ABSTRACT

Twelve isolates of *Erwinia carotovora* subsp. *carotovora* were obtained during isolation from potato soft rot tubers on Logan's medium, twelve isolates of *Pseudomonas syringae* pv. *phaseolicola* were isolated on king's medium from blight bean leaves and ten isolates of *Xanthomonas campestris* pv. *vesicatoria* were isolated on YDC medium from spotted tomato leaves.

The morophological, physiological and biochemical characteristics were conducted for all isolates. confirmed the identification of the causal pathogens. Serological assay using Dot Immunobinding assay (DIA), Indirect immunofluorescens assay (IF), Agglutination test and Double diffusion assay(ODD), were performed to confirm the identification and the relationships between isolates. Varietal susceptibility of potatoes, tomatoes and beans were screened against soft rot, bacterial leaf spot and halo blight diseases. In addition some bioagents were tested against isolates of *Erwinia carotovora* subsp. *carotovora, Pseudomonas syringae* pv. *phaseolicola* and *Xanthomonas campestris* pv. *vesicatoria* in vitro to determine the antagonistic effect.

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