Abstracts

This Action Research of Highland Local Mushroom Rehabilitation and Utilization aims to investigate the diversity and distribution of local mushrooms in experimental fields, the study of culture's technics to cultivate potential mushrooms, study of process mushroom conservation, rehabilitation and utilization. And developing mushroom conservation and rehabilitation, learning bases by community's participation. The distribution of mushroom in experimental field Ban Mae Malor, Mae Malor Highland Development Project Using Royal Project System, Amphoe Mae Chaem, Chaingmai found *Amanita* sp., *Russula* sp., *Cantharellus* sp. and *Termitomyces* sp., but not found *Astraeus* sp. in this area. In the study of some factors affect to fruit-body forming of *Astraeus* sp., only in burned areas were found. Samples of *Termitomyces* sp. HL795, HL797 were identified by using ITS4 and ITS5, found that similar to *T. heimii* and samples of Astraeus spp. could identify to 2 species, *A. odoratus* and *A. sirindhorniae*. The study of relationships between microbes in termite mounds and Termitomyces mushrooms, that could culture 30 isolates of bacteria and *Xylaria escharoidea* from termite combs. And the simple method to cultivate Astraeus sp. and Termitomyces sp. is using spores from the mature fruit body. In a zero waste study, old spawn can use to cultivate oyster mushroom, straw mushroom, ink cap mushroom and giant cup mushroom. Developing mushroom conservation and rehabilitation learning bases by community's participation; the group's activities will process continually to practice skill. The public's lecturer developing and visiting the successful person or organization is the important thing that bring to the sustainable of mushroom conservation, rehabilitation and utilization.

Keyword: **local mushroom, Termitomyces, Astraeus, mushroom rehabilitation and utilization, highland mushroom**