

Airborne Fungi in microbiology laboratory

Vena Chupia¹, Kanreuthai Wongsawan¹, Raktham Maktrirat¹, Malee Mekapratheep²

¹*Department of Veterinary Bioscience and Veterinary Public Health,
Faculty of Veterinary Medicine, Chiang Mai University*

²*Department of Microbiology, Faculty of Medicine, Chiang Mai University*

Abstract Nine (9) locations in the microbiology laboratory, one (1) location at indoor of central laboratory and one (1) location at outdoor of central laboratory were collected for airborne fungi by using airborne microorganism collector. The results showed that the mean concentrations of airborne fungi were 1,027.7, 1,930 and 2,960 cfu/m³, respectively, which were higher than the recommendation of the American Conference of Governmental Industrial Hygienist (ACGIH) (<500 cfu/m³). The result showed that at least 7 genus of fungi (*Aspergillus* spp., *Penicillium* spp., *Cladosporium* spp., *Curvularia* spp., *Alternaria* spp., Yeasts and non sporulating fungi) were found. *Cladosporium* spp. (37%), *Aspergillus* spp. (30%) and Yeast (21%) were frequently isolated genus than the others. Furthermore, we found that the concentration of airborne fungi after disinfection by Ultra-violet Germicidal Irradiation (UVGI Lamp) at 0, 8 and 16 hours were 627.7, 938.5 and 962.4 cfu/m³, respectively.

Keywords: airborne fungi, microbiology laboratory, airborne microorganism collector
