

Title Occurrence of tomato bacterial spot disease in Saudi Arabia, and effect of salicylic acid treatments on disease incidence

Author Y.E. Ibrahim and M.A. Al-Saleh

Citation ISHS Acta Horticulturae 914:47-51.2011.

Keywords salicylic acid; foliar application; *Xanthomonas campestris*pv. *vesicatoria*

Abstract

Symptoms of a bacterial disease caused by *Xanthomonas campestris*pv. *vesicatoria* were observed on tomato plants growing in Al-Kharj area of Saudi Arabia. Symptoms included irregular yellow-necrotic areas on tomato leaves and spotting on the stem. Five bacterial isolates were isolated from the infected tomato seedlings. The pathogen identity was confirmed biochemically, and physiologically, hypersensitive reaction occurred in tobacco plants and pathogenicity test was conducted. All concentrations tested of salicylic acid (SA) had inhibitory effects against *X. c.*pv. *vesicatoria* under laboratory conditions. Application of SA at 1.5 ppm reduced severity of bacterial leaf spot of tomato.