

NEW DISEASE REPORT

## First record of bacterial canker caused by *Pseudomonas syringae* pv. *syringae*, on apricot trees in Turkey

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During the spring and summer of 1999 and 2001, a serious disease with typical bacterial canker symptoms was observed on nearly 80% of apricot trees (*Prunus armeniaca*) grown in commercial orchards and home gardens in the provinces of Erzurum, Erzincan and Artvin in Turkey. Initial characteristic symptoms were small, water-soaked lesions on blossoms, young expanding leaves and twigs. Subsequent development of the disease was expressed as blossom blast, dried leaves attached to trees, twig dieback, bark necrosis and trunk cankers. A fluorescent, Gram-negative bacterium was consistently isolated from diseased tissues onto King's B medium. A total of 33 bacterial strains were isolated that were oxidase- and arginine dihydrolase-negative, and levan-positive. None of these isolates utilized erythritol and DL-lactate as sole source of carbon (Jones *et al.*, 1986). Fatty acid analysis of the isolates identified the bacterium *Pseudomonas syringae* pv. *syringae* with similarity indices of 66–87% (Janse *et al.*, 1992). All isolates were able to induce a hypersensitive response on tobacco plants (*Nicotiana tabacum* cv. Samsun) (Klement, 1982). Pathogenicity of the strains was confirmed by spray-inoculating 1-year-old host twigs with  $10^8$  CFU mL<sup>-1</sup> bacterial suspensions in sterile water (Şahin *et al.*, 1999). Inoculated and sterile water-sprayed controls were maintained in the growth chamber with 90% RH for 6–7 days at  $24 \pm 2^\circ\text{C}$ . Symptoms similar to the

original were observed on inoculated plants within 5–7 days. No symptoms developed on controls. Bacteria reisolated from inoculated plants were identified as strains of *Pseudomonas syringae* pv. *syringae*. This appears to be the first record of the occurrence and outbreak of a bacterial canker disease on apricot trees in Turkey.

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### References

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