

ANGULAR LEAF SPOT OF SLEEPY MALLOW INCITED BY A PATHOVAR, CLOSELY SIMILAR to *Pseudomonas syringae* pv. *Syringae**

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Abstract

Angular leaf spots of sleepy mallow *Malvaviscus penduliflorus* have been observed in some areas of Mazandaran and Golestan provinces. The spots were angular, brown and necrotic. A levan positive and oxidase negative pseudomonad was isolated from the symptomatic leaves. The biochemical and physiological characteristics and profile of fatty acid methyl esters of the causal bacterium was very similar to *Pseudomonas syringae* pv. *syringae*. Pathogenicity of selected strains was confirmed by inoculation of sleepy mallow with bacterial suspension of several strains. PCR amplification using the *syrB* specific primer pairs yielded the expected 720 bp fragment from all strains. In rep-PCR, the fingerprints of the strains from sleepy mallow showed 28% similarity to those of the standard strains of *P. s.* pv. *syringae*. However, on the bases of difference in host specificity, some genotypic properties, sequencing of some highly conserved genes (*rpoD* and *gyrB*), the strains isolated from angular leaf spot on sleepy mallow just were similar to *Pss* but were genetically distinct from other groups and may represent a new pathovar of *P. syringae* belonged to another genemospecies.

Keywords: *Pseudomonas syringae*, Sleepy mallow, Taxonomy, Iran.

See Persian text for figures and tables (Pages ۱-۱۵).

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