

Abstract:

Fusarium yellows of beans caused by *Fusarium oxysporum* Schl. sp. *phaseoli* Kendrick & Snyder was suppressed significantly by bacterial antagonists, *Bacillus* sp. that had been introduced into infested soil in a greenhouse. The antagonists had been isolated from organic materials used as soil amendments in a previous experiment. Application methods determined the success of the antagonists as disease control agents. Direct application of the antagonists onto the seed or soil was ineffective whereas small amounts of farmyard manure used as a carrier of the antagonist was effective. Although the disease control by the antagonists was significant compared to the control treatment, it was still partial. The disease severity was 31 % in the control treatment and 21 % in the treatment with manure as the antagonists carrier. This was a 10% disease reduction with the *Bacillus* treatment.