SUMMARY

Tomato plants showing symptoms of bacterial wilt were collected from four localities in Trinidad. Bacterial isolates from these plants when inoculated into healthy tomato plants caused wilting and death. The isolates were grown in pure culture and identified as *Pseudomonas solanacearum* E.F.S.

In vitro assay tests showed no appreciable inhibition of the bacterium by concentrations of less than 50 p.p.m. of streptomycin sulphate.

Phytotoxic effects were observed on plants whose roots were soaked in 500 p.p.m. streptomycin sulphate solution. Plants grown from seed soaked in 1000 p.p.m. streptomycin sulphate solution were unaffected.

Soaking seeds in streptomycin sulphate solutions of: 0, 50, 100, 200, 500 and 1000 p.p.m. concentrations for periods of 2, 5 and 8 hours gave no protection to seedlings planted in infected soil.

Soaking the roots of seedlings and transplants in the antibiotic at concentrations which inhibited the pathogen in vitro gave no protection from the disease.