

LOCAL USE OF SATHON, *Millettia utilis*, IN NA HAO, NORTHEAST THAILAND
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ABSTRACT

Sathon, *Millettia utilis*, is a tree that grows in Loei, Pitsanulok and Petchaburi Province. It is unique for the Northeast region to use the leaves to make sathon sauce as a compliment to add taste to the food (Agricultural office, Dan Sai). The local people make it in March- April every year. There is not much research on this species even though it has long traditions in use. The objective of this study was to find out more about its use, harvesting method and the processing of the product. From earlier studies in the village we knew they kept sathon in homegardens, but little was known about the status of the natural population and the origins of sathon.

The research for this study took place at Ban Bung village in Na Haeo district in the Western part of Loei Province. A part of the fieldwork was done at the Kao Nam Lin temple forest, about 1km West of Ban Bung. The study includes both qualitative and quantitative data attained from social survey and biological assessment. For social survey we mainly did household interviews, semi-structured and open-ended as well as informal conversations. The results show that *M.utilis* has many uses and the villagers share the same knowledge about its use. We also found that they can use two species for making the sauce; both *M.utilis* and *M.leucantha* var. *buetoides*.

METHODS

The field period was from the end of March to the first of May. This period was chosen because it is harvesting season for *M.utilis*, and the processing of making the sauce was possible to observe directly. The purpose for doing a biological assessment was to verify the presence of a natural population of sathon trees. We talked to the villagers to specify where they go to find sathon in the wild. One site was the Kao Nam Lin temple forest (550 m.a.s.l) on a quite steep hill about 1 km West of Ban Bung village. It is classified as a mixed deciduous forest (Dhillion et al., 2003). The villagers use the temple and there are many signs of human activity.

A belt transect was set up to count the number of trees and divide them into age-size classes to get an impression of the population status. The field area was divided in 4 parallel transect lines, each of 50 meter. For each transect we made 5 plots, (10*10m). Altogether there were 20 plots. For each plot all individuals of sathon trees were counted. The data on age-size distribution was sampled according to Dhillion et al.(2003). Adults ($\geq 1.50m$), sapling (0.50-1.50m) and seedling ($< 0.50m$). For all samples we measured height and also dbh for individuals taller than 1.30m. Signs of harvesting, like cutting branches, were also noted.

RESULTS

We interviewed 52 people(19 men, 33 women) of the 232 villagers in Ban Bung (Na Haeo statistics, 2003). The age range was from 22-80 years. The results show that women and men share the same knowledge and gave almost the same answers to all questions, even though not all explanations were detailed. Every household make sathon sauce, and they use it everyday. They all find sathon in homegarden, but they also said they could find sathon in the forest if they needed more. We found that they can use two species for making sathon sauce; *Millettia utilis* and *Millettia leucantha* var. *buetoides*.

Table 1 The table shows differences between the two species used for making sathon sauce. (Source: Dr. Nijisiri, Chulalongkorn University, Dunn, 1914 and Hooker, 1973).

	<i>Millettia utilis</i>	<i>Millettia leucantea</i> var. <i>buetoidea</i>
Name	Sathon	Sa thon
Pod	Flat	Turgid
Leaves	5	7
Bark	Thin	Thick
Flavonoides	Few	Many

Use

According to a key informant¹, people originally used the root of sathon as a medicine. They boil the root and drink the water to protect from pathogenic and cure air and acid in stomach. It was this property that led to the invention of sathon sauce making. They smashed the leaves and put on the head and on the stomach where it hurts. Then they mixed water into the smashed leaves. They tasted it, added salt and boiled it and found it had a good taste. After this discovery, people started to bring seeds from the forest to grow in the field and homegardens. The rumour spread, and now it is common to make the sauce in any village where sathon is available. They eat it with fruit, *somtam* and many local dishes. In Dan Sai they also use it to make a curry. Some still use it as a medicine. In addition they can use the stem for firewood and handles for implements. Some also save the leaves after fermentation to use as fertilizer or to grow an edible mushroom. Of 52 respondents 37 say they sell some bottles, but mostly to relatives or others who don't make it themselves. In average every household keep 20 bottles a year.

Belt transect

We found only one site in the forest with natural population of sathon according to old informants. On the selected site we counted altogether 53 adults, 96 saplings and 70 seedlings. There were few signs of harvestings, and only two trees had cuts from the past that had influenced the stamens growth.

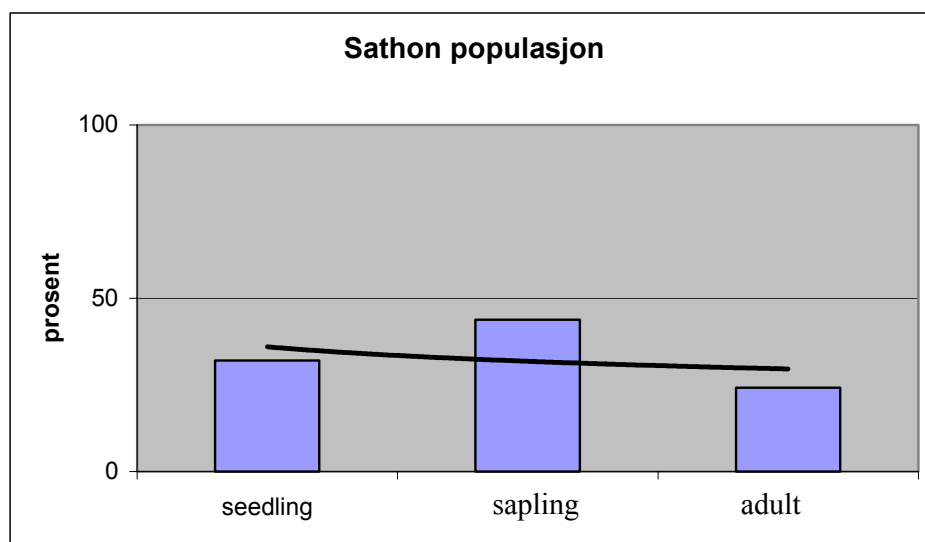


Figure 1 Age and size distribution in natural population of sathon at Kao Nam Lin forest.

DISCUSSION

Traditional knowledge has resulted in the multiple use of sathon tree. It is passed down from generations, and they all seem to share the same knowledge, women as men. It is interesting that they can use both *Millettia utilis* and *M. leucantha* to make the sauce, however *M. utilis* is preferred for better taste. They seem to get enough leaves from homegardens and surrounding fields even though everyone uses it. The natural population we looked at had an even distribution of all age classes, but little can be said about the status due to the small sample size. It did not seem much impacted from harvesting. Sathon is useful in many ways and the villagers want to take care of it. People said it had always been little sathon trees in the forest. The reason for shortage of sathon is probably due to deforestation in general, and not because of overharvesting. They all know you can only harvest once a year.

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Informant 1: Kampan On Utai (woman, 49 years)

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