

Biological Control of *Sclerotium rolfsii*, Damping-off Disease on *Centella asiatica*

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Abstract : *Centella asiatica*, asiatic pennywort is a medicinal herb plant used widely which held in herbal health care group. The problem of asiatic pennywort production is the outbreak of *Sclerotium rolfsii* causing a damping-off disease which caused plant stem turn yellowish, finally they begin to die and result in extremely damaging to growers. Therefore, the studies were carried out to control damping off with *Trichoderma* sp., *Bacillus subtilis* and fermented banana as compared to the control to suppress with bi-culture under the laboratory condition. It was found that *Trichoderma harzianum* showed the highest percentage of inhibition, 69.44%. The pot experiments in greenhouse condition showed that chemical had minimum of damping-off (31.54%) and highest yield (1.20 tons/rai) and following by *Trichoderma harzianum* and *Bacillus subtilis* treatment. Due to the chemical usage leaving toxic residues on plants and affect the human bodies. *Trichoderma harzianum* and *Bacillus subtilis* should be considered as alternatives which have percent of damping-off disease and yields as follows: 45.50 and 43.75%, and 1.12 and 1.09 tons/rai, respectively. These two products are known that they have no health risk for growers and consumers in the future.

Keywords : *Centella asiatica*, *Sclerotium rolfsii*, *Trichoderma harzianum*, *Bacillus subtilis*

Conference Title : ICMAP 2015 : International Conference on Medicinal and Aromatic Plants

Conference Location : Penang, Malaysia

Conference Dates : December 03-04, 2015