

Lac Insect Cultivation on Local Weeds for Increasing Lac Production

Metheesitthikun, Ratchanon (School: Huayso Wittayakhom Rachamangkhaphisek)

Punyainkaew, Natnicha (School: Huayso Wittayakhom Rachamangkhaphisek)

Thammawong, Warakorn (School: Huayso Wittayakhom Rachamangkhaphisek)

Lac is one of the important export products of Thailand as it can be used in many industries such as medicine, paper, printing, etc. Lac is a resinous substance secreted from lac insects (*Tachardia lacca* Kerr). At present, farmers tend to cultivate lac insect on *Samanea saman*, *Combretum quadrangulare*, *Albizia lucida*, *Zizyphus mauritiana*, *Cajanus cajan*, and *Ficus racemosa*, etc. which are economic crops. This causes damage to wood and produce and is also inconvenient to collect the lac from these tall trees. Therefore, this project aims to investigate the cultivation of lac on local weeds. Four weed plants, namely giant mimosa (*Mimosa pigra*), leucaena (*Leucaena leucocephala*), sunn hemp (*Crotalaria juncea*), and sesbania (*Sesbania javanica*), which had same age and branch sizes were tested. The results showed that suitable weed for lac cultivation was giant mimosa over 3 years old and branches diameter more than 2 cm. Moreover, the quantity of lac larvae should be 400 per branch. This ratio gave the highest lac yield of 82.52 g per branch and did not kill the tree. In addition, lac cultivation on giant mimosa plant gave higher lac yield than that cultivate on rain tree (*Samanea saman*). Key words: lac insect, lac, weed, giant mimosa, cultivation