of citrus stubborn disease, have a wide host range. S. citri infects most citrus species and cultivars and a wide range of non-rutaceous plant species. Citrus stubborn disease widely distributed in the southwestern united states of America, northern Africa and Mediterranean countries. It is naturally transmitted by phloem-feeding leafhopper vectors. S. citri can be detected by grafting to citrus indicators, culturing on artificial media, serological, DNA probes, dot-immunobinding assay, Immunocapture Polymerase Chain Reaction (I C- PCR), Polymerase Chain Reaction (PCR) and real-time PCR. There is genetic variability among isolates of S. citri. © 2011 Asian Network for Scientific Information.

Keyword: Detection; Non-rutaceous host; Spiroplasma species; Stubborn.