

Silver Prize

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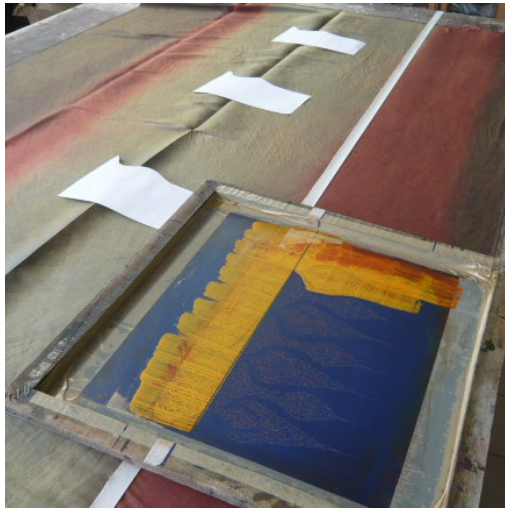
Silk Products Development Using Silkworm Fed with Cassava Leaves

Thai government currently encourage agriculturalist to cultivate more cassava for producing Ethanol but cassavas are grown annually in arid and poor soil and live only by rain. They can be harvested in the age around eight to ten months. This project cassava leaves, *Manihot utilissima* and castor leaves, *Ricinus communis* are fed to non-mulberry silkworm therefore; the worms are called Eri silkworm, *Philosamia ricini Boisid*. They distinctively differ from mulberry silkworm, in that they are easily raised and healthy. They can also eat many kinds of plants, especially, cassava leaves.

The silk threads are also lustrous, good quality, not easily wasted by perspiration, and soft. Silk are not only used for making clothes but for many furnishing applications such as upholstery, curtains, duvets, table coverings, and more.

The process is unraveling several cocoons and winding the filaments onto a reel. This indicate that the fibers can be easily removed and be more productive with less time consuming. These processes brought about various threads and silk products. In addition, the by-product of silk farming gave benefit to the community for example, the by-products and left over materials can make extra income as long as silk famers are supported to grow cassava to feed Eri silkworm. According to QTHAISILK's research, using 50 percent of cassava leaves to feed up Eri silkworm farmer harvested less corps but using only 30 percent of cassava leaves gave more corps. To study and gather

information to improve Eri silkworm's species, to conduct research and to develop silk farming technology by using cassava leaves, to study production technique and silk processing including studying cost and income used for Eri silkworm farming are the complete studying process of development. All of these of these are to support the extended outcome in the future which local cassava farmers have other options to increase their income and they will not desert their homeland. The most important thing is they to some extent have a better living which possibly develop society in rural area and prevent migrating of local labors.



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