

## Identification of *Pseudomonas viridiflava* on Tomato by Traditional Methods and Enzyme-Linked Immunosorbent Assay

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*Pseudomonas viridiflava* is one of the causal agents of tomato stem necrosis in the eastern Mediterranean region of Turkey. The bacterium causes general wilting, yellowing of tomato plants, dark blotches on the pruning sites of the stem, browning, and hollowing of the pith. *P. viridiflava* strains, isolated from Antakya and Mersin, were identified by traditional methods and indirect enzyme-linked immunosorbent assay (ELISA). For indirect-ELISA, polyclonal antisera were produced against a regional isolate of *P. viridiflava* (AD-OZ 3a). Using indirect-ELISA, the pathogenic bacterium was identified rapidly and safely from both pure culture and inoculated plants in 2 days. There was no cross reaction with other stem necrosis pathogens. With indirect-ELISA, the lower limit for *P. viridiflava* detection in pure culture was 10<sup>3</sup> colony-forming units per milliliter.

KEY WORDS: ELISA; *Pseudomonas*; identification; stem necrosis; tomato.

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