

# Differentiation and Detection of Phytoplasma using Polymerase Chain Reaction from Diseased Plant in Korea

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## **Abstract**

This test checked jujube witches'-broom disease, sumac witches'-broom disease, paulonia witches'- broom disease and mulberry dwarf disease whether or not they were infected by phytoplasma, using universal and specific primers. Upon treatment of DNA amplified by PCR of phytoplasma with *Alu* I, *Hpa* II and *Sal* I restricted enzymes, distinction of phytoplasmas was possible. Particularly, phytoplasma of each host was distinguishable by treatment of *Hpa* II restricted enzyme. Meanwhile, analysis of restricted enzymes of jujube witches'-broom disease showed a higher infectivity of phytoplasmas of two origins. There were a lot of relations between jujube witches'-broom disease and sumac witches'-broom disease, and between paulonia witches'-broom disease and mulberry dwarf disease.