

Wine from Međimurje – from Rome to Decanter

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Abstract

The paper 'Međimurje Wine - From Rome to the Decanter' provides a systematic overview of the exceptional tradition of wine production in Međimurje. As one of the most important economic branches for the people of Međimurje, as well as for numerous lords and rulers of the region between the Mura and Drava rivers, its roots date back to the Roman Empire. In the modern era, in the second half of the 20th and early 21st centuries, it was fully realised and presented to the world. The aim of this work, based on numerous sources, is to show the development and numerous changes in vine cultivation and wine production throughout its long history but also to tell the story of the connection of a large part of the Međimurje population with this economic branch. The fertile soil and climate, combined with new varieties and techniques, as well as the association of winemakers, have certainly contributed to the creation of Međimurje wines. This has resulted in an exceptional leap in quality and promotion, creating a consistency in the wines that has led to outstanding results recognised at both national and global levels.

Keywords: winemaking, viticulture, wine road, Urbanovo, pušipel, Decanter

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Note: A decanter is a vessel used to hold wine or liquid that may contain sediment. Decanters have diverse shapes and designs and are traditionally made of glass or crystal. Their volume is usually equal to that of a standard bottle of wine (0.75 l). Today, the decanter is synonymous with the event in London where the world wine awards are distributed—the Decanter World Wine Awards.

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Introduction

Međimurje, a region located in northern Croatia, presents a geographical and climatic mosaic that shapes its unique natural heritage. This area is nestled between the Mura River to the north and the Drava River to the south, offering diverse landscapes ranging from the lowlands of Lower Međimurje to the hilly highlands of Upper Međimurje. This terrain configuration makes Međimurje an example of how natural topography can influence local climatic conditions.

The climate of Međimurje is characterised by its sharp contrasts, with warm summers and cold winters, reflecting the continental climatic influence. Average temperatures vary, making July the warmest month, while January brings freezing days, often with snow cover that further emphasises the cold of winter.

Precipitation is evenly distributed throughout the year, with a pronounced peak during the summer. This is favourable for agriculture, especially viticulture, which is deeply rooted in the region's culture and economy. These climatic conditions, along with fertile soils, allow for the cultivation of various grape varieties that produce high-quality wines, making Međimurje renowned in wine circles. This article explores how the natural geographical features of Međimurje are reflected in its climate, flora, and fauna and how the local population adapts and utilises these conditions for sustainable living and the development of their economic activities. Through detailed consideration and analysis, readers will gain a deeper insight into the dynamic relationship between nature and people in this fascinating Croatian region.

Climatic and natural-geographical characteristics of Međimurje

Međimurje is situated at the touch of the Pannonian plain and the eastern Alps, two large morphological units of this part of Europe. Geographically it belongs to the peripheral, southwestern zone of Pannonian space. According to the natural and geographical characteristics, two micro-regional units are differentiated: the hilly upper and lowland lower Međimurje. Gornji Međimurje has distinctive features of a low hill whose altitudes do not exceed 350 meters (the highest level of Mohokos 344.5, Robadje 339, Sveti Juraj on Bregu 320 m, etc.), and the beginning is in relief of somewhat more pronounced Slovenian hills ("Characteristics of the Međimurje Region," CREDU, 2024). The climate is characterised by hot summers and cold winters. The average annual air temperature is around 10°C. The warm part of the year, where the average temperature is higher than the annual average, lasts from mid-April to mid-October and coincides with the growing season. The warmest month is July, with an average monthly temperature of 19°C, and the coldest is January, with an average monthly temperature of -1°C. January is the only month of the year with an average temperature below 0°C.

The total annual precipitation amounts to around 900 mm, with a maximum in the warm part of the year (April to September) and a secondary maximum in late autumn. There are no dry periods. Snow cover occurs annually between 45 and 50 days (from

October to May). On average, it can be expected that snow cover of 10 cm or more lasts for 21 to 28 days. Međimurje is relatively rich in moisture throughout the year. The annual course of cloud cover has a maximum in winter and a minimum in July and August. Sunny days are most frequent in summer, while there are almost none from November to February. The Međimurje area, with around 2000 hours of sunshine per year, belongs to the moderately sunny areas of Croatia. The longest monthly duration of sunshine is in July, around 9 hours per day. Annually, there are around 40 to 60 days with fog. Fog rarely occurs in the summer months. Frost occurs from September to May, with the most dangerous being the one that appears during the growing season. Hail occurs on average once a year, and it is most likely to occur from May to July. The following soil types are distinguished in the territory of Međimurje: loamy-clayey soil on limestone bedrock in the hilly part, clayey loam below the hilly part and along the Mura River, peat and mud in Lower Međimurje along the Mura River, gravelly soil in the area of Gornji Hrašćan - Donji Hrašćan, chernozem and loam in the central plateau, and sands and gravelly soil along the Drava River. According to the analysis of Međimurje's soil, it is evident that the majority of the soil in Upper Međimurje belongs to podzols of varying degrees of podzolisation, mostly eroded soils, whose parent material consists of loamy marls, sands, and sandstones. They were formed by the devastation of forests on the steeper slopes of higher hills and are used for arable, i.e., viticultural-fruit growing cultures. Mineral-carbonate soils (brown and yellowish-grey) predominate in the highest relief positions of Upper Međimurje (above 260 m). They were formed by surface erosion, exposing calcareous marls of clayey or loamy composition. These soils have considerable potential fertility, but the leaching of physiological plant nutrients reduces it due to the rapid runoff of water down steep slopes. The soils are used for vineyards, so the fight against erosion is equally important here ("Characteristics of the Međimurje Region," CREDU, 2024). Climatic advantages, exceptional positions, and soil composition allow for excellent results of certain varieties, especially Sauvignon Blanc, Yellow Muscat, Chardonnay, Sylvaner, Pinot Gris, and Muscat Blanc à Petits Grains. The positive thermal climate shift in the past twenty years has provided an opportunity for planting Cabernet Sauvignon and Gamay.

First mention of wines from the region of Međimurje

Tomičić (1986, p. 196), in his work "Archaeological Image of Antiquity in Međimurje", emphasises that the first important news about the ethnic groups that lived in Međimurje was brought by the Greek geographer Strabo (65 BC - 24 AD), who in his work "Geography" mentions the Drava River (Drabos) and the Pannonian tribes. In "Monumentum Ancyranum" - his political testament, the Roman emperor Tiberius emphasises: "The Pannonian tribes, which before my principate had never been visited by the Roman army, I brought, after they were conquered by Tiberius Nero, my then stepson and legate, under the rule of the Roman people and I extended the borders to the banks of the Danube". Pliny the Elder (23 - 79 AD) writes that where the Drava River flows, the Serreti, Serapilli, Iasi, and Andizeti live. According to the classical philologist A. Mayer, the Serapilli tribes lived in Međimurje, and their name suggests that they

used "grain pits". The Serapilli are, therefore, an indigenous population that, mixed with the Celts, welcomed the Roman conquerors.

In the period from 9 to 12 AD, the Romans occupied Međimurje, and it became part of their province of Upper Pannonia (Pannonia Superior). It belonged to the administrative area of Res Publica Poetoviensis and is currently in Ptuj. The Roman conquest and the stay of the Romans in the province of Pannonia, which included Međimurje, left significant traces of material and spiritual culture. The Romans built roads in Međimurje on already known and traced routes. The Amber Road from Aquileia via Emona (Ljubljana), Celeia (Celje), Poetovia (Ptuj) through the hilly part of Međimurje and the crossing over the Mura at Halicanum (Sveti Martin na Muri) led to Savaria (Szombathely) and further north through the so-called Moravian Gate to the Baltic. It also shows the direction of Roman conquests. At the height of the ancient settlement of Curta (Središče ob Dravi), a route branched off that continued across the Mura to Aquincum (Budapest). Thus, two important roads of the Roman Empire, significant for the general communication of the East with the West, separated precisely in the area of today's Međimurje, states Tomičić (1986, p. 199). There, the road emerged from the hills of a sheltered and easily defendable zone into the Pannonian Plain, which, for defence, required the establishment of military camps and the keeping of permanent garrisons. Settlements of civilians were formed next to these military camps. Among the numerous settlements, Pliny the Elder, in his travelogues (Itinerarii), focused most on the description of Stridon, very likely today's Štrigova, pointing to the highly developed viticulture in its surroundings. Rudolf Horvat, in his work "History of Međimurje" (p. 20), states that the wines produced in that region, according to Pliny the Elder, were transported and sold even in Rome. In the 8th century, Croats came to Međimurje and settled here permanently. Kalšan (2006, p. 18), in his work "History of Međimurje," emphasises that having found relatively developed viticulture, they continued to cultivate grapevines.

Development of wine – growing in Međimurje during the Middle Ages.

Data on Međimurje in the developed Middle Ages speak of the intensive construction of feudal relations. The cultivation of grapevines and the production of wine are mentioned in numerous documents that regulate property relations. Already in 1261, during the time of the Croatian-Hungarian king Bela IV, in the documents of Count Henry of Güssing, one of the feudal lords in Međimurje, we find data on the cultivation of grapevines with carefully enumerated obligations of subjects within the framework of labour rent. Namely, it is said that the serfs had to dig, prune, tie, harvest, and press in the vineyards. The document specifically notes that the serfs had to procure stakes for the vineyards. Other sources also speak of the cultivation of grapevines. Kalšan (2006, p. 35) states that the stewards visited the serfs' vineyards and collected 1/4 of the wine for the count's cellar and that this best speaks of the natural obligations of the serfs to the lord, i.e., that the "gornica" (wine tax) in such an amount was mentioned for the first time in the second half of the 13th century. The serfs gave a tenth of the wine to the church as early as the 13th century.

King Louis I of Anjou donated Međimurje with the fortresses of Štrigova and Čakovec to the former Transylvanian voivode and viceroy of Naples, Stephen Lacković (Apor) and his sons Dionysius, Nikola, Emeric, Stephen, and Ladislav on October 30, 1350, for special military merits, for all time. The deed of gift for Međimurje is one of the most important historical documents about Međimurje issued in the 14th century. It shows the economic and social structure of the secular estate. Kalšan (2006, p. 36) states that the document lists inhabited and deserted villages, churches and chapels that were built in them, vineyards, forests, groves, thickets, streams, fishponds, the right to fish, cultivated and neglected arable land, present and future, mills, taxes, revenues, rights, fruits, and benefits on the estates and in all villages belonging to the mentioned property.

The Zagreb Chapter, as a credible place, issued a document on October 12, 1352, regarding the purchase and sale of the Ledenica estate in Međimurje. The buyer of the estate was then the ban of Croatia and all of Slavonia, Stephen Lacković, the lord of the Čakovec estate, and the sellers were Bela and Nikola, the sons of Benedict, i.e., the grandsons of Radyn of Saint John near Kapornak in today's Hungary. Bela, in his own name and the name of his sons Matthias, Benedict, and Ivan, and Nikola, in his name and the name of his son Benedict, sold the Ledenica estate to Ban Stephen Lacković with all rights and income in perpetuity. The Ledenica estate was located in the area north of today's Šenkovec to the village of Brezje. Unfortunately, the exact location is impossible to determine today. The document only mentions neighbours, i.e., the owners of neighbouring estates. In the neighbourhood is the vineyard of the parish church of St. Nicholas in Kapornak, the vineyard of Zoryan Ivan of Wrathne, the vineyard of Peter, the son of Kolar from Kapornak, and the estate of Master Stephen, the son of Ban Mikac, states Turk (2017, p. 28).

A very interesting document was issued on June 15, 1454, in Nedelišće, and with it, Johannes Reichmutter, the scribe of the Counts of Celje, bought the Khnorr vineyard in Međimurje. The document mentions a multitude of names that are completely unknown to historical science. It is stated that the vineyard called Khnorr on the hill of Marko Wasseller was located between the vineyard of Mihael Czigán of Sisckowecz (Žiškovec) and the vineyard of Thomas of Drasymertz (Držimurec). The sellers of the Khnorr vineyard are Erasmus of Lok and his wife Elizabeth, residents of the market town of Prelog. The previous owner of the vineyard was Jakob Kranjec, the brother of Luka, the manager of the marof (estate) in Štrigova. The document, i.e., the sales contract, was confirmed in the same month by Ivan Lamberg, the manager of the estate of the Counts of Celje, and, unfortunately, the unnamed judge of the market town of Nedelišće. Johannes Reichmutter bought the Khnorr vineyard for one hundred marks of Viennese pfennigs. That was the value of eight annual scribal salaries, or for that amount, one could buy 30 horses at that time, Perči (1988, pp. 148-150) points out in his work "Two contracts from the 15th century with the seal of Nedelišće." In addition to Ivan Ernušt Hamp, the Fadan de Thwran family also had significant possessions in Međimurje. Christopherus Fadan de Thwran donated a two-wheel mill on his property in Krištanovec to the Paulines in today's Šenkovec in 1496. His son Sigismund Fadan de Thwran donated a vineyard in Zasadbreg to the Paulines in 1506.

On the Čakovec estate, during the feudal rule of the Counts Zrinski (16th-17th centuries), viticulture and winemaking, as a very profitable branch of agriculture, had enormous economic importance. When Nikola Zrinski of Siget became a feudal lord in 1546, Salamon (1865, pp. 332-336) points out that Međimurje was covered with large forests that were immediately cleared to start planting orchards and vineyards on the fertile land. In the assessment of the value of the estate of Count Juraj IV Zrinski, which was carried out in the period from January 18 to February 15, 1592, the income from wine on the Čakovec estate was also specified. From the wine from the allodial vineyards in the Čakovec fortress, 300 barrels were listed, i.e., 6,600 urns or buckets (cubulus seu urna - the amount of 1 cubulus, i.e., kupljenik - weinkubel, a measure used in Međimurje at the time, amounted to 47.41 litres) worth 6,600 forints, and in the premises of Nova Curia near Čakovec 22 barrels of wine worth 535 Hungarian forints (one bucket was worth one forint), according to Barabas (1895, p. 339). In addition, in the cellar of the Span vineyard on the Selnica hill, there was wine worth 2,200 Hungarian forints; in the cellar of the Bassa vineyard on Ciganjščak, there was wine worth 600 forints, in the cellar of the Zasad vineyard in Zasadbreg, there was wine worth 440 forints, in the cellar of the Longoschyak vineyard near Štrigova, also wine worth 440 forints, in the Elek vineyard on the Globoka hill, wine worth 220 forints, and in the Turk seu Torok vineyard on the Globoka hill, wine worth 660 forints, Barabas (1895, p. 352) presents data in his work.

The same author lists the income from the gornica (wine tax) that Juraj IV Zrinski received from the following vineyards: Zasadbreg - 2,150 forints, Frkanovec - 2,710 forints, Lopatinec - 1,960 forints, Dragoslavec - 1,542 forints, Vukanovec - 974 forints, Vugrišinec - 1,481 forints, Lohovec - 1,629 forints, Martinuševec - 1,150 forints, Stanetinec - 1,652 forints, Leskovec - 3,334 forints, Razkrižje - 834 forints, Štrigova - 2,352 forints, Hrastice - 3,197 forints, Selnica - 3,780 forints, and Zebanec - 2,693 forints.

Wine and wine taxes are also mentioned in the well-known document of Juraj IV Zrinski, seen in image 1 below, by which he granted great privileges to the inhabitants of the suburb of his Čakovec fortress on May 29, 1579, and in fact turned Čakovec into a market town. "...Furthermore, the citizens of Čakovec are obliged, after completing the harvest of the vineyards, to hand over 25 barrels of wine. This obligation is called 'stotnjak' in the national language. They are not obliged to give wine to anyone else. We want the citizens of Čakovec to move freely and to be able to buy and sell houses freely. We want and command that trade be completely free. The citizens above and residents are obliged to pay a tenth of the income from wine, grain, and other crops, which is calculated in money. Therefore, every year, on the first Sunday of Advent, the citizens are obliged to deposit or pay 127 Hungarian forints to us or our people. The beginning of this obligation runs from 1580, on the first Sunday of Advent. The citizens of Čakovec pay their tax to the emperor and king with this amount, and there is no other obligation besides this one. We want no citizen to be exempt from this obligation, that it is paid equally by the mayor of the city, the jurors, and other citizens alike..."



Figure 1. Charter of Juraj IV. Zrinski issued on 29 May 1579, with which Čakovec became a free market town (Museum of Međimurje Čakovec, inv. number 102)

The importance of vineyards and wine revenues is also evidenced by the very frequent seizures and confiscations of vineyards and wine revenues that the Zrinski family inflicted on their subjects and monasteries. The most famous case was when Juraj IV Zrinski, a Protestant, abolished the right of the Pauline monastery in Sv. Helena to a tenth of the wine in 1570 and confiscated the Fadan vineyard in Zasadbreg. Already on January 27, 1627, the guardians of the underage counts Nikola and Petar, the bishop of Zagreb Petar Domitrović, and the protonotary of the Croatian Parliament Stjepan Patačić donated part of the gornica (wine tax) and tithe from the vineyards in today's Zasadbreg to the Pauline monks of Sv. Helena. It was a quantity of about 5,000 litres of wine per year. The Paulines received this for services during the burial of their father, Ban Juraj V Zrinski, and they could use it until the young counts came of age. In addition, the Pauline monastery was returned the vineyard in Zasadbreg, which Krsto Fadan de Thwran bequeathed to them in 1496 and which Juraj IV Zrinski had taken away from them. On the same occasion, the Paulines were also returned the right to hold the famous fairs, which Juraj IV Zrinski had also taken away from them. Bedeković (1752, p. 273), in his famous work "Natale solum..." points out that the monastery's biggest income at those fairs was from the sale of wine. In general, the guardians of the then-underage Counts Zrinski made sure that the monastery of Sv. Helena was returned the rights and estates that their grandfather, the Protestant Juraj IV Zrinski, had taken away from them. In return, the Paulines pledged to serve Holy Mass every week and on the anniversary of the death of Ban Juraj V Zrinski.

Most of the wine produced in Međimurje was sold through a network of manorial and leased taverns (*iura regalia minor*). The soldiers in the defence system were big consumers, and part of the wine was intended for export.

In case the wine started to spoil, there were recipes for wine recovery. In case the wine darkens and loses its colour, the cook advises putting honey, three pots of water, and a bowl of gravel into the barrel. If the wine smells, you should take hot bread out of the oven, put it in a bag, cut it into pieces, and let it into the wine. This should be repeated

three times, and the wine will have a good smell. Varga (2016, p. 178) in his work brings preserved advice from the Čakovec court chef for flavouring wine and keeping it from souring: "To have wine with a muscat scent, take the elderflower as soon as it opens, dry it nicely in the shade and in the wind, keep it in a clean bowl so that it doesn't collect dust, and when it's harvest time, put it in a bag, hang it in the must and let it ferment together and be sure to take it out of the barrel twice and strain it into the barrel, and do so until it ferments, but after straining, put the bag back into the must." In addition to elderflower, they also used sweet root, nutmeg, galangal (a spice plant from Asia), and frankincense. Varga (2016, p. 179) also brings instructions from an anonymous cook at the Zrinski court in Čakovec about the wine cellar, who writes that it must be deep, walled, and vaulted, and the windows should face north. It must be far from any source of impurity, and no fire must be lit in it. Once a year, the floor in the cellar should be changed, whether it is gravel or packed earth. The cellar must be clean at all times, and the doors and windows closed, especially during thunderstorms. Sometimes, the windows can be opened in the morning or evening for ventilation. In autumn, during the harvest season, due to the fermentation of the must, and in spring, during the wine transfer, the windows need to be kept open. The equipment of cellars where wine is produced and stored is not often mentioned in historical sources. However, in the document "Inwentario universorum frumentorum in hoc dominio Chakthornensis" from 1672, in the wine cellars of the Čakovec fortress, there were iron hoops, drills, valves, ladders, containers for collecting wine dripping from barrels, sealing iron, various measuring vessels (pint, ica, seksterius), funnels, and rods.

A particularly striking description of Međimurje is Jacob Tollius's (2000, p. 6) letter to Nikola Witsen. Tollius went to Čakovec from Graz in 1660 with Count Pötting, Nikola Zrinski's cousin,: "Three days later we arrived in Čakovec, the fortress and the main department of Count Zrinski. The whole area is very fertile and produces grain and fine wine, and it seems as if Cerera and Bakho were competing to get the land under their protection. Among the wines is Lutenberg, and since its taste is sweeter than any honey, I admit that I do not know why it should be behind the Spanish wines in value. Both in Croatia, Austria and elsewhere, the famous Hungarian wine, named after the nearby Tokaj, is famous. But it is stronger, at least in my opinion, and it should be said that it leads to the drinking of people, while the first is milder and keeps them refreshed."

In the mid-17th century, the Zrinski family owned 10 allodial vineyards, eight in Upper and two in Lower Međimurje. These were the vineyards on Kozlovčak hill, on Batanji hill, on Šantavec hill, near the village of Frkanovec, on Popovčak hill, on Strmec hill, two vineyards near Banfi, and vineyards near Legrad and Kotoriba. Each vineyard had a wine cellar with a wine cellar and a special official (vincilir) who took care of it. The central wine cellar was located in Čakovec. They obtained about 1,000 buckets of wine from their own vineyards and about 1,100 buckets through the gornica and wine tithe. According to data from the census on the confiscation of the estate's income after the Zrinski-Frankopan uprising, from 1672, the total amount of wine in the estate's cellars was 2,161 buckets. The total value of wine obtained from the gornica and wine tithe amounted to about 7,600 forints annually. If the value of wine from own vineyards is

added to this, then the total value of wine accumulated annually in the estate's cellars was about 15,000 forints. The value of cereals produced on the Međimurje estate was almost ten times less. Therefore, wine, as Modrić (1974, p. 40) states, brought the highest income. In 1672, the economy of the part of the Čakovec estate owned by the chamber was managed by a provisioner. All officials and servants were subordinate to him. The estate accountant had the same annual income as the provisioner. In addition to accounting, he took care of the winery and wine sales. He also had an assistant. The estate keykeeper took care of the cellars and wine. Gornica, or wine tax, was the most important feudal natural tax. It was determined according to the size of the serf's vineyard, that is, according to the number of diggers who could dig it up in one day. In 1672, the Čakovec estate received 4,371 buckets of gornica. Gornica provided over 40% of the manor wine income. So, the remaining 60% of the wine was produced in manor or allodial vineyards. According to the prices at that time, Adamček (1980, p. 583) claims that this wine from gornica was worth 4,371 forints, or about a quarter of the value of the natural rent. In 1692, the subjects of Međimurje gave 3,660 buckets of gornica wine, which then brought 42% of the total income from wine. On other noble estates in Međimurje, about 40% of the value of the manor's income from wine was realised through gornica. During the 18th century, over a hundred noble families lived in Međimurje. Their estates were relatively small. Their greatest income came from state services, leasing small royal rights from the Čakovec estate, primarily tolling, butchering, and keeping ships (rafts) on the Mura and Drava rivers, and income from vineyards. Almost everyone in Upper Međimurje had vineyards. Kalšan (1999, p. 4) gives an example of the noble Keresztury family from Domašinec (they also had a house in Varaždin) who had a vineyard in Vučetinec. The house in the vineyard had 4 rooms, a kitchen, a pantry, and a cellar. The house for the winemaker had two rooms, a kitchen, and a carport. There was also a hut with a fireplace. In bad weather, cattle could also be sheltered in the hut. The Keresztury family also had a tavern in Murščak. The tavern had a room, a kitchen, and a stable. In the 18th century, almost all parishes in Međimurje had their vineyards, and individual parish priests also had special vineyards in their ownership. The Mihovljan parish was moved to Čakovec in 1789, and the guardian of the Franciscan monastery was appointed parish priest - it had two vineyards, near Selnica and in Lopatinec. The parish priest had a vineyard near Lopatinec, which 50 diggers could dig up in one day. The parish in Nedelišće had three vineyards. Two were in Dragoslavec and one in Lopatinec, and there were a total of 80 diggers. The parish in Belica had a vineyard for 20 diggers in Merhatovec. The parish in Macinec had a vineyard in Pernjak, for 12 diggers, and the parish in Vratišinec on Praporčan hill, for 30 diggers. The parish in Selnica had a vineyard for 12 diggers. The parish in Gornji Mihaljevec also had a vineyard in Selnišćak, for 25 diggers. The parish in Štrigova had three vineyards, in Slatnjak for 36 diggers, in Trnovčak for 20 diggers, and near Globok for 25 diggers. The parish priest had 4 of his own vineyards with a total of 125 diggers. The parish in Sveti Juraj na Bregu had 3 vineyards with a total of 50 diggers. The parish priest had his own vineyard for 8 diggers, as did the chaplain for 13 diggers. The parish in Sveti Martin na Muri had one vineyard for 50 diggers, and the parish priest had his own vineyard in Kapelščak for 40 diggers. Precisely because of such large vineyards owned by the parishes, parish priests in Upper Međimurje during

the 18th century demanded payment from the peasants in money instead of in natural tax on wine. It is obvious that due to the large production and, therefore, the supply, the parish priests had difficulty placing wine on the market. In addition, there are objective circumstances because the feudal lords of Međimurje, the Counts Althan, still hold the right of tolling in their hands. The Franciscan monastery in Čakovec had only one vineyard until the 18th century - Praporčan. Immediately after he was put in possession of Međimurje in 1791, Count Juraj Feštetić, as the patron of the monastery, ordered that 32 buckets of wine be handed over to the monastery from the manor's cellars every year. Later, in their desire to get rid of this obligation, the Feštetić family ceded to the monastery 3 vineyards in Lopatinec, 3/4 acres in size, and one of the same size in Sv. Rok. Josip Bedeković (2017, p. 274) provides interesting information about Štrigova and the Štrigova region as an attractive place to spend holidays: "This place is most beautified by three large and elegant buildings on the nearest vineyard hills: Althan's built not long ago, the brand new Čaki's and the somewhat older Esterhazy's. They were built in that region so that these gentlemen could sometimes, especially during the autumn harvest, due to the pleasantness of the place and the healing properties of the air, get a happy rest from the efforts of their public and private affairs in hunting game, birds, and other gentlemanly pastimes and entertainment. Well, even though the Esterhazy and Čaki families do not own a single estate in Međimurje, they, like many others from Croatia and Styria, have vineyards bought with their own money on various hills so that they can toast themselves and distinguished guests at their table with a glass of cheaper pure wine. This is what I intended to present about the market town of Štrigova and its former episcopal and today parish seat". In the structure of land areas of the Čakovec estate (Međimurje) at the beginning of the 18th century, vineyards made up 1.6 per cent or 1,833 acres of arable land were under vineyards. Slowly but surely, the areas under vineyards in Međimurje increased. Simonffy (2002, p. 117) presents the structure of agricultural areas in Međimurje in 1851: arable land 40.28%, meadows 19.67%, vineyards 1.76%, pastures 17.82%, forests 20.24%, and reeds 0.23%. In the period from 1857 to 1895, there were noticeable changes in the structure of agricultural land in Međimurje. The area of arable land increased by 8%, meadows by 3%, and the area of forests decreased by 6%. This is understandable because from 1855, a large sugar factory operated in Čakovec, which initiated the clearing of forest areas and the planting of sugar beet. Other areas have not changed significantly. Although the areas under vineyards did not change much, there was a rapid change in the assortment of viticulture. Namely, phylloxera almost destroyed all old varieties in 1882, and after that, mass planting on American soil began. In the second half of the 19th century, the Counts Feštetić cultivated almost 16 hectares of vineyards in Međimurje on their own. Baron Vinko Knežević, the owner of a large estate in Štrigova and Leskovec, at the end of the 19th and the beginning of the 20th century, was engaged in intensive cultivation of vines and systematically replaced old vineyards with new ones. With the already affirmed Fruit and Vine Nursery in Vukanovec, the replacement of old varieties with new ones was carried out relatively quickly. It was precisely this circumstance that contributed to the high quality of the assortment of Međimurje wines. It later opened up opportunities, among other things, for the establishment of a "sparkling wine factory" in Čakovec. Until 1902, the owner of

the Fruit and Vine Nursery in Vukanovec was the notary public Kalman Ziegler, and then the state bought it. The establishment of the state fruit and vine nursery Vukanovec was written about in the local newspaper Medjimurje in March 1898, here in Figure 2, as an important project that the state is implementing in the renewal of Međimurje vineyards and the faster development of viticulture.

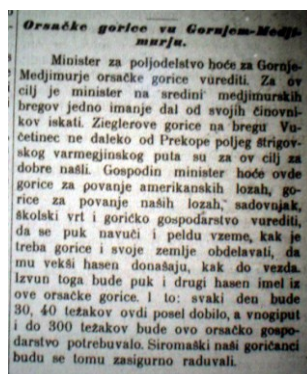


Figure 2. Article on the introduction of American species for vine rootstocks (Medjimurje – Muraköz, 27.03.1898.).

Diseases of the vine and struggle against them

In 1880, downy mildew (peronospora) appeared in the Monarchy and very quickly reached Međimurje. It is a disease on grapevines and other cultivated plants. The name comes from the Latin name of the causative agent *Plasmopara viticola*, Berkely&Curtis, Berlese & de Toni. It attacks all green parts of the plant, mostly the leaf on which the first signs of the disease are recognized by the appearance of oily spots that get a white-grayish coating on the underside of the leaf. The diseased areas soon turn brown and dry up, which means that the tissue in those areas has died. Winter spores of the fungus found on fallen leaves, when favorable conditions occur, germinate into so-called macrosporangia from which zoospores reach the leaf and other green organs of the vine by wind and rain. ("Peronospora", vinopedia.hr). Just when the winegrowers managed to deal with it, phylloxera, or grape phylloxera, a leaf aphid from the Phylloxeridae family, about 1 mm long, also arrived. It appears in several forms (virginoparous, sexuparous, parthenogenetic, etc.), and this is related to the alternation of generations and changes in lifestyle. Phylloxera is a typical monophagous pest, i.e. it attacks only grapevines, its aboveground and underground parts, so the forms that live on the leaves differ morphologically from the forms that live on the roots. Phylloxera on American vines causes galls on the leaves, and on European (domestic) vines, by sucking the juices, it causes nodules on the roots, then rotting and finally the death of the vine ("Phylloxera"). As elsewhere in northern Croatia, in Međimurje, phylloxera, which was first noticed near St. Margareta in 1886, destroyed almost all old varieties on their own roots. After that, a mass renewal of vineyards on American soil began. The replacement was done relatively quickly and on stakes. The fruit and vine nursery Vukanovec, then owned by Kalman Ziegler, a notary public from Čakovec, and Baron Viktor Knežević, the owner of large vineyards in Štrigova and Leskovec, affirmed themselves in this action, as seen in Figure 3.



Figure 3. Kalman Ziegler
(Kalšan V., Kalšan J., 2012)

Baron Viktor Knežević's text about downy mildew in *Medjimurje – Muraköz* (1.10.1889.):

"New vine disease

Peronospora viticola de Bery is the name of the new vine disease that will devastate our vineyards even before phylloxera arrives, if we do not take care of its destruction in time.

When they started destroying the vine lice in France, and ordered the planting of American vines, they suddenly noticed that the leaves of the vine begin to fall off in May and June, and the grapes are so sour that the must barely reaches 8 degrees, in a word, the cultivation of the vine already it turned out to be quite useless when they came to the conclusion that the vine, smeared with vitriol (copper vitriol) up and down the stake, turns the beautiful green leaves of the vine gray, and after the first cold rain in September, the vine is already bare, it cannot produce sugar in it, nor can the stems of the vine ripen and freeze in the slightest winter and thus shorten their natural life. The reason for this is the American vine, after transplanting it, it carried mold (heads of mold) with immense speed to all the farthest countries, so that it is already showing up in the Czech mountains. It has been observed in our country since 1881 - and to an ever greater extent. In 1888, we only got good wine because this year all possible good circumstances accelerated the harvest. The disease develops best when there are large dews, and especially when warm sun follows cold rain. In 1886, however, we had an extraordinary drought in July and August, and there was a constant wind, in addition, most of the grapes were already edible at the beginning of September, so that around September 15, peronospora and leaf fall occurred on ripe grapes, so it could not do more harm. Peronospora appears earliest in Burgundy vines and the so-called Gutedel, which already has leaves at the end of August, but as early vines still give the best wine. Well-fertilized young vines, especially on loamy soil, retain their leaves the longest. But because peronospora still causes great trouble, we are acting very recklessly if we do not defend ourselves against it. We may not get a harvest for 20-30 years, and the vine lice will have already destroyed our vines in about 10 years."

By the 1890s, phylloxera had caused significant damage in the Međimurje region. Lectures about this pest were held in various locations, including a well-known one by Baron Knežević at the state school in Štrigova, attended by a large audience (Medjimurje – Muraköz, 29.11.1891.). Newspapers dramatically reported on this plague, covering the visit of ministerial envoy Deák Tamás, who "inspected the

Međimurje vineyards" and warned from personal experience that without organized defense against this disease, "in 6 years, people will not press a single drop of wine in all of Međimurje" (Medjimurje – Muraköz, 6.12.1892.). He also mentioned that Zala County would take measures regarding this issue. Efforts were made at that time to encourage grafting onto "American vines that phylloxera cannot harm" in Međimurje (Medjimurje – Muraköz, 6.12.1892.), emphasizing that "countries that have done this now press better wine." An 1892 article in the Međimurje newspaper describes the benefits of planting "wild American vines" but also warns about the cost of hiring an expert to teach people how to handle the new American vines. The article states, "It's not worth it for one landowner to bring in a renowned expert to teach him how to handle American vines, so landowners should join together and defend themselves that way" (Medjimurje - Muraköz, 6.12.1892.). There was organized sales of grafts, as can be seen in the advertisement (Figure 4). As early as 1898, the Hungarian Ministry of Agriculture established the Inspectorate for Viticulture and Winemaking Affairs, headquartered in Čakovec. The Inspectorate was also assigned to the districts of Nagykanizsa, Letina, and Nova. A department of agriculture was opened at the Čakovec Teacher's School. Students were taught about fruit growing, vineyard cultivation and planting, vegetable gardening, and other knowledge and skills.



Figure 4. Advertisement for the sale of grafts at the Teacher's School in Čakovec (Medjimurje – Muraköz, 31. 03. 1895.)

Protection against hail

Hail protection was introduced in Međimurje as early as 1898, and the local newspaper Medjimurje first wrote about it, calling the rocket launchers "štuke" (pike) and the whole process "shooting at the clouds." The journalist emphasizes that a "štuka" costing 70 forints has already been installed on Globoka hill, and that "in the Štrigova area, people want to set up štuke in 11 places to shoot at the clouds, namely: on the hills Stanetinec, Rimščak, Robadi, Šprinc, Veščica or Rackaniža, Globoko, Strmec, Orehovčak, Prekopa, Ciganjščak and Štrigovčak." (Medjimurje – Muraköz, 19.06.1898.).

The initiative to establish hail protection was quickly accepted and implemented. By the beginning of September of the same year, 1898, Imbra Josipović, a minister in the Hungarian royal government, came to Međimurje and visited Dr. Oskar Kiss, a royal notary from Varaždin, a member of the state parliament, and a landowner in Međimurje, in Orehovčak near Štrigova. There, in Orehovčak, the minister inspected the installed ramp "for shooting against the clouds."

Sparkling wine production

On November 23, 1904, the "Međimurje Champagne Factory Strahija and Partners" began operating in Čakovec. The joint-stock company was headed by Karlo Strahija, a resident of Čakovec, as shown in Figure 5. Production was managed by Juraj Streck, a highly respected expert in sparkling wine production at the time. The machinery was purchased from France and Germany, and the sparkling wine was produced using the French method. The company's primary goal was to market refined Međimurje wines in the Austro-Hungarian Empire and Europe. The factory sourced wine for sparkling wine production from reliable winegrowers in upper Međimurje. The justification for registering for sparkling wine production states that Međimurje wines are equal in quality to wines from Tokaj. A short text in the local newspaper confirms this: "This champagne is called 'Animo' and is made in the first Međimurje champagne factory, which is owned by Strahija and others. The factory is located near the railway station in the former Hacklin house. They say that this champagne is excellent and can be enjoyed if one has the money," the article states (Medjimurje – Muraköz, 16.09.1906.).



Figure 5. Karlo Strahija
(Kalšan V., Kalšan J., 2012)

The Međimurje sparkling wine was first marketed under the name "Torlei," and the label featured a small black boy, as seen in Figure 6. Later, it became known on the market as "ANIMO SEC." The red label, along with the text ANIMO SEC, featured the text MURAINSULANER CHAMPAGNER-FABRIK A..G. Csáktornya (Međimurje Champagne Factory, joint-stock company), as shown in Figure 7.



Figure 6. "Let us drink Animo champagne! Refreshing drink! Home made!"
(Medjimurje – Muraköz, 16.12.1912.)

In 1909, the company was operating with a capital of 150,000 crowns, but by 1912, it had fallen into a difficult financial situation, as reported in a newspaper article (Medjimurje – Muraköz, 11.07.1909.). The management convened an extraordinary meeting in November and proposed a serious discussion about the future of the business. After a comprehensive debate, it was decided that the company would continue operating, and it did so until mid-1914, according to newspaper reports (Medjimurje – Muraköz, 10.10.1912.). Production was likely halted at that time due to the war. After World War I, no one attempted to revive production, and the building, which still exists today, was taken over by the company "Elemer Vajda."



Figure 7. Label of the Međimurje Champagne Factory Čakovec
(Kalšan J., private collection)

Viticulture in Kingdom of Serbs, Croats and Slovenes (later Yugoslavia)

After the establishment of the new state, the Kingdom of Serbs, Croats, and Slovenes (later Yugoslavia), wine production became a source of income for the new government. This is evidenced by the fact that organized wine sales were held in

Međimurje in the state vineyards in Vugrišinec (these were vineyards of the state property Vukanovec, not the Međimurje estate of Count Feštetić), as highlighted in contemporary newspapers (Volja Naroda, 30.1.1919.). These were primarily Pušipel (also known as Pošipel or Šipon) and Riesling wines. These varieties are explicitly mentioned when the parish of the Holy Trinity from Nedelišće sold its vineyard in Gornji Mihaljevec in 1920. Šipon (Moslavac) is a very productive variety and, therefore, attractive to winegrowers. It ripens late and requires warm locations. It is the leading and oldest grape variety in Međimurje. The name Šipon comes from "c'est sibon," which translates to "it's so good." The wine is usually golden yellow with a greenish reflection. It is characterized by a delicate taste and pleasant aroma. Šipon is a relatively full-bodied wine, moderately strong, with pronounced acidity, and fine and emphasized freshness. It is an exceptionally drinkable wine and is served chilled at a temperature of 10°C. Riesling (Graševina) is a variety that requires the best locations and fertile and not-too-dry soils. It is considered a late variety and may not ripen well in bad years. The colour of the wine is greenish-yellow (like chamomile tea), and it has a characteristic mild taste of almond kernels ("Upoznajte vinske sorte...", 2024.). By enacting the Wine Law, the state sought to control wine production and the market by transferring a large part of the authority in the entire production process to local self-government. Harvesting grapes for eating was allowed when each variety ripened. The general harvest of grapes for wine production could not be carried out before the date determined by the municipal authorities in agreement with agricultural bodies. Those who harvested before the deadline (Section 8 of the Wine Law) were punished by the first-instance administrative authority with imprisonment from 1 to 14 days or a fine of 25 to 1000 Dinars (Section 30 of the Wine Law). The municipal authority could grant permission to start harvesting before the general harvest, but only for early wine varieties. The municipality was obliged to inform the state control body about this. Every winegrower, owner, or tenant was required to report, verbally or in writing, to the municipal head where their vineyard was located immediately after the harvest how many grapes they obtained, how much must or wine they produced from it, and how much pomace they obtained, as well as the purpose and duration of its use. If the winegrower did not process the grapes into wine themselves but sold them to others, they were to submit a report to the competent municipal authority indicating the quantity of grapes obtained and to whom they were sold. The buyer of the grapes was obliged to submit a report to the municipal authority where the grape processing took place, stating from whom and how many grapes were purchased, how much wine and pomace were obtained, and the purpose and duration of the pomace's use. Municipal authorities would send this data to district chiefs, who would then forward it to the state wine inspector. Violations were punishable by the first-instance administrative authority with imprisonment from 1 to 14 days or a fine of 25 to 1000 Dinars, as stated in the weekly newspaper at the time (Jugoslavija, 26.9.1931).

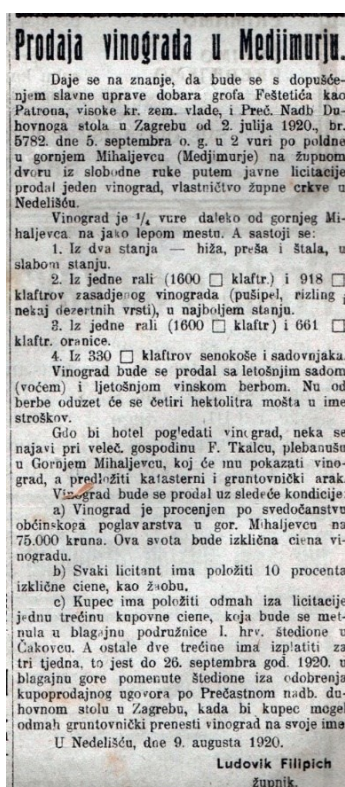


Figure 8. Advertisement in the Međimurske Novine newspaper for the sale of a vineyard on August 12, 1920. (Međimurske Novine, 12.08.1920).

Between the Two World Wars - In Upper Međimurje, larger areas were dedicated to vineyards and orchards. The Church also owned vineyards and sold them to interested parties, as seen in the advertisement in image 8. Alongside the Vukanovec fruit and vine nursery, several excellent winegrowing families stood out, particularly the Murai, Terboz, Krauthaker, Franetović (pictured in Figure 9), and Fodroczy families.



Figure 9. Jerko Franetović, a lawyer from Čakovec, once owner of Castle Banfi (Kalšan V., Kalšan J., 2012)

Based on the announcement from the Ministry of Agriculture, the Great Župan of the Maribor Region, Dr. Schaubach, invited winegrowers to an autumn course on July 30,

1927, under the Law on the Renewal and Development of Viticulture of December 30, 1921, and the regulation based on that law from February 24, 1923. The course lasted for four days and was held in Pekre near Maribor and in Kapela near Slatina-Radenci. The course program, as published in the Official Gazette of the Ljubljana and Maribor Regions on September 17, 1927, included: preparation and cleaning of containers for harvest, measuring sugar and acids in must, grape picking, conditions for proper fermentation, making white and red wine, the use of sulfur dioxide in wine production, the use of metabisulfite, etc., racking, artificial cleaning and filtering of wine, conditions for a good cellar, main wine diseases and their prevention and treatment, preservation of fresh grapes and fruit, drying fruit and grapes, preserving fruit and vegetables by sterilization, and preserving must (non-alcoholic wine), handling cellar preparations and their proper storage, and cooking brandy from pomace. In addition to free accommodation, each course participant received 10 dinars per day as a contribution for food. Furthermore, at the end of the course, outstanding participants received awards in the form of tools. The courses were primarily intended for young farmers and winemakers and then for others who wanted to attend the courses at their own expense.

At the wine fair held in early May 1936 in Zagreb, which was organised solely for the promotion of wines from the Sava Banate, many of our winegrowers from Čakovec were awarded for their excellent wines, as reported by the newspapers at the time (Međimurje, 13.5.1936.). The first serious news about the harmfulness of "direktor" (noah) in Međimurje appeared in 1922. According to the latest law on the promotion of viticulture, planting direktor was generally prohibited. This ban was also reported by Glas Međimurja i Zagorja (1.12.1922.) "because it has been proven that direktors are not as resistant to phylloxera and die sooner than grafted American rootstocks, and in addition, the wine is spoiled by them and is not suitable for export." The authorities of the Maribor Region also joined the efforts for the development of viticulture and winemaking and the fight against the planting and cultivation of direktor in their area. Dr. Schaubach, the Great Župan of the Maribor Region, announced a competition for participants in a nine-month viticulture and fruit-growing course, which was held from February 15 to November 15, 1928, as reported in the Official Gazette of the Ljubljana and Maribor Regions on January 9, 1928. The course was held at two locations in nurseries in Pekre near Limbuš and Kapela near Slatina-Radenci. The course was free and intended for basic practical training in viticulture and fruit growing.

Campaign against the Director

Stjepan Koydl from Slavonska Požega published his article in many Croatian newspapers in September 1929, including Varaždinec on September 14, 1929. Due to the broad scope of the issue, the article attracted significant public attention.

"Against 'Direktor'"

The need for energetic measures to destroy the so-called direktor. Since various directly or indirectly producing American vine varieties (direktort) are still being propagated and planted, despite existing laws and regulations prohibiting the spread and possession of these

inferior vine varieties, it is imperative to immediately prevent further planting of these "direktor" in the interest of preserving our noble viticulture. Existing plantations should be uprooted or, if located on suitable and prime vineyard locations and soil, grafted (refined). Besides ruining our noble viticulture, direktor (Noah or Nojet) (Delaware, Othello, etc.) cause the following damage:

1.They take away land from cereals (wheat, barley, corn, potatoes), various vegetables and fruits, and other necessary and beneficial plants, thereby hindering the population's food supply. Our people need bread and other healthy and nutritious food, as well as refreshing drinks (fruit wine, fruit juices), not bad wine from direktor.

2.Wine from direktor harms both the health of consumers and their resilience, as well as their willingness to work intensively and think. Therefore, the Ministry of Public Health should also take steps against the planting of such vine varieties and the consumption of this wine, especially since regular consumers of wine from direktor become aggressive and commit various acts of violence and other misdeeds. This, on the one hand, gives ammunition to abstainers in their fight against wine consumption in general, including noble wines, while on the other hand, consumers of wine from direktor cause various problems and harm themselves. Based on the Burgenland law on direktor, the planting and propagation of the notorious Noah Ipze, Jacquez, Elvira, Clinton, and all those direktor varieties that truly contribute to the ruin of both viticulture and winegrowers themselves are explicitly prohibited... Noah is especially prohibited due to the severe physical effects of consuming Noah wine, which have been observed in southern Styria, Croatia, and elsewhere, and have also occurred in Burgenland. Chief Inspector H. Bauer stated that consumers of Noah wine make a sad impression and degenerate along with their families, while owners of grafted vineyards are healthy and strong, have large families, and in short, show no health problems due to the consumption of noble wine.

3.Wine from direktor damages our reputation as an important wine-producing country in Europe, hinders the export of our noble wine, and prevents the prosperity of our progressive winegrowers who are forced to engage in noble viticulture because they cannot utilize their land on hills for other crops. Hungarian policy at one time was to destroy our viticulture through propaganda for planting inferior direktor, so that Hungarian fine wines could then be placed on the world wine market without competition from Croatian-Slavonian wines! In a letter dated February 25th of this year, in which the renowned Romanian viticulture expert M. Ambrosijun in Mediasch responds to my inquiry about direktor in Romania, the aforementioned expert states, among other things: As you will see from the attached study, which was sent to you separately, direktor are particularly widespread in Bessarabia, while they are hardly found in Transylvania. Several years ago, the Delaware variety was planted on a large scale in Transylvania, but today it does not occur to any winegrower here to plant direktor. Our winegrowers are now transitioning to noble viticulture more than ever before. In Bessarabia and some parts of Old Romania, strict measures by the state will be needed to eradicate direktor! According to the report of Prof. Dr. F. Zweigelt, it was concluded at the 14th International Agricultural Congress in Bucharest (from June 7th to 10th of this year) that strict measures should be taken against the planting of direktor. At the first Slovenian Viticulture Congress, held at the end of May this year in Krško, the speaker on viticulture, Chief Inspector F. Gombač, rejected all direktor, as well as some other vine varieties.

4. Direktor reduce the value of land (property) since they cannot be considered a crop, but rather the opposite - a non-crop. Due to the decrease in the value of land (property), the economic and thus the tax capacity of the owner, national wealth, and credit are equally damaged.

5. Some large distilleries buy wine from direktor for brandy production, thereby harming our mushroom industry on the one hand, while on the other hand, promoting the spread of the unfortunate direktor... Thus, they cause double damage to our national economy.

For the above reasons, the following measures should be taken against direktor:

1. Direktor should have been destroyed in their infancy, and not allowed to spread to such a large extent, as is unfortunately the case with us. Therefore, now is not the time for long conferences about direktor, but rather, in the interest of the survival and profitability of our noble viticulture and the associated national economy, it is absolutely necessary to take immediate and effective measures against further planting of direktor, including forced uprooting or grafting of existing plantations. Success lies in quick and energetic action, and the defenders of direktor must quickly feel the power of the authorities. Now is the time to remove the evil...

2. The establishment of vineyards should be made dependent on the permission of the competent authorities (viticulture experts), as is the case with building permits. Vineyard planting should be placed under general control, both in terms of choosing the location and soil for the vineyard, and in terms of selecting rootstocks and European vine varieties for each wine-growing region.

3. Cities and municipalities should, in the interest of foreign tourism in our regions and the reputation of our wines (increased consumption!), work to prevent the planting and production of grapes, as well as the serving of wine from direktor.

4. Direktor planted in wine-growing regions should be grafted, but only in the following cases: a) if they are planted in prime vineyard locations, b) if the land in question was loosened 70-80 cm deep (ridged) before planting the vines, c) if the distance between rows and vines is 120-125 cm in a square pattern, and d) if grafting is still worthwhile considering the age and development of the direktor!

5. All direktor plantations should be taxed at 2-3 Dinars per vine. The registration of direktor in individual municipalities should be carried out by financial control bodies, which should be provided with a certain special reward for this purpose.

In addition to combating the planting and cultivation of "direktor," winegrowers and experts also fought against the increasingly frequent diseases that attacked vineyards. Numerous lectures and newspaper articles discussed the most effective methods and recipes for protecting vineyards. A characteristic article was published in the Varaždin newspaper Podravska oblast on May 26, 1928. The author of the article, who signed with initials and identified as an agricultural expert, wrote that one of the most important tasks of every winegrower is the defense of grapevines against downy mildew, powdery mildew, and grape berry moth. They noted that there are completely safe and proven remedies against powdery mildew and downy mildew, but there is still no effective defense against grape berry moth, although science has established that arsenic preparations are satisfactory in combating this pest. However, reliable success in defending against all these diseases will only be achieved if the remedies are used at the right time and in the right way. The author then provided brief instructions on

the timing and method of using individual remedies: Powdery mildew is controlled by sulfur dusting, which must be done for the first time when the shoots are up to 10 cm long, the second time before flowering, and the third time during flowering. If rainy and foggy weather occurs in June, sulfur dusting should be repeated every 8-10 days until the end of the month. If the rain washes away the sulfur, the dusting should be repeated. Each morning of the vineyard requires 50 kg of finely ground sulfur annually. Downy mildew is controlled by spraying a solution of copper sulfate and lime. The vineyard should be sprayed at least four times: the first time when the shoots are 15-20 cm long, the second time before flowering, the third time after flowering, and the fourth time in the first half of July. Grape berry moth is controlled with arsenic preparations, two of which are known and have been tested in our country. These are "Arsokoll," marketed by a Czech factory, and "Arsol," produced by "Kaštel" d.d. in Karlovac. "Arsokoll" or "Arsol" should definitely be used during the second spraying, i.e., once before flowering and once after flowering.

Međimurje viticulture after World War 2

After World War II, the Vukanovec Fruit and Vine Nursery first became a state property under the administration of the Ministry of Agriculture of the People's Republic of Croatia and then the Čakovec District Agricultural Property. It continued the production of varietal seedlings, including Traminac, Sauvignon, Zeleni Silvanac, Rhine Riesling, Graševina, and Moslavac, as well as table grapes like Bijela Plamenka and Žuti Muškat. Among the red varieties, it had Frankovka, Crni Burgundac, and Portugizac in its nursery. The restoration of old vineyards and the establishment of new ones was the primary task of the Peasant Work Cooperative in Železna Gora and the procurement and sales cooperatives in Štrigova, Sveti Urban, Stanetinec, Preseka, Gornji Mihaljevec, Prekopa, Selnica, and Sveti Martin na Muri. The rapid development of viticulture began only after 1950 when new technology was introduced in vineyard cultivation. The spacing between rows was widened, stakes were replaced by posts and wires, new pruning methods were introduced, along with artificial fertilizers and protective agents, and motor sprayers replaced backpack sprayers.

The first terraced plantation vineyard was established in 1953 by the District Fruit and Vine Nursery in Vukanovec. It was the first terraced vineyard in the then Yugoslavia (Međimurje, 15.10.1953.). Terraced vineyards are created on steep slopes to prevent soil erosion, enable plowing, and promote better fruit ripening. By 1957, the socialist sector had about 30 hectares of young vineyards cultivated in a modern way. There were plans for the gradual replacement of old vineyards with noble vines and to achieve 1,700 hectoliters of first-class wine by 1961, which could be marketed on the wider Yugoslav market (Međimurje, 17.7.1957.). This would mean an increase of 17% compared to 1957. A very ambitious plan for the development of viticulture and winemaking also included the construction of a wine cellar. The construction of the wine cellar in Štrigova began in 1959 as a direct consequence of the establishment of the Međimurje Wine and Fruit Association in 1957. The Association included agricultural cooperatives in Štrigova, Železna Gora, Lopatinec, Selnica, Sveti Martin na

Muri, Gornji Mihaljevec, and Preseka, as well as the Vukanovec Fruit and Vine Nursery. In addition to improving viticulture and fruit growing, the Association paid special attention to winemaking and the refinement of Međimurje wines. The cellar was opened in 1960 (pictured in Figure 9). The projected grape production in Međimurje in 1961 was as follows: Agricultural cooperatives 200 tons, and the rest of the socialist sector 83 tons. It was estimated that the private sector would produce 2,600 tons. A total of 2,883 tons of grapes were expected to be produced.

The construction of the second phase, the Wine Production Facility in Štrigova, was completed on September 29, 1963. It involved the construction of a concrete tank with a capacity of 20 wagons of wine and space for storing wooden barrels with a capacity of 14 wagons of wine. With this, the Štrigova cellar reached a total capacity of 100 wagons of wine. The investor of the construction was the Agricultural Cooperative, and in addition to the cellar in Štrigova, the cooperative also had smaller cellars in Prekopa, Tkalec, Vukanovec, and Železna Gora. With the construction of new capacities in Štrigova, these cellars served as special operational units for individual work phases, as stated by Bičak and Puklavec in their work (1982, p. 3).



Figure 9. Grand opening of the cellar in Štrigova in 1960.
(Kalšan, J., private collection)

The Wine Law, enacted in 1976, enabled the protection of geographical origin for wines. This outlawed any wild production and uncontrolled distribution that did not consider quality. By 1980, over 260 wine producers were registered in Međimurje. All of them were listed in the Register of Grape, Must, and Wine Producers of the Čakovec Municipality. The Čakovec Municipal Administration utilized the possibility provided by the law and transferred the management of the producer register to local offices, while the aggregate data was maintained in the Municipal Secretariat for Economy. This facilitated producers who registered at their nearest local office: Štrigova, Gornji Mihaljevec, Lopatinec, Selnica, and Sveti Martin na Muri. Čakovec was among the first municipalities in Croatia to start registering winegrowers. In Međimurje, the registration of winegrowers began on March 1st and was completed on August 30, 1978.

The register included taxpayers from personal income from independent agricultural activities or other land users. Registration was done based on a written application from the producer in two identical copies, one of which remained with the register manager, and the other served as a registration document for the producer. Those without registration could not market grapes, must, or wine. This particularly affected the cooperative members of the Agricultural Cooperative because otherwise, their obligation to deliver grapes would be questioned. The same applied to producers who marketed wine in neighbouring Slovenia, as stated in the Međimurje newspaper on June 27, 1980. In one move, the introduction of the producer register brought order to the production and marketing of grapes and wine in Međimurje.

The types of wine grown by Međimurje winegrowers and winemakers, with which they began to affirm Međimurje viticulture, in addition to those previously listed, were:

- **Urbanček:** A white, semi-dry quality wine with a protected geographical origin from the Stanetinski Vrh vineyard location. The wine is obtained by blending Riesling, Pinot Blanc, and Muscat Sylvaner. Urbanček is light yellow with a greenish reflection, specific taste and aroma, pronounced fullness, harmony, and freshness, typical aroma, and developed bouquet characteristic of the grape variety. It is served chilled at 10 to 11 degrees Celsius.
- **Štrigovčanec:** A dry, white quality wine with a protected geographical origin from the Međimurje wine region. It is produced by processing Sauvignon Blanc, Gewürztraminer, Rhine Riesling, and Graševina grapes. The wine is light yellow with a greenish reflection, subtle aroma, and harmonious and fresh taste. Moderate alcohol content and appropriate total acidity make it a drinkable wine. Like other lighter white wines, Štrigovčanec is drunk chilled at a temperature of 10 degrees Celsius.
- **Rizvanac (Müller-Thurgau):** Professor Müller from Thurgau cultivated this variety in 1882 from Rhine Riesling and Sylvaner. It is a very popular variety in Germany and Burgenland (Gradišće in Austria). In Germany, it surpasses Rhine Riesling and Sylvaner in terms of planted area. It is an early-ripening grape variety, maturing around the same time as Muscat Ottonel. This delicate wine with a discreet aroma and relatively low acidity is best enjoyed young when its freshness is most pronounced.
- **Pinot Blanc:** This variety is not sensitive to location, but wines from calcareous soils are better, with a more pronounced aroma. It is considered a medium-early variety and, with proper care, yields a good harvest. Pinot Blanc wines are aromatic, full, and delicate and have a pleasant aroma, varietal and developed bouquet. It is a harmonious wine whose taste ends with a slight, gentle bitterness. The colour ranges from yellow-green to golden yellow. The wine pairs well with spicy dishes, as well as fish, poultry, white meat, and various desserts. It is served chilled at a temperature of 10 to 12 degrees Celsius.
- **Kerner:** This is a cross between Trollinger and Rhine Riesling cultivated in Weinsberg, Germany, and named after the poet Justinus Kerner. The wine is fresh

and fruity and has a delicate bouquet reminiscent of Rhine Riesling, while the aroma contains muscat components. Kerner is the closest to Rhine Riesling among all the crosses. It is good for blending with other wines.

Međimurje viticulture in Republic of Croatia

In the early 1990s, Međimurje winegrowers and winemakers, who the state had neglected, began exhibiting their wines at domestic and international wine exhibitions, achieving significant results. Before that, about ten of them managed to obtain geographical origin protection for their wines. Geographical origin was a guarantee of wine quality and provided security in marketing the wine. Success at exhibitions and the great potential for this activity to become an important economic branch in Međimurje raised the question of development, association, joint market appearance, connection with other complementary activities, and the creation of all other conditions for unhindered operation. The basis of all efforts was joint action and the development of a strategic plan for Međimurje winemaking and viticulture. Therefore, a professional association called "Hortus Croatiae" was founded. In the presence of about a hundred interested parties, of which 78 became founders, the Međimurje Association of Winegrowers and Winemakers (DVM) was established in the Vukanovec Nursery, and the name "Hortus Croatiae" (Croatian Flower Garden) was accepted by acclamation. As Professor Franjo Lovrec introduced, this was a historic moment for Međimurje winegrowers, as it fulfilled "a desire and, at the same time, a great hope in the expectation of realising common goals and interests."

Among the guests and dignitaries were Anton Jurinec, President of the Executive Council of the Čakovec Municipal Assembly, Dubravko Mikulić, President of the Varaždin Regional Chamber of Commerce, Dr. Zvonimir Bartolić, President of the Čakovec Branch of Matica Hrvatska, Vesna Nikolić, Secretary of the Čakovec Tourist Board, university professors from the Faculty of Agriculture in Zagreb, Dr. Dubravka Premužić and Nikola Mirošević, then Ivan Enjingi from Požega, the largest private winegrower in Croatia, as well as prominent journalists and wine writers Srećko Ljubljanović and Željko Suhadolnik. Dražen Videc, Milan Židov, Ladislav Zuzel, Josip Ranteš, Marijan Majcen, August Požgan, Alojzije Srpak, Srećko Ljubljanović, Stjepan Matanović, Željko Brezovački, Ivan Novak, Josip Bogdan, Josip Novak, Darko Cvijović, and others participated in the discussion on the proposal for the decision on the establishment of the Association, the Statute proposal, the income and expenditure plan proposal, and other founding acts and issues. All proposed documents were adopted unanimously or with a negligible number of votes against. The Međimurje newspaper of April 3, 1992, states that Franjo Lovrec, owner of vineyards and cellars in Sveti Urban and a music professor at the then Pedagogical Academy in Čakovec, was unanimously elected as the president of DVM "Hortus Croatiae," and Ladislav Zuzel, a lawyer from Čakovec, as the secretary. Out of ten proposed candidates, Zdravko Holcinger-Giga, Martin Jakopić, Marijan Majcan, Dražen Videc, Bojan Štampar, and Milan Židov, were elected to the Management Board by public vote. Vinko Ignac, Josip Novak, and August Požgan were elected to the Supervisory Board of the Association.

All officials were elected for a term of four years. The goals and tasks of DVM "Hortus Croatiae" are to gather and activate its membership and, in cooperation with other professional and other organisations, especially the Viticulture and Winemaking Section of the Croatian Agronomic Society, work on the improvement and development of viticultural and wine production in Međimurje. This will be achieved through a wide range of activities, including advocating for developmental and creative work and the introduction of modern and economically viable technology in viticultural and wine production, organising professional excursions, visits, lectures, seminars, courses, and other forms of professional development for members, organising various exhibitions, fairs, and other forms of presenting viticultural and wine products of its membership and reviving, nurturing, and promoting traditional celebrations, festivities, folk customs, and gatherings related to viticulture and winemaking in Međimurje, as highlighted in the Međimurje newspaper of April 3, 1992.

Wine predicates and Sparkling wine

In the Međimurje wine region, the production of predicate wines began in the early 1990s. The first variety to ripen for late harvest was Graševina. The first predicate wine was an incentive for the most experienced winegrowers to move towards selective harvesting. The first selective harvest of Graševina took place the following year, in 1992.

Predicate wines are premium wines. The following categories are distinguished:

- **Late harvest:** Wine produced from grapes harvested at full maturity, with a must containing at least 94°Oe (degrees Oechsle) of sugar and a portion of the grapes slightly affected by noble rot.
- **Selection harvest:** Wine produced from carefully selected grapes, with a must containing at least 105°Oe of sugar. In this harvest, only the best bunches infected with noble rot are picked from the vineyard.
- **Selection of berries: harvest** Wine produced from overripe or noble rot-affected parts of bunches or berries, with a must containing at least 127°Oe of sugar.
- **Selection of dried berries harvest** Wine produced from dried berries, with a must containing at least 154°Oe of sugar. Grapes from this harvest resemble raisins purchased in stores.
- **Ice wine:** Wine produced from grapes harvested after the temperature has been below -7°C for several days and processed in a frozen state, with a must containing at least 127°Oe of sugar (Predikatna Vina - Podrum Štrigova, 2024).

After the first successful results with Graševina, the production of predicate wines continued with other varieties of the Međimurje wine region: Pinot Blanc, Sauvignon, Moslavac, Traminac, etc. The first and basic condition for producing these top-quality wines is a good location. The production of top-quality predicate wines is only possible from grapes produced in specific locations for individual varieties. The second condition is the fungus *Botrytis cinerea*, which causes noble rot on grape clusters. The best predicates of the Međimurje wine region from the Graševina variety are produced on southeast-facing carbonate soil at high altitudes. Predicates from the Moslavac

variety are produced almost exclusively on sandy, steep, south-facing terraced terrain in the westernmost part of the wine region, near the Slovenian border. In contrast, Traminac has proven to be the best on gentle northeast-facing slopes of sandy soil in locations where winds constantly blow. Pinot Blanc, as well as Pinot Noir, have achieved the best results on the southwestern carbonate soils of Železna Gora. Sauvignon, unlike most other varieties, has achieved the best results on heavier clay soils (PRODUCTION OF PREDICATE GRAPES AND WINE IN THE MEĐIMURJE WINE REGION - Administration for Expert Support of Agricultural Development, 2024). The event on Sunday, December 27, 1992, in the vineyard of the Varaždin family Matanović on Stanetinski Vrh in Sveti Urban entered the history of Međimurje and Croatian viticulture and winemaking. The first ice harvest of grapes was carried out according to all the most demanding rules of the profession and science, based on which the highest wine predicate, ice wine, is obtained. At numerous wine exhibitions, Stjepan and Vlatko Matanović's wines received the highest awards. They are known as promoters of modern viticulture and wine culture, and their contributions to the recognition of the geographical origin of wines from numerous locations in the Međimurje wine region are undeniable. For this undertaking, the Matanović family left over 300 vines of the Graševina variety, also known as Welschriesling. In their adherence and respect for the process, the Matanović family closely cooperated with the Faculty of Agronomy and the State Hydrometeorological Institute in Zagreb. As reported in the Međimurje newspaper (8.1.1993.), it was calculated that they would obtain about 150 litres gross, while in a regular harvest, the yield from the same vines would be about 700 litres gross. After the closure of the Međimurje Champagne Factory in Čakovec in 1914, no one produced sparkling wines in Međimurje for many years. However, when 2004 was officially declared the Year of Croatian Sparkling Wines, and a presentation of Croatian sparkling wines was held at the Katunar Winery in Vrbnik in mid-summer, Croatian winemakers and sparkling wine producers appeared, including Dejan Jambrović from Lopatinec. Although he only sent his bottles of sparkling wine to the presentation, it was a national promotion and a sign that sparkling wine was being produced again in Međimurje using the classic method. Today, the leading producer of sparkling wine is the winery "DGA pjenušci" with its vineyards and production facility in Banfi. The French phrase "C'est bon," meaning "it's so good," allegedly spoken by Napoleon's soldiers while drinking Šipon as they passed through upper Međimurje, inspired Gordan Horvat and Alen Švenda to name their Međimurje sparkling wine SIBON. They began producing sparkling wines in 2011, using the classic method of ageing on lees for a minimum of 18 months. Their sparkling wines are made from the traditional Međimurje variety Šipon/Pušipel. Brut and Extra Brut are made from 100% Šipon, while Rose Extra Sec is made from Cabernet Sauvignon. They started with a production of 2,000 bottles per year and now estimate an annual production of approximately 15,000 bottles. Sibon Brut from DGA pjenušci won a silver medal at the Decanter World Wine Awards in 2018 (Radić, 2019). Štampar Winery, in addition to producing premium wines, also produces top-quality sparkling wine. Urban White Extra Brut from Štampar Winery won a gold medal and, according to the results of the 2020 Decanter Awards, the title of the best Croatian sparkling wine. Urban White from Štampar Winery and Sibon Brut from DGA pjenušci, having won high recognition at the world's largest wine

evaluation, have placed Međimurje among the wine regions with the best sparkling wines in Croatia (Međimurje Proudly Bears the Title of Wine Region with the Best Sparkling Wines, 2020).

Međimurje Wine Road

Međimurje wines can be tasted in the cellars and wine-tasting rooms of the Međimurje Wine Road. The award-winning wine samples are from white varieties such as Sauvignon, Chardonnay, Graševina, Rhine Riesling, Pinot Blanc and Pinot Gris, Traminac, Sylvaner, and Yellow Muscat. Lovers of red wines have a slightly narrower choice of Pinot Noir and Cabernet Sauvignon, and rosé is also offered. They do not shy away from blends, which Međimurje winemakers compose brilliantly. However, they are proud of their high-quality varietal wines and premium predicates from selected harvests and ice wines. Tastings in the tasting rooms and wine cellars are expertly guided, complemented by a selection of traditional cold cuts. The Štampar family winery, in its constant pursuit of perfection in combining tradition, knowledge, and innovation, offers the discerning and demanding market exceptionally high-quality and award-winning wines from about ten representative varieties of the Međimurje wine region. On the slopes of Sveti Urban and Krpec in Robadje, varieties of Pušipel, Graševina, Sylvaner, Chardonnay, Pinot Gris, Rhine Riesling, Yellow Muscat, Sauvignon, Cabernet Sauvignon, and Gamay ripen. The vineyards yield standard harvests, late harvests, selections of dried berries, and ice harvests. The Belović cellar and tasting room are located in Železna Gora, with a beautiful view of the family vineyard and part of Štrigova. Among the 13 varieties grown by the Belović family, the most famous is Sauvignon, adorned with numerous medals as the best Croatian white wine in 2001. Podrum Štrigova has 65 hectares of vineyards. They produce noble wines from the most valued grape varieties. The wines have a refined bouquet, fine aroma, pleasant and refreshing taste, and moderate strength. They are the largest winery with the best selection of quality wines in the Varaždin and Međimurje counties. Many award-winning wines make Podrum Štrigova a serious player in the Croatian market and beyond. In addition to wholesale, the wine is marketed through their wine shops in Čakovec, Varaždin, and Bjelovar. The first cellar of the Cmrečnjak family, now Vinska Hiža Cmrečnjak, was mentioned in Sveti Urban as early as 1884. They have been thoughtfully, intensively, and successfully engaged in winemaking since 1990. The whole family is involved in the business. They complement their offer of varietal wines with predicate wines and selected harvests. They offer 10 types of wine: 1 red, the rest white, sparkling wines, white and rosé, and Pušipel classic and prestige. They also offer homemade cold cuts, cellar tours, and the possibility of organised tours of the Mađerkin Breg viewpoint. The Dvanajščak family will welcome you to Jurovčak, above the Sveti Martin Spa, in their wine-tasting room. Along with wine, they will offer you their own meat and cured meat products. The Dvanajščak Kozol family from Dragoslavec is one of the younger winegrowing families in Međimurje, continuing the tradition of their parents. They received geographical origin designation in 1996 and can boast of producing the first Pinot Noir in Međimurje. The Hažić family farm, in addition to Chardonnay and Graševina, for which they also have a geographical origin

designation, also produces apples and domestic honey. They are located in Jurovčak, in the immediate vicinity of the Sveti Martin Spa. The Horvat family from Sveti Urban started winegrowing about 40 years ago, and the second generation began to engage in winemaking more intensively at the beginning of this century. In 1998, they received a designation of geographical origin for their wines. The Jakopić winery is located on the Međimurje Wine Road in Železna Gora, in the settlement of Orehovčak. The Jakopić family is among the first in Međimurje to have a geographical origin designation for the vineyards from which they produce top-quality wines. In addition to Rhine Riesling and Sauvignon, their wine blend is also excellent. They welcome guests in their castle, the Terbotz mansion, built at the beginning of the 19th century. The Kerman Wine House cultivates ten types of white wines in vineyards located on the southern side of Sveti Urban: Pušipel, Graševina, Sylvaner, Rhine Riesling, Urbanska Kapljica, Yellow Muscat, Gewürztraminer, Pinot Gris, Chardonnay, and Graševina, and from red wines: Pinot Noir, Cabernet Sauvignon, and Zweigelt. They organise tastings, promotions, and receptions with local specialities in their wine houses in Nedelišće and Sveti Urban. The winery of the Alojz Novak family is located on Kozlovčak Hill, one of the most famous and mysterious hills of Štrigova. It produces particularly high-quality wines based on a tradition dating back to 1814. The pride of the house are Sauvignon, Rhine Riesling, Traminac, Graševina, Moslavac, Pušipel, Pinot, and especially Urbanska Kap. They present and offer them alongside authentic Međimurje specialities. At the VINO Lovrec estate of the wine knight Franjo Lovrec, guests are offered a cultural-historical presentation of the development of viticulture and winemaking, as well as a review of the preserved material monuments of cultural heritage and intangible content of the micro-location "Pri Zidu - Pernjak" in Sveti Urban. Among other things, there is an old traditional wine cellar mentioned in documents as early as 1522, an obelisk from 1822, an ethno-eno collection, monuments of park architecture, and more. The Židov Viticulture and Winemaking estate is located on the Međimurje Wine Road, where Železna Gora meets Sveti Urban. It is the property of the well-known Međimurje winemaking family of Franjo Lebar, where the wine house of his daughter Jasna and her husband Milan Židov, winegrowers and winemakers, is located. They have embraced the fact that they are the heirs of the great winemaker Franjo, a wine knight and successful winegrower. Yellow Muscat, Rhine Riesling, Sauvignon, Pušipel, and Chardonnay are the grape varieties they grow on selected vineyard areas, and based on the rich family tradition, they create wines of exceptional quality. At the very entrance to the Međimurje wine capital, Štrigova is the wine house of the Kocijan family. They nurture the family tradition but also follow and implement new technologies in viticulture and winemaking. With their fragrant Traminac, a top-quality wine, they have reached the very top of Croatian winemaking. The Kunčić winery is located at the last meters, where Croatia geographically connects to neighbouring Slovenia. The wines of Dragutin Kunčić, until recently a world champion in bocce and now a renowned winegrower and winemaker, are among the best in the country and the region. The best wine and pride of the house is Yellow Muscat, which is actually a symbol of the winery that is relentlessly climbing the ladder of success. The Yellow Muscat of the Kunčić Winery is made from the best grapes grown on the slopes of Banfi, on the sunny side of the Alps. The winery of the Boris Novak family is located in

Banfi, where the underground rocks of Ljutomer-Ormož meet, on which the best wines in this part of Europe are produced. The modern, spacious, and beautiful wine temple, as well as the farm and family house, are located on the top of Banfi Hill, about fifty meters from the Croatian-Slovenian border. In addition to the excellent Graševina, they also offer excellent Chardonnay, Pušipel, Rhine Riesling, Sauvignon, and Pinot Noir, wines that will satisfy the taste of the most discerning consumers. All these wines are created in modern cellars and mature to obtain the taste of authentic Međimurje wine. Next to the wine temple, there is a tasting room with about 50 seats.

The crown of the Međimurje Wine Road is Mađerkin Breg, with a newly built viewpoint. The hill is only a few meters lower than the highest point of Međimurje. The view from it reaches Austria, Slovenia, Hungary, and Slovakia. On clear days, Zagorje and even Sljeme can be seen. The hill was named after Emilija Krauthaker, born in Budapest, better known as "Mađerka." She was the wife of Albert Krauthaker, a landowner and winegrower. Only two families lived on the hill - Strahonja on the northern part of the hill and Emilija, Mađerka, on the southern part. As late as the 1980s, her abandoned villa, built at the beginning of the 19th century, still stood and was later demolished during the construction of vineyard terraces by Podrum Štrigova. The Cmrečnjak and Štampar winegrowing families now own Mađerkin Breg. Located about fifteen kilometres from Čakovec and only two from Štrigova, Mađerkin Breg is becoming an interesting and attractive destination. It is becoming an open-air wine salon, a place for culinary and oenological enjoyment, as well as concerts and casual entertainment.

Exhibitions and Fairs

Međimurje winemakers had their first significant appearance at the dawn of the independent Republic of Croatia at the international agricultural and food products fair in Gornja Radgona, Slovenia, which lasted from August 16 to 26, 1990, and was attended by almost 1,200 exhibitors. A nine-member commission of renowned Slovenian oenologists evaluated the submitted wine samples from Slovenian winegrowing regions, as well as the Međimurje wine region, on August 6 and 7. The awards were presented by Maks Bastl, the then Minister of Market and General Economic Affairs of Slovenia. The Međimurje wine region was represented at the Radgona fair by four representatives with a total of 11 samples: Franjo Lovrec, Albina and August Bobnjar, Stjepan Matanović, and Mirko Žižek, whose wines were awarded 3 gold and 8 silver medals. Out of a total of 23 varieties, Međimurje participated with 7 varieties, as highlighted in the Međimurje newspaper on August 31, 1990.

The second Wine Exhibition of the Međimurje-Varaždin region, held on the first weekend of June 1992 at "Međimurska niža" in Balogovec, was a significant contribution to the development of this economic branch in northwestern Croatia. The organiser of the exhibition was HGK - GK Varaždin, and the patron was the Croatian Chamber of Commerce. The co-organizers were the municipalities of Čakovec, Ivanec, Ludbreg, Novi Marof, and Varaždin, as well as the wineries Varaždin and Štrigova. At the opening of the exhibition, speeches were given by Ivica Gaži, President of the Croatian Chamber of Commerce; Marčelo Popović, Minister of Tourism in the

Government of the Republic of Croatia; Dubravko Mikulić, President of the HGK - Regional Chamber of Varaždin, Anton Jurinec, President of the Executive Council of the Čakovec Municipal Assembly, and Stjepan Matanović, Vice-President of the Organizing Committee. The majority of exhibitors were from Međimurje, followed by the Varaždin-Vinički wine region. Wines from the Međimurje wine region also received the most gold diplomas. According to the Međimurje newspaper of June 12, 1992, Stjepan Matanović received five gold awards for his wines, three each for Albina and August Bobnjar, as well as Viktor Kotolenko, and one gold each for Mladen Mišak, Josip Pokos, August Jambrović, Ivan Horvat, and Franjo Lebar. The most successful exhibitor was the Štrigova Winery of the Čakovec Agricultural Estate, whose four wines received gold diplomas. At the traditional 24th exhibition of wines from northwestern Croatia in Sveti Ivan Zelina, winegrowers and winemakers from nineteen municipalities participated, submitting 197 samples for evaluation. A total of 24 gold medals, 97 silver medals, 42 bronze medals, and 34 recognitions were awarded. Međimurje wines marked the exhibition. A total of 15 Međimurje producers participated with 29 samples. Međimurje received 12 gold, 16 silver, and 1 bronze medal. In other words, wines from the Međimurje wine region won half of all gold awards. Out of a possible 20 points from the expert commission, 19.1 points were awarded to the late harvest Graševina from Stjepan Matanović's vineyard in Sveti Urban, and three other wines received 19 points. Matanović received 4 gold medals. Albina and August Bobnjar received gold medals for three wines, and Dražen Videc, Franjo Lebar, Ivica Maleković, Josip Ranteš, and the Štrigova Wine Cellar received one gold medal each. The winners of silver medals were Josip Kocijan, Ivan Horvat, Bojan Kalchbrenner, Rajko Cmrečnjak, Bojan Štampar, Josip and Pavao Novak, Bolfek Štampar, and Martin Jakopić. Silver medals were also awarded to wines from individual producers who also won gold, as reported by Međimurje on July 3, 1992. In Šaulovec Castle near Varaždin, the Wine Exhibition of the Zagorje-Međimurje sub-region was held on the first weekend of June 1993, organised by the Croatian Chamber of Commerce - Regional Chamber of Varaždin, where 88 producers exhibited a total of 128 wine samples. The wines were evaluated by a special expert commission headed by Prof. Dr. Dubravka Premužić. The commission followed strict criteria, so for some samples, the ratings were below expectations. The opening was attended by the prefects of Varaždin and Međimurje counties, Dr. Zvonimir Sabati and Marijan Ramušćak. The Međimurje newspaper (11.6.1993.) reports that the champion of the exhibition was declared to be the ice wine Graševina by Stjepan Matanović from Varaždin, whose vineyard is located on Stanetinski Breg in Sveti Urban.

Urbanovo

"Urbanovo – Days of Wine in Zrinski County" is a traditional event held since 2000 with the aim of promoting the Međimurje Wine Road as a tourist product and Međimurje as a desirable tourist destination. The Urbanovo project has developed over the years, and the name "Days of Wine in Zrinski County" itself speaks of the intention to present the entirety of the historical heritage and the richness of the tourist, oenological, and gastronomic offer of Međimurje through this event. With a constant increase in the number of exhibitors and visitors, Urbanovo has grown beyond the county's borders

over the years, and today, thanks to partnerships and cooperation with other counties and wine regions of Croatia - Zadar, Istria, Primorje-Gorski Kotar, Osijek-Baranja, Zagreb - it represents an event of national character and significance. With the constant participation of foreign exhibitors from Slovenia, Austria, and Hungary, it has gained an international character. Urbanovo has also become the key Međimurje wine festival of Pušipel, organised by the association Hortus Croatiae. As usual, all leading winemakers exhibit and offer fresh wines from the previous harvest, as well as wines from older vintages, to the public and experts. Thanks to Urbanovo, Međimurje wines are increasingly present throughout Croatia, and in recent years, exports to foreign markets have also been growing. The Pušipel project has proven to be a complete success, as wines under this name are the most sought-after wines from Međimurje vineyards outside the home county. Pušipel is a Međimurje grape variety whose synonym in Slovenia is šipon, in Hungary furmint, and in Moslavina moslavac. It produces interesting fresh, lighter, and medium-strong wines, most often with between 11 and 12% alcohol by volume. Pušipel, in taste and aroma, resembles a mixture of wine peach and old-fashioned red apple. Which flavour will prevail depends on the character of the particular vintage. It is a brilliant wine that can stand alongside world-renowned and sought-after white wines. Fourteen different grape varieties are grown on 1000 hectares of Međimurje vineyards, and Pušipel itself covers as much as 100 hectares. At the end of the 1990s, the people of Međimurje adopted the name Pušipel. In 2007, they turned it into a protected trademark of Međimurje. Within the framework of the Phare Interreg IIIA EU fund, the Economic School Čakovec received funds in 2005 to implement the project "Organization of an economic cluster for rural areas for former and current students (pupils) of the Grm Novo Mesto Agricultural School and the Čakovec Economic School". At the Economic School Čakovec, it was decided to dedicate the project to the development of brands of autochthonous Međimurje products, specifically wine, Turoš cheese, pumpkin seed oil, and meat from "tiblica". The neglected wine variety Moslavac-šipon was revitalised by this project. In 2011, Međimurje County, in cooperation with the Faculty of Agronomy of the University of Zagreb, launched a project of clonal selection of the Moslavac variety, or Pušipel in Međimurje, with the aim of improving the quality of planting material and the genetic base of this variety. Experts from the Faculty of Agronomy singled out five clonal candidates that proved to be the highest quality and were used to establish a certified mother plant (Regional Weekly, Clonal selection: "Pušipel is a top variety in which the future of Međimurje viticulture lies!", 2020). Historical sources indicated that this variety produced top-quality wines in the Međimurje region in the past. Therefore, it was necessary to subordinate the entire production technology to raising quality. There were such examples of good practice among individual winegrowers in Međimurje (Matanović, Lovrec, Lebar...), and the famous Hungarian wine-growing region of Tokaj and the neighbourhood of eastern Slovenia were also excellent examples. Eminent experts were engaged who determined the technological guidelines in production. After that, a marketing plan was developed to inform the public about the course and results of the activities. Historian Mr. sc. Vladimir Kalšan was invited, who systematised historical facts about this variety and proposed a new-old Međimurje name for the variety - PUŠIPEL. The name Pušipel was mentioned in 1920 during the sale of a

vineyard owned by the Nedelišće parish, which was located in Gornji Mihaljevec. In addition to Pušipel, the advertisement for sale mentions that the vineyard also contains Riesling and some dessert varieties. Strong media support was requested and received. Winegrowers were gathered and encouraged to join the entire project. The result was not lacking. Fifteen farms that joined the project, respecting technological instructions, significantly raised the quality of the wine and became recognisable on the market. And not only with Pušipel but also with their other quality wines (Economic School Čakovec - Pušipel, 2024).

Young Međimurje

By participating in numerous wine fairs and other wine-related events in Croatia and neighbouring countries, constantly seeking new forms and methods of affirming Međimurje wines, the young generation of very capable Međimurje winegrowers and winemakers has made a strong breakthrough not only in Croatia but also on the international scene. They are making their mark internationally, but they do not neglect their increasingly discerning domestic customers. The events are diverse, and one of them is the "Young Međimurje" project. At the beginning of November 2018, in the business & city break hotel Castellum in Čakovec, the process of presenting the project of Međimurje winemakers – Young Međimurje began, inspired by famous world wine regions that present and sell their selected young bottled wines every autumn. Štampar, Preiner, Cmrečnjak, Kocijan, Dvanajščak-Kozol, and Kunčić wineries presented their wines. Young Međimurje is a project that our wineries have seriously embraced and started marketing throughout Croatia. The presentation of the project started in Čakovec and continued in Varaždin and Zagreb. and it is in the hands of PR agencies that deal with the promotion of wine and wine regions. at the presentation itself in Čakovec, the presentation was entrusted to the best sommelier in Croatia and judge of Decanter world competitions, Siniša Lasan. Lasan pointed out that he knows many winemakers in Međimurje and follows their work. He especially referred to Međimurje Sauvignon, which, according to him, is the best in the world, of course, with maturation under proper conditions. Međimurje soil is a gift from God for this wine variety. He also gave support to actions such as branding the Međimurje wine variety Pušipel, creating a unique bottle for that variety, which by that act was the first in Croatia to receive its unique packaging (Six Međimurje Winemakers First in Croatia Bottle and Sell Quality Fresh Young Wines, 2018).

Decanter

Decanter World Wine Awards (DWWA) is the largest and most influential wine evaluation in the world. After thirty years of great effort and persistence in the Međimurje wine scene, in 2016, for the first time in history, the first two medals arrived in Međimurje. Just two world-class medals were enough to confirm the vitality and potential of Međimurje. That year, the Cmrečnjak winery received silver for its Sauvignon, and the Štampar winery also received bronze for Sauvignon. The medals

were a crucial confirmation of the high class of Međimurje wines and a great encouragement to other wineries on the Međimurje Wine Road. The following year, the Štampar winery won Decanter bronze with Sauvignon, and the selection of dried Graševina berries from the Jakopić winery triumphed with a sensational platinum medal. Međimurje has become a notable place in world wine guides and reports. The first gold from Decanter arrived for Pušipel Prestige selection of berries at the Jakopić winery in 2018 (Županić, 2018). In accordance with the events of recent years, the Municipality of Štrigova is pursuing a policy of transforming the Štrigova House of Culture into the World Center of Pušipel. The president of the Association of Winemakers and Winegrowers Hortus Croatiae, David Štampar, pointed out that Međimurje wines have made an exceptional breakthrough at Decanter and that "they are really receiving a lot of awards in all categories, from classic, fresh, sparkling, predicate, young and sweet wines, so that the quality level of wine is raised high..." that Međimurje wines are positioned and become recognised in Croatia and offered in the best restaurants that have a Michelin star. (Međimurje Winemakers Awarded by Decanter Presented Their Wines, On 33 Hectares of Međimurje Wine Roads We Have 1 Decanter - Međimurje County, 2021)

Conclusion

Wine production in Međimurje has a centuries-long tradition. It has always been one of the most important economic branches for the local people, as well as for the numerous lords and rulers of this region. Many sources speak of exceptional earnings from the sale of wine, as well as the quantities that were produced on the Međimurje "hills". In conclusion, wine is part of the lifestyle of all people from Međimurje, or at least a large part of the population between the Mura and Drava rivers. The quality of the soil, suitable climate in combination with new varieties and techniques, and the insight of Međimurje winemakers, who have raised the overall quality and consistency of Međimurje wine by joining forces, have led to excellent results recognised at the national and global levels.

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