



Lerkekåsa Vineyard, Gvarv, Norway

THE GROWTH OF VINEYARDS IN NORTHERN EUROPE

By Ann J. Samuelson

Wine grapes were typically grown between the 30th and 50th parallels in the northern hemisphere, but change is afoot, and they are now being successfully grown further north. For this article we are looking at the growth of vineyards in Northern Europe which not long ago would have been considered as inhospitable for successful grape growing for wine. The area will be defined by drawing a line around the 54th latitude by the Baltic Sea and north to include the Nordic countries; Denmark, Sweden, Norway, and Finland, as well as the Baltic countries; Estonia, Latvia, and Lithuania. The most northerly commercial vineyard is Lerkekåsa, in Norway, on 59th parallel; which is the same as the south of Alaska.



Vinyard in Vingården, Sweden

Climate Change?

Climate change has moderated the winters in the Nordic countries, especially in the southern part. Scandinavian farmers noticed 30 years ago that their growing seasons were lengthening and making it more and more feasible to grow grapes in Nordic countries. A report published by the Swedish Meteorological and Hydrological Institute in 2022 found that in Sweden the growing season had lengthened by 20 days and the average temperature had increased by 2oC over the past 30 years.

According to climate scientist, Borger Aamaas, at The Center for Climate Research, Norway has become 1.9oC warmer since the 60`s. The sea has a dampening effect on the temperature increase and therefore there is a slower increase by the coast. Some of the inland municipalities, Gausdal and Jevnaker, have even warmed up 3oC. It is mostly since the 80`s that we have seen the temperature increases and it is seen more and more each decade. If temperatures continue to rise at their current rate, it is predicted that Denmark`s climate will be like northern France in 50 years` time.

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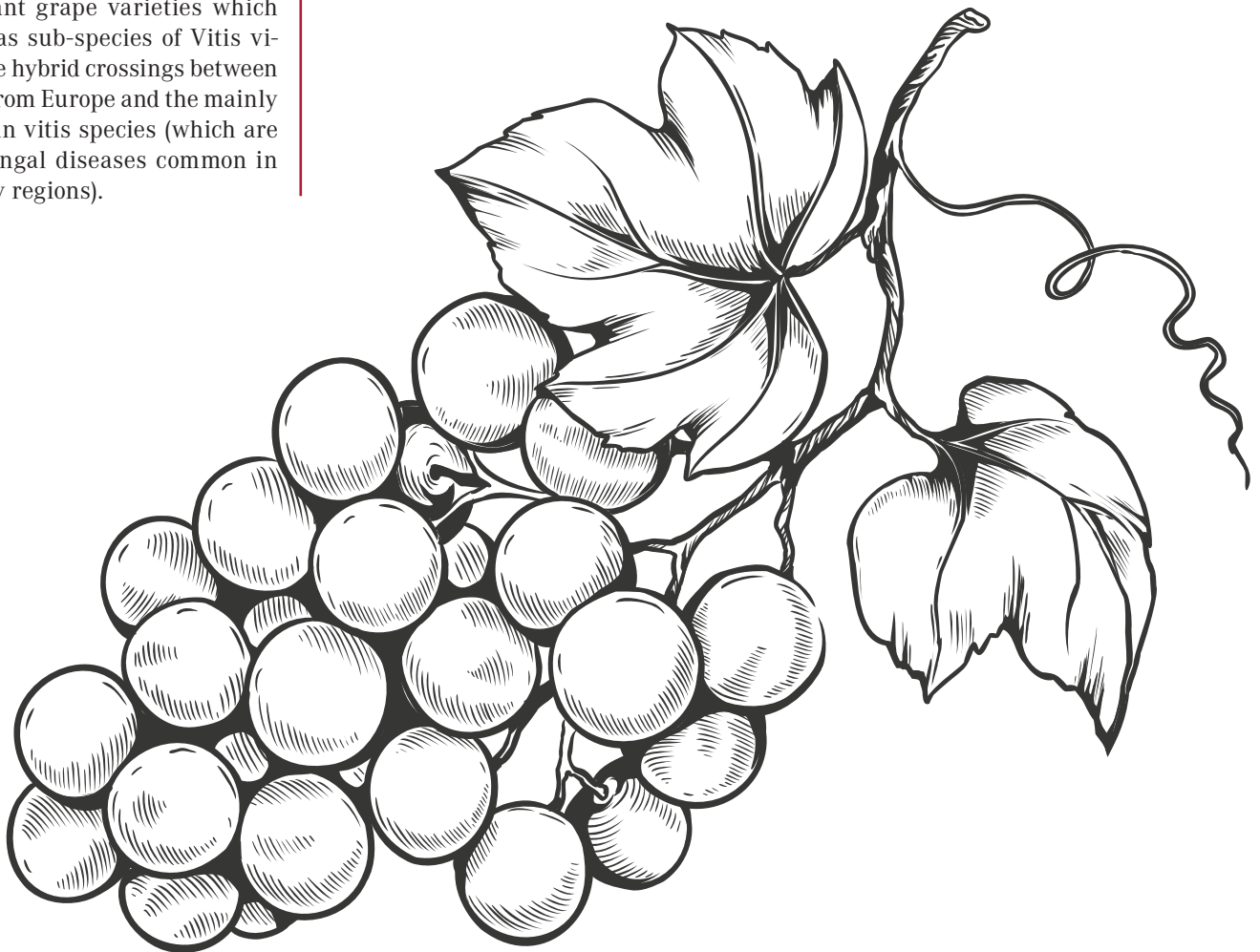


Wines Styles and Grapes

In the Nordic and Baltic countries you will find sparkling, white, rose, red, and sweet wine styles. The sparkling and white wines, in particular, made from the solaris grape have been showing great potential in these cool climates. The wines are fruity, with aromas of apple, citrus, and elderberry, with notes of honey. Acidity is high, which makes the wine fresh and lively. The key to success in these marginal climates is to use the right grape variety and rootstock, in addition to have a good sun exposure for the vines. The most common grape varieties used are “PIWI” grapes. PIWI is an abbreviation of the German term “Pilzwid-erstands-fähige Reben” which refers to fungus resistant grape varieties which are classified as sub-species of *Vitis vinifera*. They are hybrid crossings between *Vitis vinifera* from Europe and the mainly North American *vitis* species (which are resistant to fungal diseases common in these northerly regions).

The most successful of these hybrid grapes are the white variety, solaris, and the red variety, rondo. Other white varieties used are souvignier gris, muscaris, johanniter, orion, hasansky sladki, donau riesling, and vidal blanc. The common red varieties are cabernet cortis, bolero, cabernet cantor, regent, fruh burgunder, and sirame. The most suitable rootstocks to use in the cool climate are the SO4 and 5BB, according to Lena Jørgensen at Vingården in Klagshamn, Sweden. These rootstocks are suited to a humid climate. They slightly advance maturity by helping the grapes reach full phenolic maturity and leading to a higher quality wine.

The Nordic countries have also experimented with the international grapes such as riesling, sauvignon blanc, chardonnay, pinot gris, pinot blancs, pinot noir, merlot, cabernet franc and cabernet sauvignon. For the moment, Denmark and Sweden have the best potential to ripen these international grape varieties on a regular basis. Their most southern wine producing areas are between the 55th to 56th parallels. British Columbia in Canada and Lithuania in Northern Europe are other wine producing regions and countries on the same parallels.





Glenholm Vingård, Jutland, Denmark

State Restrictions Or Not?

In 2000, Denmark, Sweden, Finland were accepted by EU law as commercial wine producing countries. Denmark does not have a state wine and spirit monopoly and can therefore sell wines at their wineries. Sweden, Norway and Finland have a state monopoly and can only sell their wines at the monopoly shop or direct to the Horeca market. These countries have been granted permission by EU to maintain their regulation with state monopoly. However, there has been a change as Finland was recently granted an allowance to sell up to four bottles of wine per person at the wineries. This is now up for discussion in Sweden. The Riksdagen (Sweden's highest decision making assembly) will make a decision this in Autumn. If it goes through in Sweden, hopes are that it may also be granted in Norway. This decision will be a very important step for wine producers in these countries as it will help them build their oenotourisme.

The Nordic Countries

Denmark has the most advanced wine scene and the longest experience with grape growing. They started in the early 90's. The first Danish winery was started in 1993 by a few enthusiasts. Denmark now has four main wine regions - Bornholm, Funen, Jutland, and Zealand. The Dons sub-region in Jutland has now become the first protected designation of origin (PDO) in Denmark. This is the most northerly PDO in the EU and covers an area of 500 hectares. The two biggest winegrowers in Denmark are Dyrehøj Vingård in the Roesnaes peninsula near Kalundborg on the northwest coast of Zealand, and Skærsøgaard in the Dons sub-region in Jutland. Together these two form 20% of the total with 40,000 vines and 30,000 vines respectively. They both make award winning wines with the solaris variety - namely Dyrehøj Solaris Reserve white wine, and Cuvée Brut Sparkling Wine from Skærsøgaard. The Skærsøgaard winery is owned by Sven Moesgaard. Skærsøgaard's signature wine "DONS" has gained the certification BOB (Beskyttet Oprindelses Betegnelse) which are like the French AOC or the Italian DOC. Skærsøgaard's sparkling wines is the only product in Denmark which has achieved BOB. In addition to a range of sparkling wines, Skærsøgaard also produces white, rose, red, and sweet grape wines.

Sweden has 150 hectares under vine along the southernmost coast in Skåne, and on the islands Öland and Gotland, as well as, some in the Södermanland region southwest of Stockholm. In just 20 years, Swedish viticulture has gone from being a hobby to a commercial success being recognised for producing prize winning wines. There are around 200 wine producers with their own vineyards and 55 of these are commercial vineyards. 95% of the production is from PIWI grapes, with solaris being the dominant variety for white wine and increasingly, for traditionally made sparkling wines.

Two years ago Sweden's Branch Organization for Oenology and Viticulture (SBOV) was formed. The country is now working to obtain a geographical indication of origin (PGI) status, such as Wine from Skåne. Just outside Malmö Skåne, is Vingården i Klagshamn. It was founded in 2001 by two of the pioneers of Swedish viticulture, Murat Sofrakis and Lena Jørgensen. 80 percent of their 1.8 hectares of vineyards are planted with solaris. The other 20 percent grows red rondo and cabernet cortis, and a small area of frühburgunder. Their philosophy is to make something new for the wine world instead of making one more chardonnay or pinot noir wine. The intention is to make



the best possible wine from the grape varieties they consider most suitable to their soil and climate. Vingården I Klagshamn is open for public from 15 May to 15 August, but it is very popular with wine geeks and visits can be booked during the other months. Kullaberg Vingård is Sweden's largest winery with a total of 14 hectares, most vines planted a decade ago. They are located up the coast from Malmö and are surrounded by the three seas - Öresund, Skälderviken and Kattegat- which makes the climate mild with a longer growing season. Kullaberg produces mostly white wines and sparkling wines. Their wines can be found in high end restaurants from Europe to Japan, as well as sold through the Systembolaget (Sweden's monopoly). Their oenologist and winemaker, Felix Åhrberg worked in vineyards around the world before to Sweden to head up Kullaberg Vingård in 2017.

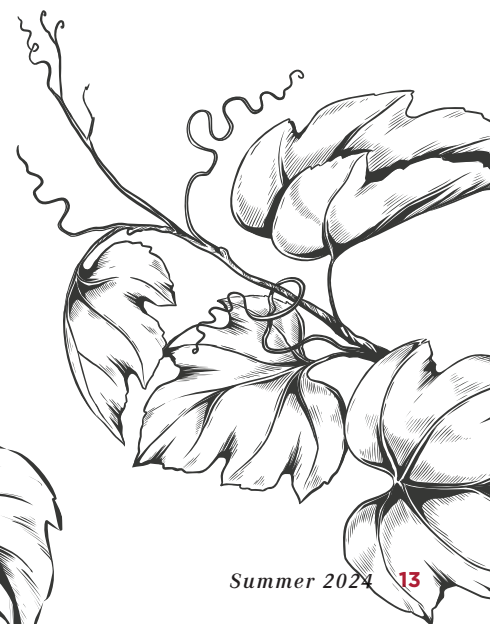
In Norway, viticulture is in its early stages, but with an exciting future. There are 50 registered wineries in Norway, according to the Norske Druedyrkere's association. Most vineyards are by the southern coast from Drammen to Kristiansand or slightly inland. Norway benefits from still having a marginal climate. Though the temperature has increased in the last decades, the temperature difference between day and night during the growing season leads to high acidity levels. This will benefit the wines with a refreshing acid structure and a long shelf-life.

As mentioned at the start, Lerkekåsa Vineyard, is the most northerly commercial vineyard. It is two-hour drive south-west of Oslo, in Gvarv. Nestled in a valley near Lake Norsjø, and is protected by hills and mountains, it has a special microclimate and one of the warmest places in Norway. The vineyard was planted in 2008 by Joar Saettem, a professional geologist by trade and his wife Wenche. Lerkekåsa now produces around 1,500 litres of wine - white, rose and red.

Alongside Sognefjord, Norway's longest and deepest fjord, there are a group of 8 wine producers trying to establish a new winemaking region as far as 61 degrees north. In total, they have 15,000 vines between them. Slinde Vineyard, owned by Bjorn Bergum and his partner Halldis work with a variety of grapes to create blends that have good aromatic notes and minerality coming from the clay soil. Slinde planted their first vines in 2014 and now they have 3,000 vines. A secret to producing quality wines in this cool climate is frequent mildly chilly nights, and the sun reflecting off the fjord onto the steep hillside. Slinde Vineyard has won gold medals in Norway's national wine competition, and their plan is to go commercial.

Finland has traditionally produced wines mostly from fruits and berries, but with the change in climate they are now embarking on becoming a wine producing country. Currently Finnish wine production is only small-scale, and mostly on experimental basis. This is set to change. Today, there are about 25 wineries in Finland, mostly around the southern coast and a few up on the west. The wine producing association in Finland is called Viininkasvattajaty.

A pioneer in Finnish wine production is Kaarlo Nelimarkka. He owns a winery in Waasa on the western coast, only 400 kilometres south of the Arctic Circle! Nelimarkka started experimenting with winegrowing almost 40 years ago. After decades of trial and error, his Sundom winery now makes white wine and red wine from his 2,000 vine plants. His specialty is the Sundom white wine made from the hardier grape varieties solaris, madeleine angevine, and gewurztraminer. A big advantage in this northerly region is that the grapes enjoy up to 20 hours of daylight each day during the summer months.



INSTEAD OF GRAPES, TRADITIONAL ESTONIAN WINE MAKING USES LOCALLY-SOURCED FRUITS, BERRIES, AND FLOWERS. DANDELION, RHUBARB, PRIMROSE, ROWAN, AND BLACKCURRANT ARE SOME OF THE FREQUENTLY USED BASES, RESULTING IN A SWEETER TASTE PROFILE COMPARED TO GRAPE-BASED VARIETIES.



The Baltic Countries

In Estonia, the wine industry is growing and their wine tourism is growing rapidly. Their focus is on cool climate grapes such as solaris, regent, rondo, cabernet cortis, leon millot, zilga, and hasanki sladki to produce light, fresh and mineral driven wines with subtle grape aromas. Estonian winemakers also experiment with other fruit varieties such as apples, pears, and cherries.

The Southern Estonia wine region is one of the most interesting areas for wine production with small, family-owned wineries. Visitors can enjoy vineyard tours, wine tastings, and cellar visits. Harjumaa is another interesting wine region in the northern part of Estonia, as well as, the islands of Saaremaa and Muhu. Latvia has been making wine from grapes for years, but also from fruits, berries and flowers. The winery Mazburkas, near Engure, has been growing grapes for 15 years and produces 3 whites, 1 rose, and 2 reds. When visiting them you can stay in one of their cabins with a view of their vineyard.

Abavas winery is in Sabile, in the centre of the Curonian peninsula at 57th parallel. They first planted grapes in 2010. This started as a family winery, but it is now owned by three families - Barkan, Gadazhi and Krasovsky. The best northern grape varieties for them are solaris, muskaris, and rondo. They produce one sparkling wine from the solaris grape and a red wine from rondo.

Before making wine from grapes they produced wine and sparkling beverages from fruits and berries.

Lithuania is a relative newcomer with vineyards starting to spread and cultivate different cool climate varieties. As global warming intensifies, the season for cultivating grapes in Lithuania is extending. It is considered that at least 180 frost free days are required (eg. 15 May to 11 November which would be a European norm) for successful grape production. Lithuania has 160-180 frost free days along the coast and 130-150 in the east (which could increase in time). There are over 200 farmers across Lithuania that cultivate vineyards, but much of the Lithuanian grapes ends up inside a juicer. The Viticulture Association has started to register vineyards and it is estimated that there could be around hundred grape growers there now. Some producers are starting to open for visitors on their farms and offering accommodations. The best wine region in Lithuania is in the southeast due to its light soil. One of the biggest wineries in Lithuania is located southwest of the capital Vilnius and are owned by Andrius Diliautas and his wife.

The Future

As drought, rising temperature, and other extreme weather events are forcing traditional winegrowing regions (France, Spain, Italy and Greece) to reassess their production methods, grape varieties grown, and also vineyard location, the vineyards of Northern Europe look to be in a good position to go from strength to strength as producers of quality wines. England is a good example - traditionally only being able to ripen PIWI varieties, southern England is now at the forefront of producing some of the finest sparkling wines, using classic grapes; chardonnay and pinot noir - the future is definitely looking bright!