

**ADDITION OF ORGANIC MATERIAL IN FORMULATIONS
Bacillus subtilis TO CONTROL *Pantoea stewartii* subsp.*stewartii*
CAUSE WILT STEWART IN CORN (*Zea mays* L)**

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ABSTRAC

The addition of ingredients in the formulations of *Bacillus subtilis* to control *Pantoea stewartii* subsp. *stewartii* cause wilt stewart on maize (*Zea mays* L) has been carried out in the Laboratory of Microbiology and Greenhouse Faculty of Agriculture, University of Andalas Padang. The study was conducted from September-November 2015. The disease is relatively new presense in Indonesia. This study was conducted to determine the effect of organic matter mixed with *Bacillus subtilis* in the formulation of starch to suppress attacks stewart wilt disease and enhance the growth and yield of corn. This study use a completely randomized design (RAL), which consist of 10 treatments and 4 replications. Parameter measured were population density *Bacillus subtilis*, the incubation period, the percentage of diseased leaf, the intensity of the diseased leaf, growth and yield corn. The result showed that the formulation of *Bacillus subtilis* in tapioca flour + cow manure showed a better effect in controlling the disease wilt stewart with 52,75% effectiveness and showed a better effect in increasing the growth and yield of maize with 72,1% effectiveness.

Key words : Treatment Seed, Maize Varieties, PGPR, Quatantine Pest

