

The History of Wajima-nuri

There are a number of theories as to how urushi production started in Wajima but as yet none of them have been confirmed. Vessels that contain locally found powder mixed in with the urushi undercoating have been discovered in a number of local excavations which date back to medieval times. From evidence found in the small number of handed down texts that have survived the centuries, it is thought that urushi was being produced in Wajima in the Muromachi Period (1333-1573).

Important factors in the development of urushiware production are both the local abundance of readily available materials such as Noto cypress, zelkova, urushi trees and Wajima jinoko powder and the area's favorable climatic conditions. Wajima was historically a port of call on a major sea route which made it convenient for the transportation of materials and goods. This was probably an important contributing factor to the local development of the industry. However, the fact that the people involved in the production and distribution of urushiware had such pride in their work, and that the level of the techniques were continuously being honed, are probably the most important factors in ensuring that the tradition has been passed down so successfully to the present day.

The Production Process of Wajima-nuri

There is a systematic division of labor in the production process of Wajima-nuri that at its broadest level can be divided into the stages of substrate production, lacquering and decoration. Within these general categories there is a further level of specialization which includes the wooden substrate crafts of wan-kiji (wood turning to produce objects composed of concentric circles), magemono (the bending of previously soaked wood to produce substrates), sashimono (the assembly of processed wood into boxes and shelves), hou-kiji (specialist carving of more complex shapes), and the lacquering techniques of shitaaji (undercoating), uwanuri (top coating), ro-iro (polishing), maki-e (predominantly decoration through the sprinkling of gold or silver into intricate patterns) and chinkin (decoration through carving of patterns onto the surface and filling the grooves with gold and silver).

With a production process based on a system of division of labor, a piece will typically go through over one hundred stages which can take anything from six months to several years to complete. Each of the specialist fields have developed their own traditions of high level craftsmanship and efficiency at each stage of the production process which have been carefully passed down through generations and are still held in high regard today.

Each craftsman works with confidence and dedication to produce his work. The nushiya is the master craftsman and it is his job to manage and oversee the entire production process. From the time that an order is placed until the delivery of the product he is uncompromising in ensuring that at each stage the highest standards of quality are maintained.

About Urushi

Urushi is the sap of the urushi tree. It has strong adhesive properties and is used as a lacquering material that on hardening becomes extremely durable and produces a glossy finish. It can be found widely throughout Eastern Asia and has been used in Japan for several thousand years. The word 'urushi' is thought to have originated from the Japanese *uruwashi* or *urumu* which approximates to the English for fresh and vibrant gloss. When urushi hardens it is very resistant to both acids and alkalis and is durable enough to last several thousand years. Urushi vessels have been found in excavations that date from the Jomon period (8000 BC - 300 BC). There have even been cases reported where the original wooden base has completely rotted away but the original urushi coating has remained with its color and quality preserved.

Urushi is also a very delicate substance. The quality of urushi changes depend-ing on the time of day and year in which the urushi is taken from the tree and it is also affected by the method by which it is collected. Urushi is different from other coating materials in the way that it is dried. It contains a substance called urushiol which reacts with oxygen and hardens through a process of oxidation. For this process to occur a suitable temperature and level of humidity are both necessary. The drying process also proceeds gradually over a considerable length of time after the piece has been completed. Therefore a piece that has just been finished should be treated very carefully when it is first used. It can be used normally after the first year and after about three years of use the gloss fully matures and the piece can be said to have come of age



Urushiware is Ecological

With its raw materials of wood and urushi, urushiware is a collaboration of two of the blessings of nature. The production process uses almost all natural materials which means that a very small amount of energy is required. Further, there are no harmful side-effects associated with the production process and it creates minimal environmental pollution or ecological damage.

How to Handle Urushiware

If urushiware is used for its original purpose it will rarely become damaged. However, there are some points to remember with regard to the way that it is washed and stored. If care is taken to keep to these guidelines, urushiware will enhance the aesthetic quality of your life for many years to come.

How to Wash



Urushiware can be washed with a conventional neutral household detergent. Scrubbing brushes and steel wool that contain abrasive material in them will cause scratching and so should be avoided.

If urushiware is washed separately from tableware with rough surfaces such as pottery any risk of scratching can be further avoided.

No Microwave Ovens



Electromagnetic waves burn urushi so under no circumstances should urushiware be put into microwave ovens.



Refrain from Using Automatic Dishwashers and Dish Dryers

Please refrain from automatic dish washers and dish dryers as boiling water and hot air can damage urushi.



Avoid Direct Sunlight

Urushi deteriorates by being exposed to ultra-violet rays and so should not be placed in areas that get direct sunlight for long periods of time.

How to Store

If urushi is to be stored for long periods of time it should be out of direct sunlight and in a place with a reasonable amount of humidity. In order that mold does not form on it is important that any dirt or water should be wiped off before storage. A place that is too dry can cause warping so should be avoided.

Scratches and Damage Can Be Repaired

Urushiware can be re-lacquered and damage can be repaired. In Wajima this has been known from olden times as naoshimon and is the responsibility of craftsman who made it.



Wooden Substrates



The shape of the wooden substrate differs according to its purpose and the industry is divided into trades in which craftsmen who have mastered the necessary specialist techniques work. Certain woods are more suited to certain shapes and the correct choice of wood for each shape is another important part of the production process. Whichever kind of wood is chosen, it needs to be dried for three to five years after the tree has been felled before it can be used.



Wan-Kiji

Wan-kiji, which is also known as *hikimono-kiji* is the technique of turning wood on a lathe while carving it with a turning tool. It is used for producing circular vessels such as bowls, dishes, plates and pots. The woods most often used are zelkova, cherry and horse chestnut.



Sashimono-Kiji

Sashimono or *kakumono*, is the assembly of wood that has been made into boards. The woods most often used are Noto cypress, Japanese cypress, paulownia and ginkgo. The boards are used to make such things as stacked box sets, ink-stone boxes, miniature dining tables and trays.



Magemono-Kiji

Using thin prepared wood with a vertical grain, the wood is soaked in water to make it pliable and then bent into round shapes such as circular trays and lunch boxes. Good quality wood is necessary such as Noto cypress or Japanese cypress.



Hou-Kiji

Hou-kiji is also known as *kurimono* and falls within the field of *sashimono*. It is the specialist field of the production of substrates which have many curves and require the carving of more complex shapes such as tatami floor chairs, the legs of flower vases, the lips of *sake* vessels and spoons. The woods most often used are magnolia, *katsura* and Noto cypress.

Lacquering



Wajima-nuri has a characteristic lacquering method. It is known as *hon-kiji* and is a traditional technique of undercoating. *Wajima* has remained steadfast in keeping to this method and through continuing research has strived to achieve the highest quality possible in urushiware. It has become the standard in *Wajima* lacquering.

The parts of a wooden substrate that are most prone to damage are reinforced with cloth that is applied to the wood with urushi. Subsequent urushi undercoats are mixed with *Wajima jinoko* which literally means earth powder.

Jinoko is high quality baked diatomaceous earth (a light soft chalk-like sedimentary rock that contains fossilized algae that give it an absorbent quality). *Jinoko* is extremely heat resistant and when mixed with *urushi* dries to form a hard and durable coating. *Jinoko* in *Wajima* is graded according to the size of the particles and is applied to the substrate mixed with *urushi* from the roughest *ippenji* (first grade) followed by coats with successively finer grades. Between each stage the surface is sanded when dry and with each layer the finish becomes both finer and smoother. The repeated undercoating process however is not just for the purpose of ensuring durability. The undercoating process is also known as *jitsuke* and through careful manipulation of the thickness of coats and the sanding process between these coats the craftsman also determines the final shape and character of the substrate. It is an extremely important stage of the

production process as there is no room for error as any oversight will be visible in the finished product. In order to produce such high quality work, a considerable level of technique is required from the craftsmen to consistently produce at such a demanding level.

In *uwa-nuri* high quality refined urushi is applied to the substrate with a brush. Dust is the greatest enemy at this stage which requires great care and concentration. There are several varieties of urushi which are each used according to their individual properties. The season and climate contribute to the condition of the urushi when it is used and so it has to be carefully prepared. The experience and techniques of the *uwa-nuri* craftsman provide him with the ability to carefully mix and adjust the urushi so that each time it is used an optimum coating is achieved.



Decorative Techniques



One of the most important factors that give the both durable and elegant - its character is the beauty of the decorative techniques of *maki-e* and *chinkin*. With their harmonized colour-schemes they add a new dimension of aestheticism to urushiware.



Ro-iro Finish

Broadly speaking there are two main finishes in urushi. These are *nuri-tate* and *ro-iro*. *Nuri-tate* refers to the finish that is achieved by applying the final coat of *urushi* and doing no other work on it after it has dried. *Ro-iro* is a repeated process of rubbing urushi into the top coat and then polishing it. At the end, the final polishing is carried out using the skin of the hand until even the tiniest scratches have been removed. The resultant mirror-like finish which is unique to urushi sets off the gold and silver decorative work.



Maki-e

This is the decorative technique of using *urushi* to draw patterns on a lacquered surface and then sprinkling on gold or silver. It has a history of several thousand years and is one of the representative decorative techniques in Japanese urushi art.

Within *maki-e* there are a number of specialist techniques such as *hira maki-e* (flat collage-like designs), *togidashi maki-e* (sanded through designs), *taka maki-e* (raised designs) and *shishiai maki-e* (designs in relief). These can be used in a variety of ways to achieve many different kinds of finishes.



Chinkin

Chinkin is a decorative technique that involves carving into the lacquered surface of urushiware and filling these grooves with gold leaf or powder. A round-tipped chisel is the standard tool and is used for carving lines and grooves but other special chisels are also used for different particular tasks such as carving shallow wider areas or gouging out deeper grooves in the surface.