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Exploration and Identification *Trichoderma* spp. as a Biological Control Agents to Plant Pathogens and Starter Making Biological Fertilizers

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Abstract : The objectives of this study are: (1) to inventory *Trichoderma* spp. in North Minahasa District, South Minahasa District, and Tomohon City-Minahasa District, (2) inventory of *Trichoderma* spp. in the rhizosphere of cultivated and fallow gardens, and (3) calculate the population density of *Trichoderma* spp. all soil samples. The scope of this study is the biological control of plant pathogens, induce plant resistance, and biological fertilizer production. *Trichoderma* isolation spp. has been carried out by dilution method and cultured on PDA + antibiotics. Population density of *Trichoderma* spp. calculated using the plate calculation method. Identification of this species function based on the color and patterns of sporulation in the colony; hyphae and clamydospores; conidiophores; and phialides and phialospores. *Trichoderma* species found in North Minahasa District were *T. harzianum, T. koningii*, and *T. viride*; in South Minahasa District, *T. koningii* and *T. viride*; and in Tomohon City-Minahasa District, *T. koningii* and *T. viride*. In fallow gardens were *T. harzianum, T. koningii*, and *T. viride*, and in cultivated gardens were *T. koningii* and *T. viride*. Population densities of *Trichoderma* sp. in South Minahasa District, North Minahasa District, and Tomohon City-Minahasa District, respectively 1,363.64, 466.67, and 26.67 CFU / g soil.
Keywords: Decomposer, Starter, *Trichoderma harzianum, Trichoderma koningii, Trichoderma viride.*

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