individual sake from the more than 50 breweries in the prefecture has its own unique characteristics. "Once a year, the breweries always measure the mineral content, the pH value, and the hardness of water, and analyze them. It doesn't change so much every year, but working with the water in this way enables us to understand the subtle differences. One of the breweries dug a new well seeking good water, and the taste of their sake became better and their sales increased. This made me realize again that water has a tremendous influence on sake."

Each brewery uses a different type of water, such as well water, spring water from the nearby mountains, or tap water, but the important thing is how to use it. "'Well water' and 'spring water' may sound good, but they cannot be used without any special processing. The bacteria they might contain could be a serious problem. Also, they might have too much mineral content such as iron, which interferes with sake brewing. The brewery filters the water on its own site to the standard set by the government, but using too strong a filter could make the water taste thin, and as a result the taste of the sake could become bland. Moreover, temperature is the most important factor for brewing, so the brewer adjusts the temperature with extra care."

#### Thankful for the blessings of nature, trusting my own sensitivity"

Water is a blessing of nature. Using it, what kind of sake is brewed is decided by the individuality of the brewery. Therefore, Rokkasen has introduced the latest machinery, and they are trying some unconventional sake brewing.

Originally, Rokkasen was a joint operation for bottling product from five breweries. While in junior high school, Mr. Matsuoka decided to take over the brewery. He integrated the five breweries and introduced modern machinery for the sake brewers.

Today, he uses all-stainless, double-layered barrels and the latest koji-making machines. Making koji used to be a 24-hour job, but the introduction of machines frees workers from sleepless shifts. "We are aiming to have machines do the physical work that machines are able to do and to make sake using the natural sense and sensitivity of human beings."

"In 2006, we also started making liqueurs. Yamagata has a variety of fruits, and we wanted to make the most of them as resources. Our brewery has a good atmosphere when it comes to airing our opinions freely, so we have been discussing various ideas with each other since I returned to the brewery. I've always said that sake brewing at Rokkasen is based on sensitivity, and I think that's exactly our strength."





Right: The sake brewery that has introduced a machine to make koji is a rare one. This has greatly reduced the burden of koji making, which had previously required a sleepless shift. Left: Rokkasen makes a lot of Junmai Ginjo-shu using sake rice produced in the prefecture.

# The Origins of Ginjo Kingdom, Yamagata



Twelfth generation Brewer of Yonetsuru Shuzo Co., Ltd.

#### Umetsu Yoichiro

## Make sake and help improve each other Promote the spirit of "good sake, harmoniously brewed"

The brewers of Yamagata Prefecture have shared their skills and improved each other beyond the boundaries of the brewery. How was this attitude and mind-set of striving to make good sake created and passed down? We asked Mr. Umetsu, the twelfth generation brewer of the Yonetsuru Shuzo.

#### Kenjo-kai supports improving brewing techniques

GI Yamagata may seem to be a regulation to unify all sake breweries in the prefecture, but it is not. It is an effort to bring out the individuality of each brewery. By setting certification standards, the overall quality of sake is raised to a higher level, and then each brewery competes for individuality. Letting people know that all of Yamagata Prefecture's sake is high quality and unique is the first step towards developing sake brewery tourism and expanding Japanese sake overseas.

Sake from Yamagata Prefecture has been winning prizes in many competitions every year, and behind these achievements are the study groups and technical training programs that have supported the improvement of brewing techniques in Yamagata Prefecture. A typical example is the study sessions held by the Kenjo-kai from May to September. Artisans from various breweries gather and study by dividing into subgroups such as yeast, sake rice, and commercial sake.

From August to October, they invite breweries from other prefectures to give workshops discussing various issues with people involved in production as well as people involved in the research and sale of sake from inside and outside the prefecture, in order to exchange techniques and knowledge. They also actively accept trainees from outside the prefecture. These efforts have been on-going for more than 30 years.

In Yamagata Prefecture, breweries take individual responsibility for their own sake production, and most of them do not employ a Toji (supervisor for manufacturing sake) who has trained at other breweries. This can be a disadvantage in terms

#### 米鶴酒造株式会社

Yonetsuru Shuzo Co., Ltd.

Founded 1704

Okitama Area Takahata-machi





of technical improvement, but it ensures that the working style of a new Toji does not confuse the other craftsmen or affect the quality of their sake. The craftsmen in Yamagata's sake trade have created a positive environment for sake brewing and deepened their learning, all on their own.

What is indispensable for these seminars and

study groups is the social gathering over drinks. It's a great way to mingle. While drinking, they get to know each other and exchange in-depth opinions about sake brewing. They share their visions and worries about the future and build a relationship of trust beyond the walls of the brewery.

#### \* The key to passing on the techniques and passion of sake brewing

It can be said that sake brewing in Yamagata Prefecture, where everyone learns from and teaches each other, is a culture that should be passed on



Yamagata Research Institute of Technology The staff and brewers work together to develop sake rice, acquire GI, and improve the accuracy of sake brewing.

from generation to generation. What is needed to keep the successive generations alive? One of the many hopes is to expand their market overseas.

"I worked in the energy industry until I was 32, and then I came back to Yonetsuru to take over the brewery. As I worked hard to develop sales channels to keep the brewery going, I naturally began to think about exporting. It's very rewarding to know that a local sake brewery may be able to change the economy of the countryside, which is not very prosperous."

Yamagata Prefecture is home to many small and medium-sized breweries, but 80% of the more than 50 breweries export sake overseas, and the volume of exports is steadily increasing

every year. Mr. Nakano, is the president of the Yamagata Sake Makers Association, says that he has been telling sake breweries which are not interested in exporting that "overseas development is important for their successors, so let's just open the door. Even if a brewery is small, the fact that it is selling sake overseas gives it confidence, and can be a reason for succeeding generations who might have left the business to come back to it."

While it sounds glamorous, once you get into

the brewery, it is actually a simple repetition of work. Education differs from brewery to brewery, but in Yamagata Prefecture there is a rule that in addition to working at your own brewery, you must participate in committees run by the Yamagata Sake Makers Association, such as the technical committee, the raw rice committee, and the overseas strategy committee. From the time they are young, they communicate with other brewers and their seniors to learn about sake brewing.

\$

#### The presence of friends makes for good sake

"In my opinion, people in Yamagata Prefecture focus on creating good work and good products while respecting the harmony between people. There is a saying, 'wajo ryoshu,' which means 'harmony' among people involved in sake brewing makes good sake." They are concerned about the products of other breweries in the prefecture with which they have technical exchanges. Also, they have to continue to preserve in their own products a quality that they would not be ashamed of if seen by our instructors or other breweries. There is a moderate sense of tension.

"Since delicious sakes are becoming more

prevalent in recent years, some overseas people who drank sake and didn't like it in the past might come to like it now. We hope they will try it again." Yonetsuru Shuzo's sake is sharp and refreshing, and people said about it, "You never get tired of it." When restaurants invite the brewery to events, they always run out of Yonetsuru sake, even if they have prepared an average amount of sake. The GI certification has made it easier for consumers to access good sake. Sake still has a small share of the alcohol market in the world. Mr. Umetsu said, with hope, more and more people will start enjoying sake from Yamagata.





Left: Yonetsuru Shuzo pioneered the Ginjo-shu boom with the release of its Junmai Dai-Ginjo "Yonetsuru F1" in 1969, which drew a lot of attention. The brewery's sake is refreshing and well-balanced in aroma, taste, and sharpness.

Right: After completing the fermentation process, the sake-mash is squeezed to separate the sake and the sake lees.





Left: The temperature of cooling steamed rice is tightly controlled.

Middle: A high-precision "thermal tank" controls fermentation.

Right: The prefecture devel-

oped its own original yeast.

# GI Certification Means Yamagata Sake Will Live for a Thousand Years

Mr. Toshihiko Koseki is one of the key members of the Yamagata Sake Makers Association who managed to obtain Gl. They turned Yamagata Prefecture, which just 40 years ago had been an obscure, backward production area of sake, into one of the foremost collections of breweries of sake, so much so that it's called "Ginjo Kingdom." Now Mr. Koseki is exploring how Yamagata can contribute to sake as a "KOKUSHU" (national drink) and to its future.

A long with shochu, a distilled liquor, sake, a brewed liquor, has been designated as the KOKUSHU (national drink) of Japan. Starting in 2012, the Japanese government launched a project called "ENJOY JAPANESE KOKUSHU" to promote the overseas expansion of sake and shochu.

There is a history book, a compilation of Japanese people and customs written at the end of the 3rd century in China, which describes how "people like to drink sake," and how "people sing and dance and drink with others" in times of mourning, indicating that there was already a custom of drinking in Japan at that time. It is unclear whether this was sake, though. The earliest clear description of sake is found in one of the old historical books from the 8th century,

Toshihiko Koseki Born in Kawanishi Town, Yamagata Prefecture. Graduated from the Department of Agricultural Chemistry, Faculty of Agriculture, Niigata University in 1978. Joined Yamagata Research Institute of Technology in 1980, became director in 2015. Special advisor to the Yamagata Sake Makers Association since 2016. Visiting professor of Yamagata University.

# Toshihiko Koseki

Special Advisor, Yamagata Sake Makers Association

where it is written, "the food offered to gods decayed and became moldy," and "as such, sake was brewed." As you can see, sake has been imbibed in Japan for more than 1,300 years, and is truly worthy of being called "KOKUSHU."

"You can tell the nationality of a country by drinking its KOKUSHU," Mr. Koseki explains, suggesting there is a strong connection between drink and people. For example, there are many drinks around the world that can tell the history of a country, such as Champagne in France, and the whiskeys of Scotland and Ireland, and rum in the Caribbean. Likewise, sake is the KOKUSHU of Japan, and it should be rightly promoted to the world

"It takes a great deal of time and effort to brew sake, making it especially unique in the world. That is why people are so surprised and delighted when they drink it. We should bring sake to the world," says Koseki.

throughout the world, GI Yamagata is a good way to define 'true sake.' It is an international protection regulation like the A.O.P. (Appéllation d'Origine Protégée / Protected Designation of Origin) in Europe."

In the modern era, many sake breweries bought rice from other regions or brewed low quality sake for local use to save costs. Such breweries might be left behind by GI certification. This can be

called the risk associated with growth. Since some local governments fear this risk, they hesitate to apply for the certification. Therefore, there are still only 7 prefectures or areas that have achieved GI certification (as of February 2021). In the situation, it is so remarkable that Yamagata is the first entire prefecture to receive the certification.

"Yamagata revealed all its information about sake brewing and did not hide it. The whole prefecture already had a resolute attitude that would not accept any inferior products going back 40 years. Yamagata breweries are aware that good quality doesn't weaken its originality, but supports it. I believe such awareness made GI Yamagata possible so early."

Since ancient times, sake has been controlled as a subject of taxation. Koseki points out it has changed to a "luxury item" over time. These days, health-conscious people are reducing alcohol intake, so the value of alcoholic drink is on the move to high quality. There is a good chance that sake, which is fermented with a great deal of time and complicated effort, will be highly appreciated.

"Yamagata will take a leading role in promoting sake to the world. Then, if Yamagata Prefecture becomes like Chablis in France, sake will be drunk by people all over the world for a thousand years to come."

Left: Yamagata Research Institute of Technology was the home base for gaining GI Yamagata. Right: Summer sake brewing workshop.



#### GI YAMAGATA CHRONICLE

Steps toward GI Yamagata



# 1984 --->2016

It was prior generations of current Yamagata brewers that took the first step toward GI certification. Here is the history of two generations of brewers who spent more than 30 years upgrading techniques, rice, and human resources.



"Yamagata Sanga" was renewed in 2001 as "Shin Yamagata Sanga" by using the brand of sake rice, "Dewasansan."

#### Promotion Council Established To develop an original sake rice for the prefecture

The amount of sake produced in Japan, which was 1,471,757 kiloliters in 1973, had been decreasing continuously after that, to a low of only 1,016,435 kiloliters in 1984. As the demand for sake decreased in Japan, Yamagata sake brewers laid out their new policy, "Ginjo Kingdom Yamagata," which valued quality over quantity. In that same year, Yamagata Prefecture established the Promotion Council for the appropriate production of sake rice with the aim of developing a rice suitable to the prefecture's land and climate.

1984

1985

# Development of a unified brand Dai-Ginjo "Yamagata Sanga"

Under the direction of then-Governor Seiichiro Itagaki, Dai-Ginjo "Yamagata Sanga" was developed as a unified labeling brand for the prefecture. After a rigorous quality screening process, the sales of the product followed in 1986. The screening process was quite strict, and only about 30% of the breweries passed.

Development of "Yamagata Sanga" stimulated new breweries in the prefecture to start brewing Ginjo-shu, and the brewing techniques of the entire prefecture improved. This laid a solid foundation for "Ginjo Kingdom Yamagata" that has continued up to the present.



#### "Kenjo-kai" Established To improve brewing techniques

Following the introduction of "Yamada-Nishiki" in the previous year, the "Kenjo-kai" was established to improve sake brewing techniques. In addition to workshops on techniques and sales, the Kenjo-kai planned various activities, including data sharing of sake submitted to Sake Awards, or inviting top brewers from other prefectures for technical guidance. While it has continuously provided opportunities to learn sake brewing suitable for the times, it has also played the role of nurturing the next generation brewers.







- 1 Mr. Tamon Wada, the head brewer of Wada Syuzo, served as the first president of the "Yamagata Kenjo-kai." 2 General meeting of the Kenjo-kai.
- **3** The Kenjo-kai has hosted various workshops to improve brewing techniques.

1987

1986

#### "Yamada-Nishiki" provided to breweries Aiming to improve techniques for brewing Ginjo-shu

With the growing need for improvement of brewing techniques for Ginjo-shu, Seijiro Nakano, then head brewer of Dewazakura Sake Brewery, took the lead in securing "Yamada-Nishiki," a high-grade sake rice used for Ginjo-shu, and provided it to breweries seeking to learn or improve brewing techniques



to raise the level of Ginjo-shu throughout the prefecture. Yamagata Prefecture's unique policy of disclosing its techniques has been carried on from then to now.

"Yamada-Nishiki" is at its best when used to brew high-grade sake such as Dai-Ginjo with rich aroma and no unpleasant aftertastes. 1994

# After 11 years of pursuit "Dewasansan" was developed

In 1984, the development of an original Yamagata sake rice started from 27 grains of blended seeds obtained by a hybrid between "Miyama-Nishiki" and "Hana-Fubuki." As a result of various efforts, such as adopting "Miyama-Nishiki" as a recommended variety in 1988, or securing enough acreage of sake rice, "Dewasansan" was finally developed after 11 years of pursuit.



"Dewasansan," with large grains and a high yield, can be brewed into a soft and rich-tasting sake. It is suitable for Ginjo-shu.

#### The "DEWA33" brand launched Unique characteristics of breweries stand out

In 1991, Yamagata launched a new Junmai-shu brand, "Yamagata-Seisei," which had stipulations that it be made from "Miyama-Nishiki" from Yamagata and a yeast developed by the prefecture. As Yamagata had developed "Dewasansan" the previous year, there

were expectations for the release of sake made from the prefecture's original sake rice, and a Junmai Ginjo "DEWA33" label (it reads dewasansan in Japanese) was launched. The rice, water, yeast, and koji mold were all developed in Yamagata Prefecture. It can be said that "DEWA33," a genuinely Yamagata-produced sake, was a pioneering moment in the effort to acquire GI certification.



Top: Sake that has passed the "DEWA33" stipulations can display a mark with the motif of "Dewasanzan" (three mountains of Dewa).

1995

2004

2005

#### Winning 24 gold prizes in the Japan Sake Awards Overtaking Niigata, Yamagata became the No. 1 prefecture of the year

In the 1980s, when the "Ginjo Kingdom Yamagata" policy was first proposed, Yamagata won only five or less gold prizes at the Japan Sake Awards. However, Yamagata brewers continued to refine their tech-

niques and ingredients by such efforts as developing original sake rice or establishing the Kenjo-Kai, and in 1991 they won 12 gold prizes. Moreover, in 2004 they won 24 gold prizes, making Yamagata the prefecture with the most gold prizes in Japan that year.



### New sake rice for Junmai-shu "Dewa-no-Sato"

After the development of "Dewasansan," a rice suitable for Ginjo-shu, Yamagata continued to develop sake rice. "Dewa no Sato," a sake rice for Junmai-shu, was developed by crossing "Dewasansan" and "Gin Fubuki," a rice derived from "Yamada Nishiki." Sake made from "Dewa no Sato" is certified as "Yamagata Selection," which is made by 23 breweries in the prefecture.



"Dewa no Sato," with large shinpaku (the white part) and low protein content, is suitable for Junmai-shu. It can be made into a pure and clear-tasting sake.

# "GI Yamagata" The first entire prefecture to be certified in Japan

"Standards for Geographical Indications of Sake" came into effect in 2015, and Yamagata Prefecture became the first entire prefecture in all of Japan to obtain GI certification in 2016. The certification was based on the fact that the geographical

factors optimal for sake brewing, such as the cold climate of the snowy region, which is advantageous for low-temperature fermentation, and the use of underflow water from melting snow for brewing, are well reflected in the sake's characteristics. This was the moment when all the efforts of Yamagata brewers for more than 30 years finally bore fruit.



Sake that has passed GI Yamagata standards is marked with the symbol on the top as proof of certification.





GI certification review meetings are strict and rigorous. In fiscal 2020, eight meetings were held.

2016

# 2015

#### "Yuki-Megami" developed Original sake rice suitable for Dai-Ginjo

Following "Dewasansan" for Ginjo-shu and "Dewa-no-Sato" for Junmai-shu, the next sake rice developed by the prefecture was "Yuki-Megami." It was developed by crossing "Dewa-no-Sato" and "Kura-no-Hana," which was a descendant of "Yamada-Nishiki." As it has low protein content, and its property regarding rice polishing is superior because of the small amount of shinpaku in the center of the grain, it is more suitable for Dai-Ginjo than "Dewasansan," which had been recommended in the prefecture prior to that. It is attracting attention as a sake rice that has potential to add new value to the prefecture's Dai-Ginjo.







