

Abstract

Over 800 kinds of medicinal plants and folk medicine from the study of the past year has led to the study for a rehabilitation conservancy of local wisdom in the aspect of highland medicinal plants utilization and a value creation research to improve as the products with the standard. The purpose is to raise an awareness of the highland communities about the value of medicinal plants and to encourage its members to conserve and utilize their own local wisdom in the preliminary treatment as the substitution of using the external requisites with suitable approach.

The study of 6 highland communities is consisting of: Huai Som Poi, Huai Nam Khun and Wat Chan Royal Project Areas and Pong Kum, Pa Kluai and Pang Ma-O Highland Development Project Using Royal Project System. From the rehabilitation conservancy of local medicinal plants and folk medicine utilization, various plants were developed into 5 potential products as follows: herbal compress ball, herbal inhalant, tamarind body scrub, Gurmar and Horseradish instant powder beverage.

In the aspect of value creation, the analyses of soil quality in 5 medicinal plant farms, despite there are the contamination of metallic poisons: Arsenic and Chromium, but the quantity is lower than the average level of metallic poisons in soils. Furthermore, the inspection results of production equipment, the water used in factory of Ban Sri Boon Ruang were within the designated criterion. The producing process of Gurmar and Horseradish instant powder beverage has been improved that the number of yeast and mold was decreased at 97.60 % and 85.55 % respectively. Moreover, the amount of Coliform bacteria and *Bacillus cereus* in Gurmar instant powder beverage was reduced at 95.65 % and 99.93 % respectively. In addition, the study of plants propagation such as *Elephantopus scaber* L. indicates that the cluster separation method has only 19.44% chance of survival and has a slow growth rate in comparison with natural seed propagation. For the *Gymnema inodorum* (Lour.) Decne., the old branch grafting method has the highest survival rate at 65% and in experimental planting have growth rates similarly. For the *Thunbergia coccinea* Wall. ex D.Don., the method of cluster separation has the highest survival rate at 78.80%, followed by the roots grafting method with the rate of 50% and in experimental planting by triangle shape of climbing support structure made from bamboo have growth rates well. And, 6 kinds of medicinal plants, including: *Gymnema inodorum* (Lour.) Decne., *Curcuma longa* L., *Zingiber ottensii* Valetton, *Zingiber montanum* (J. Koenig) Link ex A. Dietr., *Cymbopogon citratus* and *Citrus hystrix* DC. were tested to plantation into the farms for the future source of herbal materials. Moreover, 2 formulae the detoxification and five formulae of the physical encouragement and

elixir were selected and study for the local utilization which are in need of further study for the plantation and developed into products.

Keywords: Medicinal plant, Local Wisdom, Rehabilitation Conservancy, Value creation, Highland community

