



## CHAPTER TWENTY

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## ASIA

### LEARNING OBJECTIVES

After studying this chapter, the candidate should be able to:

- Describe the recent growth of the culture and business of wine in China.
- Discuss the physical location and general attributes of the wine-producing regions of China.
- Recall the main grape varieties used in Chinese wine.
- Describe the grape-based wine industry in Japan.

Wine—particularly grape-based wine—has generally not been given the cultural importance in Asia that it enjoys in much of the rest of the world. In addition, portions of the Asian continent are given over to geological and climatic obstacles—in terms of extreme mountains, deserts, and monsoons—not seen in much of the rest of the world. Despite these natural limitations, parts of Asia have their own long history with viticulture and winemaking. In addition, many parts of this vast continent are developing (or renewing) an interest in the culture and business of wine.

China in particular is an emerging wine powerhouse, and Japan—despite its small size—has a developing wine industry. Other areas of Asia, even those that push the boundaries of latitude and climate such as Vietnam, India, Indonesia, and Thailand, are producing wine in increasing, if minute, amounts. These wines are evolving in quality as well.

### CHINA

While China has a long history of wine production reaching back several thousand years, it is only recently that the consumption of fine wine has become widespread among portions of the population. Beginning with the economic reforms of the 1980s and a more recent influx of investors from international wine- and spirit-producing powerhouses, domestic wine production increased steadily until 2016; since then, growth has leveled off or even slowed in some parts of the industry.

However, the numbers remain impressive, and with approximately 1,940,000 acres (785,000 ha) under vine, China is now considered one of the world leaders in grape and wine production. The country has over 500 wineries along with an estimated 52 million wine drinkers (Wine Intelligence). Domestically-produced wine—including a large majority made by Changyu Pioneer Wine Company and the China Great Wall Wine Company, the country's largest producers—accounts for nearly half of the wine consumed in the country. Dry red wines are the dominant style produced in China, comprising four-fifths of the total volume.

## HISTORY

China, specifically the settlement of Jiahu, located in the central portion of the country south of the Yellow River Valley, is the site of what may be the world's first fermented beverage produced using grapes. In the 1980s, clay jars described as having "high necks, flaring rims and handles" were discovered in the area and dated from the early Neolithic period, estimated to be 7000–6600 BCE. Noted beverage historians Dr. Patrick McGovern and Professor Fang Hui and their team describe this ancient beverage as a "Neolithic grog." The team was able to confirm via chemical analysis of the porous clay that the jars once contained a fermented beverage made using rice, honey, hawthorn fruit, and wild grapes.

Other important archeological finds in the area of Jiahu include the discovery, in 2011, of a tightly sealed bronze vessel containing liquid at a burial ground. The vessel was dated to more than 3,000 years

ago, belonging to the era of the Shang and Western Zhou Dynasties. Chemical analysis of the contents revealed the liquid to be a fermented, alcoholic beverage produced using hawthorn fruit, wild grapes, rice, and beeswax. These discoveries have confirmed that grape-related winemaking has been present in Chinese culture for thousands of years.

The modern era of wine production in China is said to have begun around 1892, when Zhang Bishi, a Qing Dynasty diplomat, imported more than 100 European grape varieties for use in modern China's first winemaking facility, the Changyu Winemaking Company, located in the Shandong province. The company exists to this day and—now known as Changyu Pioneer Wine Company, Inc.—is one of the largest wine-producing companies in the world, yet remains essentially unknown outside of China.

Upon the founding of the People's Republic of China in 1949, the communist government became heavily involved in the country's wine industry. Under its command, the wine industry was expanded greatly, and it became common practice to blend grape-based wine with ferments produced from other fruits as well as grains. In 2004, new regulations mandated that wine be made strictly from grapes or grape juice.

China's wine industry has experienced some exponential growth spurts in the last few decades, beginning with the economic reforms of the 1980s and a more recent influx of investors from international wine- and spirit-producing powerhouses. Examples of international companies with interests in the Chinese wine industry include Pernod Ricard, Torres, LVMH, Rémy Cointreau, and Domaines Barons de Rothschild.

Advances in quality have accelerated since the mid-2000s, and new wines from joint ventures and other enterprises are being released and will multiply in the years ahead. The profile of these wines and the image of Chinese wines in general will likely continue to evolve in unpredictable ways.

## Main Winegrowing Regions of China



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Figure 20-1: Map of the major winegrowing regions of China

### GEOGRAPHY AND CLIMATE

China is the fourth largest country in the world (by geographic area) and is somewhat comparable to the size of the United States (the US ranks third after Russia and Canada). Much of this land is taken up by deserts, particularly the Gobi Desert in the north and the Takla Makan Desert in the northwest. The far north of the country, located to the east of Mongolia, is isolated and mountainous, as is the far west of the country, which is dominated by the mountains and plateaus of the Kunlun Shan Mountain Range. To the southwest, the landscape consists of the immense Plateau of Tibet—which, at an average elevation of nearly 15,000 feet (4,500 m), covers one-fourth

of China's surface—and the dramatic Himalayas.

Broadly speaking, China has a continental monsoon climate differentiated by region and characterized by dry, cold winters and rainy, hot summers. A good portion of the country is located within the temperate latitude zone considered ideal for viticulture, with only the portion extending from the city of Hangzhou down to Macau reaching farther south than 30° north latitude. Thus, most of China's grape growing and winemaking is focused in the northern portion of the country. The only exception to this is the Yunnan region, which borders Myanmar (Burma), Vietnam, and Laos.

As is to be expected in a country of such large scale, China's climate varies widely across the whole of the landmass. Precipitation ranges from an average of fewer than 2 inches (5 cm) per year in the Takla Makan Desert in the inland northwest, to 28 inches (71 cm) per year in the coastal sections of the northeast, with precipitation overall increasing as one travels farther south. Annual rainfall as high as 50 inches (127 cm) is often experienced in the areas around Macau.

### GRAPE VARIETIES

The varieties that dominate plantings are Red Globe, Kyoho, Thompson Seedless, and Muscat, reflecting the substantial production of table grapes. Of the dozens of different species of the *Vitis* genus, many are native to China and the surrounding areas of Asia. For much of China's long grape growing history, these native grapes—now known by such names as *Vitis amurensis* (the Amur grape), *Vitis armata*, and *Vitis sinocinerea*—were the only grapes known.

Several hundred varieties of *Vitis vinifera* were imported into China beginning in 1892. As occurred in many other regions at the time, many of these initial vinifera vines did not survive—although some have lasted over the decades—and many were used, along with local species, to create hybrids that are still in use today. As technical knowledge and understanding of climatic and geological suitability

increases, vinifera grapes are becoming more widely grown and, in many cases, preferred for the production of wine.

Grape breeding programs, beginning in the 1950s, have led to over 50 new grape varieties considered to be native to China. These crosses and hybrids were created particularly for their resistance to the destructive low temperatures of northern Chinese winters and for their disease resistance in the areas with hot, humid summers. One of the most successful crosses is known as Yan 73, a Muscat Hamburg X Alicante Bouschet cross used to strengthen color in red wine owing to its pigmented pulp. Gongniang No. 1, a Muscat Hamburg X *Vitis amurensis* hybrid, is widely used in wine production for its extreme cold resistance; it can safely overwinter, without being buried for protection, in conditions as low as -7°F (-22°C), and has produced award-winning wines as well.

It is not currently known what the exact acreage is by grape variety in China. Cabernet Sauvignon is, by all estimates, the most widely planted wine grape, believed to account for half of all plantings. This is followed by Cabernet Gernischt (the local name for what has recently been confirmed to be Carmenère), Merlot, Chardonnay (the leading white grape), Cabernet Franc, Shiraz, Gamay, Grenache, Marselan (a French-created Cabernet Sauvignon X Grenache cross), and Pinot Noir, among others.

Among the assorted grapes somewhat unique to China, the vinifera variety Longyan appears to have been planted in China for several hundred years. No one seems to know just how it arrived in Asia, but it has long been appreciated as a table grape, known by the name Dragon Eyes. Longyan is a high-yielding grape variety with a reddish-pink skin that produces wines often described as having a Gewürztraminer-like aroma and flavors of flowers, peaches, and lychee fruit.





Figure 20-2: Marselan grapes

### WINE LAWS AND REGULATIONS IN CHINA

National regulations governing wine production and sales in China are still largely in their infancy. The first geographical indication protection regulation was put in place in 2005, requiring both local and foreign regions to be registered for protection with the General Administration of Quality Supervision, Inspection, and Quarantine (AQSIQ).

Other laws and regulations are now beginning to be enacted. For instance, in December 2012, the Shandong Bureau of Quality and Technical Supervision (SBQTS) approved and announced a set of standards concerning the use of the term “estate wine.” The regulations require the producing estate to own all the vines, produce and bottle the wine within the estate, and only use grapes from vines that are more than three years old, among other requirements.

Also in December 2012, the Eastern Foot of Helan Mountain wine region, located within the Ningxia Hui Autonomous Region, became



the first legally regulated and geographically defined wine region in China by vote of the People's Congress Standing Committee. These regulations set standards for viticulture and winemaking and limit the use of the regional name to wines produced 75% from grapes grown within the geographic confines of the area. In addition, two geographical indications in Xinjiang, Hoxud and Turpan, are pending approval.

As Chinese wineries begin to export, both local and regional laws such as these will take on greater importance and are likely to become more widespread.

## CHINESE WINE REGIONS

### **Hebei**

The Chinese province of Hebei is located in the northeast of the country between 36° and 42° north latitude, surrounding the municipalities of Beijing and Tianjin. Hebei, whose name can be literally translated as “north of the river,” is located entirely north of the Yellow River, on the coast of the Bohai Sea. It is estimated that Hebei, together with neighboring Tianjin, has over 50 wineries and is responsible for up to half of China's total wine volume.

Despite its proximity to the ocean, coastal Hebei has a warm monsoon climate, experiencing hot, humid, and wet summers and autumns, followed by cold, dry winters. Winter temperatures are low enough to require vines to be buried. Portions of the northern section of the area situated at up to 3,300 feet (1,000 m) are well-suited for viticulture and enjoy a much cooler climate—as well as higher levels of sunshine—than the city of Beijing and the coastal areas. Here, as in China's other northern vineyards, viticulture is dependent upon irrigation.

The large population of the city of Beijing provides a ready market for much of the wine produced in Hebei. The Great Wall of China cuts through the area and, in many cases, vineyards are planted in its shadow. This area is home to several large producers of Chinese

wine, including the China Great Wall Wine Company, which is currently China's largest producer by volume.

Hebei is also home to the Sino-French Demonstration Vineyard, planted in the late 1990s as a joint venture between the French and Chinese governments. The Sino-French Demonstration Vineyard, whose wines are marketed under the name Domaine Franco Chinois, grows a wide array of vinifera varieties, including Cabernet Sauvignon, Riesling, Viognier, Merlot, Marselan, and Petit Manseng.

## **Ningxia**

The Ningxia Hui Autonomous Region is located about 500 miles (805 km) west of Beijing. The area is basically an alluvial plain of the Yellow River, situated on the eastern edge of the Gobi Desert. Due to centuries of agriculture, the soil here has been depleted to a fine type of loess soil, highly susceptible to wind and water erosion. Viticulture is encouraged in this area due to its affinity for such marginal conditions and to help prevent further erosion.

Thoroughly landlocked, Ningxia has a true continental climate, with significant day/night and summer/winter temperature variations. Summertime temperatures into the 80s F (upper 20s C) are assuaged by the altitude of the vineyards, which typically approach 4,000 feet (1,200 m) above sea level. The winters are long and very cold, however, which means that many vines must be buried under an insulating layer of dirt in order to survive. The months of December through February also see negligible precipitation; rainfall is concentrated in summer months, reaching only 8 inches (20 cm) annually. Irrigation is necessary for agriculture, and early methods to divert water from the Yellow River were developed during the Xia Dynasty (2100–1600 BC) and expanded in later periods.

The Ningxia region has proved to be one of China's most promising vineyard areas and is the focus of significant investment. The area has experienced significant growth and, by some counts, is home to over 200 wineries. These wineries produce a wide range of wines—using Cabernet Sauvignon, Cabernet Gernischt, Chardonnay,

Riesling, and Syrah as well as other varieties—that include some high-quality wines that have won medals at international competitions. China's first official appellation, the Eastern Foot of Helan Mountain wine region, is located here, and several international companies have interests in this zone.



Figure 20-3: Vineyards in the Eastern Foot of Helan Mountain wine region

## **Shandong**

The province of Shandong, located on the shores of the Yellow Sea somewhat equidistant between the cities of Beijing and Shanghai, is home to many of China's most prosperous wine producers. The majority of the viticulture in the area surrounds the Shandong Peninsula, located just south of the mouth of the Yellow River and extending 164 miles (264 km) eastward toward Korea.

Shandong's location on the ocean, with a coastline 1,800 miles (3,000 km) long, yields a temperate climate with maritime influences and significant humidity. The area is influenced by warm summer and autumn rains resulting from the East Asian Monsoon; this may lead to waterlogged soil and fungal issues. Heat and precipitation are both at their highest levels in July and August, an unusual

coincidence not found in many leading wine regions and contrary to the pattern in Mediterranean climates. Winters are mild enough that vines do not need to be buried, a significant advantage and cost savings compared to China's northern regions.

Shandong is home to the Changyu Pioneer Wine Company, considered the first "modern" Chinese winery and credited with importing many vinifera varieties into China beginning in the 1890s. Cabernet Sauvignon, Cabernet Gernischt, Riesling, and Chardonnay are among the most important grape varieties grown in the province, supplemented by Marselan, Petit Manseng, and Petit Verdot.

## **Shanxi**

The province of Shanxi, located about 250 miles (402 km) west of Beijing and adjoining Hebei, sits on a high loess plateau between the Gobi Desert and the coastal plains. The area experiences a continental climate featuring cold winters requiring over-winter vine protection, yet the vines have a high rate of survival compared to those in regions farther west. Summers are generally dry, but inconsistent summer rains of the East Asia Monsoon may cause problems with humidity. These issues are countered by the area's high altitude vineyards, which receive ample sunshine and possess excellent vine drainage. However, the rains vary from year to year, and the best vintages are typically those that experience a minimal amount of rain. The area devoted to wine grapes is relatively small, roughly 3,000 acres (1,200 ha).

Shanxi is the home of Grace Vineyards, founded in 1997 and considered to be one of China's most renowned wineries in terms of quality, reputation, and world-class facilities for tasting and tourism. The estate, with 148 acres (60 ha) under vine, produces approximately 400,000 bottles of wine a year (including some made with fruit sourced from Ningxia).

## **Xinjiang**

The Xinjiang Uyghur Autonomous Region lies in the extreme west of

the country, neighboring the central Asian countries of Kazakhstan, Tajikistan, and Afghanistan. The exact origins of viticulture in the area are uncertain, but vestiges of vineyard plots outside dwellings and the remains of a vinifera vine have been discovered dating from the 4th century BCE. In the 13th century, the famous explorer Marco Polo described his journey down the Silk Road, mentioning the fine grape wines of Xinjiang.

Xinjiang has the greatest surface area of China's autonomous regions and is considerably larger than the states of California and Texas combined. It is divided roughly in two by the Tien Shan Mountains. The dominant geographic feature is the formidable Takla Makan Desert covering nearly 130,000 square miles (337,000 km). The wine grape areas are to the north of the Tien Shan Mountains and to the south around the perimeter of the Takla Makan Desert. Xinjiang's Heshuo/Hoxud region obtained Geographical Indication status in 2015.



Figure 20-4: Vineyards in the Ningxia Autonomous Region

## **Yunnan**

The Yunnan province lies mostly south of the Yangtze River and shares a border with Vietnam, Laos, and Myanmar. The region lies between 21° and 29° north latitude, well outside the temperate zone typically considered ideal for viticulture. However, as is the case in some other areas of the world, the tropical climate of the low

latitudes is moderated by higher elevations, which average almost 5,000 feet (1,500 m) above sea level. In Yunnan, there is no need to bury vines as in northern China. The region also has the advantage of a long growing season; on the other hand, harvest coincides with the arrival of the rainy period.

The area is believed to have a 200-year history of wine production, which began—according to legend—when a French missionary traveled from India to Yunnan via the Ancient Tea Horse Trail. The missionary was given a plot of land in order to build a church. He planted a vineyard with grapevines that included a variety brought from France known as Rose Honey. Rose Honey is still grown in the area today, although it has since become extinct in France. Other distinctive varieties of uncertain origins—including some non-vinifera species and hybrids such as Crystal and French Wild—are also present in the region, along with more typical grapes such as Cabernet Sauvignon. All of these varieties are grown and sold by the Yunnan Red Wine Company, one of the largest of Yunnan's producers.

The newest project in Yunnan is the Shangri-La Winery Company Limited. Situated in the northwest corner of the province in Deqin at 28° north latitude, the company sources grapes from vineyards located on the steep slopes of the Mekong River. These vineyards are among the highest in the world at 8,200 feet (2,500 m).

## JAPAN

The densely populated island country of Japan has traditionally been more closely associated with the production and consumption of rice wine (sake) than grape-based wine; however, Japan has its own history and tradition of viticulture and grape wine production. Japan has been making wine from the Koshu grape, considered to be its own native variety, since the 8th century. Vineyards are estimated to cover 44,500 acres (18,000 ha), yet a mere 5,000 acres (2,000 ha) are dedicated to wine grapes. Japan currently has close to 250

wineries.

## HISTORY

Wine has a little-known but long history in Japan. According to the most widely repeated legend, viticulture and wine production began in 718 CE when a Buddhist Monk by the name of Gyoki had a vision of the Yakushi Buddha (the Buddha of medicine and healing) holding a bunch of grapes. In honor of the vision, Gyoki planted the first vineyards in Japan at the Daizenji Temple, located in present-day Yamanashi Prefecture about 65 miles (105 km) west of Tokyo.

The appreciation of European wine in Japan dates back to the 16th century, when Portuguese missionaries arrived in Japan bearing gifts of Portuguese wine for the feudal lords of Kyūshū. This wine became known as *chintashu* (a phonetic equivalent of the Portuguese word “red” [*tinta*] and the Japanese word for “liquor” [*shu*]). The gifts were well accepted, and the locals, who developed a taste for the wine, continued to import it. This practice all but ceased, however, during the 17th and 18th centuries as the sakoku policy of imperial isolationism applied strict regulations to commerce, trade, and travel.

Beginning in the 1870s, with the opening of the country during the Meiji Restoration, viticulture and wine production was once again attempted in parts of Japan, using North American and European grape varieties.

The first modern Japanese wines were produced in 1874 in the city of Kōfu (Yamanashi Prefecture, on the island of Honshu). The endeavors had some minor success, but it was not until after World War II that winemaking in Japan began in earnest. The interest in wine saw another increase in the 1970s and beyond, as many western products and fashions found their way to Japan, and Japanese tourism to the west increased in turn. In the last few decades, wine consumption in Japan has grown exponentially, yet remains less than 3 liters per capita (the highest in Asia). While the



majority of the wine consumed continues to be imported, domestic production has increased as well.

## GEOGRAPHY AND CLIMATE

Located in the Pacific Ocean, Japan is an archipelago of 6,852 islands. Four of these islands (from north to south—Hokkaido, Honshu, Shikoku, and Kyushu) make up about 97% of the country's land area and support most of the country's 126 million people. This long, narrow nation stretches from 24° to 46° north latitude. The climate is primarily temperate but varies from north to south and includes some extremes, such as the heavy winter snowfall experienced in the north, and the hot, downward-sloping winds sometimes experienced on the Honshu west coast.

While there are vineyards from the far north to the south, the majority of Japanese wine is produced on Honshu (the main island), primarily in Nagano, Yamagata, and Yamanashi. These three prefectures produce almost half of the nation's grapes and an even larger percentage of the wine. Other regions known for viticulture and winemaking include Hokkaido, despite its location in the frigid north, and Miyazaki Prefecture on the southern island of Kyushu. In Kyushu, humidity is a serious challenge, and vines here are often trained on overhead trellises or pergolas known as *tanazukuri*. These *tanazukuri* encourage air circulation beneath the vine canopies, thus reducing the risk of fungal disease.



Figure 20-5: Koshu grapevines trained on tanazukuri

### GRAPE VARIETIES

There are relatively few grape varieties that are commercially grown for use in winemaking in Japan; these include Koshu (considered to be native to Japan), Muscat Bailey-A and Yamasachi (both Japanese hybrids), Delaware (believed to be a European/American hybrid) and Muscat of Alexandria. However, there are fragmented plantings of many other varieties, including Merlot, Chardonnay, Cabernet Sauvignon, Kerner, and Zweigelt.

The story of Japan's native variety, Koshu, begins with the original grapes planted by the monk Gyoki. According to legend, they were found "growing wild." However, it is now believed that they were brought from Europe by travelers, as modern DNA mapping has proven them to be of *Vitis vinifera* origin with 90% of the vinifera footprint still intact. The original European grapes apparently modified themselves over the generations so that the contemporary descendant is in fact a hybrid, now known as Koshu and considered to be a variety indigenous to Japan. Koshu is a pink-skinned grape variety known for producing light-bodied white wines with delicate

fruit and floral flavors. Sparkling versions are produced as well.

The Muscat Bailey-A grape is a red hybrid grape created in 1927 by Zenbei Kawakami at the Iwanohara Winery in Japan's Niigata Prefecture. Kawakami set out to create a red wine grape variety that would thrive in Japan's climate. The result is a hybrid between the Bailey variety (already a complicated *vinifera/rupestris* hybrid) and Muscat Hamburg (Black Muscat). Muscat Bailey-A produces wines with a very grape juice-like flavor and, on its own, is generally used to produce sweet wine. However, it is sometimes blended with *vinifera* grapes to create a sturdier red blend.

### **Wine Laws and Regulations in Japan**

In 2005, Japan introduced regulations requiring that a product marketed as a "Wine of Japan" be produced entirely with grapes grown in the country. Previously, wines produced in Japan—regardless of the origin of the grapes—were allowed to be sold as "Japanese Wine." Subsequent laws have been passed requiring varietal wines to be produced using a minimum of 85% of the named grape variety and limiting the use of places-of-origin (including geographical indications) to wines that are comprised of a minimum of 85% grapes grown in the named place.

### **Geographical Indications**

As of 2022, Japan has five geographical indications for wine. The first was awarded (in 2013) to the Yamanashi Prefecture, located on the island of Honshu and approved for wines produced using a range of grape varieties, including Koshu and Muscat Bailey-A. In 2018, the island of Hokkaido was awarded Japan's second geographical indication. Hokkaido GI wines are produced using Koshu, Muscat Bailey-A, and several other grapes—including the unique, cool-climate Pinot Noir grown on the island. In 2021, three more regions—all located on Honshu—were so indicated. These include Nagano GI (located in the center of the island and now the second-largest producer in terms of volume), Yamagata GI (located in the northern part of Honshu, facing the Sea of Japan), and Osaka GI (specializing in the Delaware grape variety and located in the foothills near the

large city of the same name).