

Koshinetsu and Shizuoka Soy Sauce Brewing

Development of a Multipurpose Seasoning and Pickling Culture

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1. Yamanashi Natives Love Dashi-tsuyu

In Yamanashi Prefecture, following on the heels of five major producers is a brewery that leads the regional industry as the top mid-size maker. Founded in 1872, the brewery recently introduced a machine for large-scale production of koji, allowing it not only to meet its own needs but also supply other companies. It also introduced a bottling machine that can even fill liquids like dressings that contain solids, and is invested in OEM manufacturing. Another defining feature of this soy sauce brewery is its focus on *tsuyu* soup bases and *tare* sauces. In particular, the *dashi-tsuyu* launched by the brewery in 1964 was a big hit, creating a boom alongside *mentsuyu* (noodle soup base) and *dashi shoyu* (combined stock and soy sauce), which were developed in the Tohoku Region and Niigata Prefecture in the late 1960s. High economic growth led to declining numbers of people cooking at home, but the company sensed a desire among households to pass on flavors inherited from parents to children. Thus, they developed the simple, delicious, multipurpose seasoning soup base. Today, as the decline in home cooking and simplification of preparation continues, I am reminded once again that this trend has been of concern for over 60 years. This particular *dashi-tsuyu* is apparently used not only for noodle and simmered dishes but is also good as seasoning in fried rice. Its sales reach from across Yamanashi Prefecture to Nagano and Niigata prefectures, and in Nagano it is often used in homes for pickling Nozawana, a locally grown leafy green vegetable. The existence of this pickling culture in Nagano Prefecture clearly affects the sales of processed soy sauce products from neighboring prefectures.

2. Pickling Culture in Nagano Prefecture

Locals told me there is a culture for pickling everything in Nagano Prefecture. When I visited in September, I was surprised by the mountain of sake lees products available for pickles and vegetable dressings in a special installation corner of the supermarket. I am told that Kasu-ae, sliced cucumbers rubbed with salt and steeped in sake lees, offers a nostalgic taste of summer. In addition to sake lees, miso pickles, soy sauce pickles and moromi miso dip, many other variations of fermented foods exist here. When people hear Nagano, they often think of “Shinshu miso”, a product using the old name for Nagano. This name spread like a brand name all over the country after

the Great Kanto Earthquake of 1923 when a large amount of Shinshu-produced miso that had been stockpiled at an unused sericulture (silkworm culture) farm was released as emergency supplies. With the decline of the sericulture industry, many businesses switched to miso brewing, but were later consolidated into large-scale manufacturers. In contrast, the local soy sauce brewing industry is dotted with cottage industry-style brewers handcrafting their *moromi* mash.

A brewer from northern Nagano near the prefectural border with Niigata, is in an area famous for Togakushi Soba. I learned that the correct way to eat this dish is to soak the noodles deep in the *tsuyu*, slurping the soup base and soba noodles together, unlike in Tokyo where noodles are barely dipped. Although the soy sauce flavor is rich, it is not too salty, and the noodles taste best with a slightly sweeter *tsuyu*.

This brewer's soy sauce making is quite unique. First, a mash is made from only wheat koji, prepared like *amazake* sweet fermented rice drink. Amino acid liquid is added to the preparation, which is then mixed into a naturally brewed mash, and the combined mash is fermented and aged for two weeks to one month before being pressed. This brewery also possesses *kioko* wooden barrels. One of its soy sauce varieties, made from whole soybeans and prepared in cedar barrels, became famous when it was used in ramen soup at a Tokyo shop that earned a Michelin star, and ever since, ramen shops from around the country have been coming to visit and sample the products. Ramen soups based on local soy sauces can be found everywhere, including Toyama Black, ramen with thick and dark colored soup with soy sauce, and Tokushima Ramen. The above episode highlights the influence of the ramen boom. Separately, another specialty in Nagano called *shoyu mame*, a kind of chunky soy sauce, is similar to Gunma's *oname* and Chiba's *hishiomame*.

One brewery in Matsumoto City, in the center of Nagano Prefecture, was built on farmland in 1902, and ever since the whole family has worked concurrently in agriculture and soy sauce brewing using wooden barrels. All the soy sauce is prepared in barrels that were made around the 1920s and passed on from a former sake brewery. Of the breweries using barrels, there appear to be two styles: those that are actively trying to add value in soy sauce preparation by using barrels, and those that employ unchanged methods and continue to use the barrels because they are still fit for use. How will they respond to the 2020 introduction of the Hazard Analysis Critical Control Point (HACCP) management system for food safety? Brewers



A huge 13.5m diameter disc-shaped koji production machine (left). “Bimisan” multipurpose seasoning loved in Yamanashi and nearby prefectures (right). Taken at Tenyo Co., Ltd.



1kg packs of “summer sake lees” and individually portioned sake lees piled up in the special installation corner (left). Soy sauce is essential in insect tsukudani (right). Taken in Nagano Prefecture, July 2018.

say this is a worrisome problem, because the public health center is frowning upon the use of wooden barrels.

At soy sauce breweries in the south of the prefecture, *usukuchi* soy sauce suitable for Nozawana pickles is the longtime bestselling product. Although the price of 450 yen per liter may seem high compared to discount products it is sold alongside, many local households regularly buy the product, using six to ten 1.8-liter bottles just for pickles. I felt the power of pickling culture here, too. I think that the regional taste preference is for strong, salty-sweet flavors. Local traditional dishes incorporating soy sauce include *koi-no-umami* simmered carp, and *tsukudani* of small crucian carp, grasshoppers, and silkworm chrysalises boiled down in soy sauce.

3. Rice Cracker Demand in Niigata Prefecture

Niigata Prefecture is well-known as a source of rice, sake, and miso, showing its color as a flourishing brewing and fermented foods region. Sado Island thrived on exports of miso to Hokkaido from the Edo period. Production of rice confections also abounds, with Japan's major manufacturers gathered in Niigata. Most of the business-use soy sauce used here flavors rice crackers, and tamari soy sauce is specially prepared for rice confectionery makers to give the crackers a lustrous finish.

A processed soy sauce with bonito stock called *katsuo-dashi* was first sold as a multipurpose seasoning by a brewer in Nagaoka City around 1970. In Yamanashi, Yamagata, and Akita prefectures, multipurpose seasonings for simmered foods and *mentsuyu* noodle soup bases had already been developed and their market was expanding. Because it does not lose the balance of flavor even when diluted, the Nagaoka product can be used in cooking as a soy sauce containing dashi stock, and is often used as *mentsuyu*. Some people in the prefecture use *katsuo-dashi* for everything, from cooking, to dipping and dressing.



Brewery along the old Mikunikaido highway. A sense of the old highway remains, with Shinto shrine gates and statues watching over travelers (left). Multipurpose seasoning "Koshino Murasaki" loved by Niigata residents (right). Taken at Koshino Murasaki Corporation.

4. Shizuoka Prefecture Refermented Soy Sauce and Other Sauce Production

Currently, there are four breweries preparing their own mash in Shizuoka Prefecture. I visited three of these, excluding the cooperative. The main product from a brewer in Gotemba, eastern Shizuoka, is a *saishikomi* refermented soy sauce with the name "Kanro". After the production method was established over ten years from about 1972, it became the product standard at soy sauce competitions. This was before *saishikomi* soy sauce was prescribed as one of the five classifications of soy sauce in the Japan Agricultural Standards (JAS). As there is no dilution during production, the brewer says it was difficult to find the perfect flavor – not too rich and not too mild. The ratio of wheat is slightly higher to achieve

good aroma and mellow sweetness, and the product is a blend of soy sauces prepared separately in fiber-reinforced plastic tanks, wooden barrels, and enamel tanks. Aging for one year yields good aromas; aging for two years accentuates the umami; and aging beyond three years brings

out increasingly unique characteristics. Because the brewery considers soy sauce an aromatic seasoning, they determine the timing of pressing with greatest emphasis on aroma.

One processed soy sauce product that speaks of Shizuoka is a *tare*, or sauce, for making *Unagi-no-Kabayaki* grilled eel. Located across the Oi River from Yaizu City, Yoshida-cho started farming eel because the Oi River underground water was not suitable for rice cultivation. The soy sauce brewer in Yoshida-cho started working on *tare* for basting grilled eel to be shipped to Tsukiji and other markets in the Kanto area, developing into a specialized *tare* maker, with one recipe for shipments to the Kanto, Chubu and Kansai areas, and another for shipments to Kyushu. About ten years ago, the company started technical guidance for a Chinese company, which says that Japanese-style soy sauce has a reputation for good flavor, and now popularity for their locally produced dipping and dressing soy sauces is also increasing.

At a Hamamatsu City brewery, brothers who graduated from the Tokyo University of Agriculture divide the work of soybean and wheat cultivation, and make soy sauce and other sauces in the family business still run by their predecessor. The predecessor still remembers when he was in elementary school in the 1960s and an instructor from the Soy Sauce Research Institute in Machida City, Tokyo, came for a week to stay and provide technical guidance. At that time, there were many large soy sauce makers in the prefecture, with as many as three in the same town alone. Since the brewer's founding came later than others, the company says its philosophy has always been to make low price but delicious products. Its signature product is an original sauce made with plenty of soft, light brown granulated sugar from Kikaijima, an island in Kagoshima. Amino acid solution, saccharin and other ingredients are used in just the right combination to make a mixed soy sauce that suits local people's tastes.



A collection of wooden tools for brewing. Every corner of the brewery is spotless. Taken at Amano Soy Sauce Co., Ltd.

While southern Yamanashi and western Shizuoka have a strong connection with the Nagoya area, I heard in most places that Koshinetsu and Shizuoka, in general, belong most closely to the cultural sphere of Kanto. Many makers ship *honjozo* regular fermenting method soy sauce and other soy sauce products to the Kanto region, but they also meet local demand with various types of soy sauce and soy sauce products that are connected with the local food culture, and were created through the unique methods of the local brewers. It is also interesting that the development of *mentsuyu* and *dashi-shoyu*, beginning in the 1960s and spanning from Koshinetsu to the Tohoku region, continues today.