



## Thesis Abstract

### **Study on Wild Eggplant (*Solanum torvum*) as a Rootstock Resistant to Bacterial Wilt (*Ralstonia solanacearum*)**

By Khin Lay Lwin, MS in Phytopathology, Gadjah Mada University

The study determined the graft compatibility of five commercial eggplant varieties and four tomato varieties with wild eggplant (*Solanum torvum*) from three locations.

All *S. torvum* varieties were resistant against bacterial wilt, while all commercial eggplant and tomato varieties showed susceptibility to bacterial wilt. The graft combinations were compared with rootstock variety (*S. torvum*) and two susceptible scion varieties by observing symptom under greenhouse condition and by counting the bacterial population in root, collar, stem (rootstock), and stem (scion) of inoculated plants at 10, 20, and 30 days after inoculation.

There was no disease incidence in all grafted combinations and *S. torvum*. In contrast, disease index was higher in two susceptible scion varieties. Although all grafted combinations and *S. torvum* showed no wilt symptom, the plants were latently infected with bacteria and the population were lower than two susceptible scion varieties in all plant parts. The colonization of bacteria in root and collar region after inoculation is common in resistant and susceptible cultivars and the degree of bacterial colonization in upper stem was an important factor that determined the resistance and susceptibility