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## LOTUS FIBRE: A RAREST FABRIC

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**L**otus, *Nelum bonucifera* also known as Indian lotus, sacred lotus is native to Asia and Australia and is an aquatic plant under the family Nelumbonaceae. It requires air temperature at least 21°C and blooms after 3-4 weeks in water above 27°C. It needs 6 hours of direct sunlight to flower. It is one of the sacred flowers that are used for blessing in Hinduism and Buddhism.



Courtesy: AAA セッション –  
Divine Human Alchemy

### Commercial Use of Lotus

The main consumable parts of lotus are rhizome and seed. Rhizome is very popular in Asia as it is consumed as vegetables. In Manipur also, this rhizome is very popular for making a dish called “*Singju*” (*Vegetable Mixture/Salad*).

Flowers, leaves and seeds are used as medicines. Flowers are used for worshipping in different parts of India. Seeds are also used for eating purpose. It helps in preventing bleeding, cough, fever, liver and stomach-ache. Sometimes, it is used for seasonings and flavours. It is also believed that lotus helps in swelling, cancer cell, heart and blood vessels. It is used for cosmetics and perfumes.

### Lotus Silk

It is one of the rarest fabrics in the world. It is produced across Cambodia, Myanmar and more recently produced in Vietnam and India also. Just for extracting lotus silk by a person for one scarf, it usually takes 2 months. The only variety that can produce lotus fibre

is *Padon-ma-kya*. It is of two varieties viz. Large and Small *Padon-ma-kya*. The large one contains spike up to only half of the stem while the other contains spike all over the stem. It grows in running water and deep down at 7 feet. There are 3 colours for this variety viz. white, red and pink and only, the pink one is used as the other two (white and red) cannot produce fibre. The nature colour of the lotus fibre is greyish yellow or pale yellow with different colour variations along the thread. The ideal stem of lotus fibre has no flowers and is pink in colour.

It is luxurious as it is done only by hand and also requires high skill to extract and weave it for final products. The products weaved from lotus silk is durable, and adaptable to weather conditions viz, warm during winter and cold during summer and also produce fragrance from the silk. The weight of the products is also too light, soft and water resistant.

### **Steps of Production for Lotus Silk**

Firstly, the leaves from the stems are taken out after harvest. Then, the stems are cleaned and wrapped it with wet clothes to keep it wet. The stem is dipped in water overnight for 2 days. After this, the fibre should be extracted from the stem within 10 days while it is wet or else the stem is break. Stems are cut into halves by blade or knife and stretch at opposite sides. Blade or knife is used as it is not easy to break the stem. We can see the fibre coming out from the stem. Once the threads come out, we need to twist and roll them with the hand on the table. We stretch until all the fibres from the stem are taken out. Then again, from the cut stems just 3 inch from the end, it is again cut with a blade and stretched it again. This procedure is done again and again until the fibres extracted becomes thick. Then, the fibres are rolled together to form a strong thread like structure. During the whole process, water is sprinkled over the fibre to make it wet. After the fibre is extracted, it is put under shade. The threads are washed thoroughly before drying to Sun. Traditional glue made from rice is applied to the thread and after that rubbed with wax. After that the lotus silk is spin in order to put onto the loom with the help of spinning wheel. For dyeing purposes, natural materials such as tree barks, seeds, jackfruit and lotus leaves are used. Then, the weavers make into final product in the form of scarf, shawls, etc. by weaving with traditional loom.

	
<p>Courtesy: Pinterest Step 1: Lotus Harvesting</p>	<p>Coutesy: NguyễnHuệHảiNgoại: LuaTo Sen Ở Myanmar (nguyenhuehaingoai.blogspot.com) Step 2: Lotus Fibre Extraction</p>
	
<p>Courtesy: Lotus Silk: A Sacred Luxury (onlineclothingstudy.com) Step 3: Preparing Lotus Yarn</p>	<p>Courtesy: Pros of New Kintakun Luxury - Kintakun Collections (kintakun-bedcover.co.id) Step 4: Lotus Fibre weaving</p>
	
<p>Courtesy: Lotus Weaving (annheritageinle.com) Step 5: Weaving Lotus Fibre</p>	<p>Courtesy: Long live the ingenuity of the textile industries  Mid&amp;Plus (midetplus.fr) Step 6: Dyeing Lotus Fibre</p>

**Case Study on the Inle Lake of Myanmar**

In Myanmar, about a century ago, a woman, Daw KyarOo, wove a robe from lotus fabric for the first time to give to a Head Abbot at a local Buddhist temple. In Myanmar, lotus has a high symbol of religion and spiritual power. After her death, her relatives review the weaving techniques and take



Courtesy: A Complete Guide for Traveling to Inle Lake (halfhalftravel.com)

under her footsteps to continue the lotus weaving work.

Inle Lake is located in Nyaungshwe Township of Shan State and is a part of Shan Hills in Myanmar. It is the 2<sup>nd</sup> largest lake in Myanmar. In dry season, the average water depth is 7feet with deepest point being 12 feet and during rainy season, the depth is increased by 5 feet. Inle Lake measures 22km long and 10km wide and is a home to Intha people. The transportation is done by boats on the lake.

Lotus plants grow abundantly in Inle Lake due to its perfect geographical and its suitability conditions. Unique fabrics from the lotus fibres in this Inle Lake and so many tourists came to this place in order to observe the ancient technique of lotus silk extraction. The threads are extracted from the sacred lotus (*Nelumbium speciosum*). It attracts more buyers due to the increase in tourists since Myanmar opened its doors to vacationers in 1990s. While the tourist came for the visits, the people in the shops of lotus fabrics try to demonstrate how to extract fibres from the stem of the lotus. The fabrics became popular to singers, modellers, actors for its uniqueness and even attract international clothing brands. Due to the increase in demand, the raw materials are even taken from different parts from Myanmar. Japanese and Italian designers are already incorporating the luxury fabrics into collective and finished products sold for thousands of dollars.

A few kilometres from the Lake, a school is located and is run by a master weaver Khin Win Kye. This school mainly focus to train the young girls for fabric extraction from lotus stem. There are no tuition fees for this school and donations are given by non-government organisations to run this school.

Firstly, lotus fibre extraction was done mainly to give offerings to Buddhism abbots in the form of lotus robes, but nowadays it is being used to weave scarves, shawls, clothes, etc. In InleLake, most of the experts that are experts in lotus weaving are old women. Most of the older women turns the threads into yarn and weave while the younger ones mainly focus on the fashioning of the clothes designs. Most of the people working under the shops and workshops are older women and also gives chance to older women in their 70s and 80s to earn their living by lotus plant picking and gathering, weaving, extracting fabrics. The supply chain for the finished products has also grown higher due to increase in demand. Occasionally, silk and lotus threads are also mixed together to make different products but the pure lotus is the one that is more expensive.

The best season to harvest this lotus is from June to November. Nowadays, people have their own plantation of lotus and harvests from it while in the past wild plants are harvested. There is a belief in the past days for this Inle Lake people that the fibre extractor must be an unmarried woman and women in their periods should not extract fibre during the past but nowadays married women even extract fibres from lotus. Middle aged women are mostly doing the extraction process while young girls work together to train themselves for this extraction process. The stems after the extraction of fibres are thrown to the lake in order to give benefit to the lotus plants as fertilizers.

### Conclusion

In order to extract the fibre, the stems must be kept wet at all cost even during the extraction process to prevent from breaking. Lotus fibre extraction gives positive economy in Myanmar and gives the chance to earn money for many local women residing at the Inle Lake. The lotus fabric attracts even the international clothing brand due to its uniqueness and durability. The Inle Lake makes a tourist site for lotus fabrics and due to its high demand, some of the raw materials are even taken from elsewhere inside Myanmar. The products that are produced from lotus fibres are luxurious and expensive because of time consuming factors and requirement of high skills from the extractors and weavers. The quality of the fibre or products made from it depends on the skills of the extractor.

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