

# Introduction to Sake



# What is Sake?

Sake, pronounced “sah-keh”, is a Japanese alcoholic beverage made from fermented rice.

In Japan, sake is a general term for any alcoholic beverage, and what Westerners know as sake actually refers to *nihonshu*, the traditionally brewed and fermented drink.

Sake is a category of its own with a unique brewing process and over 10,000 variations.

The history and origin of Japanese sake goes back approximately 2,000 years when rice farming came from China.

Since then, rice has been a staple in Japanese cuisine, and sake, which was originally used to celebrate rice harvests, is enjoyed with unique food cultures developed in each region of Japan.

At its peak in the 19th century, there were over 20,000 sake breweries in Japan, but the number has declined to what is now just over 1,400 breweries due to war, government restructuring, and the modernization of Japanese consumer culture.

# Sake ingredients

There are four ingredients to make sake: rice, water, yeast and koji.

Special rice, called sakamai, is used for making sake and is prepared through rice polishing.

Even the quality of water differs within each region of Japan and its minerality influences the speed of fermentation.

Yeast is another ingredient that contributes to the aroma components of sake.

Some strains of yeast are unique to the individual brewery or to the regions, and some are developed by the prefecture.

The fourth ingredient is *koji* (*Aspergillus oryzae*), a mold that is carefully distributed over the rice to convert the starches to sugar.

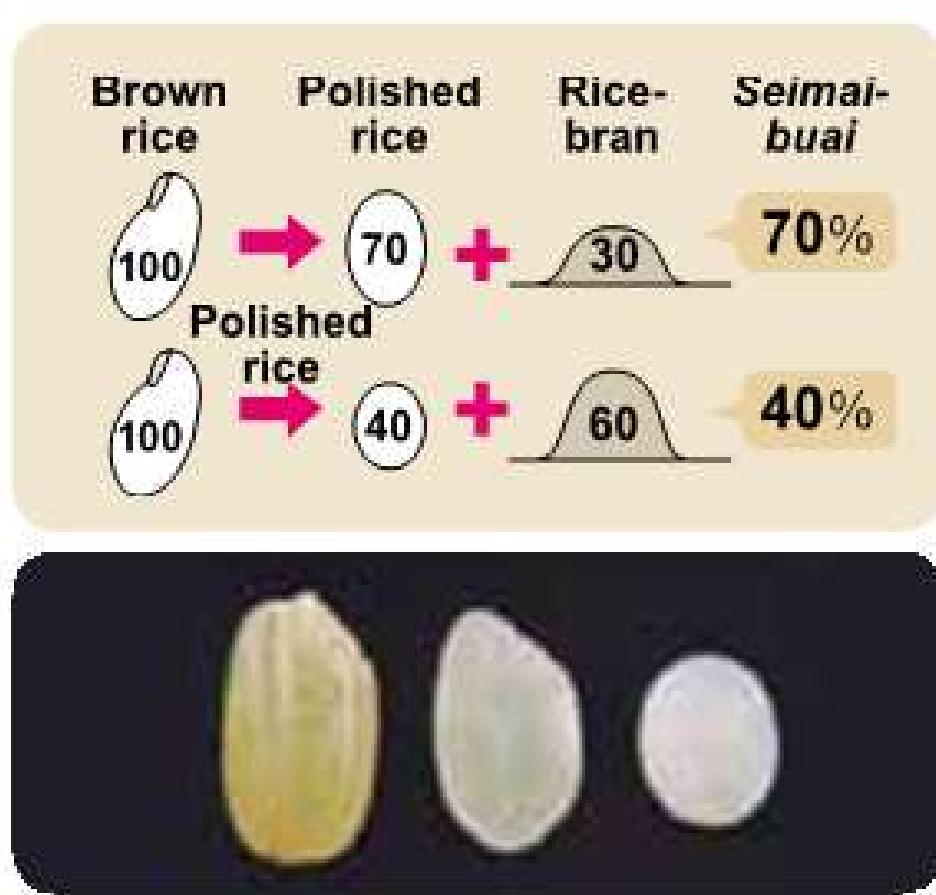
Sake requires the extensive skills of brewers to control the delicate environment throughout the production process.

Every detail, from selecting the right combination of ingredients to polishing, washing and steaming the rice, to closely monitoring the progress of fermentation—plays into the taste, aroma and appearance of the final product.

Sake is often called “rice wine” because like wine, it features unique variations of flavors with subtle aromas.

Sake is also likened to beer because it shares a similar brewing process.

However, sake brewing is much more complex and requires a process called “multiple parallel fermentation” to drive the conversion of starch to sugar and sugar to alcohol simultaneously (not sequentially as is the case with beer).



From left to right, brown rice, polished rice with a 70% *seimai-buai* and polished rice with a 40% *seimai-buai*.

# Sake Is Simple

The three grades of premium sake are determined by how much the rice is milled or “polished.” More polishing makes the sake lighter, cleaner and fruitier.

## JUNMAI FAMILY

Made from four ingredients:  
rice, water, yeast and koji.

JUNMAI  
DAIGINJO

## HONJOZO FAMILY

Made with a fifth ingredient:  
neutral distilled spirit.

DAIGINJO

ELEGANT  
DELICATE  
SMOOTH

Rice is polished down to 50% or less of the grain

JUNMAI  
GINJO

LIVELY  
FRUITY  
AROMATIC

GINJO

Rice is polished down to 60% or less of the grain

JUNMAI

RICH  
EARTHY  
VERSATILE

HONJOZO

Rice is polished down to 70% or less of the grain

# Hakutsuru Brewery

Hakutsuru has been making sake for over 275 years, making pioneering improvements along the way as well as overcoming moments of national adversity.

## Hakutsuru Excellent Junmai Sake

Hakutsuru Excellent Junmai Sake has been brewed with a 250-year-old traditional technique as our main product that has been getting good reputation from our long-loving customers.

It is characterized by its well-matured, full-bodied taste and mellow reverberation.

**Region:** Hyogo

**Grade:** Junmai

**Seimaibuai:** 70%

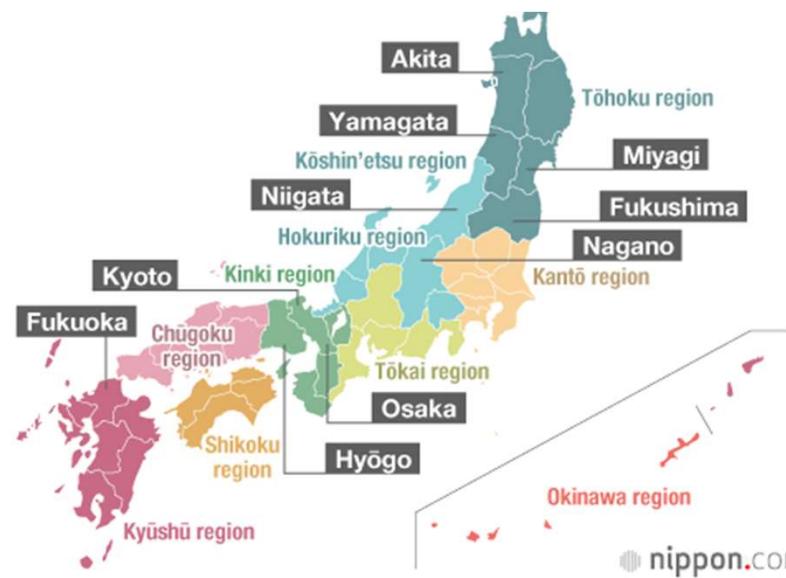
**Nihonshudo:** +4

**Acidity:** 1.7

**Amino Acidity:** 1.2

**Rice:** Japanese domestic rice

**ABV:** 15%



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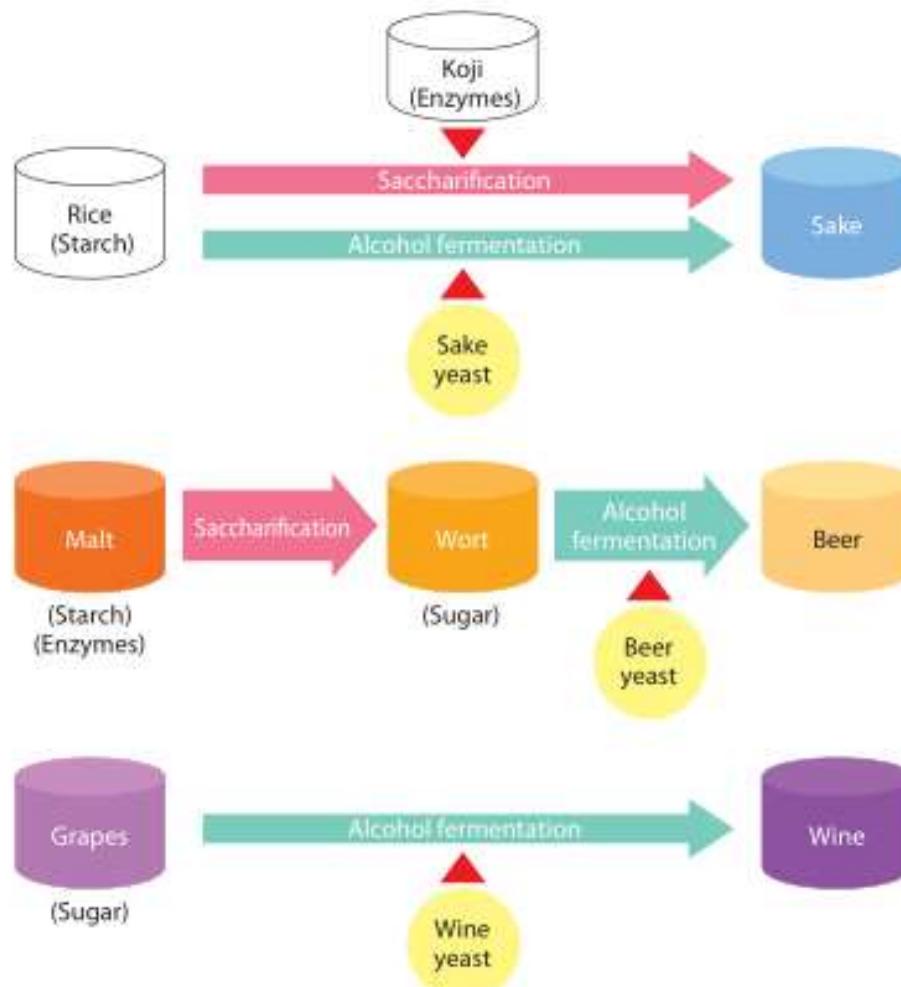
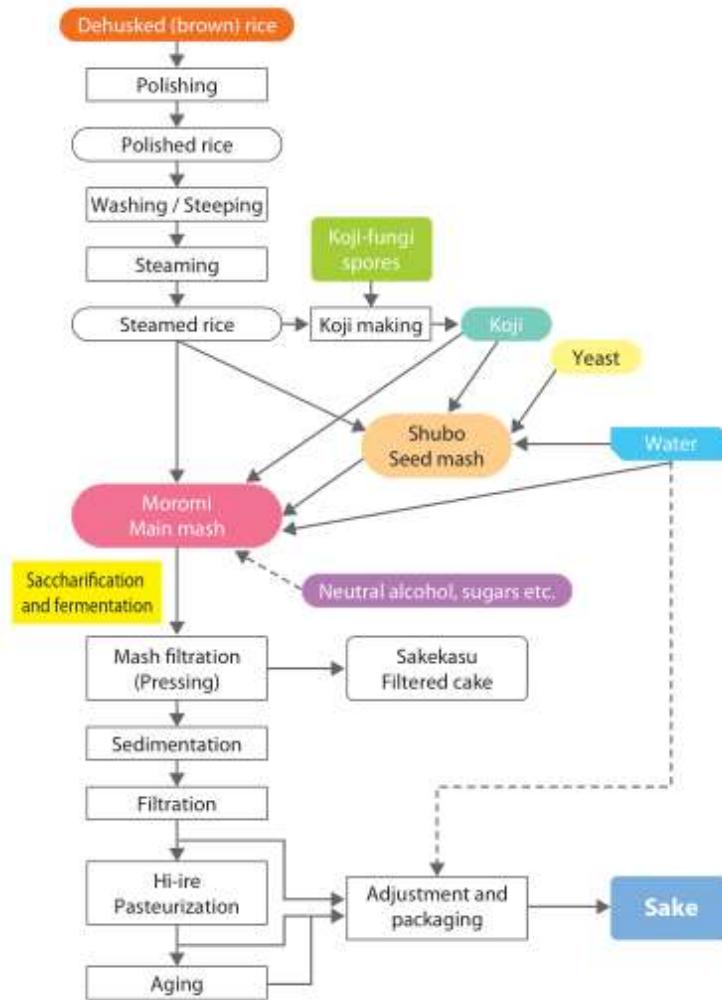


Figure 2.5 Differences in fermenting methods for sake, beer and wine

# Sake brewing (simplified)



# Eiko Fuji Brewery

## A Long Heritage Rooted in Japanese History

Makers of Eiko Fuji sake, the Fuji Brewery was founded in 1778 by the Kato Family. The company is currently managed by the 13th generation, Ariyoshi Kato. Though the brewery building is 100 years old, the brewery itself has been at the same location since its foundation. The Kato Family can trace their lineage to the famous 14th century daimyo Kiyomasa Kato, who was critical to several historical battles of his time. His family emblem of a snake's eye decorates the brewery's main door and part of the handle of his armor is still kept as an important family treasure.

## From the Mountainous Region of Yamagata

The Kato's named their sake Eiko Fuji, which means "Glorious Mount Fuji" in honor of Japan's most beloved symbol. Striving to attain the same height in perfection, every sake is brewed with pure-hearted skill and collaborative effort. The brewery operates with 6 *kurabito* (brewery workers) in peak season, 3 of whom are year-round workers and have been working at the brewery for decades.

The brewery is located in Tsuruoka City on the Northern Shonai Plain in Yamagata prefecture. Yamagata is one of the most prized sake-making regions in Japan, known for its fruity, aromatic, light and clean ginjo and daiginjo sake. An impressive 60% of the sake made in Yamagata is Ginjo level and above, the highest percentage of any prefecture in Japan. There are about 50 breweries in Yamagata, all of which are small and artisanal. Uniquely, the local brewers believe in sharing ideas and techniques with each other to improve the overall quality of sake from the region. Yamagata Kobo or yeast is also known to produce wonderful aroma and fruit. The long, cold winters also support the leaning towards ginjo and daiginjo production.

## A Pinnacle of Excellent Sake Brewing

Eiko Fuji is a wonderful expression of the region. The brewery aims to make sake that is clean, complements food, and can be drunk without tire. Ban Ryu, their flagship sake, is light, fruity and clean, with an underlying smokiness. Eiko Fuji "Honkara," short for Honjozo Karakuchi, is a classic dry type of sake which reveals hints of sweetness to add complexity. Their Namazake Junmai Ginjo is light, delicate, fruity and aromatic. The green apple notes are classic characteristics of Yamagata ginjo sake. Only two years younger than the United States at 13 generations and counting, Eiko Fuji is a Yamagata classic, pleasing to new and advanced sake drinkers alike.

## Ban Ryu Honjoso “10,000 Ways”

Ban Ryu means “ten thousand ways.” It is an expression used in the sake world to answer the question, in how many ways is one sake different from another. The answer, in 10 Thousand Ways: the yeast, the koji, timing of brewing, etc.. It also means, more informally, “versatility.” The brewery tries to catch both meanings in its name, however, they passionately believe it can be enjoyed in 10 Thousand ways—chilled, warmed, hot, with light food, heavy food, sweet food and spicy food.

### Tasting Note

Low aroma, light and fruity, with undertones of black currant, finishing crisp and clean.

### Food Pairing

Serve chilled, room temperature, or warmed. Pair with a range of flavors from acidic green salads to oily ramen

**Region:** Yamagata

**Grade:** Futsuu-shu

**Seimaibuai:** 65%

**Nihonshudo:** +1

**Acidity:** 1

**Aminno Acidity:** 1.2

**Rice:** Yamagata table rice

**Yeast:** Association #10

**Shubo Method:** Kohon Tohka

**Pressing:** Yabuta

**Filtration:** Paper filter to remove small particles

**Pasteurization:** Twice



# Additional Sake Types

**Kimoto:** Ki means “original” and moto is the yeast starter; thus, kimoto means “original yeast starter.” Naturally, it was the original way that saké makers completed this essential step. Started in the 1700’s, the kimoto method requires saké brewers to mush up the yeast starter with bamboo poles for hours on end, day in and day out for roughly four weeks. Mushing the yeast starter tightens the mixture and removes oxygen. As a result, lactic bacteria cannot easily survive and lactic acid is naturally created. Kimoto saké tends to be wild, funky, gamey, layered and rich. Kimotos can also have greater length of flavor.

**Yamahai:** In the early 1900’s, one brewer discovered that all of this hard work was not necessary: if the brewers just monitored and controlled the temperature, water levels, exposure to air and a few other variables, the lactic bacteria in the yeast starter would naturally produce lactic acid which would fight off unwanted bacteria and yeasts. Yamahai saké still takes roughly four weeks to make and a high degree of control and skill, but it does not require the same manual labor as kimoto. Yamahai sakés are deep, layered and complex but tend to be earthier and smokier than kimotos.

**Sokujo:** The sokujo method is most modern way of making the moto or yeast starter. Brewers simply add lactic acid, which is as natural as what you would find in a health food store. This battles the lactic bacteria and sterilizes the yeast starter. Almost all saké is made using the sokujo method, which takes seven to ten days to complete, and with less risk.

**Gen-shu** is sake which has not been diluted with water after fermentation. Thus, gen-shu usually has an alcohol content of 20%, whereas most saké is brought down to about 15% to 16%. Gen-shu is generally released and marketed as a special product, but a very small number of brewers make most of their saké as gen-shu without saying it is.

**Nama-zake** is saké which has not been pasteurized. Almost all saké is pasteurized twice to maintain stability. Nama-zake or “live saké” has not been pasteurized and, thus, has a raw, brash personality to it. Nama-zake is usually released in the spring instead of going through the six-month storage period which lasts until the fall. Nama-zake should always be kept refrigerated and immediately after being released.

**Namazke Gen-shu** is unpasteurized, undiluted saké. It is almost always released during the spring. Like gen-shu and namazake, it should be refrigerated.

**Nigori-saké**, literally meaning “cloudy sake,” is saké with the lees still in the bottle. Saké makers achieve this by running the saké through a coarser filter or by adding the lees back in after filtration. Nigori saké has a creamy mouthfeel and a smooth, easy-going flavor. It should be refrigerated.

# Tajima Brewery

The Tajima Brewery is located about 15 miles inland from the Sea of Japan in the Momozono area of Fukui City in the mountainous Fukui Prefecture. They have specialized in the *Yamahai* method of sake brewing for over 100yrs and make nearly all of their sake in this way. While most breweries in Japan switched to the more modern *Sokujo* method by 1911, the Tajima brewery finds excitement and magic in the Yamahai process and its results. For these reasons, they will never give it up.

Established in 1849, the brewery is managed today by the 6th generation president, Tokuhiko Tajima. With just 4 kurabito, or brewery workers, they are a small brewery and do every step of their brewing process by hand. The incredible skill and patience needed to make their highly acclaimed, exceptionally layered and complex Yamahai Sake year after year requires three times as much work and time as the modern *Sokujo* method.

To make sake this way, Tajima brewery believes teamwork plays a critical role. When it comes time to press the sake, every member of the staff including the *Toji*, or brewmaster, the kurabito and all other members engage in tasting sake from the tank to decide when exactly the sake should be pressed. The unanimous agreement among all members determines the flavor of Fukuchitose.

Tajima brewery uses local sake rice grown in Fukui. They are lucky to have an abundant source of highly prized soft water, which is ideal for brewing. They make everything from *Futsushu* to *Junmai Daiginjo* all in the Yamahai method from these local ingredients.

# Tajima Brewery (continued)

When beginning the brewing process, most breweries transfer the steamed rice to tank immediately after it has been cooled. Conversely, Tajima Brewery allows steamed rice to sit in open air for a long time so the rice can absorb air-born microorganisms. Mr. Tajima adds: “of course this process is invisible to the human eye, this is the moment you feel a sense of romance...in terms of flavor, Yamahai sake from other breweries tend to be robust with high acidity. Our Yamahai has a more mellow attack and you can taste the umami and rice afterwards... it is fragrant and rich.” In terms of their techniques and craftsmanship, they strive to be the “only one” accomplishing this level of highest quality.

The label of Fukuchitose communicates the attitude and personality of the brewery itself. *Fuku* means “happiness” and *chitose* means “forever.” The mascot is an owl, which is loved throughout the world as a bird that brings luck. Their hope is that when you drink Fuku Chitose sake, you will have happiness and luck forever.

## Food and sake of Fukui-Ken

Fukui is a mountainous prefecture bordering the Sea of Japan with 35 small-scale breweries in operation today. The area is blessed with abundant seafood as well as great food from the mountains. Specialties of the area include *Oroshi Soba*, soba served with grated daikon and dashi, *heshiko*, mackerel pickled in salted bran-paste, and Echizen crab (only in winter). Also popular in the area are foods with strong flavors like tempura and sukiyaki. The Tajima brewery feels lucky that the local foods, as well as the richer flavored foods across the world, go very well with their sake. He recommends drinking Fuku Chitose with hamburgers and steak.

## Fukuchitose Toku “Old Virtue” Yamahai Jinmai Ginjo

The creators of this sake, Tajima Brewing Company specialize in the yamahai brewing method, and their continuous advancement has led to their sake taking on a unique flavor.

While many yamahai sake have high acidity, this one is mellow with a delicious umami and rich rice essence.

The label really tells you what to expect.

With “Fukuchitose” meaning “happiness forever,” each sip brings a smile to your lips.

Category	Junmai Ginjo
Subcategory	Yamahai
Taste Profile	Rich & Dry
Alcohol	15.5%
Seimaibuai	55%
Nihonshudo	+1.7
Acidity	1.6



# Sake Terms

**Seimaibuai** is the degree to which the rice used in a saké is polished. It is always expressed as the percentage of the original rice grain that is left. Thus, a seimaibuai of 70% means that 30% has been stripped away.

**Nihonshudo**, the dryness rating of a saké, is always expressed as a positive or negative number with the range being from -6 to +7 or higher. Saké with a nihonshudo of +2 and lower is generally on the sweet side, while heading up to +3 or +4 is getting drier. We don't often employ this term because we want people to discover for themselves.

**Acidity**: Acidity is stated on a bottle of saké in Japan, with low acidity being around 1.1 and high acidity being over 2.0. Like nihonshudo, we don't use this term very often so people discover for themselves.

**Masu**: a masu is a square box used for serving saké.

**Go**: a go is 180ml of saké. A yongobin is a "four-go-bottle," or a 720ml.

**Shou**: a shou is 1.8L of saké. An ishoubin is one of those big bottles of saké you see at Japanese restaurants.

**Koku**: one koku is 180L and is the standard measure of production volume for a saké brewery. A brewery that is less than 1,000 koku is considered small, 3,000 medium-small and anything close to or over 10,000 to be big.

**Sakagura** means saké brewery and is a combination of the word "saké," changed to saka, and kura, changed to gura, meaning "brewery."

**Shuzouten** is the commercial term for a sakagura, or saké brewery. It is best translated as "brewing company," whereas the sakagura is the brewery itself. Shuzou is also used by smaller or older brewing companies. Although confusing to consumers, the brewing company name is almost always different from the brand name of the saké.



# Fuji Brewery

Located in Shimane prefecture, the Imaoka family founded the Fuji Brewery in 1939. Izumo, the town where the brewery sits, is famous for its shrine called Izumo Taisha, built in the 8th century. This shrine is regarded as the oldest and most important shrine in all of Japan. Shinto deities from all over the country come to Izumo in October to answer the prayers people have made about various aspects of their lives throughout the year: love, romance, weather, crops, and connections in business.

In its name, Izumo Fuji sake pays admirable tribute to both this shrine and Mt. Fuji, the most loved and revered symbol of Japan. Accordingly, founder Shoichi Imaoka's passion was to create sake that would be loved by all people, rooted in the land of Izumo. Throughout its history, Izumo Fuji has brewed sake to create strong relationships between people and between people and food, more than any other sake in Japan.

Mr. Imaoka operates the Fuji Brewery independently with just 3 kurabito, or brewery workers, and produces 300 koku (1 koku = 1800L), the Japanese measurement for brewery size.

The family believes in old school and traditional brewing practices passed down from generation to generation. Even today, they have no modern machines. Every step of the brewing process is done by hand: steaming using an old-fashioned Japanese steamer, koji-making, and pressing by fune press, or wooden vat. Fune pressing can take days but is very gentle and yields soft and smooth sake. Most breweries reserve fune pressing for only top end sakes for ultra delicacy. Fuji brewery does this for all of their sakes.

# Fuji Brewery (continued)

The brewery mostly uses rice locally grown in Shimane. The main variety is called Sakanishiki, which is cultivated by local farmers specifically for Fuji Brewery. They cultivate this rice using all sustainable methods, which is crucial for quality, but takes enormous effort and dedication. The water of the area is very soft, which is perfect for sake brewing.

The style of Izumo Fuji sake is loose, relaxed and expansive. Refined and sophisticated, yet unpretentious, it should be drunk fresh and chilled. The sake will please all people and is easy to pair with many foods.

Bordering the Sea of Japan in Southwestern Japan, Shimane prefecture is blessed with many mountains, rivers and lands. The bounty of fresh ingredients from their own land and waters mean they do not have to preserve food and mostly enjoy fresh, seasonal and local foods. There is a strong food and beverage culture in Shimane, where people always drink during their meals. Foods like Izumo Soba, clams, Shimane Wagyu, mineral (salt) rich foods, dashi, fresh raw vegetables, and many varieties of seafood from the Sea of Japan are frequent delicacies enjoyed by the locals and are perfect pairings with Izumo Fuji Sake.

## Junmai “Ancient Shrine”

### Tasting Note

Violet aroma, plum on palate; soft, relaxed, and expansive in texture. An “umami type” of sake with ricey sweetness.

### Food Pairing

Serve chilled, room temperature or warmed. Versatile but best with rich foods like Japanese stews, grilled steak, and briny shellfish.

Region: Shimane

Grade: Junmai

Seimaibuai: 70%

Nihonshudo: +4.5

Acidity: 1.8

Amino Acidity: 1.2

ABV: 16%

Rice: Yamada Nishiki

Yeast: KA 1

Shubo Method: Sokujo

Pressing: Fune

Filtration: Diatomite

Pasteurization: Once, in bottle

Brewery: Fuji



## Junmai Ginjo, Yamada Nishiki 50 "Shimane Local"

### Tasting Note

On the nose, it shows pineapple, candied sugar, and pear. On the palate it is juicy, soft and melting.

### TECHNICAL DATA

Rice: Yamada Nishiki (from Shimane)

Yeast: Proprietary Blend

Rice Polishing: 50%

Sake Meter Value: +5

ABV: 15-16%

Acidity: 1.7

Shubo: Sokujo

Pressing: Fune

Pasteurization: Once, in bottle



# Saiya Brewery

Founded in 1903, the Saiya Brewery is one of the most award-winning breweries at the Japanese National Sake Competition.

In the past fifteen years of the competition, the brewery has won an astonishing ten gold medals.

Mr. Takahashi, their brewmaster, has been recognized by the Emperor of Japan as a cherished craftsman.

Sake is a product of natural reaction of koji rice and yeast that as humans we cannot imitate. Instead, as Saiya toji Toichi Takahashi emphasizes, the brewer can only provide the situation for nature to take place. It's the care and respect of natural resources, traditional methods, and accumulated skill that Saiya brewery, and each and every one of the following breweries we've since added, instills in their sake.

Saiya Brewery doesn't allow high demand speed their production. The sake they brew follows a strict discipline to fine quality. The brewers do all they can to insure a healthy and clean environment and level of strong, consistent effort in brewing. The composition of their sake doesn't take on a strong aroma (known as uwadatsuka), instead it has a strong aftertaste, or fukumi. This achievement takes studied time, brewing at low temperatures without exposure to air. The result allows for the aromas of the yeast to blend beautifully into their sake.

## **Yamahai Junmai “Old Cabin”**

Unlike most yamahais, Yuki No Bosha is mellow and elegant.

Many sake drinkers are surprised that this is a yamahai because it does not have the gamey and funky character that most do.

However, it still shows some of the nutty and oily dimensions of a yamahai.

### **Tasting Note**

Overall, mellow and well balanced.

Notes of roasted chestnuts, brown butter, and honey on the nose and palate; gentle acidity in the finish.

### **Food Pairing**

Enjoy from room temperature to mildly heated with pork belly, shabu shabu, and hard, nutty cheese.

**Region:** Akita

**Grade:** Yamahai Junmai

**Nihonshudo:** +1.0

**Acidity:** 1.

**Alcohol Percentage:** 16



## **Junmai Ginjo “Cabin in the Snow”**

This junmai ginjo is a favorite with new and seasoned sake drinkers alike.

### **Tasting Note**

Hints of anise on the nose; mango and strawberry on the palate, finishing with a white pepper spice.

### **Food Pairing**

Serve chilled with salad, spicy foods, sashimi, and desserts.

Region: Akita

Grade: Junmai Ginjo

Seimaibuai: 55%

Nihonshudo: +1.5

Acidity: 1.5

Amino Acidity: .08

Rice: Akita Sake Komachi

Yeast: Special House Yeast

Shubo Method: Sokujo

Pressing: Yabuta

Filtration: SF Filter

Pasteurization: Once

