

Manufacturing Process and Characteristics of Classical Moxa

<Moxa raw materials> Moxa is made from the leaf of the mugwort (*Artemisia vulgaris*), using the dense white hairs on the bottom side of the leaf. Although mugwort is common throughout Japan, the plants that grow in areas of high snowfall are considered to provide the best-quality raw material for moxa. The areas around the Ibuki mountain range in Shiga Prefecture and in the mountains of Toyama and Niigata in western Japan produce particularly large mugwort leaves with optimal characteristics for moxa production. Large leaves mean fewer stems, which in turn reduces the amount of stem impurities introduced during the process of separating the fine hairs from the back of each leaf. This improves the yield rate and decreases production costs.

<Harvesting mugwort> Mugwort leaves are gathered from mid-May until early August. The harvested leaves are pulled from the stems and spread on a straw mat or other surface to dry naturally in the sun for 5 days. During this time, the leaves are carefully turned once or twice daily (a process termed "reversing heaven and earth") to ensure uniform drying. The dried mugwort is stored until the beginning of winter in the mountains, when the air becomes dryer than during the hot, humid summer months.

<Drying by heating> Moxa production is begun in late November. At that point, the sun-dried mugwort is dried by heating to remove any remaining water. If the leaves are not adequately dried, it is very difficult to separate impurities from the moxa later in the production process, and the resulting moxa will not be of high quality. This is why moxa is manufactured during the winter, when the humidity is low and better drying can be achieved. We use special drying rooms heated with natural gas, and blowers to disperse the hot dry air throughout the room. For moxa that will be used directly on the skin (direct moxibustion), the leaves are dried for about 20 hours. For applications in which a thin sheet of paper or similar substance is placed on the skin and the moxa is then positioned on that sheet (indirect moxibustion), the leaves are dried for about 12 hours.



<Grinding> Grindstones are used to separate the impurities from the fine hairs that will be used in the moxa. This process uses three different types of grindstone, which differ by the number and depth of grooves in the stones, and by the weight of the upper stone. Grindstones 1, 2, and 3 are used in grinding direct moxibustion, Grindstones 1 and No. 2 are used for applications in which moxa is burned on the head of an inserted acupuncture needle, and only Grindstone 1 is used for indirect moxibustion.

The grindstones are constructed in pairs, with one upper stone and one lower stone. The upper stone turns, the lower stone is fixed in position, and the mugwort is introduced through a hole in the upper stone. The stone used in grindstones for moxa production should be neither hard and fine-grained or soft and coarse-grained; the best stone is hard and coarse-grained. Fine-grained hard stone produces moxa fibers that are too finely powdered and will not stick together, while rough-grained soft stone yields poorly cut fibers and coarse, uneven moxa. For well-cut mugwort, with minimal damage to the fine hairs from the leaves, the best grindstones are made from volcanic rock.



<Nagadoshi> At the end of the grinding process the dried leaves have been reduced to powder. However, impurities such as leaf and stem pieces remain. The moxa is separated from the impurities by sieving through a device called the "nagadoshi". Within this device is a cylinder made from a bamboo screen, similar to the screens used to make sushi rolls, but larger. The powdered mugwort is turned and mixed within that cylinder, and then passes through a sieve. The bamboo screen is set at an angle, with the powdered mugwort introduced through the top of the cylinder. As the cylinder turns, the powdered impurities are gradually thrown out through the spaces between the bamboo screens, leaving only moxa by the time the product reaches the exit point at the bottom. The yield rate for coarse moxa at this point is 10-15% in comparison to the dried leaves. The moxa is now suitable for use in indirect moxibustion and acupuncture needle head applications.



<Tohmi Winnower> The coarse moxa that was obtained from the Nagadoshi is further purified by filtering through a Tohmi in order to produce high-grade point acupuncture moxa. This device works much like the Nagadoshi, turning and mixing the coarse moxa to separate impurities, except that instead of a turning cylinder, the Tohmi is equipped with large revolving plates that turn within an unmoving bamboo cylinder. Coarse moxa is poured in through an opening at the top of the device. The rotating plates mix the contents of the cylinder, so that the impurities fly out through the bamboo screen, and only purified high-quality moxa remains within the Tohmi. The time required for this winnowing process depends on the quality of the desired product: about 6 hours for direct moxibustion, and about 12 hours for the highest-grade direct moxibustion. The yield rate at this stage is approximately 4% of the original dried leaf.



<Regulating quality> The finished moxa may differ in quality depending on the weather conditions at the time of production, so sorting and blending are performed to insure uniform quality before the product is shipped. Moxa manufacturing is concluded by the end of March, when winter is drawing to a close in the mountains.

(Contents and photos provided by Yamasho Co., Ltd.)