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DISEASE NOTE

NECTARINE FRUIT SCAB CAUSED BY *PSEUDOMONAS SYRINGAE* pv. *SYRINGAE*

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Symptoms of severe fruit scab were observed at the beginning of summer 2005 in adult nectarine (*Prunus persica* Batsch var. *laevis* Gray) orchards planted with the cultivars Diamond Ray and Big Top and grown in the Ravenna province (Northern Italy). The disease incidence was high, up to 30-35% of the fruits was affected. To isolate the pathogen, tissue from lesion margins were 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 as well as by BOX-PCR and 16S rDNA gene sequencing. All isolates were levan-positive on 5% sucrose agar 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. Following BOX-PCR the isolates showed high similarity with some representative *Pseudomonas syringae* pv. *syringae* van Hall strains previously characterized with the same technique (Scortichini *et al.*, 2003). The sequencing of the 16S rDNA gene confirmed the high similarity with *P. syringae* pv. *syringae* strains (99% homology). Pathogenicity tests were carried out on nectarine, peach and lemon fruits as well as on lilac and pear leaves. All isolates induced scab-like lesions on nectarine and peach fruit and necrosis on lemon fruits, lilac and pear leaves. Re-isolations yielded the same colony type as in the primary isolation. We conclude that the severe disease observed on nectarine fruits was caused by *P. syringae* pv. *syringae*. This is the first record of fruit scab on nectarine caused by this pathogen in Italy and Europe.

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

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