C-2.4. Effect of acidification of environment on wood-decaying fungi

Contact person Hiroyuki Hattori
Associate Professor
Department of Biological Production
Faculty of Bio-Resource Sciences
Akita Prefectural University
Kaidobata-nishi 241-7, shimoshinjyo-nakano, Akita 010-0146, Japan
Tel:+81-18-872-1656 Fax:+81-18-872-1678
E-mail: hhattori@akita-pu.ac.jp

Total Budget for FY1996-1998 14,781,000Yen (FY1997, 4,927,000Yen)

Key Words Acidification, *Armillaria*, Forest damage

In this studies, the effect of acidification of environment on the pathogenic fungus *Armillaria* are investigated.

The pathogenesis of hypha of *Armillaria* obtained from the blighted trees of Nikko and Mt. Tanzawa was investigated. The hyphae obtained from the blighted trees and the hypha of *Armillaria mellea*, that is the strongest pathogen among the *Armillaria*, were inoculated into the soil where larch (*Larix leptolepis*) was planted and the disease symptoms of the larch were observed. The larch inoculated with *A. mellea* died after 3 months of the inoculation, while those inoculated with *Armillaria* of Nikko and Mt. Tanzawa did not die. Also, the color of the fruit-bodies of *Armillaria* from Mt. Tanzawa was different from that of *A. mellea*.

These results suggest that the *Armillaria* of the blighted trees of mountainous region is not *A. mellea* and the pathogenesis is less strong than *A. mellea*.