

C026033: MAJOR INDUSTRIAL MICROBIOLOGY

KEY WORD: ECTOMYCORRHIZA

Sarawooth Huntapap: Effects of Isolated Ectomycorrhizal fungi on Growth of Khasia Pine (*Pinus Kasiya* Royle ex Gordon) Seedlings. Thesis Advisor : Asso. Prof. Prakitsin Sihanonth, Ph.D. 120 pp. ISBN 974-579-836-3

Eighteen strains of ectomycorrhizal fungi were isolated from root of Pine (*Pinus* spp.) seedlings. Pine seedlings were collected from nursery which locate in five provinces of Thailand. Grouping them into five groups based on the similarity of their colony and mycelium formation pattern. Isolated ectomycorrhizal fungi Surin 1, Pisanulok 2, Saraburi 3, Tak 4 and Ubolrachathani 3 were represented to Group 1, 2, 3, 4 and 5 respectively. The inoculum medium containing 1:50 volume by volume of organic soil (soil plow) and vermiculite gave the highest growth rate in all five representative isolated ectomycorrhizal fungi. Comparing growth rate of infected khasia pine seedling with five representative isolated ectomycorrhizal fungi and uninfected khasia pine seedlings found that five months old infected khasia pine seedling with all five isolated ectomycorrhizal fungi showed higher growth rate statistically significance than uninfected khasia pine seedlings.