Artificial Production of Myceria of Entomopathogenic Fungi Species by using Soybean as Host Medium

Nam-Sook Park ¹, Eunju Park², Byung-Rae Jin³, Hung- Dae Sohn³,
Pil-Don Kang⁴ and Sang-Mong Lee¹

¹Department of Genomics, Proteomics and Bio-materials, Miryang National University, Miryang 627-706; ²Division of Life Sciences, Kyungnam University, Masan 631-260; ³Department of Applied Biotechnology, College of Natural Resources and Life Science, Dong-A University, Busan 604-714; ⁴Department of Agricultural Biology, National Institute of Agricultural Science and Technology Suwon 441-100

This study was carried to establish the production methods of mycelia of the entomopathogenic fungi, *Cordyceps militaris*, *Paecilomyces tenuipes*, and *Paecilomyces spp.* on the host media of several soybeans. The mycelia of entomopathogenic fungi showed optimal growth at $26\,^{\circ}\text{C} \sim 28\,^{\circ}\text{C}$, $90\sim 95\%$ R.H. without host (soybean) and germ line specificity. On the other hand, *Cordyceps militaris* grew well under the photoperiod of 24L (illumination of 24 hours), but the germ lines *Paecilomyces tenuipes* and *Paecilomyces spp.* showed best growth under the photoperiod of 6L18D (illummination of 6 hours and darkness of 18 hours per day). From these results, all the germ lines of 3 fungi did not show species-specificity in culture temperature and humidity during artificial cultivation of soybean mycelia, but showed the photoperiod specificity in during the processing.