

عنوان مقاله:

Etiology of Chinaberry Gall Disease in Iran

محل انتشار:

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خلاصه مقاله:

Chinaberry (*Melia azedarach* L.) is a beautiful tree indigenous to the Himalayas that grows as a native plant in Iran. Symptoms similar to bacterial gall have been observed on the crown, shoot and twig of chinaberry, a recent landscape tree since ۲۰۰۳-۲۰۰۴ in Shiraz, Fars province, south of Iran. A gram negative bacterium was isolated from the galls. The isolates did not produce fluorescent pigment on King's B medium, were negative in oxidase, levan production, potato soft rot, casein, gelatin hydrolysis, nitrate reduction, growth at ۵۰C, ucase production and indol production, but were positive in arginine dihydrolase, catalase, growth at ۳۵C, and also produced hypersensitive reaction on tobacco. Wound inoculated bacterial suspension into chinaberry seedlings produced galls from which the bacterium was reisolated. Systemic movement of the isolates into the vascular system of chinaberry was shown by the formation of gall above the inoculation site on the stem. On the basis of biochemical, physiological and pathogenicity characteristics, the isolated bacteria were identified as *Pseudomonas meliae*. Electrophoretic pattern of cell proteins showed that chinaberry isolates were different from *P. syringae*, *P. viridiflava*, *P. fluorescens*, *P. savastanoi*. The current article is the first report of bacterial gall disease of chinaberry in Iran

کلمات کلیدی:

Chinaberry, Gall, *Pseudomonas meliae*

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