

Distribution of Streptomycin-Resistant Strains of *Erwinia amylovora* in Israel and Occurrence of Blossom Blight in the Autumn

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Following failure in control of fire blight with streptomycin, the distribution of streptomycin-resistant strains of *Erwinia amylovora* in Israel was surveyed. During 1994–1997 109 pear, apple, loquat and quince orchards were monitored. Streptomycin-resistant strains of *E. amylovora* were recovered from flowers and from infected branches collected at 18 locations in the Sharon, Galilee and Golan Heights regions. In the Sharon region all the isolated strains of *E. amylovora* were streptomycin-resistant, whereas in the Galilee and Golan Heights, resistant as well as sensitive *E. amylovora* strains were recovered at different locations. In the southern coastal plain no resistance could be detected. Streptomycin-resistant strains of *E. amylovora* did not hybridize with the DNA probe SMP3, and resistance could not be transferred by mating to a sensitive strain, suggesting that streptomycin resistance in Israel is not plasmid-mediated. Fire blight symptoms were observed, for the first time, on pear blossoms during the autumn of 1994. A high population of 2×10^6 – 6×10^7 CFU/flower in the autumn of 1995 and of 1996 was correlated with the appearance of blossom blight symptoms. KEY WORDS: *Erwinia amylovora*; fire blight; streptomycin resistance.

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