

THIS IS URUSHI

- The Beginning of Urushi
- The Urushi Tree
- The Range of the Urushi Tree
- The Harvest of Urushi
- The Components of Urushi
- The Properties of Urushi
- The Cautions of Urushi
- Other Uses of Urushi
- The Purification of Urushi
- The Varieties of Urushi
- The Creation of Urushi Objects

THIS IS URUSHI

The Beginning of Urushi

Urushi is the sap drawn from the urushi tree [*Rhus verniciflua*] and among all the varieties of natural lacquer, urushi has the most superlative qualities. It is said that in China lacquer has been used since 4000 B.C. while in Japan urushi lacquered items such as combs and trays have been excavated from the Fukui Prefecture Shimahama tomb that were used earlier than the Jomon Period or roughly 5500 years ago.

It is thought that the Japanese word 'urushi' is derived from 'uruwashi' (beautiful, pleasing) and 'uruosu' (to be moist and luxurious). Elsewhere urushi objects are frequently called "japanware."

At first urushi was utilized for its adhesive quality in the making of hunting and warrior equipment. Later other good qualities of urushi were observed, such as the property to paint surfaces and to preserve what it had been painted on. Innovative applications beyond the original purpose brought about a culture which valued the decorative qualities of urushi.

The Urushi Tree

The urushi tree is a deciduous tree that grows to around 10 meters in height and 10 cm in diameter. The leaves emerge around April or May, around June bear yellowish-green flowers, and in autumn turn brilliant red.



The Range of the Urushi Tree

The urushi tree ranges widely from Japan to China, Vietnam and Southeast Asia. Though unusual, urushi has been gathered in Mexico and various crafts are made there. However of all the countries in the world in which the urushi tree is found, those flourishing in Japan are of the highest quality.

The Gathering of Urushi

Urushi is harvested by making cuts on the trunk of the urushi tree. From June through November, at intervals cuts are made in the tree to gather the sap (raw urushi). This is the Japanese method of harvesting urushi.

Over the 14 to 15 year life of the urushi tree during which sap can be harvested, it yields only about 200 grams of urushi.



The Components of Urushi

The urushi sap is composed of urushiol, gum, nitrous elements, liquid and so forth. Of the primary components urushiol and lacquer, urushiol is responsible for the special characteristics that urushi possesses. The higher the content of urushiol, the higher the quality the urushi becomes. In terms of the proportional content of urushiol, urushi produced in Japan has the highest, that produced in China is next, and that from Vietnam next.

The Properties of Urushi

Urushi differs essentially from paint in the way in which it dries. Urushi is not cured through a drying process but rather requires exposure to specific temperatures and humidity (that is, between 10-20 degrees centigrade and between 70 to 90 percent humidity). Within these conditions the significant components of urushiol and lacquer undergo a chemical transformation that produces a “curtain” or layer of lacquer.

Once urushi has hardened, it creates a lacquer sheath that can withstand acid, alkali, alcohol and high temperatures. With its adhesive strength, urushi is completely different from any other kind of paint.

Urushi is not dissolved with water, but rather turpentine, camphor oil, or kerosene are used. When water is applied to urushi instead of dissolving it, the hardening process is hastened.

The Cautions of Urushi

Due to a toxic element within the urushiol component, if urushi comes into direct contact with the skin it can create an irritation much like poison ivy. However there are some people who have no reaction to contact with urushi.

With contact, in addition to the strong itchy sensation there may be blisters and puffy redness. However as long as there are no germs or suppuration from the blisters, the skin will return to normal. Exposure to urushi in this way may even result in a degree of immunity to further exposure.

Other Uses of Urushi

It is said that urushi has some medicinal properties with effect on acid stomach, chapped hands and feet, and as a tonic. It appears that in order to be ingested, the outer skin of the urushi seeds should be removed, the inner portion only parched and ground to a fine powder that is prepared as a beverage like coffee.

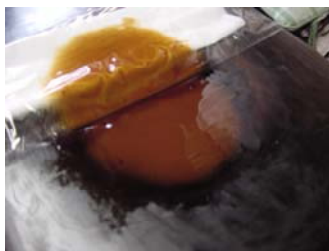
The Purification of Urushi

From the urushi sap drawn from the urushi tree foreign material and impurities are filtered out. Then slowly the water content is evaporated. The purification process is intended to produce the appropriate seasoning, viscosity, glossiness and transparency for a painting medium. This work is called "nayashi" or "kurome."



The Varieties of Urushi

The sap which is drawn from the urushi tree is called raw urushi. When water content is evaporated from raw urushi it makes clear urushi. Mixing iron powder into clear urushi makes black urushi. These three broad categories of urushi are the basis for decorative lacquer techniques, to which we will now turn.



Ki-Urushi(raw urushi)
Urushi)



Suki-Urushi(clear urushi)



Kuro-urushi (black