

DISEASE NOTE

SEVERE OUTBREAK OF *PSEUDOMONAS*  
*SYRINGAE* PV. *SYRINGAE*  
ON NEW APRICOT CULTIVARS  
IN CENTRAL ITALY

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Symptoms of severe twig dieback and death of whole plants were observed in one-year-old apricot (*Prunus armeniaca*) orchards planted in the province of Rome (Italy) with newly introduced cultivars Lillycot, Mangocot, Orangecot, and Sweetcot. The incidence of completely wilted plants was up to *ca* 30%. To isolate the pathogen, tissue from lesion margins was ground in a mortar containing sterile saline; 0.1 ml aliquots of serial ten-fold dilutions were plated on medium B of King *et al.* (1954), and incubated at 25-27°C for two days. The resulting fluorescent colonies were analysed with biochemical and pathogenicity tests and by rep-PCR using BOX and ERIC primers. All isolates were levan-positive and tobacco hypersensitivity-positive. They were all oxidase-, potato soft rot and arginine dehydrolase-negative (LOPAT tests, group Ia). In addition, they had an oxidative metabolism of glucose and did not reduce nitrates. Upon rep-PCR, the isolates showed, with both primers, high similarity with some representative *Pseudomonas syringae* pv. *syringae* van Hall strains obtained from apricot and previously characterized with the same technique (Scortichini *et al.*, 2003). Pathogenicity tests were carried out on apricot twig, lilac and pear leaves and lemon fruits. All isolates induced necrotic lesion on lemon fruits as well as on lilac and pear leaves. In addition, they caused wilting on inoculated apricot twigs one month after inoculation. Re-isolations yielded the same colony type as in the primary isolates. The conclusion is that the observed dieback and wilting of young apricot trees is caused by *P. s.* pv. *syringae*. It is likely that the severe outbreak was due to the very high susceptibility of apricot cultivars recently introduced in the area.

King E.O., Raney M.K., Ward D.E., 1954. Two simple media for the demonstration of pyocyanin and fluorescin. *Journal of Laboratory and Clinical Medicine* **44**: 301-307.

Scortichini M., Marchesi U., Dettori M.T., Rossi M.P., 2003. Genetic diversity, presence of *syrB* gene, host preference and virulence of *Pseudomonas syringae* pv. *syringae* strains from woody and herbaceous host plants. *Plant Pathology* **52**: 277-286.

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