











# Forbidden Fruits

The fabulous destiny of Noah, Othello, Isabelle, Jacquez, Clinton and Herbemont

"[...] I committed the irreparable: plant a grapevine of Clinton. This variety is, as five other, victim of an ancient ban, maintained while the suspicions against him were all falsified by science."



#### ARCHE NOAH's motivations to conduct this research

Even if ARCHE NOAH has been an advocate for agricultural biodiversity from its inception, the association was not specifically founded to protect the variety called "Noah". ARCHE NOAH has been striving to preserve and develop the diversity of all cultivated plants for 25 years. We are committed to the conservation and sustainable use of biodiversity for present and future generations, in order to ensure more efficient adaptation to local and changing environmental conditions, while preserving traditional knowledge attached to genetic resources, more specifically those linked to agricultural practices. To that end, we believe it is not enough to keep genetic resources in gene banks or scientific institutions, freezing them off for future research. ARCHE NOAH strongly advocates that these resources be cultivated, and made available to and by farmers to safeguard not only the basis of agriculture, but also the richness of flavours that enhance our quality of life.

Wine grape biodiversity is thus only a portion of our actions for crop diversity, but it rightly exemplifies unjust and unsound laws adopted against socially rooted and environmentally sound practices. In the case of Austria for instance, a due legalisation of so called "direct producer varieties" would ensure the continued existence of *Uhudler*. It would recognise and support its economic and cultural contribution to the Burgenland region, while releasing wine growers from uncertainty and illegality. Furthermore, having had direct experience in the consumption of *Uhudler* for obvious research purposes, we can vouch that neither anger excesses, hysteria, tendencies to hallucinations, nor mental and physical degeneration were observed at the time of writing.

INTRODUCTION     4 PART I. THE PROHIBITION'S GENERAL HISTORICAL CONTEXT IN EUROPE	7
The Phylloxera plague in Europe	
The resistance of American wine grape varieties	
The wine market after WWI	
Anti-Americanism	10
Conclusions	11
PART II. CASE STUDIES: DIRECT PRODUCERS PROHIBITIONS IN AUSTRIA, FRANC GERMANY, PORTUGAL AND SPAIN	
Austria	12
France	19
Germany	25
Portugal	28
Spain	33
Conclusions	37
PART III. ARGUMENTS AGAINST DIRECT PRODUCERS	40
Quality arguments – tasting the Fox?	40
Economic arguments – stabilising the wine market?	
Human health arguments – making you crazy?	42
Plant protection arguments – Spreading Phylloxera and now flavescence dorée?	45
Conclusions	47
PART IV. THE POTENTIALS OF DIRECT PRODUCERS IN TODAY'S VITICULTURE	48
Consumer arguments – there is a market for direct producers out there	48
Rural development arguments – direct producers create regional identity, regional value cha and tourism	ins
Environmental arguments – direct producers need less plant protection inputs	
Agrobiodiversity – direct producers preserve genetic resources	
Conclusions	
GENERAL CONCLUSIONS	53

#### INTRODUCTION

In this paper, we are going to tell a story of admiration and detestation. It's a story about the six protagonists Noah, Othello, Isabelle, Jacquez, Clinton and Herbemont and other so-called "direct producer" wine grape varieties. These vines and their ancestors were brought from North America to Europe about 150 years ago, bringing joy and sorrow to European viticulture and wine consumers. For almost 100 years, they have been forbidden; lately even by EU law. Hence, these wines have survived and are being cultivated and consumed by a growing fan community. Well, what can be more attractive than a forbidden fruit and love story?!

In this paper, we are going to trace back how this all happened and ask the question of whether the prohibition of these special wines can still be justified today. Feeling intrigued? Well, pour yourself a glass of wine and enjoy reading!

Noah, Othello, Isabelle, Jacquez, Clinton and Herbemont are six of the wine grape varieties whose turbulent history in Europe begins with the invasion of the vermin *Phylloxera* (*Viteus vitifoliae*) in the 19<sup>th</sup> century. Because of their natural resistance to *Phylloxera*, these varieties from North American breeders or from spontaneous crosses, were imported, amongst others, and used to counter the plague. Common strategies were to use breeds based on North American species as rootstocks to which European *Vitis vinifera* varieties were grafted, as well as to use them in longer term resistance breeding programs, primarily to infuse their resistance into *Vitis vinifera*. These varieties were, however, also directly planted in winegrowers' fields. This particular practice gave them the name "direct producers" or "direct producer wines". The term came to refer to native American species as such (*Vitis aestivalis*, *V. labrusca*, *V. riparia*, *V. rupestris*), but also the first generation hybrids obtained from interspecific crossings, either with each other, or with the European common species *Vitis vinifera*, all the while maintaining their resistance to *Phylloxera*.

Today, direct producer varieties are grown in several European countries, and wine is still produced from their harvest. Strangely though, the planting of some of them for the purpose of wine production is forbidden. Indeed, in the course of the direct producer's 150-year history in Europe, first national, and then European laws adopted a dramatically restrictive and unfairly discriminatory approach to certain direct producers and hybrids, beginning mostly in the 1930s. The prohibition of a handful of wine grape varieties most notably appeared in the French legal order in 1934, at the dawn of perhaps one of the darkest times in European history, under the pressure of wine producers of the Midi region for strict wine production rules. Upholding this restrictive stance, French wine producers managed to inspire and induce similar regulations in a wide range of European countries during the surplus crisis that lasted throughout the 1970s, including at the European level. Indeed, "many of the current EU regulations [concerning wine] can be traced back to French regulations in the late 19th century and early 20th century. [...] What were initially mainly French and to a lesser extent Italian national regulations now apply to approximately 60% of the world's wine production"<sup>2</sup>.

The main barrier to the development of these vines in currently applicable European law relates to so-called classification, both for producing wine and qualifying it as quality wine

-

<sup>&</sup>lt;sup>1</sup> Meloni, G., et al., 2012.

<sup>&</sup>lt;sup>2</sup> Meloni, G., et al., 2012: 29.

for marketing purposes. Having undergone changes throughout time, the classification regime nonetheless gives little to no room to non *Vitis vinifera* varieties, severely impeding innovation and hampering rural development prospects. Although quantitative restrictions regarding production areas and yields should remain the cornerstone of the European wine policy, the case for restricting the choice of varieties seems weaker. This practice has nonetheless continued to be carried out since 1970<sup>3</sup> and was most prominently complemented in 1999<sup>4</sup> through the express prohibition of six wine grape varieties –namely Noah, Othello, Isabelle, Jacquez, Clinton and Herbemont –from all classification. This express prohibition appears to have been a direct reaction to the 1998 authorisation of Noah and Isabella in the Friuli Venetia Giulia region of Italy. The wording hailed by the European regulators in 1999 stems from the French legal order, through legal terms introduced in 1934 but abolished in 2003 at a national level.

The European *acquis communutaire* nonetheless maintains the prohibition in Regulation 1308/2013, which has direct effect in national legal orders. The provision restricting the choice of wine grape varieties in the Union today, Article 81 of EU Regulation 1308/2013 establishing a common organisation of the markets in agricultural products, reads:

- "1. Products listed in Part II of Annex VII and produced in the Union shall be made from wine grape varieties classifiable in accordance with paragraph 2 of this Article.
- 2. [...] Only wine grape varieties meeting the following conditions may be classified by Member States: (a) the variety concerned belongs to the species Vitis vinifera or comes from a cross between the species Vitis vinifera and other species of the genus Vitis:
- (b) the variety is not one of the following: Noah, Othello, Isabelle, Jacquez, Clinton and Herbemont."

Given the current legal situation, where non *Vitis vinifera* varieties like Concord are excluded in principle from classification as quality wine, and where six particular varieties are excluded altogether from all European wine-making, one wonders why these varieties have attracted so much hate and are so purely and simply forbidden. They may, and do, have fans. They thus have a market. They can create employment. Furthermore, thanks to their inherent resistant characteristics, they are good for the environment. Many arguments have been hailed to justify their prohibition, including their poor quality, the risk caused to human health, plant protection issues, as well as market stabilisation concerns. We show that these arguments, which were doubtful to begin with, absolutely do not hold true today.

Our research seeks to answer a single and simple question: Is the current prohibition of certain wine grape varieties in wine production appropriate for modern, liberal legislation which is committed to promoting rural development rooted in sustainable, resilient, and environmentally-friendly practices in agriculture?

<sup>4</sup> Council Regulation (EC) No 1493/1999 of 17 May 1999 on the common organisation of the market in wine, JOL 179, 14.7.1999, p. 1–84.

<sup>&</sup>lt;sup>3</sup> Council Regulation (EEC) No 816/70 of 28 April 1970 laying down additional provisions for the common organisation of the market in wine, Council Regulation (EEC) No 1388/70 of 13 July 1970 on general rules for the classification of vine varieties, and Commission Regulation (EEC) No 2005/70 of 6 October 1970 on the classification of vine varieties, and Council Regulation (EEC) No 817/70.

In our attempt to answer this question, we set out to demonstrate that the current prohibition, based on legislation enacted in the 1920s and 1930s, came to life in a very specific historical context very different from current conditions. Backed by historical case studies from Austria, France, Germany, Portugal and Spain, we intend on looking at the rationale behind this discrimination, analysing the most important arguments used to support the prohibition of direct producers, before delving into the untapped potential of Noah, Othello, Isabelle, Jacquez, Clinton, Herbemont and other direct producers.

# PART I. THE PROHIBITION'S GENERAL HISTORICAL CONTEXT IN EUROPE

Direct producers and associated wine grape varieties have been controversial since their initial encounter with the European wine landscape. Introduced to the Old Continent in the 19<sup>th</sup> century by researchers interested in their resistance to harmful diseases, the Holy Grail of North American native and resistant wine grape varieties was nonetheless two-faced. Although there was never proof for this claim, they were accused of bringing in additional and perhaps even more devastating organisms. Representing both the illness and the cure, they triggered extremely strong, yet opposing sentiments.

Before investigating in depth the national political history of wine production and correlated regulation, it is first necessary to clarify the ethno-botanical conditions under which direct producers were first introduced as cultivars in Europe. This will then allow us to discuss the broad socio-economic and cultural issues which lie behind the prohibition of direct producers in wine-making.

# The Phylloxera plague in Europe

The introduction of direct producer hybrid wine grape varieties in Europe goes back to the mid of the 19<sup>th</sup> century, when the spread of *Phylloxera* destroyed great portions of European wine production areas. *Phylloxera* (*Viteus vitifoliae*) is an insect that eats the roots and leaves of grapevines. It has a quite complicated life cycle, and its flexibility – *Phylloxera* has two forms of reproduction, and takes areal and terrestrial forms – makes it persistent and difficult to fight. *Phylloxera*'s nymphs damage grapevine leaves by forming galls on their undersides<sup>5</sup>. Depending on the genera of grapevine, this results in deformations and secondary fungal infections on roots, gradually cutting off the flow of nutrients and water to the plant.

It is not precisely known when *Phylloxera* first appeared in Europe. Presumably, it entered through the roots of vines of wine grape varieties arriving from North America, which were employed from 1858 to 1962 in order to test their resistance potential against another disease that was already damaging production: powdery mildew. *Phylloxera* was first described as the "new disease of the vine" in the 1860s by Montpellier-based professor J.-E. Planchon, who had examined infected slopes in France's Bas-Rhône and at Pujault, in the Gard<sup>6</sup>. Beginning in France, the pest then spread across Portugal, Switzerland and Italy. From there, it went on to South Africa and Australia and eventually affected Spain, Germany, Austria, Croatia, Dalmatia and Central Europe.

To this day, there is still no universally acclaimed cure for *Phylloxera*. From the 1870s to the 1890s, French scientists had a hard time looking for strategies on how to deal with *Phylloxera*<sup>7</sup>. Their research identified at least three solutions, the first one being chemical treatment for old European wine grape varieties. More innovative approaches took advantage of the natural resistances to *Phylloxera* of American wine grape varieties, which allow them to coexist with the bug as infected hosts. Two solutions were developed using this approach: the grafting of American rootstock to European vines, and resistance breeding in developing hybrids. In Germany, *Phylloxera* was considered to beexterminated in the mid 20<sup>th</sup> century

<sup>&</sup>lt;sup>5</sup> Gale, G., 2011: 51

<sup>&</sup>lt;sup>6</sup> ibid.

<sup>&</sup>lt;sup>7</sup> See the sub-section on the Introduction of American direct producers, PART II, Ch. 2.

through conversion to grafted wine grape varieties. However, at the beginning of the 1990s it once again began to beincreasingly observed worldwide, this time considerably harming grafted wine grape varieties as well<sup>8</sup>. Previously, throughout the 19<sup>th</sup> century and early 20<sup>th</sup>century, breeders had been developing crosses of American and European wine grape varieties, uniting American resistance with European taste. Even though this solution is not an absolute one, it has proven to be the most effective of the three aforementioned options, and today most wine grape varieties cultivated in Europe are hybrids<sup>9</sup>. The most frequently used rootstocks are descendants of the three American species *Vitis riparia*, *V. rupestris* and *V. berlandieri*, that were crossed with each other, or with *Vitis vinifera*<sup>10</sup>.

Last but not least, a fourth solution was also taken up in most European wine growing countries, as wine growers simply planted the American wine grape varieties as they were. Why shouldn't they? The plants had reliable yield, since they were resistant to *Phylloxera*, and their cultivation was inexpensive since neither grafting, nor chemical inputs were needed. "With the exception of Germany, all of the invaded countries of Europe planted, first old American vines and, later, as they became available, new hybrid producteurs directs (HPD), the so called 'Franco-American hybrid" vines alongside their reconstituted vinifera vineyards" 11.

*Phylloxera*'s impact on wine growing and wine production in Europe, but also beyond, was immense. Thousands of hectares of vineyards were uprooted because of the bug. It led to migration, sorrow, impoverishment, and profoundly altered social structures. The pain and the suffering were immense. Huge efforts were undertaken to deal with the plague. As a consequence, *Phylloxera* opened up new debates in the wine growing and wine making sector. The crisis resulted in new approaches in viticulture. Supporters of the direct producers and the grafted wine grape varieties were competing for the "best way" to reconstruct devastated European vineyards. The race started in France, then made its way across Europe, following the hybrids hot on their heels, even to this day<sup>12</sup>.

# The resistance of American wine grape varieties

European wine grape varieties adaptpoorly to North American conditions and exist only in a few areas. This means that North Americans who wanted to grow vine had to do it with native grapes. "North America has one of the richest troves of wild grape species in the world. [...] It is generally accurate to say that there is a grape native to every region in the United States, southern Canada, northern Mexico, and the Carribbean" About 20 native American grapes are known. However, as time went by, the imported European Vitis vinifera vines crossed by pollen with the native ones and resulted in new "native" American vines, e.g. the Concord, Catawba and Norton.

Most of these native grape varieties developed in *Phylloxera* infected regions and have thus developed coexistence strategies and resistances. However, in the battle against *Phylloxera*,

<sup>&</sup>lt;sup>8</sup> Mohr, H. D., 2012.

<sup>&</sup>lt;sup>9</sup> Gale, G., 2011.

<sup>&</sup>lt;sup>10</sup> Hofmann U., et al., 1995

<sup>&</sup>lt;sup>11</sup> Gale, G., 2011: 183 In this work, we will refer to old American hybrids as well as Franco-American hybrids just with the term direct producers because they were targets of the same prohibition measures.

<sup>&</sup>lt;sup>12</sup> Gale, G., 2011, paraphrase

<sup>&</sup>lt;sup>13</sup> ibid.: 253

<sup>&</sup>lt;sup>14</sup> ibid.

not all species have been used equally<sup>15</sup>. The root systems of American *Vitis* species themselves, as well as their crossings, are considered as resistant against root *Phylloxera* (the biotype of *Phylloxera* which propagates in roots)<sup>16</sup>. In addition to the *Phylloxera* resistances, American direct producers also possess natural resistances against the fungal diseases of powdery and downy mildew, and can thus live without plant protection products. Powdery mildew is caused by the fungus *Erysiphe necator*, colloquial Oidium. It is a pathogen of the *Vitis* genus and was introduced with North American wine grape varieties in France in 1847<sup>17</sup>. European wine grape varieties are more susceptible to this fungus. Downy mildew is caused by the fungus-like microorganism *Plasmopara viticola*, colloquial Peronospora. It was originally common in wild North American wine grape varieties and brought to Europe in 1878 on vines which were used as rootstocks in the struggle against *Phylloxera*<sup>18</sup>. It was mainly responsible for the decline of viticulture at the previous turn of the century<sup>19</sup>.

This conundrum has led authors to declare that "the source of the disease and the cure for the disease are the same!" Indeed, *Phylloxera*, Oidium and Peronospora entered Europe on vines of American origin, something that was detrimental to the reputation of direct producers. In some countries, there were efforts to prohibit any trade of scions and rootstocks. But there was also a great need to reconstruct the destroyed vineyards by using the inherent resistances carried by these varieties, which made it necessary to use the potential of hybrids. Furthermore, in contrast to European native wine grape varieties, American wine grape varieties had reliable yield (resistant to *Phylloxera* and fungal diseases) and their cultivation was inexpensive (no grafting, no chemical inputs needed). Compared to native European wine grape varieties, American direct producers could be regarded as low cost varieties, both in terms of economic and environmental costs. The culprits would not only be the saviours of European *Vitis vinifera*, but would alsoattract additional interest from certain wine growers.

# The wine market after WWI

After the *Phylloxera* disaster, European vineyards were reconstructed with hybrids developed by French researchers. But resolving biotic issues was going to lead to larger socio-economic ones, also thanks to the influence of the market situation as a whole. As a result of the reallocation of resistant varieties that finally gave expected yields, wine overproduction would become the big issue during the 1920s<sup>21</sup>.

In 1929, wine producers notably had a great harvest in terms of quality and quantity<sup>22</sup>. As Anderson and Nelgen demonstrate in their statistical compendium<sup>23</sup>, in the decade ranging from 1920 to 1929, wine production in Western Europe reached its pre-World War II peak. Documented wine production in France, Italy, Portugal, Spain, Austria, Germany and Greece amounted to 13,580 megalitres. While in the previous decade (1910 to 1919), the volume

<sup>16</sup> Mohr, H. D., 2012: 178

<sup>&</sup>lt;sup>15</sup>ibid.: 254

<sup>&</sup>lt;sup>17</sup> Postmann, K. P., 2010: 33

<sup>&</sup>lt;sup>18</sup> Börner, H., 2009: 81

<sup>&</sup>lt;sup>19</sup> Loskill, B., J., 2005

<sup>&</sup>lt;sup>20</sup> Gale, G., 2011: 45

<sup>&</sup>lt;sup>21</sup> Doré, C.; et al., 2011:770

wineterminator.com, Jahrgänge 1929.

<sup>&</sup>lt;sup>23</sup> Anderson, K., et al., 2011

amounted to only 11,440 megalitres. However, 1929 is also known as the year of the Great Depression: "The loss of real income in agriculture was as profound as in the industry, although production was stable. Rather it was prices which fell. However, regarding the period prior to the crash the question is open to whether there was an independent agrarian crisis which in turn contributed to the collapse of the stock market."24. While globally speaking, overproduction was an issue in "wheat, rubber, sugar, silver, zinc and to a certain degree cotton"; in France, wheat and wine were the biggest issues<sup>25</sup>. At the beginning of the 1930s, the European wine market in general was in a significant crisis. The crisis was caused by overproduction, mainly thanks to the battle won against *Phylloxera*, but also because more countries (like Algeria) began wine production on a large scale<sup>26</sup>. This trend was met by under-consumption due to the general economic crisis, tax rises and the prohibition movement in the United States and in some parts of Europe. These factors considerably aggravated the predicament European wine growers found themselves in. In this disquieting context, it is reported that discussions on the 1932 Wine Conference between leading persons of the wine business tried to find solutions to these issues, and mentioned the enhancement of wine propaganda, but mainly the limitation of production quantity<sup>27</sup>.

Other socio-economic factors also weighed in when it was time to adopt a clear political agenda, especially that of employment. Indeed, wine is traditionally a very work-intensive crop. As unemployment during the economic crisis was already skyrocketing, the direct producers, which are considerably less work-intensive since they don't have to be grafted and don't need chemical plant protection, may have been seen as an additional threat and not necessarily a solution. Fears that a change from European wine grape varieties to direct producers would lead to an increasing unemployment rate were undeniably present in the 1930s.

# Anti-Americanism

Besides the aforementioned gloomy socio-economic context, a number of cultural considerations also played a role in shaping the road to the prohibitions of direct producers. In France, "Official anti-Americanism and the policies it engendered via the laws of 1878 and 1879 were in every sense disastrous"<sup>28</sup>, and considerably shaped legislation pertaining to wine production. In the late 18<sup>th</sup> and early 19<sup>th</sup> century, as the US became something more than a colonial or religious outpost, the "Uncultured but Cocksure"-Criticism of America started to morph into a powerful set of Anti-American ideas and stereotypes.

The earliest forms of Anti-American comments tended to be cultural criticism of the lack of taste, grace and civility in American habits and everyday life. European writers, such as Charles Dickens and Frances Trollope built up a picture of Americans as rude and indifferent to manners or polite conversation. Summarising the criticisms of 19<sup>th</sup>century European intellectuals about America's lack of civility and taste, Norwegian writer Knut Hamsum commented that "America is a very backward country culturally" However, what infuriated Europeans the most was that this American backwardness and coarseness was combined with

<sup>&</sup>lt;sup>24</sup> Kindleberger, C. P., 2014

<sup>&</sup>lt;sup>25</sup> Kindleberger, C. P. 2014: 317

<sup>&</sup>lt;sup>26</sup> See PART II, Ch. 2, Overproduction crisis – Algeria & under-consumption in the late 1920s

Neue Wein-Zeitung, Die Beschlüsse der Internationalen Weinkonferenz. 1932: Nr. 22

<sup>&</sup>lt;sup>28</sup> Gale, G., 2011: 58

<sup>&</sup>lt;sup>29</sup>O'Connor, B., 2004: 79

what they regarded as a cocksure arrogance. Simon Schama writes, "By the end of the nineteenth century, the stereotype of the ugly American – voracious, preachy, mercenary, and bombastically chauvinist – was firmly in place in Europe"<sup>30</sup>. In short, Americans were seen as overconfident and self-important, and according to Schama it was this American 'egocentricity' that most aggravated Europeans<sup>31</sup>.

The Anti-American discourse built on the image of the "civilized" Europeans. And in wine production, they were now dependent on the "uncivilized" American through the hybrids used to reconstruct their vineyards. This premise heavily influenced the debate on direct producers, being omnipresent in the later discourses on American wine grape varieties which finally led to their comprehensive prohibition.

# **Conclusions**

Direct producers and associated wine grape varieties have been quite controversial from the start of their history in the European continent. Representing both the *Phylloxera* illness and its cure due to their inherent resistance, they triggered extremely strong, but also opposing sentiments. The divide was clear between those who viewed them as an opportunity to go forward in the evolution of European wine-making, and those who considered them a threat. The menacing voices seem to have prevailed in a tense socio-economic and cultural context, where overproduction, under-consumption and cultural supremacism were the norm, leading to the prohibition of direct producers. It is within this general context that we shall now examine more closely how this hesitation between love and hate of direct producers was translated in five specific countries.

<sup>&</sup>lt;sup>30</sup>Ibid.

<sup>101</sup>**u.** 

<sup>&</sup>lt;sup>31</sup> O'Connor, B., 2004: 79. Paraphrase.

# PART II. CASE STUDIES: DIRECT PRODUCERS PROHIBITIONS IN AUSTRIA, FRANCE, GERMANY, PORTUGAL AND SPAIN

The range between mistrust and enthusiasm in relation to direct producers has been a gliding and slippery one, in most of the important wine producing countries. The range was however heavily guided towards mistrust by the "wine establishment" and the architects of wine policy in Europe. Direct producers were first condemned at the Viticulture Section of the International Congress of Agriculture held in Bucharest in 1929. Echoing what had been declared during the International Wine Congresses of Bordeaux in 1928 and Barcelona in 1929, the promotion of quality wine via *appellations* and the outlawing of hybrids and malpractices were seen as the sole solutions to the overproduction crisis that was shaking European wine making. The 1932 International Wine Congress, held in Paris, set the stage for the swift and strict demise of direct producers, by voting that they simply had to be prohibited in the regions of *grand crus* and quality wines.

Notwithstanding this general streaming of the minds, the contexts to the prohibitions of direct producers have been as diverse as Europe itself. It is especially interesting to examine the particular national socio-economic backgrounds that lie behind the legal provisions which still today prohibit the planting of certain wine grape varieties for the production of wine. To illustrate, we have chosen five Member States of the European Union (namely Austria, France, Germany, Portugal and Spain), on account of their importance in the history of direct producers, their importance within the European wine market, and also due to practical considerations and the inherent limits of this research. Aiming to give a differentiated view on the topic, we opted for both a chronological but also at times thematic analysis of the prohibition itselfand the reasons lying behind it. We found numerous similarities but also quite significant differences within our case studies.

#### 1. Austria

Through a dynamic historical account of the situation of direct producers in Austria, our research will discuss their introduction into the country, their prohibition, and the central actors in a nationally contextualised fashion.

# Introduction of direct producers in Austria

The introduction of direct producers in Austria goes back to the end of the 19<sup>th</sup> century, when the spread of *Phylloxera* destroyed great parts of the Austrian wine growing business. Indeed, the disease was first found in the Habsburg Monarchy in 1868<sup>32</sup>. The most prevalent response to the outbreak came in the way of resistance breeding. The first hybrids came to Austria in two waves. The first wave, the "old hybrids" came as early as the 1890s and new crossings from Alsace were introduced in 1922.

It is important to note here that the discussions on direct producers in Austria were principally led by Fritz Zweigelt, the breeder of the famous Austrian red wine *Zweigelt*. Fritz Zweigelt was a convinced National Socialist and first an illegal member of the Nationalsozialistische Deutsche Arbeiterpartei (NSDAP), officialising his allegiance after the annexation of Austria in 1938 by Adolf Hitler. He then became director of the *HBLA Klosterneuburg*, a renowned

\_

<sup>&</sup>lt;sup>32</sup> Postmann, K. P., 2010: 33

school for viticulture and pomology in Austria<sup>33</sup>. Fritz Zweigelt was an active supporter of prohibiting direct producer hybrids and had a significant influence on the drafting of national wine laws and consequently in the prohibition of direct producers in Austria. Zweigelt was not only a breeder of wine grape varieties, but also a very active scientist, carrying out research on direct producers in Europe.

While Dr. Zweigelt had a dislike for the "old hybrids", he was hoping that newer breeds of direct producers would be more valuable and suitable for planting in mass-wine regions. He himself was involved in breeding activities, and even included the old direct producer varieties into his experiments<sup>34</sup>. However, he was not successful in combining the American wine grape varieties' resistance to *Phylloxera* with the *Vitis vinifera* varieties' quality and frutifulness<sup>35</sup>. In 1929, his widely cited book on direct producers written in collaboration with Albert Stummer, a wine growing inspector of Southern Moravia, declared a significant "contamination bydirect producer hybrids" in Austria<sup>36</sup>.

# Legal history

As Zweigelt –a central figure in the discussions on direct producers in Austria – and other like-minded officials voiced their concerns over the spreading of these wine grape varieties in the territory, the formal prohibition of their use gradually saw the light of day in Austrian federal law. Even though different state laws had dealt with the question beforehand, the main steps of the nationwide prohibition were the wine laws of 1929 and 1936.

#### Federal State laws - Federal State interests?

After the infamous Zweigelt held a speech on direct producers in a meeting at the Austrian Ministry of Agriculture, a viticulture committee was founded in 1928. The committee examined the issue ("Hybridfrage") in various sessions and finally came up with a draft law, which proposed to ban the cultivation and marketing of direct producer hybrids in the affected states of Austria. These demands were adopted nationally in 1936 and 1937, while the first formal prohibitions actually came from regional authorities. The direct producer debate in Austria was strongly influenced by local interests, which is why the positions of the regional state governments and national laws are quite different.

The federal states of Styria and Burgenland had the largest area of directs producers, whereas Lower Austria (which produced the most significant total amount of wine) had a very small percentage of them<sup>37</sup>. These three states were competing in the Viennese market, especially in the sector of cheap (mass) wine, wherewine from direct producers belonged<sup>38</sup>. Styrian direct producer growers also made money by selling vine shoots from their vineyards to other wine growers. The demand for cheap vine shoots was high in areas where *Phylloxera* had destroyed extensive parts of the vineyards. The Lower Austrian government (according to Fritz Zweigelt<sup>39</sup>) considered the introduction of direct producer vine shoots into its territory as a threat to its viticulture. That is why order LGBI 54/1924 forbid the import and trade of so-

<sup>&</sup>lt;sup>33</sup>Eckhart, W., et al, 2008

<sup>&</sup>lt;sup>34</sup>Zweigelt, F., 1924

<sup>&</sup>lt;sup>35</sup>Arthold, M., 1924; Zweigelt, F., et al., 1929

<sup>&</sup>lt;sup>36</sup> Zweigelt, F., et al., 1929

<sup>&</sup>lt;sup>37</sup>Wobisch, F., 1935

<sup>&</sup>lt;sup>38</sup>ibid.

<sup>&</sup>lt;sup>39</sup>Zweigelt, F., 1923

called direct producer vines within Lower Austria:

54.

Berordnung des Landeshauptmannes von Riederöfterreich vom 7. April 1924, 3. II-1189, betreffend das Berbot der Einfuhr von Direktträgerreben nach Riederöfterreich und den Berkehr mit denselben in Riederöfterreich.

§ 1.

Bur Hintanhaltung einer Schäbigung des heimischen Weinbaues und zur Abwehr der Reblausgesahr wird auf Grund des § 1 des Gesetzes vom 27. Juni 1885, R. G. Bl. Nr. 3 ex 1886, die Einsuhr von sogenannten Direktträgerreben nach Riederösterreich und der Berkehr mit benselben innershalb Niederösterreich ausnahmslos verboten.

"For the avoidance of an impairment of the local viticulture and averting the Phylloxera danger [...] the import of so-called direct producer vines into Lower Austria and the trade within Lower Austria is prohibited without exception".

This prohibition was nonetheless bypassed, as direct producer vines from Styria were shipped by declaring them as fruitwood: "[...] dass das Landesverbot [LGBl 54/1924, remark] durch den bereits jetzt im Herbste einsetzenden Rebholzversand aus Steiermark in Kisten unter der Deklaration "Obst" durchbrochen wird [...]"<sup>41</sup>

In a similar fashion though, the Burgenland authorities passed a law in 1928, which prohibited the planting, reproduction and marketing of direct producer wine grape varieties, just like the recommendation of the viticulture committee's draft law. Exceptions were established for approved varieties (although none existed at the time) and also for plantings of public institutions for experimental uses<sup>42</sup>:

"Der Anbau und die Vermehrung von Ertragshybriden (sogenannten Direktträgerreben) sowie jeder entgeltliche oder unentgeltliche Verkehr mit ihnen ist mit den unten folgenden Ausnahmen innerhalb des Bundeslandes verboten [...]."<sup>43</sup>

Surfing the same wave, the Styrian state government introduced a draft law in 1929 at the request of the *Styrian association of fruit and wine growers*. The law aimed to "protect the interests of premium vintners (Edelweinbauern)" and "warn against future disadvantages for the federal economy". This draft law was however withheld "out of political interests", according to the Styrian wine administration<sup>44</sup>.

The most stringent federal state text came much later. In 1935, Vorarlberg issued a regulation which forbid the planting of directproducers and, for the first time in Austria, forced winegrowers to stub existing stands within three years<sup>45</sup>, foreseeing the stringent national future.

<sup>&</sup>lt;sup>40</sup>Landesgesetzblatt für das Land Niederösterreich. 14. April 1924, p. 31. own translation.

<sup>&</sup>lt;sup>41</sup>Zweigelt, F., 1924

<sup>&</sup>lt;sup>42</sup>Neue Wein-Zeitung, Die Direktträgerfrage in Österreich und der Weinhandel. 1929: Nr. 11

<sup>&</sup>lt;sup>43</sup>Zweigelt, F., 1929: 347.

<sup>&</sup>lt;sup>44</sup>Neue Wein-Zeitung, Das neue Direktträgergesetz in Burgenland. 1929: Nr 44

<sup>&</sup>lt;sup>45</sup>Wobisch, F., 1935

## National laws: from cautiousness to prohibition

Federal state laws were the vanguards for the comprehensive restriction of planting and marketing of direct producers. They would soon be followed by national laws, which remained cautious until the 1930s.

Indeed, at national level, in 1929, Article 23 of the new wine law (WeinG) in Austria forced wine producers to declare wine from direct producers and their blends as "wine from direct producers" or "wine from hybrids". This was the first nationwide legal measure, in the form of compulsory labelling, regarding the sale of direct producer wine. But it was not a prohibition at all. Despite its limited nature, this new wine law ignited massive protests by direct producer growers in the Styria region, who said that it was "anti-agricultural and solely represented Lower Austrian interests". The name "wine from direct producer" was seen as a massive attack on direct producers because it was "strange and preventing from purchasing" and would stop their trade. Because of the protests, the law was mitigated 47. As stated by an article in the Neue Weinzeitung in 1932, the declaration system was in fact not carried out because political spheres took into account the interests of direct producer growers 48. However, provisions of the wine law of 1929 were reintroduced into Austrian legislation after the end of WWII<sup>49</sup>.

The actual prohibition of direct producer hybrids came into effect with the new wine law of 1936. It addressed both the planting of these wine grape varieties, but also their marketing. The wine law 73/1936 prohibited the constitution of new vineyards, § 2 explicitly prohibiting the planting of direct producers. In the accompanying executive order BGBl 367/1936, one can further read that not only the planting, but also the replacement planting and the sale of wood from direct producers, were prohibited (§ 4 and §6). The order 329/1937 also quite dramatically stated that vineyards with direct producers in their wine production areas had to be stubbed by 1946 (§ 7). Regarding the marketing of direct producer wine, § 3 of the order 329/1937 banned the marketing of blends with direct producers in Austria<sup>50</sup>:

§ 3. Berschnitte von aus Edelreben gewonnenem Bein, Traubenmost und Maische mit Erzeugnissen, die aus Direktträgerreben hergestellt sind, dürfen nicht in Berkehr geseht werden.

Impelled by influential persona and federal state laws, the prohibition to plant direct producer vines, as well as to market their product as wine, found its way to the national Austrian wine law in 1936, heralding a new era for the well-performing but snubbed and disliked hybrids.

# Arguments used against and in favour of direct producers

Even though most of the arguments used against but also in support of direct producers will be examined in detail in Parts III and IV of this study, it is interesting to see which ones were used in the specific context of Austria to justify the nationwide prohibition of 1936. Indeed, the prohibition of direct producer wine first at state level, and then at national level, was

-

<sup>&</sup>lt;sup>46</sup>Neue Wein-Zeitung: Zur Bezeichnung der Direktträgerwein-Verschnitte. 1929: Nr. 57

<sup>&</sup>lt;sup>47</sup>Neue Wein-Zeitung: Das österreichische Provenienzschutzgesetz. 1929: Nr. 58

<sup>&</sup>lt;sup>48</sup>Neue Wein-Zeitung: Der Verkehr mit Direktträgerwein in Österreich. 1932: Nr. 20

<sup>&</sup>lt;sup>49</sup>Heinrich, A., 2003

<sup>&</sup>lt;sup>50</sup>Bundesgesetzblatt für den Bundesstaat Österreich. Jahrgang 1937, ausgegeben am 24. September 1937, p. 1343

backed by efficient, yet perhaps simplistic and fallacious, conceptions and arguments against these grape wine varieties, ranging from market considerations to those concerning quality or mere taste.

#### The Austrian wine market in the 1930s

From 1870 to 1930, the total area of vineyards in Austria considerably shrunk, primarily because of vine diseases, especially *Phylloxera*, but also due to a lack of workforce during wartime. State support tried to reverse this development and managed to beat the curb from 1930 onwards, when the wine production area started to expand again. But the state aid also made vineyards prosper in non-traditional wine growing regions, often on more fertile ground, and to the detriment of other crops. As the new vineyards were often more productive than their older counterparts, the fear of overproduction started to gain ground<sup>51</sup>, just like in the rest of Europe. In the meantime, direct producers were gaining popularity because of their less work-intensive nature, proving useful in times of workforce scarcity, especially after the First World War<sup>52</sup>.

But this popularity raised eyebrows in political spheres, leading to the aforementioned formal nationwide prohibition. The justifications for this aversion included market considerations. Indeed, even though direct producers represented only a small part of the Austrian wine market, they were deemed too influential in the lower price barrier of "Schankwein" (wine by the carafe). Dr. Franz Wobischfrom the Austrian Ministry of Agriculture, warned that an enlargement of the directproducer cultures could lead to a flood of mass-wine, a phenomenon that had caused sales crisis in some regions of France<sup>53</sup>. In a statement on 1st March 1936, he further justified the new wine law by pointing to the danger of massive overproduction and a subsequent price decline in the wine market. Indeed, the "*methodless*" enlargement of new vineyards in Austria had to be banned in order to protect those winegrowers who made a living from wine production. Criticism was directed especially towards vineyards with direct producers, which would be needed to be addressed with swift action, just like in other European countries<sup>54</sup>:

österreichische Weinbau in einer nicht erwünschten Richtung entwickelt, indem vorwiegend außerhalb der Weinbaugebiete auf Aeckern ständig neue Weingärten angelegt werden. Das muß in absehbarer Zeit unbedingt zu einer Ueberproduktion an Wein und in weiterer Folge zur Absatzkrise und zu einem katastrophalen Sturz des Weinpreises führen. Dann werden gerade diejenigen Weinhauer, die ausschließlich vom Weinbau leben müssen, von dem Erträgnis ihres Weingartens den Lebensunterhalt für sich und ihre Familie nicht mehr bestreiten können,

<sup>52</sup>Zweigelt, F., 1923

<sup>&</sup>lt;sup>51</sup> Wobisch, F., 1935

<sup>&</sup>lt;sup>53</sup>Wobisch, F., 1935

<sup>&</sup>lt;sup>54</sup> Neue Wein-Zeitung, Das neue österreichische Weinbaugesetz. 1936: Nr. 19

Das Gesetz verbietet weiters das Anpflanzen von Direktträgerreben. Ueber die Direktträger und über das Problem, das sie — nicht nur für unseren Weinbau, sondern für den Weinbau überhaupt — bedeuten, ist so eingehend in Wort und Schrift berichtet worden, daß ich mir Ausführlicheres hierüber wohl ersparen darf. Ich möchte nur darauf verweisen, daß nahezu alle Staaten, in denen Weinbau betrieben wird, schon zur Erlassung von Verboten gegen die Direktträgerreben genötigt waren. Und zwar von Verboten, die meist viel weiter gehen als unsere Vorschriften. Sind doch in manchen Staaten außer dem Verbot der Anpflanzung auch gesetzliche Bestimmungen erlassen worden, daß die schon bestehenden Direktträgerweingärten innerhalb einer gewissen Frist gerodet werden müssen, weiters, daß von einem bestimmten Termin ab Direkt-

Another turning point in the use of market arguments against the spreading of direct producers came on 8 September 1936, at the First Central European Wine Congress, which took place in Vienna. The *Neue Wein-Zeitung* reported that all the resolutions submitted by opinion leader Dr. Fritz Zweigelt were adopted unanimously. One of the final resolutions of the congress concerned direct producer hybrids, which were defined as harmful for viticulture in general. The congress demanded to take action to make them disappear, on the grounds that their prohibition would be a useful means of improving the quality of wine and relieving the market for "mass-wine" 55:

1. Die Einschränkung der zur Kultur zugelassenen Rebsorten und das Verbot der Anpflanzung von Massenträgern wie auch von Ertragshybriden sind sehr empfehlenswerte Mittel, die Qualität des Weines zu verbessern und den Markt von Massenwein zu entlasten.

In another section on overproduction in the wine sector, the congress' final resolutions pointed out that direct producers should make space for quality wine grape varieties, as they would be the only ones able to guarantee the continued existence of wine growing<sup>56</sup>:

1. Die Tatsache des Ueberschusses an Wein erweist sich bei genauer Prüfung als Ueberschuß an minderen, leichten Weinen und Halbweinen. Infolgedessen ist die Haustrunkerzeugung, um Mißbräuche zu vermeiden, in den Ländern, in denen sie gestattet ist, auf das Aeußerste zu beschränken; andererseits haben die Direktträger und die minderen heimischen Massenträger den Qualitätssorten Platz zu machen, da diese allein imstande sein werden, die Existenz des Weinhandels wie des Weinbaues zu sichern.

These demands became reality with the implementation of the aforementioned wine law in 1936, underpinned by several additional arguments, including those of taste, quality, health and colliding industry interests.

<sup>56</sup>ibid.

Der Kongreß erkennt den Anbau von Hybriden als schädlich für den Weinbau; der Hybridenbau ist daher durch geeignete Maßnahmen möglichst allgemein und bald zum Verschwinden zu bringen.

<sup>&</sup>lt;sup>55</sup> Neue Wein-Zeitung, Erster Mitteleuropäischer Weinbaukongreß. 1936: Nr. 71

# Further arguments used against and in support of direct producers in Austria

The wine of hybrids obtained through crosses with or within American wine grape varieties has a more or less distinct strawberry or raspberry taste, commonly referred to as the "fox tone". Opponents of the direct producers used this fact to defame it. For example, a consultant of the Lower Austrian government wrote that the wines of direct producers had a strange taste<sup>57</sup>. Even though some people just adapted to the "fox tone", direct producer wine was used in big quantities for blends with other wines to reduce its specific taste. In 1923, the main society of Austrian winegrowers warned its members against the planting of hybrids, because they did not meet the quality and quantity needs<sup>58</sup>. According to Zweigelt's studies, mass-wines of Vitis vinifera (albeit treated with sulphur and copper) in general showed higher yields on the same area than direct producers<sup>59</sup>. This fact might explain the breeder's aversion to direct producers but cannot explain why it was completely prohibited nationwide. Even more remarkable is the fact that pages and pages of advertisements for carbon disulphide and related application technologies can be found in the "Messages of viticulture and cellaring of the association of viniculturists" on as well as in Zweigelt's book "Die Direktträger - Hybrides" producteurs directs". Though not entirely a part of the public debate, producers and traders of chemical plant protection might have played an important role in the prohibition of direct producers in Austria.

While some arguments focused on taste or reduced use of inputs, other sources claimed that consuming direct producer wines led to negative health effects, due to a higher content of methanol. Even though by 1929 the scientific consensus was that higher methanol levels were not to blame for health issues<sup>61</sup>, this prejudice was nonetheless continuously used in the political arena in order to defame direct producers, well into the late 1980s, a charge that had to be refuted once and again through scientific studies<sup>62</sup>.

On the other hand, even Dr. Zweigelt himself was well aware of the advantages provided by direct producer varieties: "Aramon [V. vinifera mass wine variety] needs Sulphur and Copper, while its opponent [direct producer varieties] protects itself against Peronospora and Oidium [Plasmopara viticula and Erysiphe necator]". In the fight against Phylloxera, Zweigelt recommended instead of direct producer planting the application of carbon disulphide for old stands of V. vinifera on their own stock and grafted vines for new vineyards<sup>64</sup>. This recommendation was repeated by the consultant of the Lower Austrian state government almost to the letter. Aside from the value stemming from the inherent resistances of direct producers, they were also supported for other qualities. For instance, some red direct producer varieties have a very strong colour, which brought them support from a prominent producer of sparkling wine. The wish of Mr. von Schlumberger (a winegrower and a wine merchant

<sup>&</sup>lt;sup>57</sup> Arthold, M., 1924

<sup>&</sup>lt;sup>58</sup>Mitteilungen der Weinbau und Kellerwirtschaft, Direktträger. 1923: Nr. 1-3

<sup>&</sup>lt;sup>59</sup>Zweigelt, F. et al., 1929

<sup>&</sup>lt;sup>60</sup>Zweigelt, F., 1923

<sup>&</sup>lt;sup>61</sup>Zweigelt, F. et al., 1929.

<sup>&</sup>lt;sup>62</sup>Eckhart, W., et al., 2008

<sup>63</sup> Zweigelt, F. et al., 1929

<sup>64</sup> Zweigelt, F., 1923

<sup>&</sup>lt;sup>65</sup>Arthold, M., 1924

himself) was to authorize these varieties for the purpose of colouring red wine, for instance<sup>66</sup>.

#### **Conclusions on Austria**

The rise of direct producers in Austria is mainly attributed to the economic advantages they entailed. Their vine shoots were cheaper than those of European ones. Their cultivation was less work intensive, since they did not have to be grafted. Their resistance against *Phylloxera*, powdery mildew and downy mildew saved money that would otherwise be spent on chemical plant protection products. After the *Phylloxera* catastrophe and the war, these were the main features in which growers of direct producers were placing all their hopes.

But those advantages were also responsible for the direct producers' demise. As they had the potential to significantly lower the price of the mass wine segment, they were a threat to the economic existence of other winegrowers. The European wine market was trembling with the threat of overproduction and under-consumption. These considerations were significantly stretched in order to successfully prohibit the use of certain wine grape varieties. Indeed, a mere regulation of the amount of vineyards would have been as effective and reasonable in achieving a fairer regulation of production. In Austrian literature (and elsewhere, as we shall see in the further course of this study), it is really not clear why these resonant market arguments led to the destruction of direct producer vineyards. That is why the significantly more subjective arguments pertaining to quality and taste, as well as the political influence of Lower Austrian winegrowers and Fritz Zweigelt, might have played a crucial role.

# 2. France

The case of France is of paramount importance in the history of direct producers, since the country has been a driving force not only in the development of certain hybrids, but also paradoxically in the introduction of the prohibitions in national and European laws that are mostly still in place today.

# **Introduction of American direct producers in France**

Until 1869, the effects of *Phylloxera* were confined to six departments of the Lower Rhône.<sup>67</sup> Gradually however, it spread all over the country and "[...] once the plague hit, the reaction was ever the same: 'The French winegrower... passed from indifference to incredulity, then to worry, and finally to despair'"<sup>68</sup>. Gale displays some figures pertaining to the 1870s, which show that vineyards had diminished by half: "Le Gard, which had 88,000 hectares of vines in 1871, had only 15,000 in 1879; during a similar period, the Hérault plummeted from 220,000 to 90,000 hectares; and the Valcuse went from 20,000 to 9,000" (Lachiver 1988, 416)<sup>69</sup>.

As soon as the American origin of *Phylloxera* was confirmed, the quest for natural resistance started, using the natural resistance traits of the culprits<sup>70</sup>. At the same time, quarantine measures were adopted, zones of contamination established and a number of prohibited

<sup>&</sup>lt;sup>66</sup>Wobisch, F., 1935

<sup>&</sup>lt;sup>67</sup>Gale, G., 2011: 14.

<sup>&</sup>lt;sup>68</sup>ibid. 15, citing *Garrier 1989, 45*.

<sup>&</sup>lt;sup>69</sup>ibid.: 15.

<sup>&</sup>lt;sup>70</sup>ibid.: 45.

activities were declared by the administration. The scale of the social and economic disaster created by the outbreak was immense. Indeed, in 1877, eight million people in France lived directly off the vine<sup>71</sup>. The crisis thus hit the population severely: "People moved to cities, or emigrated to Tunisia and Algeria, hoping to start over as winegrowers in a new, uncontaminated vineyard".

In the search for a solution, different threads were taken up, dividing those concerned into two camps. First, "the chemists", sometimes referred to as "the sulphurists", who were proponents of chemical treatments for the pure, attacked French vines (vigne francaise). The second category, coined "the Americanists", proposed looking for the solution in the resistant wine grape varieties native to North America. While the former were still bitter about the fact the bug had come with the direct producers, the latter saw an opportunity in their natural characteristics. And even though the former had a strong voice, the latter "Americanists" got down to work. "By 1882 it was clear that "La Défense" had failed. As much as Paris wanted to keep American vines out and traditional French practices in, it wasn't going to happen. Defending traditional French practices against the American insect scourge was simply too expensive and ineffective in terms of time, environment, labour and finance" 13.

Following excursions by French scholars to the United States, rootstocks of varieties like Concord, Clinton, Jacquez, Noah, Othello, Taylor (and others) were imported to France and planted. "By [1881], American vines had clearly proven themselves in many terrains to be reliable and profitable direct producers of a healthy, albeit ordinary, product" Some of them, especially in the beginning, showed adaptation problems. But these difficulties were as much cultural as they were agronomical. Indeed, "this question of taste was the major issue in the use of American vines as direct producers [...] [as] the wine from most of the American varieties was undrinkable". Therefore, regardless of their increasing use for practical reasons, the American wine grape varieties remained contested to some extent. At the same time, grafting on American varieties became the new talk of the town. However, it turned out that many of the prescribed rootstocks would not fit the French soils<sup>76</sup>. As a consequence, science turned to the lengthy creation of new hybrids, transferring the American resistances to European taste and quality, through crosses of traditional French varieties and American direct producers. This solution was championed by Montpellier University and has come to be known as the "Seibel Method". As a matter of fact, in 1958 about 30% of vines cultivated in France were such hybrids<sup>77</sup>.

# Overproduction crisis - Algeria & under-consumption in the late 1920s

In the early decades of the 20<sup>th</sup> century, the horror of *Phylloxera* seemed like distant history. Although *Phylloxera* remained a present menace in some parts of France, the newly bred hybrids significantly relieved the market. However, the market was to face another evil, that of wine overproduction, especially in the later 1920s<sup>78</sup>. In 1929, metropolitan France became

<sup>&</sup>lt;sup>71</sup>ibid.: 15.

<sup>&</sup>lt;sup>72</sup>ibid.: 58.

<sup>&</sup>lt;sup>73</sup>ibid.: 79.

<sup>1010.: 79.</sup> 

<sup>&</sup>lt;sup>74</sup>ibid.: 119.

<sup>&</sup>lt;sup>75</sup>ibid.: 91.

<sup>&</sup>lt;sup>76</sup>Gale, G., 2011: 134.

<sup>&</sup>lt;sup>77</sup>Doré. C. et al., 2006: 771.

<sup>&</sup>lt;sup>78</sup>ibid.: 770.

seriously worried about the amount of wine produced in Algeria<sup>79</sup>. That, along with the 1929 Wall Street Crash which led to theeconomic crisis and collapse, triggered a crash of wine prices in France (and other European countries).

Let's look at some production figures. Quéré<sup>80</sup> says that in 1934, 95 million hectolitres were produced in France, of which 15 to 20 million hectolitres could not be sold. Since 1875, the 15 departments of Midi had doubled their production from 15 to 30 million hectolitres<sup>81</sup>. In the meantime, Couderc argues that compared to metropolitan France, Algeria had some privileges in wine production: the freedom to plant plantations at a very low cost, practically non-existing taxes, and cheap labour force<sup>82</sup>. Thus, the wine production in Algeria also increased tremendously. Between 1928 and 1934, production in metropolitan France rose from 1,394,000 to 1,442,000 hectolitres, whereas in Algeria it rose from 221,000 to 373,000 hectolitres. In the department of Oran, from 1931 to 1933, vineyard areas had increased by 11,000 hectares, equal to about one million hectolitres. Millions of wine producers were thus facing bankruptcy.

# Legal responses

As a consequence of the dramatic premise of the 1930's, the French legislator adopted a series of laws and measures aimed at "curing" the wine market, mostly through the law of 24 December 1934, also prohibiting direct producer varieties under the same impetus. Most of the legislative action to maintain high quality wine production led to the creation of the "Appelation" regime, which also fought againt the fraudulent use of prestigious names. But the strategy also touched upon the use of hybrids, which were also in the radar of the Appellation d'Origine of Bordeaux, Champagne or Burgundy, which preferred the grafting solution to the hybrids, since it allowed them to keep their premium position. That is why the national government decided to restrict the use of cost-decreasing technologies, i.e. hybrid vines, which required less winegrowing experience, less pesticides and less capital.

"The first "quality law" that limited the use of hybrids was introduced in 1919 and modified in 1927 restricting Appellations wines to nonhybrid grapes. In addition, three other laws against hybrids were approved in less than ten years. First, the 1929 law forbade chaptalization for hybrids, a technique allowed for European vine varieties (Vitis vinifera). Second, the 1934 law stated that uprooted Vitis vinifera could only be replanted with vines registered by local authorities. Third, the 1935 law prohibited six vine varieties deriving from hybrids (Noah, Othello, Isabelle, Jacquez, Clinton and Herbemont). The invoked argument to support the 1935 prohibition was safety, since wines produced with American varieties were argued to contain a significant amount of methyl alcohol harmful for human consumption "83".

# The Law of 24 December 1934 and the order of 1935

France adopted wine laws in 1930, 1931 and 1933. However, as Mr. Cassez, the French Minister of Agriculture in office in 1934, stated in the debate at the National Assembly on 14

<sup>&</sup>lt;sup>79</sup> Meloni, G.., et al., 2012.

<sup>&</sup>lt;sup>80</sup>Quéré, M., 2012

<sup>&</sup>lt;sup>81</sup> ibid.: 30.

<sup>82</sup> Couderc, F., n.d.

<sup>&</sup>lt;sup>83</sup>Meloni, G., et al., 2012: 20.

December 1934, these three laws turned out to be inappropriate to avert the bankruptcy of wine producers: "[ces trois lois se sont révélées] *aujourd'hui incapables de sauver de la ruine la masse des vignerons*" <sup>84</sup>. The law that was supposed to cure the French wine market was voted on Christmas Eve of 1934. For American direct producers, the law was not really a present at all. It forbade the sale, offering for sale, purchase, transport or planting of a certain number of wine grape varieties, their names being Noah, Othello, Isabelle, Jacquez, Clinton and Herbemont. The list of the future illegal wine grape varieties was specified by a commission<sup>85</sup> and published in the Official Journal of 24 January 1935.

To better understand the goals pursued by the French, it is worth looking at the debate in the National Assembly, which took place on 14 and 15 December 1934. The Rapporteur underlined that the French draft law was more tempered than in other countries, where hybrids had been totally forbidden. He stressed that the Commission's desire was to forbid the cultivation of "certain" direct producer hybrids which produced "bad wine":

"Il ne s'agit pas de supprimer tous les hybrides. L'effort que nous vous invitons à faire en ce sens sera moins grand que celui de certaines autres nations. L'Allemagne, l'Australie, l'Autriche, la Bulgarie, le Chili, l'Espagne, la Grèce, la Hongrie, d'autres encore, ont pris des mesures législatives pour arrêter complètement la plantation des hybrides. Certaines autres nations en ont limité l'emploi. Nous vous demandons, beaucoup plus simplement, de dresser une liste des hybrides qui pourront être cultivés et, dans ce but, de fixer la composition d'une commission. Mais je précise qu'il n'est pas question de proscrire tous les hybrides. Le désir de la commission est simplement d'empêcher la culture de certains cépages ou producteurs directs qui produisent de mauvais vins. (Applaudissements)"87

M. Mairie, Member of Parliament, wanted to forbid any *abnormal* wine, no matter where it came from,and "*eliminate wines of inferior quality*":

"Je ne me suis pas mépris sur le sens du texte de la commission. Mais M. le rapporteur, à l'instant encore, n'a parlé que des hybrides. Or, je tiens à ie spécifier, je demande que tous les plants de vigne, quelle que soit leur origine, soient soumis à l'examen de la commission à instituer afin que soit mis un terme à la fabrication des vins anormaux. Mon amendement n'a pas d'autre but que d'éliminer du marché les vins de qualité inférieure. (Applaudissements)" 88

The President of the Council stated that the aim of the law was to "replace quantity by quality", regretting that the legislator was the one "obliged" to take such steps and not the "producers themselves".

"J'ai indiqué il y a quelques instants à la Chambre que le Gouvernement attachait une importance particulière à l'article 5. Dans notre pensée, cet article doit permettre, à

<sup>87</sup>Journal officiel de la République française. Débats parlementaires. Chambre des députés: compte rendu inextenso.

<sup>&</sup>lt;sup>84</sup>Journal officiel de la République française. Débats parlementaires. Chambre des députes: compte rendu inextenso.

<sup>&</sup>lt;sup>85</sup> According to Quéré, this commission is composed of two High Responsibles, two senators, two deputies and eight qualified representatives from vine associations and two directors of enological stations. See: Quéré, M., 2012: 31

<sup>&</sup>lt;sup>86</sup> The speaker means the « commission des boissons »

<sup>&</sup>lt;sup>88</sup>Journal officiel de la République française. Débats parlementaires. Chambre des députés: compte rendu inextenso.

l'avenir, de substituer à la quantité qui, aujourd'hui, tue le marché métropolitain et algérien, la qualité. (Très bien! très bien!) Pour y parvenir, nous ne disposons d'autre moyen que d'exercer un contrôle sur les plants; nous regrettons, d'ailleurs, d'être obligés de le faire. Il nous serait plus agréable de constater, dans un régime de liberté, que les producteurs font leur police eux-mêmes. (Applaudissements.) [...]"89

The president of the Commission of beverages wanted to see eliminated the plants "imported into France" that produced "poor" wines:

"Nous proposons de confier à une commission, dont la composition technique offre toutes garanties, d'éliminer les plants importés depuis longtemps en France et donnant des vins unanimement reconnus comme médiocres." <sup>90</sup>

By limiting its prohibition to a restricted list of six wine grape varieties, the French law-making bodies believed they had found an effective way of curbing overproduction, all the while maintaining a higher quality of wine. Even though they were unable to come up with a single properly constructed argument that would explain exactly how prohibition would be able to fight overproduction, the argument on quality was able to resonate deeply in the public opinion.

On Sunday 10 February 1935, the daily paper Le Midi Socialiste dedicated an article<sup>91</sup> to the new legislation, analysing the aim of the new law, which was to orientate French wine production towards improved quality by erasing wines with a foxy taste, denature the ancient wines of France:

"Cette mesure a été inspirée par le désir d'orienter la production française vers une amélioration de la qualité en supprimant peu à peu du marché les vins à gout foxé ou dont les caractères dénaturent les anciens vins de France" <sup>92</sup>.

The author of the article underlined that the legislator should not hesitate in enacting further prohibitions, if they help to improve the quality of French wine:

"[...] 4° En ce qui concerne les plantations qui restent permises par la nouvelle législation; propagande tendant à ce qu'il soit planté uniquement des cépages de qualité. Dans les récommendations à formuler dans ce sujet, il convient de songer à l'éventualité de nouvelles interdictions de cépages qui pourraient être édictées par décret"<sup>93</sup>.

Only after WWII was the French administration going to formally take on the American direct hybrids, through wide campaigns ordering the "uprooting of forbidden wine grape varieties", ordering that they must "disappear" before 1st December 1956".

.

<sup>&</sup>lt;sup>89</sup> ibid.

 $<sup>^{90}</sup>$ ibid.

<sup>&</sup>lt;sup>91</sup>Le Midi Socialiste, L'application des lois viticoles. 1935

<sup>&</sup>lt;sup>92</sup>ibid.

<sup>&</sup>lt;sup>93</sup> Le Midi Socialiste, L'application des lois viticoles. 1935



Both the enactment of the law and its following implementation triggered protests in certain wine growing regions of France: "Prise dans l'intérêt général de la viticulture française, elle a provoquée des protestation plus ou moins vives dans certaines régions viticoles" 94.

The measures were also criticised elsewhere. In Austria, the aforementioned expert Dr. Fritz Zweigelt published a profound analysis of the French measures in the Austrian newspaper "Neue Wein-Zeitung"<sup>95</sup>. His article was dedicated to the role of direct producers in the context of mass wine production. In various calculations, he displayed that the main reason for overproduction in France were the "enormous" plantations in Algeria. Zweigelt demonstrated that those very plantations belonged to a few owners, controlling the destiny of the French wine market. Zweigelt thought that a fair solution would be if all wine producers contributed to halting the crisis; however they seemed too powerful:

"Nun erhebt Faure die Anklage: Kann und darf es möglich sein, daß eine Handvoll Menschen das Schicksal des gesamten französischen Weinbaues beherrscht? Er will es nicht glauben und ruft in letzter Stunde zur Besonnenheit und radikalen Lösung auf, sonst bricht eine Katastrophe herein [...]"

He came to the conclusion that the French measures were insufficient in handling the overproduction crisis; moreover he stipulated that direct producers did not play a determining role in the crisis:

"Auch in Nordafrika spielen Direktträger eine Rolle; genauso wie im Midi. Auch dort werden sie einen gewissen Anteil an der Massenproduktion haben – genauere endgültige Zahlen haben wir nicht – entscheidend aber für die Krisenlage des französischen Weinbaus sind sie nicht. Sie sind es schon darum nicht, weil die Träger des Massenweinbaus andere einheimische Sorten sind [...]"

In 2013, Michel Quéré came to the conclusion that in view of the law's goals (reducing production), the prohibition of direct producers does not make sense, as their role is *insignificant* and *Noah*'s yield is "ridiculous":

"La guerre est déclarée aux hybrides producteurs directs « au gout détestable » qui pourtant ne jouent qu'un rôle insignifiant dans la surproduction. Le rendement du Noah est ridicule, comparé aux 300 héctolitres à l'hectare que peut produire l'Aramon en plaine irriguée Les principaux touchés sont les petits vignerons, alors que les

<sup>&</sup>lt;sup>94</sup>ibid.

<sup>&</sup>lt;sup>95</sup>Neue Weinzeitung, Die Direktträger im Lichte des Massenweinbaus. 1935: Nr. 19

<sup>&</sup>lt;sup>96</sup>ibid.

<sup>&</sup>lt;sup>97</sup>Neue Weinzeitung, Die Direktträger im Lichte des Massenweinbaus. 1935: Nr. 19. (emphasis in original.)

#### **Conclusions on France**

As we will see in the further course of this study, the express prohibition of the aforementioned six wine grape varieties from all classification (not just in quality wine) had nonetheless found its way into the European legal order by 1999, with a direct effect on all Member States. It has as a result been abrogated on 6 September 2003 in the French legal order for duplicity. Even in the face of extremely harsh legal provisions and accompanying campaigns against them, hectares of the "forbidden" wine grape varieties still exist in France. According to unconfirmed sources, about 70% of them are still planted<sup>99</sup>. Today, numerous actors, among them the association "Fruits oubliés" only, work for the rehabilitation of the six forbidden varieties, arguing that before that 1934 vote, an immense amount of lobbying by the big winegrowers had taken place, with extremely short deadlines for amendments and discussions. They consider that the six forbidden wine grape varieties ended up serving as scapegoats.

# 3. Germany

Compared to its Austrian and French counterparts, Germany chose a rather different approach to the *Phylloxera* invasion and direct producer wine grape varieties. Declaring infected vineyards to be "quarantined areas", the authorities put the main focus of legal action on the complete eradication of the bug, which included the destruction of all direct producers, as they were all seen as potentially infected carriers, not showing any symptoms.

# Chemical weapons - The Reblausgesetz

In quarantined areas, carbon disulphide was used to eradicate the insects in the soil. A layer of petroleum on the surface prevented them from escaping. The roots of the vines were then ripped out to a depth of 1.5 meters and burned. This method was successful in preventing the propagation of *Phylloxera*. In 1903, the vermin had little or no influence on the production and sale of wine in Germany. <sup>101</sup> There was, therefore, no need to use direct producer varieties to reconstitute destroyed vineyards and the number of direct producers in Germany remained insignificant.

In 1929, nearly 99 percent of German vineyards were not grafted. 102 German wine growers feared that *Phylloxera* would be introduced into their regions through direct producer vines, even through mere rootstock use. 103 The concern: When *Phylloxera* did come into a direct producer vineyard, it made no visible effects on the vines because of its high resistance. 104 The Germans were worried they wouldn't be able to detect the infection and then use chemical solutions to set things right.

<sup>&</sup>lt;sup>98</sup>Quéré, M., 2012: 31.

<sup>&</sup>lt;sup>99</sup>Wikipedia, Hybride producteur direct.

<sup>&</sup>lt;sup>100</sup>Association fruits oublies, Les cépages interdits.

<sup>&</sup>lt;sup>101</sup> Gale, G., 2011: 176f.

<sup>&</sup>lt;sup>102</sup>Zweigelt, F., et al., 1929: 327.

<sup>&</sup>lt;sup>103</sup>Kerschbaum (DBP), in: Stenographische Reichstagsprotokolle Bd. 428, 182. Sitz. S. 5741.

<sup>&</sup>lt;sup>104</sup>Zweigelt, F., et al., 1929: 327.

This set a generalised mood against direct producers in the country. The *Reblausgesetz* (*Phylloxera* law) of 1904 gave German federal states the power to fight direct producers, even if they were not explicitly mentioned in the law (§14). The law's §2 Abs.3 indeed stated that competent authorities could prohibit or restrict "the cultivation of vines or special kinds of vines [...] on certain areas or within certain borders [...]". The implementing regulation of the *Phylloxera* law reads:

"Der Anbau aller aus Amerika heimischen Reben oder von Kreuzungsprodukten solcher Reben untereinander oder mit anderen Arten [z.B. Vitis vinifera] ist, abgesehen von Versuchen [...] in allen Weinbaugebieten zu untersagen insoweit nicht durch Beschluss des Bundesrats auf Grund §13Abs.2 des Gesetzes die Undurchführbarkeit der Unterdrückung der Reblaus anerkannt worden ist." <sup>106</sup>

i.e.: "The cultivation of all American vines or crossings of such vines amongst themselves or with other species [e.g. Vitis vinifera] is, except for experiments [...] prohibited in all wine areas, inasmuch as a decision of the Bundesrat [2<sup>nd</sup> Chamber]based on §13Abs.2 of the law does not recognize the impracticability of the elimination of *Phylloxera*."

In some states, direct producers were expressly prohibited. However, in 1925 (resp.1924), the states of Württemberg and Baden allowed the planting of American direct producers only to prohibit it again 1929 (resp.1926). During this time, approximately 4,000 hectares of American direct producers were planted, providing subsistence to 30,000 to 35,000 farmers. Because these states neighboured France, direct producer wine grape varieties easily made it across the border. Direct producers in Germany were not only restricted to a very small area, but also limited to a very brief period of time. A further step towards the comprehensive prohibition of direct producers in Germany came in 1930.

# The extinction of direct producers

The wine law of 29 July 1930 prohibited products from direct producers in all imaginable aspects. The text's §13 outlawed the marketing of direct producer wine and §11 prohibited the production of wine for one's own use. §14 and §15 outlawed the import and production respectively of sparkling wine, brandy and even vinegar from direct producer wine. Violation of the law warranted a prison term of up to two years (§26) and §28 decreed the destruction of all products and substances in case of conviction. In this case, wine growers were given five years to switch to other varieties or crops (§34).

At the same time, supported by the *Reblausgesetz* of 1904, the Bavarian government began enforcing the destruction of direct producer vines. This was met with resistance. 4,000 farmers assembled to hold a rally that was brutally dissolved by Bavarian police forces. On behalf of the peasants, members of the German Communist Party brought forth a petition in the *Reichstag* to demand an end to the prohibition of direct producers. They considered the government measures to be only in the interest of farmers with significant property holdings,

-

<sup>&</sup>lt;sup>105</sup> Deutsches Reichsgesetzblatt 1904: 261ff.

<sup>106</sup> Verordnung zur Ausführung des Gesetzes, betreffend die Bekämpfung der Reblaus, 1935

<sup>&</sup>lt;sup>107</sup> Diez (Zentrumspartei), in Stenographische Reichstagsprotokolle Bd. 428, 200. Sitz. S. 6371.

<sup>&</sup>lt;sup>108</sup> Zweigelt, F., et al., 1929: 327.

<sup>109</sup> Deutsches Reichsgesetzblatt 1930, Teil 1, p. 355ff.

<sup>&</sup>lt;sup>110</sup> Hoernle (KP), in Stenographische Reichstagsprotokolle Bd.428, 181. Sitz. S. 5669.

including members of the *Reichstag* itself.<sup>111</sup> The National Economic Commission received the petition, then prepared a list of four proposals that were balloted in the *Reichstag*. The first proposal (reversal of judgments on direct producer farmers) was rejected; the other three (funding for transfer to other crops, one year remittance of taxes for small direct producer growers, and stricter control of the law) were approved.<sup>112</sup> German nationalists viewed direct producers to be a threat to the thousand-year-old German-quality viticulture and thus did not support the Communist Party's petition to end the prohibition.<sup>113</sup>

# The survivors - Direct producer breeding in Germany

The strict legislation and its rigorous implementation wiped out all direct producers from German soil. There was, however, one famous exception: "An exception were the German wine and vine research establishments. Thus, for example, Geisenheim and Geilweilerhof kept their hybrid vines and continued their research, which today are producing rich payoffs, with mildew resistant, fine-flavoured varieties such as Regent and Solaris." Regent, a red wine grape variety whose ancestors include Noah and Othello (old American hybrids today prohibited by EU legislation), accounts for about 2,065 hectares. of vineyards in Germany. Solaris, a white wine grape variety, makes up 54 hectares. Scientists are still eager to breed new varieties capable of facing present and future challenges.

# **Conclusions on Germany**

Like in other European countries, the prohibition of direct producers in Germany from 1900 to 1940 was primarily politically and economically motivated, and driven by fear. In contrast to other countries, however, direct producers did not play a significant role in the German wine market and thus were easily eradicated due to fear of *Phylloxera* and downy mildew. Although some sources have connected the prohibition of direct producers to National Socialist ideology<sup>117</sup>, it could not be corroborated during this research. The connection may have derived from the fact that German law was more rigorously enforced during National Socialism, thus giving more resonance to the rigorous measures.<sup>118</sup> Especially from the mid-1930s, state-run vine breeding ("*Reichsrebenzüchtung*") attempted to breed the "ideal vine" by using American hybrids. The sources of resistance to *Phylloxera*, powdery and downy mildew of grapevine all derived from American wine grape varieties.<sup>119</sup> However, just four years later (during the German Reich) the seed decree of 1934<sup>120</sup> banned from the market 90% of the crop varieties allowed to be marketed in Germany.<sup>121</sup> Such movement to regulate crop varieties must have echoed on direct producers, just as it seems likely that the prevailing

<sup>&</sup>lt;sup>111</sup> Schreck (KP), in Stenographische Reichstagsprotokolle Bd.427, 165. Sitz. S. 5105.

<sup>&</sup>lt;sup>112</sup> Reichstag IV. Periode 1928 Drucksache Nr. 2055.; Stenographische Reichstagsprotokolle Bd. 428, 183. Sitz. 5808f.

<sup>&</sup>lt;sup>113</sup> Haag (DNV), in Stenographische Reichstagsprotokolle Bd. 428, 183. Sitz. S. 5780.

<sup>&</sup>lt;sup>114</sup> Gale, G., 2011: 279

<sup>115</sup> Deutsches Weininstitut, 2013

<sup>116</sup> Statistisches Bundesamt 2008: 198ff

<sup>&</sup>lt;sup>117</sup> Gale, G., 2011: 204.

<sup>&</sup>lt;sup>118</sup> Verein Freunde des *Uhudler*; *Uhudler*, das Original aus dem Südburgenland.

<sup>&</sup>lt;sup>119</sup> Rühl, e-mail correspondence.

<sup>&</sup>lt;sup>120</sup> Deutsches Reichsgesetzblatt I 1934 p. 248

<sup>&</sup>lt;sup>121</sup> Heim, S., 2002: 97ff

"phyto-eugenic" discourse of the time had a significant influence on German wine laws.

### 4. Portugal

Like in most European countries, the prohibition of direct producers in Portugal came in the 1930s. And just like in most of them, particularly in Spain, the rationale was mostly economic, whileits prohibition was swift and efficient.

# A swift prohibition propelled by market considerations

According to the report of the minister's office published in 1935, the total area under cultivation and production per unit increased while consumption decreased. This led to a severe crisis in the wine sector. There was an imbalance of supply and demand, decline in prices, a reduction in the purchasing power of wine growers and their workers, and subsequent negative impacts on other sectors of the economy, such as commerce, industry and transport: 122

1.—Os vinhos comuns, para só falar dêstes, continuam em crise aguda. Aumentou nos últimos anos a área de plantação, aumentou a produção por unidade de superfície e o consumo deminuíu. Daí o desequilíbrio entre a produção e o consumo, o excesso de vinhos e de aguardentes, o excesso de oferta em relação à procura, a baixa de preços, o retardamento nas vendas e nas liquidações, as dificuldades de armazenamento. E, por conseqüência, os embaraços e dificuldades dos vinicultores, a redução dos salários, a deminuição do poder de compra dos que vivem da vinicultura e a repercussão dêste estado de cousas nos outros sectores da actividade económica: o comércio, indústria, transportes, etc.

Between 1919 and 1933, production increased significantly<sup>123</sup> while the total export of winedecreased during the same period<sup>124</sup>:

Producão de	vinhos	na	continente	Mádlas	allinationala
ouução uç	********	110	continente	megias	au≀nauenais

					Aı	ios						Hectolitros
1919-1923 . 1924-1928 . 1929-1933 .		_	_	_	_							5.015:831 5.776:544 7 023:050

Exportação de vinhos (total) — Médias quinquenais

•	Ano	· s						-	Hectolitros	Valor Milhares de escudos	Preço unitário
1919-199 1924-199 1929-198 1934 (O	28	•	:	:	:	:	:	1	1.455:743 1.120:099 808:620 704:089	111:752 293:918 242:343 153:936	70358 262340 299369 218363

Under these prevailing circumstances, the measures to be adopted by law envisaged two objectives: to prepare the adjustment of production and consumption, and to eliminate excesses from the market. Consequently, the minister's office argued that an intensification of the crisis through new increases in production was not to be tolerated and thus, new plantings

\_

<sup>&</sup>lt;sup>122</sup> Imprensa Nacional de Lisboa, Ségunda-feira 28 de Janeiro de 1935, Ministério da Agricultura - Gabinete do Ministro, 22/35 SÉRIE I, p. 202.

<sup>&</sup>lt;sup>123</sup> ibid.

<sup>&</sup>lt;sup>124</sup> ibid.: 203

had to be prohibited.

The Ministry of Agriculture's report further emphasized that the repression of production alone would not be sufficient; rather, it had to be constrained. The first measure was aimed at direct producers, which existed in high quantity, primarily within the demarcated regions of *Vinho Verde* (Green Wine) and, according to the report, had adverse effects on both its reputation and the cultivation of corn<sup>125</sup>:

&. — Mas não basta impedir o aumento de produção. É preciso restringi-la. O primeiro acto que se pratica neste sentido volve-se contra os produtores directos. Existem em maior quantidade dentro da região demarcada dos vinhos verdes, com prejuízo da boa reputação dêsses vinhos e da cultura do milho. Existem ainda,

Moreover, the Minister's Office claimed that direct producer wine was shallow and unbalanced, tasted of herbs, strawberry, and raspberry and did not have good conditions for conservation. Above all, it was seen as disruptive for the wine economy due to its abundance and low price. The report stated that it would become the wine of the poor. However, if this was true by virtue of its low price, it was also claimed that it would not benefit the needy because it was derived from a plant that did not create enough employment for its care and cultivation<sup>126</sup>:

cêrca de 174:000 pipas. É um vinho baixo, desequilibrado, de sabor a ervas, a morango, a framboesa, sem condições de conservação e sobretudo perturbador da economia vinícola pela sua abundância e baixo preço. Já se lhe chamou vinho de pobres. Se é de pobres por seu baixo preço, não favorece os necessitados, porquanto provém de uma planta que não emprega braços em cuidados de cultura e de amanho.

In addition, the cultivation of direct producers was considered detrimental to the cultivation of corn since direct producers, due to their quite important size, encroached upon surrounding ranges of plantation<sup>127</sup>:

Por último, é prejudicial à cultura do milho, porque sombreia com o seu desenvolvido porte a faixa adjacente à linha de plantação.

The Minister's Office also claimed that they were not alone in condemning direct producers. Furthermore, the report questions how the Minho region could claim to be different from *Vinhos Verdes* in order to defend its genuineness, all the while allowing wine of direct producers that counterfeited its quality wine<sup>128</sup>. As a result, the government decided to eliminate direct producer wine from the market, viewed as malevolent competition for its own quality wines. In addition, the producers of *Vinho Verde* were declared to be directly and immediately preferential and – free from the competition of American wines – guaranteed to be put on the market at more compensating prices in the future:

a) Eliminar do mercado os vinhos de produtores directos e a sua nefasta concorrência;

Os produtores de vinho verde são directa e imediatamente beneficiados e, livres de concorrência daqueles vinhos — os americanos —, têm, de futuro, assegurada a colocação dos seus, a preços mais compensadores. Por

It became clear that the Portuguese Ministry presented the eradication of direct producers

<sup>&</sup>lt;sup>125</sup> Imprensa Nacional de Lisboa, Ségunda-feira 28 de Janeiro de 1935, Ministério da Agricultura - Gabinete do Ministro, 22/35 SÉRIE I, p. 204.

<sup>&</sup>lt;sup>126</sup>ibid.

<sup>&</sup>lt;sup>127</sup>ibid.

<sup>&</sup>lt;sup>128</sup> ibid.

from the vineyards and market as an adequate solution to problems of overproduction and under-consumption, but also to stop the competition from lower priced, and at times fraudulent wine.

# Official legal prohibition of direct producers

In this very market oriented and protectionist context, several stringent laws were adopted to not only prohibit but also eliminate direct producers in Portugal. In January 1935, the attention of the *Estado Novo* regime in Portugal had already shifted to direct producers for the first time. Via the official gazette, the Ministry of Agriculture disclosed the adoption of two decree-laws (N° 24976 and N° 24977) that prohibited the planting of vineyards, enacted the obligation to graft, substitute or uproot existing direct producers, and prohibited the consumption of wine derived from such. Shortly thereafter, an ordinance (N° 8004) set the number and area of action of the "mobile brigades" that would lead and direct the execution of these laws. On 23 March 1935, the decree-laws became law (N° 1891), officialising the demise of these varieties in Portugal.

#### Law-Decree N° 24976

Adopted on 28 January 1935, the law-decree No. 24976 encompassed rigorous measures to ensure the destruction of direct producer hybrids in the Portuguese territory. Indeed, setting the general tone, Article 2 regulated the obligation to graft, substitute or uproot all existing direct producers by 30 March 1936. Every wine grower had to graft, substitute or uproot at least half of their direct producers by 30 March 1935<sup>129</sup>.

```
Art. 2.º É obrigatória a enxertia, a substituição ou arrancamento de todos os produtores directos existentes até ao dia 30 de Março de 1936.

§ único. Cada viticultor enxertará, substituirá ou arrancará metade, pelo menos, dos produtores directos que possuir até ao dia 30 de Março de 1935.
```

Article 3 ordered the destruction of existing direct producers in nurseries within 40 days. The owners were to be compensated by free vine seedlings from the state to the extent of 10 percent and within a time range of two years<sup>130</sup>:

```
Art. 3.º Os produtores directos existentes em viveiros serão destruídos no prazo de quarenta dias, a contar da entrada em vigor dêste decreto, e os seus proprietários indemnizados, por cedência gratuita de outros bacelos dos viveiros do Estado, na razão de 10 por cento e no prazo de dois anos.
```

More generally, the Decree also prohibited the purchase and sale, commerce and transit of direct producers within the Republicand the grafting of vine seedlings.<sup>131</sup>

```
Art. 5.º É proïbida a compra e venda, o comércio e trânsito de produtores directos no continente da República.
```

```
Art. 6.º É proïbida a enxertia dos bacelos plantados depois da vigência do decreto n.º 21:086, de 13 de Abril de 1932, salvo o disposto no artigo 2.º dêste decreto.
```

These provisions were meant to eradicate all existing direct producers either in a direct cultivation scheme, or in a grafting scheme.

30

<sup>&</sup>lt;sup>129</sup> Imprensa Nacional de Lisboa, Ségunda-feira 28 de Janeiro de 1935, Ministério da Agricultura - Gabinete do Ministro, 22/35 SÉRIE I, p. 204.

<sup>&</sup>lt;sup>130</sup> ibid.: 206.

<sup>&</sup>lt;sup>131</sup>ibid.

#### *Law-Decree N° 24977*

The second relevant legislation came with Law-Decree N° 24977, which was related more specifically to the marketing and consumption of wine produced with the prohibited wine grape varieties. Article 1 prohibited the release of wine for consumption derived from direct producers, except that of agricultural households of the respective wine growers. The reserve for the consumption of agricultural households had to be determined by a uniform percentage on production and upon the expertise of the viticulture organisms<sup>132</sup>:

Artigo 1.º O vinho de produtores directos não pode ser lançado no consumo, salvo o das casas agrícolas dos respectivos vinicultores.

§ único. A reserva para o consumo das casas agrícolas será determinada por uma percentagem uniforme sobre a produção e sob parecer dos organismos vitivinícolas.

Furthermore, stocks of the referred wines had to immediately be denatured with lime water or other appropriate substances by agents of the Technical Inspection of the Agricultural Industries and Commerce, which led to the chained sealing of existing barrels<sup>133</sup>:

Art. 2.º Os referidos vinhos serão imediatamente desnaturados, com leite de cal ou outra substância apropriada, pelos agentes da Inspecção Técnica das Indústrias e Comércio Agrícolas ou por outros especialmente nomeados ou contratados para êsse fim, e sob a direcção da referida Inspecção, podendo também selar as vasilhas.

Just like in the case of uprooting, state intervention went quite far, and denatured wines deriving from direct producers had to be acquired by the viticultural commission of the *Vinhos Verdes* region for the price fixed by the Ministry of Agriculture and under supervision of the same commission<sup>134</sup>:

Art. 4.º Os vinhos de produtores directos, desnaturados, serão adquiridos pela comissão de viticultura da região demarcada dos vinhos verdes, ao preço que fôr fixado pelo Ministro da Agricultura, sob parecer da mesma comissão.

# Ordinance N° 8004

This ordinance agreed to set the number and areas of action of the "mobile brigades" that would lead and direct the execution of decree-law N° 24976 of 28 January 1935. The government of the Portuguese Republic mandated by the Ministry of Agriculture was to create eight brigades, which should be distributed to the designated areas <sup>135</sup>:

<sup>&</sup>lt;sup>132</sup>Imprensa Nacional de Lisboa, Ségunda-feira 28 de Janeiro de 1935, Ministério da Agricultura - Gabinete do Ministro, 22/35 SÉRIE I, p. 207 .

<sup>&</sup>lt;sup>133</sup>ibid.

<sup>134</sup> ibid

<sup>1</sup>b1d.

<sup>&</sup>lt;sup>135</sup> Imprensa Nacional de Lisboa, 11 de Fevereiro de 1935, Ministério da Agricultura - Direcção Geral dos Serviços Agrícolas – Divisão de Produção Agrícola, 33/35 SÉRIE I, p. 263.

Convindo fixar o número e as áreas de acção das brigadas móveis que terão de orientar e dirigir a execução do decreto lei n.º 24:976, do 28 do Janeiro do corrente ano: manda o Governo da República Portuguesa, pelo Ministro da Agricultura, que sejam desde já criadas oito brigadas móveis, cuja missão se estenderá às áreas

abaixo designadas:

os distritos de Braga, Pôrto e Viana do Castelo e os concelhos de Mondim de Basto e Ribeira de Pena, do distrito de Vila Real; Arouca, Castelo de Paiva e Vale de Cambra, do distrito de Aveiro, e Resende e Sinfãis, do distrito de Viseu.

n brigada, com sede na cidade de Vila Real. -- Abrangerá a região demarcada do Douro.

III brigada, com sede na cidade de Viseu. — Abrangerá a região demarcada do Dão.

## Law N° 1891

The final demise of direct producers in Portugal was signed on 23 March 1935, when the two aforementioned decree-laws became law (N° 1891). This instrument re-affirmed the guiding principle of prohibition, grounded on confiscation of all vines and the ban to sell the wine produced thereof.

Article 2 prohibited the cultivation, purchase, sale and transport of American direct producers throughout the continent. Direct producers that were found at disposal or in transit were to be confiscated and those grown in nurseries were to be destroyed within 40 days <sup>136</sup>:

Art. 2.º Ficam proibidas em todo o continente a cultura, compra e venda e o transporte de produtores di-rectos americanos, devendo ser apreendidos os encon-trados à venda ou em trânsito e destruídos os que existirem em viveiro no prazo de quarenta dias, a contar da vigência desta lei.

Article 3regulated the obligation to graft, substitute or uproot all direct producers until 15 May 1937<sup>137</sup>:

Art. 3.º São obrigatórios a enxertía, substituição ou arrancamento de todos os produtores directos até 15 de Maio de 1937.

Article 8prohibited the release of wine deriving from American direct producers for consumption. Already existing wine had to be immobilized and denatured by the agents of the Technical Inspection of the Agricultural Industries and Commerce. Excluded from this rule was wine for the consumption of the household of the respective wine grower<sup>138</sup>:

Art. 8.º É proïbido lançar no consumo o vinho dos produtores directos americanos, e o que existir deve ser imobilizado ou desnaturado pelos agentes da Inspecção Técnica das Indústrias e Comércio Agrícolas ou pecção Tecnica das Indústrias e Comercio Agricolas ou outros, especialmente nomeados ou contratados para êsse fim, sempre sob a direcção da referida Inspecção. § 1.º Exceptua-se do disposto neste artigo o vinho para consumo das casas agrícolas dos respectivos vinicultores, numa percentagem uniforme, a fixar sob parecer dos organismos vitivinícolas.

# **Conclusions on Portugal**

As in France, the wine market of Portugal at the time of the prohibition of direct producers

<sup>&</sup>lt;sup>136</sup>Imprensa Nacional de Lisboa, 23 de Março de 1935, Ministério da Agricultura, 67/35 SÉRIE I, p. 423.

<sup>&</sup>lt;sup>137</sup>ibid.

<sup>&</sup>lt;sup>138</sup> ibid.: 424

was unbalanced. Consumption was low and production was high. The direct producers were eliminated to make space for *Vinhos Verdes*. They were seen as a competition to quality wines because of their abundance and low price and officials considered their taste as not good enough for conservation. Nevertheless, direct producers survived the times in some areas of Portugal as well as on Madeira and the Azores.<sup>139</sup> These regions received special treatment with regards to direct producers all the way up to 2006 at the European level. The grapes of forbidden varieties were allowed to be used in wine production destined to stay within the region, even though an eradication date was set for 31 December 2013<sup>140</sup>.

# 5. Spain

In the case of Spain, it is interesting to note that direct producers did not seem to have been such a prominent topic as in other European countries. The prohibition of direct producers came quite late compared to other countries, mainly through the impetus of more "important" wine growing countries, especially France.

# Hibridos Productores Directos - Historical background

The development of the wine sector as well as the spread of direct producers (*HibridosProductoresDirectos* in Spanish) greatly varies throughout the different regions of Spain. In humid regions in particular, direct producers gained some importance due to their high levels of resistance. Direct producer hybrids were introduced in Spain as an attempt to counter the plague of *mildium* and *oídium*. Some of the resulting hybrids between *Vitis vinifera* and American varieties were to a certain extent also resistant to *Phylloxera*. The first sighting of *Phylloxera* in Spain occurred in 1878 in Málaga. New hybrids were introduced in various provinces: Castellón, León and Galicia, especially in the very humid region of Pontevedra.

# Legal history: from assent to prohibition?

# El Estatuto del Vino 1933 - direct producers are not an issue

In his 1929 analysis, Zweigelt points out that unlike in other European countries, direct producers in Spain were not perceived to be a major problem in the wine sector. In this context Zweigelt cites Mr. Gräter, an Austrian specialist of Spanish viticulture, who stated that direct producers were rarely grown in Spain and that there was no legal regulation for direct producers simply because it was not necessary. He linked this reality to favourable natural conditions in Spain, condemning instead over-production and the backwardness of some areas

<sup>&</sup>lt;sup>139</sup>Verein Freunde des *Uhudler*, email correspondence.

<sup>&</sup>lt;sup>140</sup>Article 18 (2) of Regulation (EC) No 247/2006 states that Notwithstanding Article 19(1) of Regulation (EC) No 1493/1999, grapes from prohibited direct-producer hybrid vine varieties (Noah, Othello, Isabelle, Jacquez, Clinton and Herbemont) harvested in the Azores and Madeira may be used for the production of wine which must remain within those regions. By 31 December 2013 Portugal shall have gradually eliminated vineyards planted with prohibited direct-producer hybrid vine varieties, with, where appropriate, the support provided for in Chapter III of Title II of Regulation (EC) No 1493/1999. Portugal shall notify the Commission, each year, of the progress made in converting and restructuring areas planted with prohibited direct-producer hybrid vine varieties.

<sup>&</sup>lt;sup>141</sup> Mees, L., et al. 2005: 70

in regard to oenology as the "plagues" of Spanish wine production. 142

However harsh, Gräter's assessment appears to be accurate. Or at least reflected in the laws enacted at the time. The *Estatuto del Vino* of 1933, the first comprehensive regulation of the Spanish wine sector, did not include any mention of "hybrid problems". The Spanish Gazette from 13 September 1932 shows how the Ministry of Agriculture justified the adoption of the *Estatuto del Vino* differently. Spanish agriculture is described in this document as being in a "chaotic state". Furthermore, the importance of certain crops for export, including wine, is highlighted. The statute was enacted to resolve other problems within the wine sector. These were defined as including: the random character of demand; abundance and shortage in other wine-producing countries; disorganization of domestic consumption; impurity and declassification due to a lack of rigorous inspection; and tax regimes. Unlike laws in other European countries at the time, the statute does not mention direct producers or provide any definition of wine that excludes varieties other than *Vitis vinifera*.

# 1955: Temporary prohibition

In fact, it was only in 1955 that an order issued by the Ministry of Agriculture excluded direct producers from grafting practices. Article 8 of *Orden 16 julio 1955* states that breeders are free to plant what they wish, and to trade and circulate cuttings or grafts under the specific standards, further specifying that the "planting, sale or use as a graft of direct producers are to remain prohibited until a new order." The order seems to want to encourage the production of "quality wine". According to Mr. Yravedra, who was involved in the subsequent creation of *LEY 25/1970* as a rapporteur, this order was ineffective without a corresponding law to support it, which is why a new wave of restrictions was enacted fifteen years later. 146

# The comprehensive prohibition of direct producers in 1970

The comprehensive prohibition of direct producers was introduced with the *LEY 25/1970*, *de 2 de diciembre*, *de Estatuto de la Viña*, *del Vino y de los Alcoholes*, adopted on 2 December 1970. In the preliminary title, chapter 2, article 4, it is stated that according to this law a "grape" is defined as the fruit of *Vitis vinifera*.<sup>147</sup>

# CAPITULO II

#### DEFINICIONES

Sección primera. - De la uva y de sus derivados inmediatos

Artículo cuarto.-- A los efectos de la presente Ley, uva es el fruto de la «Vitis vinifera L».

Se denominan:

Uno. Uva de vinificación: La uva fresca madura y sobremadura en la misma planta o soleada después de la vendimia, sin

In the first title, chapter 1 on the plantation of wine grape varieties, article 37A states that the planting and replanting of hybrids between *V. americana* and *vinifera* for the production of grapes and grafts are prohibited.<sup>148</sup>

<sup>&</sup>lt;sup>142</sup> Zweigelt, F., et al., 1929: 353.

<sup>&</sup>lt;sup>143</sup> Gaceta de Madrid. Núm. 257. 13. Septiembre 1932, p. 1884.

<sup>&</sup>lt;sup>144</sup> ibid

<sup>&</sup>lt;sup>145</sup> BOE Núm. 211. 30. julio 1955, p. 4660.

<sup>&</sup>lt;sup>146</sup> Yravedra,, G., e-mail correspondence.

<sup>&</sup>lt;sup>147</sup> BOE Núm. 291. 5 diciembre 1970. p. 19817.

<sup>&</sup>lt;sup>148</sup> ibid.: 19820.

Articulo treinta y siete. Quedan prohibidas las nuevas plantaciones y las replantaciones:

- A) Con hibridos de vid americana y vinifera como productores directos de uva. así como la utilización de aquéllos como injertos,
- B) Can variedades no autorizadas para el fin a que se destinen.
- C) Con variedades dedicadas a vinificación en terrenos de regadio.

In the second title, chapter 2, article 67 on "impure products that are not suitable for consumption", article 67C states that wines that show one of the following characteristics are excluded. This list includes "[number] four. Those from hybrid direct producers [...]". 149

> Artículo sesenta y siete.—Se considerarán como no aptos para el consumo:

- A) Los adulterados.
   B) Los que rebasen los márgenes de tolerancia establecidos en el articulo sesenta y uno.

  C) Los vinos que tengan alguno de los caracteres si-

Cuarto. Los procedentes de hibridos productores directos y de variedades de uvas no autorizadas para vinificación y sus mezclas con otros de composición normal.

In the preparatory works of LEY 25/1970, one can find some justification for its creation and the simultaneous revision of the *Estatuto del Vino* of 1933, which accompanies the enactment of the new law. The main reason is stated as the adaptation of the *Estatuto* to new economic and technical processes as well as the need to improve and complete standards. Progressive integration in Europe is further mentioned, as it is stated that various agreements adopted in other European countries could have an impact on the Spanish wine market. Another reference is made to adherence to the guidelines of international institutions joined by Spain, such as the *International Organization of Vine and Wine*. <sup>150</sup> One of the main reasons appears to be economic and prestige problems regarding export to countries that prohibit the production or commercialisation of direct producers. Other motivations for the prohibition were the promotion of quality, avoidance of fraud, and the absence of extreme weather conditions, making the use of direct producers inevitable. 151

Mr. Yravedra also states that the main reason to prohibit direct producers were the import prohibitions of other European countries (e.g. Yugoslavia). He attributes these import prohibitions to the poor quality of wine deriving from direct producers. These have organoleptic defects that are responsible for their famous "foxy" taste and malvina, which makes it easy to detect direct producer wine blended with other wine. Therefore, it was deemed necessary to make clear that grapes must come exclusively from Vitis vinifera to avoid direct producers and any consequent disruption in the export market. 152

# The substitution of 1980 and direct producers today

In an even more restrictive fashion, Spanish authorities took punitive steps towards direct producers, ten years after their widespread prohibition. With the REAL DECRETO 2338/1980 de 5 de septiembre, que regula el régimen de autorizaciones para la plantación de viñedo durante la campaña 1980-81, the Ministry of Agriculture ordered the demolition or substitution of direct producers, while granting compensation to growers who put this into

<sup>&</sup>lt;sup>149</sup> BOE Núm. 291. 5 diciembre 1970. p. 19822.

<sup>&</sup>lt;sup>150</sup> ibid.: 19817.

<sup>&</sup>lt;sup>151</sup> Hidalgo, F., 2011.

<sup>&</sup>lt;sup>152</sup> Yravedra, G., 2010

practice. 153

c) Asimismo, conforme a lo previsto en el artículo cincuenta y tres del Decreto ochocientos treinta y cinco/mil novecientos setenta y dos, se fomentará el arranque o sustitución de los vinedos constituidos por híbridos productores directos, existentes en todo el territorio nacional. Se podrá optar al arranque y cambio a otro cultivo o a la sustitución por variedades preferentes en las mismas condiciones del apartado anterior.

Dos. Se concederán auxilios para fomentar las sustituciones de viñedos envejecidos y para el arranque o sustitución de aquellos constituidos por híbridos productores directos, teniendo las inversiones que se generen por estos conceptos acceso preferente al crédito oficial.

This policy was successful in the regions of Castellón and León, but not in the province of Pontevedra in Galicia. This is due to the facts that wine growers and consumers in this region are very attached to their traditions, and wine from direct producers is sold for its rich colouring, a property highly valued in Galicia. <sup>154</sup> In any case, use of the remaining direct producers in this area still remains restricted. They cannot be branded or marketed in bottles but are intended solely for farm consumption or ultimately distillation. <sup>155</sup>

According to the research institution *Mision biológica de Galicia*, what finally led to the substitution of direct producers was the recovery of old varieties of *Vitis vinifera*, which gained a far better price in the market. Also playing a role was the creation of the "designation of origin" (*denominación de origen*) *Rias Baixas* in the 1980s, one of the five designations of origin of the province of Galicia. <sup>156</sup> The introduction of this designation led to an increased use of the *Albariño* (*Vitis vinifera*) variety. Nevertheless, direct producers still exist in Galicia, particularly in the village of Barrantes, where local wineries continue to produce *Vino Barrantes*. This hybrid wine is known for its rich red colour; while the village itself is known for its "wine festival". <sup>157</sup>

# **Conclusions on Spain**

The situation in Spain significantly differs from developments in other European countries. Not only was the prohibition of direct producers introduced much later, they were not seen as a significant problem during the difficult years of European wine production. It appears that the reasons for the prohibition of direct producers were primarily economic, but mostly international, as the most important factor seems to have been the perception of the quality of Spanish wine for the export market. Furthermore, accession to the then European Community and the Association Treaty signed in 1970 may have played a role. It should also be mentioned that although health arguments may have been popular in public debates surrounding the prohibition of direct producers, it was not the main justification and was never supported with scientific research.<sup>158</sup>

155 Yravedra, G., 2010

<sup>&</sup>lt;sup>153</sup> BOE Núm. 262. 31. octubre 1980. p. 24280.

<sup>&</sup>lt;sup>154</sup> Yravedra, G., 2011

<sup>&</sup>lt;sup>156</sup> Misión Biológica de Galicia, Oral Conversation.

<sup>&</sup>lt;sup>157</sup> Bodega Pittacum, Oral Conversation.

<sup>&</sup>lt;sup>158</sup> Misión Biológica de Galicia. Oral Conversation.

# <u>CONCLUSIONS: Historical & legal contextual perspectives on the prohibition of direct producers</u>

The five case studies presented above reveal the particularities of prohibition in the wine producing countries of Europe. Our chronological but also thematic analysis of the prohibitions highlighted numerous similarities but also quite significant divergence points in the reasons lying behind them, the actors having influenced the decisions and their timelines. It is nonetheless an indisputable fact that they have all (to a smaller or greater extent) contributed to the shaping of the European common market organisation rules regarding wine, especially that of classification and quality wine schemes.

On account of the introduction of wine classification in the European Union in 1970, those wine grape varieties which did not belong to the *Vitis vinifera* family were, in practice, left out of the scope of the European common market organisation for wine. The detailed principles surrounding the criteria to be followed by Member States while implementing the principle of classification were thereon adopted in Commission Regulation 1388/70, which states:

# Article 6: With regard to wine grape varieties:

- (a) recommended vine varieties shall include varieties which: are already cultivated in the Community and which belong to the species Vitis vinifera L, or are obtained for interspecific crossings the cultivation suitability of which is recognised, after the entry into force of this Regulation, as being satisfactory in accordance with Article 10 (2), and which normally provide wines recognised to be of good quality;
- (b) authorised vine varieties shall include varieties which normally provide sound and marketable wine of a quality which, while reaching an acceptable standard, is lower than that of the wine referred to under (a);
- (c) provisionally authorised vine varieties shall include varieties: which do not meet the criteria stated under (a) and (b) but which nevertheless are of some economic importance to the administrative unit or part thereof concerned; or which have shortcomings as regards their cultivation.
  - 2. Quality shall be assessed where appropriate, on the results of tests on the cultivation suitability of the vine varieties in question, together with the results of analytical and organoleptic tests on the wine in question.

On account of the introduction of wine classification in the European Union in 1970, those wine grape varieties which did not belong to the *Vitis vinifera* family, or those "recognised" interspecific crossings, could not be "recommended" for planting, but rather only authorised. Not entirely forbidden, they were in essence left out of the coveted family of quality wines. This general exclusion was already hinted at in the dedicated Council Regulation no 817/70 (of 28 April 1970 laying down special provisions relating to quality wines produced in specified regions), which reads:

Article 3. 1. Each Member State shall draw up a list of vine varieties suitable for producing each of the quality wines p.s.r. produced in its territory. These vine varieties may be only of the species vitis vinifera and must belong to the recommended or authorised categories referred to in Article 16 of Regulation (EEC) No 816/70.

In this general framework, the Commission drew up detailed lists of authorised varieties by Member States and also regions, first published in 1970, and regularly amended (yearly). The first one of its kind was listed in Commission Regulation (EEC) No 2005/70 of 6 October 1970 on the classification of vine varieties, where at the very end of the Title I of Annex I of

the Regulation, one could read that "the following vine varieties do not, however, appear in the classification: Noah, Othello, Isabelle, Jacquez, Clinton and Herbémont". The Commission Regulation was replaced in 1981<sup>159</sup>, maintaining the exact same wording. As these are not regulatory texts as such, this specific mention of the six expressly forbidden varieties does not hold up to a complete prohibition at all, but rather reflects a reality in the implementation of the classification by Member States. It did not preclude them from doing so, within the limits set out by Council Regulations 816/70 and 817/70, and Commission Regulation 1388/70 (and/or amending texts)<sup>160</sup>. This means that legally, nothing precluded Member States to consider interspecific crossings as recommended quality wine grape, or to consider even non hybrid direct producers themselves as authorized in their territory or in certain regions.

Which is why in 1998, the varieties Noah and Isabella were actually authorised as wine grape varieties in the Friuli-Venezia Giulia region of Italy. Indeed, Commission Regulation (EC) No 1231/98 of 12 June 1998 (amending for the 18th time Regulation (EEC) No 3800/81 determining the classification of vine varieties) states that "Isabella N and Noah B are added to the category of authorised vine varieties[in Title II, Subtitle `IV. ITALY' 7. Regione Friuli-Venezia Giulia]".

It was this particular authorisation that prompted the extremely restrictive European regime we know today, as the variety-specific prohibition that existed in the French national legal order was introduced into the European legal order in 1999, on the demand of the Council. Indeed, the Commission proposal published on 31 August 1998 did not mention the express prohibition of Noah, Othello, Isabelle, Jacquez, Clinton andHerbemontat all.However, it maintained the principle of classification based on the *Vitis vinifera* species<sup>161</sup>. The European Parliament (albeit only consulted and not involved in a co-decision stance) did not propose any amendments on this particular subject either<sup>162</sup>. It is through the Regulation's formal adoption by the Council that the prohibition found its way into the Council Regulation text:

Article 19 Regulation 1493/1999 of 17 May 1999 on the common organisation of the market in wine<sup>163</sup>

1. Member States shall classify vine varieties for the production of wine. All classified varieties shall belong to the species Vitis vinifera or come from a cross between this species and other species of the genus Vitis. The following varieties may not be included in the classification: Noah, Othello, Isabelle, Jacquez, Clinton, Herbemont.

<sup>&</sup>lt;sup>159</sup>Commission Regulation (EEC) No 3800/81 of 16 December 1981 determining the classification of vine varieties.

<sup>&</sup>lt;sup>160</sup>While the common market organisation of wine underwent substantial reform, the main principle and general implementation of classification was maintained in the 1987 reform: See for instance Article 4 of Council Regulation (EEC) No 823/87 of 16 March 1987 on the common organization of the market in wine: "1. Each Member State shall draw up a list of vine varieties suitable for producing each of the quality wines produced in its territory, these varieties being only of the species Vitis vinifera and must belong to the recommended or authorized categories referred to in Article 13 of Regulation (EEC) No 822 / 87."

<sup>&</sup>lt;sup>161</sup> Proposal for a Council Regulation (EC) on the common organization of the market in wine, (COM/98/0370 final), *JOC* 271, 31/08/1998, p.21.

Legislative resolution embodying Parliament's opinion on the proposal for a Council Regulation on the common organisation of the market in wine (COM(98)0370 final -Consultation procedure), *JOC* 279, 1.10.1999, p. 385

 $<sup>^{163}</sup>$  Council Regulation (EC) No 1493/1999 of 17 May 1999 on the common organisation of the market in wine, JOL 179, 14.7.1999, p. 1–84.

2. In their classification, Member States shall indicate the vine varieties suitable for the production of each of the quality wines produced in their territory. These varieties shall be of the species Vitis vinifera.

The reader will notice that the wording used in the EU Regulation is the same as the French national provision introduced into the national order in 1934, and abrogated in 1983. Even though the restrictive scope of classification limits the margin of manoeuvre of Member States, it may be argued that most hybrids could be considered as fit to be classified. However, the word to word reprisal of the six "French scapegoat" wine grape varieties considerably restricts such margin with regards to a significant portion of direct producers. Even though the wording has slightly changed in the latest reform and in the currently applicable article 61 of Regulation 1308/2013, it remains built around a restrictive classification scope, with a list of expressly prohibited varieties. Bewilderingly so, in a completely different market situation.

### PART III. ARGUMENTS AGAINST DIRECT PRODUCERS

Having looked in depth at the contextual evolution of direct producers' prohibition within specific European Union countries, and its resonance in the European legal order, it is quite easy to identify the common narrative that was built up against these wine grape varieties. Notwithstanding country-specific considerations, which entail that certain arguments gained more weight in certain regions than others, or that they were framed differently to better echo in national law-making, it is fairly easy to distinguish general streams of argumentation that were used to designate an easy culprit in the wine crises of the time. Any attempt to debunk the ongoing prohibition quite naturally needs to deeply reflect on which are the grounds for such discrimination, before challenging their validity and relevance today.

The main arguments used to justify the prohibition of direct producers can be divided into those pertaining to the quality of wine, those touching upon economic and more specifically market concerns, next to the apprehensions for plant protection issues, and lastly those touching upon human health.

# Quality arguments - tasting the Fox?

Direct producers have been attacked for their quality, but really more for their taste. Indeed, the wine of hybrids with American wine grape varieties has a more or less distinct taste of strawberries or raspberries, called the "fox tone", which ismeant to sound disparaging. In Italy and Austria, these special aromas are described as strawberry-like, while in France they are likened to the taste of raspberries. One thing that is for sure is that the taste is very *different* to that of wine deriving from European wine grape varieties. Opponents of direct producers used this fact to defame it, not accepting direct producer wines' uniqueness and instead comparing it to "standard" European wines. A consultant of the Lower Austrian government in 1924 considered the taste as very strange. <sup>164</sup> Other people adapted quickly to the taste. Additionally, direct producer wine was in the early 20<sup>th</sup> century largely used for blends with other wines to reduce the taste. Some red direct producer varieties have a very strong colour, so they were even used for the colouring of red wine. <sup>165</sup> Oenologists from southern wine growing countries still question the admission of the variety Regent in Germany because of the diclucosid (dye substance which is unique to red wines of American origin) content. <sup>166</sup>

But is a fish supposed to fly? We can observe that the defamatory narratives ondirect producer wines' taste are ultimately normative, looking at direct producers through a "they-are-not-good-enough-Vitis-vinifera-counterfeits" prism. We believe that this approach is wrong; it's not at all about comparing an original Gucci purse to a more or less accurate fake. This means: Direct producer wines are not supposed to tiptoe, imitate or mimicry "original" European wines. Direct producer wines are their own, distinct and *complementary* product.

For those who still wish to compare: In a 2008 wine tasting, Austrian *Uhudler* wines gained just a few points less than some red wines from Spain, France and Italy<sup>167</sup>. So, if some people greatly appreciate the "fox tone", no matter how detestable the taste may seem to others, why notjust let them be?

<sup>165</sup>Wobisch, F., 1935

40

<sup>&</sup>lt;sup>164</sup>Arthold, M. 1924

<sup>&</sup>lt;sup>166</sup>Eckhart, W., et al., 2008: 151.

<sup>&</sup>lt;sup>167</sup>ibid. 134ff.

At the end of the day, consumers should be able to decide for themselves if they like the taste or not. And, the fact is, they *do* appreciate these wines' taste. In April 2016, upon invitation of members of the European Parliament (MEPs), direct producer wines were tasted at the European Parliament. Beside the fact that tasting forbidden wines in a European institution already gives sparkles, these wines received very positive feedback. MEPs and other guests were able to discover the surprising direct producer wines with pleasure and admiration. No need to say that these wines are produced through a modern cellar technique and that the winemakers are motivated by annual tastings and consumer feedback in order to improve each year. With its fresh aroma it goes perfectly with a snack in a shady pergola covered by direct producer vines. It is thus more than safe to say that taste is a very subjective feature and defers from person to person. It is most definitely not a sustainable justification in prohibiting direct producers.

Ever since their inception, European Union rules governing the common wine market have aimed to direct wine growers within the Union "towards high-quality production" through the tool of classification of wine grape varieties <sup>169</sup>. Indeed, already in 1989, it was established that "quality shall be assessed, where appropriate, on the results of tests as to the cultivation suitability of the vine varieties in question, together with the results of analytical and organoleptic tests of the wine concerned" <sup>170</sup>. It should be noted that the common rules on vine classification adopted in 1989 at the European Union level did not mention direct producers at all, a fact that clearly proves that a policy of wine quality does not need to entail a prohibition of certain wine grape varieties at all <sup>171</sup>. Even today, the classification of wine grape varieties remains the duty of the Member States and in fact there is no objective assessment of the wine grape varieties under the same criteria within the Union territory, although some common ground has been gradually built up in the successive reforms of the common organisation of the wine market. Nowhere is the taste of wine mentioned in such provisions, and rightly so, as the matter could not be more subjective.

### Economic arguments – stabilising the wine market?

Quite surprisingly, economic arguments rooted in particularly difficult features of the wine market – which years ago was undisputedly quite different than the one we navigate today – have been able to survive an astonishing 100 years.

As aforementioned, the European wine market was in a significant crisis at the beginning of the 1930s. The crisis was caused by overproduction, as new countries started to produce wine, but also by parallel under-consumptionlinked to the general economic crisis, tax rises and the prohibition movement in the US and some parts of Europe. That is how leading individuals of the wine business came to the conclusion of enhancing wine propaganda and limiting the quantity of wine being produced, during the 1932 Wine Conference held in Paris<sup>172</sup>. The leap towards a prohibition of direct producers was already quite a big and frankly excessive one during these challenging times.

Not only are we not in a context of overproduction met with under-consumption today, but the

<sup>&</sup>lt;sup>168</sup>Eckhart, W., et al., 2008: 135.

<sup>&</sup>lt;sup>169</sup>Council Regulation (EEC) No 2389/89 of 24 July 1989 on general rules for the classification of vine varieties.

<sup>&</sup>lt;sup>170</sup>ibid. see Article 6.

<sup>&</sup>lt;sup>171</sup>ibid.

<sup>&</sup>lt;sup>172</sup>Neue Wein-Zeitung: Die Beschlüsse der Internationalen Weinkonferenz. 1932: Nr 22

production potential of direct producers would by no means threaten the balance reached within the general wine sector. For instance, nowadays Austria has an annual wine production of 200 million litres, of which only 200,000 litres are wines from direct producers. The wine market is not a person, one per mille doesn't make it tipsy. Legalisation would have nearly no noticeable impacts on the whole market. Especially because it is not in the interest of producers to increase production dramatically either. Direct producer wines are going to stay a niche product and will never be a concurrence to famous old European wines. Direct producer wines are – in particular because of their special taste – not in direct competition with other wines. They must be seen not as a *competing*, but *complementary* product.

# <u>Human health arguments – making you crazy?</u>

Although they would end up becoming one of the most common and powerful narratives, the human health arguments played a very limited role in the debates of the 1920s and 1930s that led to the prohibition of direct producers. Instead, it seems they got powerful in the conversation much later in time, namely in the "second wave" of prohibition in the 1960s and 80s, when it was taken to the European level. Unsurprisingly though, these are the arguments that resonate the most in the public's perception of direct producers today. Although there seems to be no scientific evidence behind the myth of health risks deriving from the consumption of direct producers, the narrative has been powerful enough to endure until today.

### High methanol content of direct producers

The main health related discussion before the first prohibition of direct producers in the 1930s concerned the higher content of methanol in wines made from direct producer varieties. First starting as an indication that consumers of direct producers had pale complexions, it shifted into a more wide-scope defamation campaign based on the high methanol content.

In 1920s Austrian literature for instance, Mr. Zweigelt addresses the methanol content in direct producers only very briefly, citing studies proving the mostly higher proportion of methanol in direct producers and further referring to the "recent" discussions on the topic in Croatia. He goes on to mention an article by Mr. Spaic with the following statement on the specific toxic effects of wine from the variety "Noah". "Specific effects are: Anger excesses in men, hysteria in women, a tendency to hallucinations, mental and physical degeneration in children." <sup>173</sup> According to Zweigelt, Mr. Spaic hypothesized that the content of methanol was not the reason behind these symptoms, but some other poison that might be connected to the "foxy" taste. He then goes on to cite other sources from Croatian institutions which, according to him, do confirm toxic effects, but claim that the content of methanol cannot be blamed. Alsocited is Mr. Bauer, a wine inspector from Burgenland who informs that: People who regularly consume wines of the variety Noah get a "pale complexion, tremble all over, and are wasting away while wine growers with crafted vineyards have families with many children, are healthy and hard-working" 174. Unclear as to their scientific grounding, these citations all explicitly refer to wines from the direct producer variety "Noah", whose consumption was obviously assumed to have negative health effects at the time.

The narrative did however re-emerge in the 1980s. In Austria, it is worth mentioning the

42

<sup>&</sup>lt;sup>173</sup>Zweigelt, F., et al., 1929: 83 own translation.

<sup>&</sup>lt;sup>174</sup> ibid.

"expert opinion" from Dr. Leinzinger, head of the *Institute for Medical Jurisprudence of the University of Graz*, addressing the district court of Güssing in the Austrian province of Burgenland in 1988. In the report, the author makes several references to studies examining the methanol content of wines from direct producers (*Uhudler*). One cited study is the one by Dr. Walter Flak, from the wine department of the province of Burgenland. Dr. Falk notes that according to the examination of 10 wine grape varieties of direct producers (from the varieties: Noah, Isabella, Concordia, Clinton and blends that include them), the content of methanol was within the average content of red and white "noble wines". According to the studies referred to in the report, none of them indicated a health risk for consumers of wine from direct producers. Dr. Leinzinger concludes: "*In summary, the consumption of direct producer wines* (*Uhudler*) in an appropriate amount can be considered completely harmless to health." 175

Parallel studies were also conducted in France, especially with regards to the white Noah variety, which had been virulently attacked, and found no higher health risk in its methanol contents vis-à-vis other white wines <sup>176</sup>.

In spite of such reports, the rumours about a harmful higher methanol content in wines from direct producers remain very much alive, even today. Recent political developments in Austria convinced the HBLA Klosterneuburg, school for viticulture and pomology (and recognized research institutions) to conduct a study regarding the content of methanol of the Uhudler varieties. The results were discussed in an article published on 16 November 2015 in the wine magazine Der Winzer. In a recent study the scientists compared white and red direct producer varieties with white and red wines from Vitis vinifera varieties. The benchmarks for content of methanol determined by the International Organization for Vine and Wine (OIV) were used as the reference value. These benchmarks are 400 mg Methanol per litre for red wine, and 250 mg Methanol per litre for white and rosé <sup>177</sup>, as prescribed by the International Organisation of Vine and Wine<sup>178</sup>. The analysed samples show a content of methanol between 50 mg/l – 150 mg/l for white *Uhudler* and similar proportions for red *Uhudler* varieties. The authors state that methanol levels of all samples analysed were below the critical values and a health hazard can therefore definitely be ruled out. They however mention a tendency of *Uhudler* varieties having a higher content of methanol than "European" varieties. The authors suppose that the reason behind this higher methanol content is the higher appearance of pectin in these varieties. 179 A recent study from Canada also confirms that the negative allegations vis-à-vis direct producers are false. Indeed, conducted surveys showed that the level of methanol in fungus resistant grape variety wines ranged between 20 and 197 mg/L, which was "slightly higher than V. vinifera wines (26–111 mg/L) but significantly lower than the recommended limits of OIV for both reds ( $\leq 400 \text{ mg/L}$ ) and whites ( $\leq 250 \text{ mg/L}$ )" <sup>180</sup>.

Therefore, sound science has proven time and time again that even though direct producers retain methanol levels that may be at times slightly higher than their *Vitis vinifera* counterparts, these levels are far from having any detrimental impact on human health. Their consumption is thus as risk-free as wines made from other wine grape varieties.

<sup>&</sup>lt;sup>175</sup>Leinzinger, E. P., 1988 own translation

<sup>176</sup> Dubus, C., Noah, le vin qui rendait fou?, Université de Bordeaux, Thèse, 21, 1999.

<sup>&</sup>lt;sup>177</sup>Phillip, C., et al., 2015

<sup>&</sup>lt;sup>178</sup> Resolution Oeno 19/2004 of the International Organisation of Vine and Wine, dated as 30<sup>th</sup> June 2004.

<sup>&</sup>lt;sup>179</sup>Phillip, C., et al., 2015

<sup>&</sup>lt;sup>180</sup>Pedneaulta, K., et al., 2016

### **Toxicity of direct producers**

A wider discussion about the health impacts of the consumption of direct producers seemed to emerge in the 1960s. This trend is particularly evident in Austria, where the justification of federal law 187/1961, which prohibited the marketing of direct producer wines or blends, reads: "The bill joins the concerns about health issues that have been stated in the struggle against direct producers". <sup>181</sup>

A crucial study that claimed to prove the negative health impacts of direct producer hybrids and definitely fueled the debate about the toxicity of hybrids was carried out by Hans Breider. He was a German biologist and geneticist, and like Mr. Zweigelt, a member of the NSDAP. From 1959 to 1973, Mr. Breider was the director of the Bayarian State Research Centre for Viticulture and Horticulture. In the 1950s and 1960s, he conducted various experiments in which he linked the toxicity of hybrids directly to so-called "biostatica", substances that he believed to be inherent in direct producer hybrids and that would be directly connected to the level of resistance of the plants. To mention one example, in one experiment Mr. Breider fed a group of chickens, over a period of five months, with wine from hybrids, another group with "noble wine" 182, and a third control group with water. While the groups fed with "noble wine" showed no significant difference to the group fed with water, he noted that chicks fed with hybrid wine got cirrhosis (60%) and hepatoses (90%). A further study regarding the descendants of chickens fed with hybrid wines also revealed that 60% of chicks were born with certain malformations. Mr. Breider claims a connection between the substances responsible for the resistance of hybrids against certain (fungal) diseases and the observed health damage of the chicks. He also makes clear that the mere content of alcohol is not the reason for the negative effect. Breider claimed that these results were confirmed by a Yugoslavian team of scientists under Mr. Jovanovic in 1963 and backed by the experiments of the French physician de Leobardy. 183

Breiders' allegations were shortly thereafter disproved by Stoewsand and Robinson with several similar experiments. They also find that Breider "stated falsely that the results from his laboratory agreed with those of the French investigations." Stoewsand et al. published their results of a study on the effects of feeding varietal wines and juices to chicken in 1969. They concluded that: "Growing male chicks fed a defined diet and drinking wines or juices made from Vitis labrusca or Vitis riparia grapes did not show slower growth, higher mortality, physical malformations, decreased bone calcification, abnormal blood, or nervous-system aberrations as compared with chicks drinking either wines or juices of Vitis vinifera grapes." Stoewsand and Robinson conducted a second experiment, in which they proved that the reason behind the "toxic" response in chicks fed with varietal grape juice was actually malnutrition and not a "biostatic" complex inherent to hybrid grape varieties, as stated by Breider. The results were published in 1972 in the American Journal of Enology and Viticulture. In the experiment the male and female chicks were fed with grape juice of the varieties "Thompson seedless" and "Concord" or water. Additionally the chicks were fed with a feed called "Kückengrütze" imported from Germany. All three groups of chicks showed

<sup>&</sup>lt;sup>181</sup>Regierungsvorlage zum BG über den Verkehr mit Wein und Obstwein. 452 Beilage zu den stenografischen Protokollen des Nationalrats. 20.06.1961.own translation

<sup>&</sup>lt;sup>182</sup>In German, the word grafted (veredelt) means something like "was made noble", so "noble wine" can be read as "wine from grafted vines".

<sup>&</sup>lt;sup>183</sup>Breider, H., 1972: 236.

<sup>&</sup>lt;sup>184</sup>Stoewsand, G. S., et al., 1972.

<sup>&</sup>lt;sup>185</sup>Stoewsand, G. S., et al., 1969: 54.

similar symptoms. They were "crippled with malformed feet, were weak, and had a high incidence of mortality." These symptoms also described by Breider stopped showing up when the feed was supplemented with minerals and vitamins. The results similarly suggested that the malformations in Breider's experiments were due to malnutrition and not to the certain resistance substances of hybrid varieties.

Another relevant study was conducted by Leuschner and Leuschner and published in 1966. In their study the scientists scrutinized the assertions made by Breider. They conducted a similar study, testing the influence of hybrid wine, "noble wine" and an alcohol mixture on the fat content of the livers of rats. With reference to Breiders' study they hypothesized that Breider might have used chicks that already had liver problems. For this reason they used a group of healthy rats as well as a group of rats with fatty liver. There was no significant difference between hybrid wine and "noble wine" regarding the fat content of the liver. Also regarding the overall results, the authors came to the conclusion that there is no evidence for differences between hybrid and "noble" wines. 188

To conclude, just as the supposedly high methanol content has been disproved by various scientific experiments, so has the "toxicity" of hybrid varieties stated by Breider. It is thus safe to say that the myth that consumers of direct producer wines face important health risks is definitely not backed by scientific evidence. They are as dangerous as any other types of wine produced within the European Union stemming from the *Vitis vinifera* family.

# Plant protection arguments - Spreading Phylloxera and now flavescence dorée?

In all probability, a considerable part of the discussions about direct producers in Europe was influenced by a general scepticism directed towards them due to the fact that the great 19<sup>th</sup> century viticulture plagues entered Europe on American vines. Especially in Germany, two main reasons for the prohibition were mainly the desire to stop vine trading and thus the propagation of Peronospora, and to document the propagation of *Phylloxera* <sup>189</sup>. As *Phylloxera* did not harm direct producers, it was not showing symptoms either. In combination with the prohibition of rootstocks, it was also deemed useful to prevent the propagation of *Phylloxera* completely, including those "vectors" carrying it without being bitten by the disastrous insect. In the mid-1930s, the use of hybrids as rootstock was allowed since they proved to be an effective solution against the outbreak, while the prohibition of direct producers was continued. <sup>190</sup>

Even to the present day, opponents of direct producers have been very creative in finding new arguments to defame them. The newest argument is connected to the disease "grapevine flavescence dorée (GFD)" which is caused by the phytoplasm *Candidatus Phytoplasma vitis*. It is listed as a quarantine organism in EU-regulation 2002/29/EU, annex II. <sup>191</sup> It was found for the first time in France on the variety Baco Blanc (interspecific crossing Noah x Folle blanche), which is very susceptible to GFD. <sup>192</sup> Until now, GFD was found in France, Italy,

<sup>&</sup>lt;sup>186</sup>Stoewsand, G. S., et al., 1972

<sup>&</sup>lt;sup>187</sup>Leuschner, F., et al., 1966: 489.

<sup>&</sup>lt;sup>188</sup> ibid. 484ff.

<sup>&</sup>lt;sup>189</sup>Rühl, e-mail correspondence.

<sup>&</sup>lt;sup>190</sup>ibid.

<sup>&</sup>lt;sup>191</sup>AGES, Goldgelbe Vergilbung.

<sup>&</sup>lt;sup>192</sup>Wikipedia, Baco Blanc; Wikipedia, Flavescence dorée.

Serbia, Slovenia, Switzerland and Austria. 193 It is transmitted by the American grapevine leafhopper Scaphoideus titanus which, how else could it be, is native to North America. In contrast to Baco Blanc, direct producer varieties (Isabella) had not shown until now symptoms of an infection with GFD in Austria.<sup>194</sup> But there have been samples from direct producers positively tested on GFD. This means that these vines are carrying the disease unnoticed but that the vector could potentially transmit the disease to other vineyards. When GFD was first detected in Austria, the obviously infected vinifera vineyards were close to an Isabella plantation. When tested on GFD, these Isabella varieties were also infected, but had not shown any symptoms. The affected vineyards have been stubbed, so it is not known if the variety Isabella would have shown symptoms at a later point or at all. That is why some wine growers argued that all direct producers were a threat to their vineyards. 195 But grafted vines could also show no symptoms for one or more years. Rootstocks show unclear or no symptoms and are influencing the symptoms of their scions. 196In this context it has to be made clear that the disease has a certain incubation period, which is independent of the variety. The moment in which the first symptoms appear is also dependent on the time of infection. It can be said that for all wine grape varieties the incubation time for GFD spans from several months up to one year. That means that the risks of both the existence of undetected but infected grapevines and the possibility of them being a latent vector are not limited to direct producers.

That is why the risk of an undetected propagation of GFD is completely the same in all vineyards, at least at the beginning of the outbreak. Afterwards there could be a difference, but only if one assumes that direct producer varieties differ in their resistance against GFD (see Baco Blanc) as much or even more so than European wine grape varieties (e.g. Merlot shows symptoms to a very limited extent<sup>197</sup>). Drawing from several talks with experts in Austria, the claim that direct producers present a significant threat due to their latency is actually based on the experiences of wine growers in Austria and some scientific studies from France which are not available to us. Looking at the Austrian situation, it is undeniable that there may be some risks, but it is also undeniable that these are neither limited to direct producers, nor should they be generalised to all direct producer varieties. 198 Another unclear question in this context is to which extend hybrids of e.g. vinifera and labrusca show any symptoms of the desease. The generalisation that all direct producer varieties do not show any symptoms of GFD and that their cultivation is therefore of a higher risk cannot be backed by sufficient scientific research. Additionally, in each case, the matter should be dealt with using plant protection regulation, completely separate from wine grape variety classification and authorisation.

Furthermore, just as was the case in the first *Phylloxera* outbreak, viewing the resistance (or at least the late showing) of direct producers as a threat could be a step in the wrong direction. Just as these inherent resistance traits have been used in breeding in the past, they are and should be considered an incontestable potential for the future, like in the case of downy mildew.

<sup>&</sup>lt;sup>193</sup>Mohr, H. D., 2012: 85.

<sup>&</sup>lt;sup>194</sup>Strauß, oral conversation.

<sup>&</sup>lt;sup>195</sup>Steiermark.orf.at, Hobbywinzer müssen Weingärten roden.

<sup>&</sup>lt;sup>196</sup>Mohr, H. D., 2012: 76.

<sup>&</sup>lt;sup>197</sup>ibid. 85.

<sup>&</sup>lt;sup>198</sup> Reisenzein, H. oral conversation May 2016

## CONCLUSIONS. Destroying direct producers, literally and figuratively

The destruction of direct producers in Europe definitively took place literally and figuratively. They were not only outlawed, but their reputation itself was attacked for their quality and impact on human health, plant protection issues, and finally on the basis of economic and market concerns.

It's most likely that direct producers have been attacked first and foremost for their supposed lack of quality, something highly linked to their inherent "fox tone", described at times as strange, disturbing, sweet or grassy. Although these statements may be absolutely true for some tasters, it is unquestionable that the issue remains a subjective one that could never warrant exclusion of these varieties from the general classification regime. After all, fans and lovers of direct producer wine would argue exactly the contrary. As for the quality wine aspect, it is safe to say that modern direct producer wine organised through a professional association – like in the case of Austria – maintains high and constant standards of production.

In the 1930s, the most resonant arguments were linked to economic considerations in all European countries alike, especially with regards to the situation of the wine market in general. Indeed, prohibition was seen as a way out of a major crisis; a crisisthat was on one hand caused by overproduction – as new countries like Algeria started to produce wine – and on the other hand by under-consumption,linked to the general economic crisis, tax rises and the prohibition movement in America and some parts of Europe. The leap from wine propaganda, quality premiums, and wine quantity limitation, towards the prohibition of direct producers, was an excessive one even during these challenging times. Today, not only is overproduction and under-consumption not an issue, but the production potential of direct producers would by no means threaten the balance reached within the general wine sector. Direct producer wines are – like other niche products of the sector – not in direct competition with mainstream wines. They have to be considered not as a competing but a complementary product.

With regards to plant protection issues, the direct producers' resistance to disease has been at times used against them, most recently in debates surrounding *flavescence dorée* in Austria, for instance. As these varieties seem to sometimes show signs of the disease later in time than their *Vitis vinifera* counterparts, their opponents have jumped on the occasion in order to discredit them for no reason, since all vines are potential vectors of the disease.

Probably the most long-lasting arguments are linked to human health risks caused by the consumption of direct producers, including "anger excesses, hysteria, hallucinations and paleness", concerns that are all linked to their high methanol content. Not only have the studies used to develop these arguments been debunked by more recent science, they have also shown that the methanol content of all direct producers are within the limits warranted by the International Organisation for Vine and Wine (OIV). The same goes for the toxicity concerns raised in some Member States.

# PART IV. THE POTENTIALS OF DIRECT PRODUCERS IN TODAY'S VITICULTURE

Previous chapters almost only touched upon why and how direct producers were hated, discredited, prohibited and destroyed. Most of the stories that surround them are either completely untrue, or are completely irrelevant today. But there is more to the story. There is tremendous potential and hope. Our study will therefore attempt to close on a more cheerful note, highlighting the positive aspects brought by the old hybrids, further building the case for their right to exist.

These are not the words of a few biodiversity enthusiasts, as even a man who has played an eminent role in the prohibition of the direct producers, Dr. Zweigelt, admitted to such potential. He had already identified specific niches where direct producers should be used: e.g. in areas dominated by other crops (polyculture), where farmers thus do not have the time for plant protection measures; and lastly in very hostile environments who yearn for very early varieties, to still be able to produce wine<sup>199</sup>. Since Zweigelt made his statement, much time has passed, during which both the setting for wine business and the range of challenges faced by agricultural policy have considerably changed. The case for direct producers has thus gained a fair range of new and quite convincing arguments.

## Consumer arguments – there is a market for direct producers out there

Naturally, direct producer wines are nowadays produced through modern technology. In an effort to continuously control and improve the quality, the *Uhudler* association, for instance, only allows wines to carry their label if they meet their strict quality standards. Having lost completely its reputation as the wine of the poor masses, Austrian *Uhudler* has become a luxury product, aimed to ward consumers seeking something special or exciting. The demand is so highthat it cannot be met by the market. An example that demonstrates this gap is that after the late frosts in the spring of 2016, the *Uhudler* harvest of 2016 will be extremely modest. As a consequence, as early as the beginning of summer, *Uhudler* producers were literally declining to sell whole bottles, knowing that they could achieve an even better turnover by serving it at the bar.

Council Regulation (EEC) No 2389/89 reads: "Whereas the classification of wine varieties according to the quality of wine produced promotes the planting of varieties which give wine recognized to be of good quality and for which market demand is steady or expanding."<sup>201</sup>

In the regions of Europe where direct producer wines are still produced (and there are a few), they have a large fan base. In Austria, people come to the *Südburgenland* area just to drink the famous *Uhudler* wines. An association was formed that allows its members to produce and sell direct producer wine. "Since advertising is permitted, and membership is open, it is clear that the future of these wines is not only safe, but also promising" writes George Gale in his book *Dying on the Vine*<sup>202</sup>. Unfortunately, things are not as smooth as they seem. In 1992, the Austrian legislator allowed seven direct producer varieties (Ripatella, Delaware, Concordia, Elvira, Noah, Isabella and Othello). With the adhesion of Austria to the European Union in

<sup>&</sup>lt;sup>199</sup>Zweigelt, F., et al., 1929: 303f.

<sup>&</sup>lt;sup>200</sup>Eckhart, W., et al, 2008: 134ff.

<sup>&</sup>lt;sup>201</sup>COUNCIL REGULATION (EEC) No 2389/89.

<sup>&</sup>lt;sup>202</sup>Gale, G., 2011: 209.

1995, *Uhudler* became threatened by EU-legislation, which banned six direct producer varieties (Noah, Othello, Isabelle, Jacquez, Clinton and Herbemont) entirely from classification in 1999 and therefore also from cultivation and marketing. Consequently, only four of the previously seven authorized varieties in Austria were left and permitted – temporarily – until 2030. Furthermore, this completely ignores the market for direct producer wines. In 2014 there was a petition in Austria for saving the *Uhudler*, signed by 14,700 people, mostly tourists in the region. *Uhudler* is not only used for drinking, its use is rather universal. It adds a unique flavour to a variety of dishes and products like grape juice, sparkling wine, brandy, vinegar, marmalade, chocolate, cheese or even skin creams<sup>203</sup>. And why should consumers not decide themselves which wine they want to drink? They like the special taste and it brings an added value to the region.

New studies even indicate a positive health effect by wines made of hybrid grapes connected to higher antioxidant levels and lower levels of toxic metals. "[...]the polyphenols present in wines are accounting for a significant proportion of the daily antioxidant intake of the general population. [...] polyphenolic spectra of red wines produced from hybrid grapes [...] show a wider range of anthocyanins, a balanced phenolic acid profile, qualitative differences in saccharide composition, and a very low heavy metal content." <sup>204</sup>In the mentioned study, it was found that wines from hybrid grapes contained significantly less toxic metals such as Cd, Pb, As and Cu (than Vitis vinifera varieties) and significantly more flavan-3-ols which "are of particular future interest due to their recent health claim by the European Food Safety Authority." High antioxidant levels, especially in the seeds of varieties used for the Uhudler wine were confirmed by an Austrian diploma thesis. <sup>205</sup> The authors of the research in question conclude that "[...]hybrid cultivars deserve attention as a potential source of physiologically active compounds, and may be of a great future value for producing wines with an alternative chemical composition." <sup>206</sup>

# <u>Rural development arguments – direct producers create regional identity, regional</u> value chains and tourism

Lovers of a special wine are willing to pay for it and even visit the region where it is produced. In the first half of the 20<sup>th</sup> century, direct producer wines were a product for the lower income part of the population and planted on small farms by poor farmers. Already back then there was word of large migration movements out of rural areas: "Die Landflucht macht sich erschreckend bemerkbar und die Besteuerung der kleinen Landwirte überschreitet das Maß des Erträglichen."<sup>207</sup>("The rural flight is frightening noticeable and the taxation on peasants exceeds the bearable"). One of these areas was today's Burgenland, the region of Austria bordering Hungary. A majority of the population were peasants living from less than a hectare of land. Those who did not possess land, had to move as migratory workers to Vienna or Budapest. As the industrialising United States needed more and more workers in greater numbers, the situation turned into an actual mass migration<sup>208</sup>. Mainly in the interwar period of 1918 to1939, more than 66,000 people migrated to America. Chicago has at times jokingly

<sup>&</sup>lt;sup>203</sup>Verein Freunde des *Uhudler*, Produkte.

<sup>&</sup>lt;sup>204</sup>Pedastsaar, P., et al., 2014

<sup>&</sup>lt;sup>205</sup>Hartl, B., 2009: 128.

<sup>&</sup>lt;sup>206</sup>Pedastsaar, P., et al., 2014

<sup>&</sup>lt;sup>207</sup>Zweigelt, F., et al., 1929: 299.

<sup>&</sup>lt;sup>208</sup>Regiowiki.at, Amerikawanderung der Burgenländer.

been called the biggest city of *Burgenland*<sup>209</sup>. Particularly the southern part of Burgenland has still not quite completely recovered. The number of commuters is high and the unemployment higher than in the rest of Austria<sup>210</sup>. It is in this adverse context that the small direct producer vineyards survived the various prohibition measures.

The *Uhudler*, a relict of the region's long "underdevelopment", can now actually fuel regional development. It is a product that distinguishes the *Südburgenland* from other wine regions. The *Uhudler* creates a regional identity and stimulates the local economy. Approximately 200,000 litres of *Uhudler* are produced annually on an area of 50 hectares. This is nothing in comparison to the total amount of 200 Million litres of wine produced in Austria (2014). It does not influence the Austrian wine market but makes a great difference for small farmers. The *Uhudler* association has 320 members in 25 member communities. The *Uhudler* is sold in 40 wine taverns. Two thirds of tourists during their visit get in contact with the *Uhudler*. The wine museumMoschendorf and the *Kellerviertel Heiligenbrunn* contribute to the cultural program of the region and the preservation of traditional crafts.

The positive example of the *Südburgenland* can be transferred to other regions with direct producer plantings in France<sup>211</sup>, Slovenia (*Šmarnica* or *Jurka*), Hungary (*Othello*), the north of Italy (*Fragolino*), Portugal, Madeira and the Azores (*Morangueiro*, *Cheiro*) and Spain (*Vino Barrantes*).<sup>212</sup> The Austrian example shows that direct producers are not only demanded by consumers, but also create significant regional value for rural areas facing severe socioeconomic difficulties.

### Environmental arguments – direct producers need less plant protection inputs

Notwithstanding their potential market value, which could also result in regional development and the local grounding of direct producer farmers, these varieties also have tremendous potential in tackling current and future environmental challenges, and could certainly contribute in reaching new goals set out by European and national policy, regarding the environment and agriculture.

Indeed, on account of their tolerance to powdery and downy mildew, direct producers do not need farmers to resort to chemical plant protection products. This is not only interesting for farmers who simply do not have time, but also for farmers who do not want to use these chemicals, and for consumers who expect certain care for the environment in the products they purchase. In the case of downy mildew, approximately 419 million EUR are spent annually for protective treatment to prevent possible damage caused by the organism. This makes up more than 8 % of global expenses for chemical plant protection. Furthermore, 5 to 8 applications of fungicides are necessary every year to prevent a massive propagation of the fungus. Even this cannot always prevent yield losses, because the agents only affect zoospores and cannot undo an infection. Resistances of pathogenic fungi to plant protection agents are gaining importance. The discharge of heavy metals (especially Cu) and aluminium is enormous, something that is unacceptable due to its environmental implications. The copper concentration in many wine regions already exceeds the limit which leads to

<sup>&</sup>lt;sup>209</sup>Wienerzeitung.at, Chicago die größte Stadt des heutigen Burgenlandes.

<sup>&</sup>lt;sup>210</sup>Aeiou.at., Burgenland.

<sup>&</sup>lt;sup>211</sup>Gale, G., 2011: 209.

<sup>&</sup>lt;sup>212</sup>Verein Freunde des *Uhudler*, (Deutsch, Liane) email correspondence.

<sup>&</sup>lt;sup>213</sup> Loskill, B. J., 2005: 1.

<sup>&</sup>lt;sup>214</sup> Kortekamp, A., 2001: 1f

phytotoxic effects and impedes fermentation and causes taste impairments in the wine. <sup>215</sup> The reduction of fungicide applications reduces the danger of a development of resistance in the pathogens, lowers workload, saves money and protects the user. Direct producers can be considered as a low-input plantation and thus they should not be forbidden.

In Austria, in the year 2014 alone, 692 tons of Sulphur-containing agents and 143 tons of Copper-containing agents were used for plant protection<sup>216</sup>. The prohibition of the direct producer wine grape variety contradicts the environmental goals of the Austrian Agrienvironmental program ÖPUL<sup>217</sup> as it worsens the state of the agricultural ecosystem when farmers are forced to change from direct producers to the conventional wine grape variety, which is constantly threatened by mildew. Employed in breeding disease and vermin-proof rootstock and grape varieties, the hybrids have already contributed to the reduction of pesticides. Still, they do not receive the appreciation they deserve.

In organic agriculture there is a general waiver of synthetic fungicides. Due to a lack of alternatives, copper sulphate is used to control downy mildew. Copper has a high ecotoxicology and thus should have the highest priority in getting rid of it. Therefore, fungi resistant varieties (so called "PIWI" varieties) are being recommended, stressing their benefits for less pesticide intensive viticulture:

"In der Umstellungsplanung des Betriebes sollte dennoch zukünftig der Anbau pilzfester bzw. pilztoleranter, interspezifischer Sorten aufgenommen werden. Zum einen um die Sorten in ihren weinbaulichen und oenologischen Bandbreiten zu testen und kennenzulernen, zum anderen aber auch um die Notwendigkeit der Zulassung solcher Sorten zu dokumentieren. [...] Ein wichtiges Kriterium für ökologisch arbeitende Betriebe ist auch die geringe Spritzintensität beim Anbau dieser Sorten. Das Wegfallen von Behandlungen ist nicht nur für die Umwelt ein Vorteil, sie bringt auch dem Winzer eine nicht unerhebliche ökologische Rationalisierung und Kosteneinsparung."218

Due to national and European regulations, wine grape varieties with genetic heritage of American species have a bad image. In the future, the cultivation of fungus-resistant, interspecific varieties should be integrated into any strategy aimed at converting Europe's wine production into a more sustainable one. The reduction of pesticide treatments is not only an advantage for the environment, but it also encompasses important ecological and economical rationalisation perspectives for the wine grower.

# Agrobiodiversity – direct producers preserve genetic resources

Throughout the 20<sup>th</sup> century, American and French hybrids remained the base of German grape breeding at the Geilweilerhof institute. Their crowning achievements were the mildewresistant and fine-flavoured varieties Regent and Solaris. Today, Regent makes up 2,065 hectares<sup>219</sup> while Solaris makes up 54 hectares<sup>220</sup>. The hybrids were crossed with *Vitis vinifera* varieties up to five times so the resulting varieties were classified as Vitis vinifera and hence

<sup>&</sup>lt;sup>215</sup> ibid.

<sup>&</sup>lt;sup>216</sup>BMLFUW, Grüner Bericht 2015.

<sup>&</sup>lt;sup>217</sup>BMLFUW, ÖPUL 2015.

<sup>&</sup>lt;sup>218</sup> Hofmann, U. et al., 1995:162.

<sup>&</sup>lt;sup>219</sup>Deutsches Weininstitut, 2013

<sup>&</sup>lt;sup>220</sup>Statistisches Bundesamt, 2008: 198ff.

allowed under both European and German legislation. But it is undeniable that the hybrids were the ones that gave them part of their attractive properties.

However, due to stringent regulations, the time taken to market such varieties – something crucial in the context of climate change – takes much too long.

Moreover, there are an important number of wine grape varieties which have not yet played a role in breeding. Their potential in introducing resistances to biotic and abiotic stresses to existing *Vitis vinifera* diversity has been silenced. As George Gale wrote for wild American grape species, "who knows what the future might bring? Climate change, new diseases, or future mutations in Phylloxera may draw these native species into a new battle, perhaps providing exactly what we need as a weapon against the new foe." <sup>221</sup>

The direct producer varieties must be preserved for the future, not only in research facilities but also *in situ* by farmers. The preservation of the diversity of cultivated plants and its constant development can only be ensured by their sustainable use. The diversity of vines is very important to the resilience of our viticulture. Not to forget, that, warmer temperatures due to climate change will necessitate substantial changes in the regulations of protected geographical indicators of origin, or the French "Appellations", especially with regards to the connection between wine grape varieties and geographic location. In this context, a relaxation of wine grape variety classification should also be discussed.

# CONCLUSIONS. Digging into the potential of direct producers

There are numerous arguments that play in favour of direct producers in the European wine market, and its general context of agricultural but also environmental policy, as they stand today.

First and foremost, there is a **market for direct producer wine.** These wines are nowadays produced with modern technology. In the regions of Europe where direct producer wines are still being produced (and there are quite a few), they have a growing fan base that reaches far beyond these regions. In Austria, people travel to the *Südburgenland* region just to taste the famous *Uhudler* wines. After all, arguing about taste doesn't really get anybody anywhere, does it?

As a result, direct producer wines have significant potential to contribute to **rural development.** Lovers of special wines are willing to pay for it and even visit the region where it is produced. In the last century, direct producer wines were a product for lower income populations and planted on small farms by poor farmers. Today, they help make these regions thrive, like in Austria's *Burgenland*, where two thirds of the tourists link their visit to the tasting of *Uhudler* wine. Elsewhere, direct producers have become an integral part of **local traditions**, leading to celebratory fairs in the Venetian region of Italy for instance.

Not only considering their potential market value, which would additionally result in regional development and local grounding of direct producer farmers, these varieties also have tremendous potential in **tackling current and future environmental challenges.** They could contribute in reaching the new goals set out by European and national environmental policy, as well as agricultural policy. Indeed, on account of their tolerance to powdery and downy mildew, direct producers do not need farmers to resort to chemical plant protection products.

-

<sup>&</sup>lt;sup>221</sup>Gale, G., 2011: 256.

<sup>&</sup>lt;sup>222</sup>Pettentaler, F., et al., 2013: 36.

Direct producers can thus be considered a low-input plantation and should definitely not be forbidden.

With regards to **agricultural biodiversity**, the preservation of direct producer varieties should be a clear priority in achieving the Aichi Biodiversity Targets and all correlated European policies. Not only is the diversity of vines very important for the resilience of our viticulture, they have to be preserved for the future, not only in research facilities but also *in situ* by farmers. The preservation of the diversity of cultivated plants and its constant development can indeed only be ensured by their sustainable use, a use which should not be restrictively contrived.

### **GENERAL CONCLUSIONS**

In this paper, we were seeking to answer a single and simple question: Is the current prohibition of certain wine grape varieties in wine production appropriate for modern, liberal legislation which is committed to promoting rural development rooted in sustainable, resilient, and environmentally-friendly practices in agriculture?

Our simple answer to this question is: *No*.

We demonstrated that the prohibition, rooted in legislation enacted in the 1920s and 1930s, came into life in a very specific historical context.

We demonstrated how this prohibition has been introduced in the cases of Austria, France, Germany, Portugal and Spain. Also, we analysed how it has been justified, which discussions took place and which were the most important argumentation strings employed. Indeed, the prohibition's justification has significantly altered over time.

At the beginning of the 20<sup>th</sup> century, the main arguments were the unfamiliar taste and the fear of the spreading of plant diseases. In the 1920s and 1930s, the need to relax the wine market through limiting production quantity is what lead to prohibition in Europe's main wine producing countries. High methanol levels and other concerns about negative health effects appeared at different times in history and were proven wrong. In the 1970s, the prohibition entered the EEC legislation due to pressure from France. While France abolished the prohibition in 2003<sup>223</sup>, it is still maintained on an EU level.

At the same time, we demonstrated the direct producers' potentials with regards to market demand, rural development, environmental sustainability, climate change and breeding.

We thus come to the conclusion that the prohibition of direct producers is a form of non-proportionate discrimination. Whereas there are many good reasons to legalize these wines, valid objective arguments that would justify maintaing the prohibition can not be found.

We thus ask for the adaption of Article 81 paragraph 2 of the EU Regulation No. 1308/2013 establishing a common organisation of the markets in agricultural products, in order to unlock the potential of these beautiful wine grapes. We believe wine regulation should contribute to promoting and protecting a vital cultural heritage, providing new and considerable rural development opportunities and advantages and responding to a specific market demand, all the while preserving the environment through more sustainable practices.

\_

<sup>&</sup>lt;sup>223</sup>Décret n°2003-851.

### **BIBLIOGRAPHY AND REFERENCES**

- Aeiou (Das annotierbare, elektronische, interaktive, österreichischen Universal- Informationssystem): Burgenland, http://www.aeiou.at/aeiou.encyclop.b/b944915.htm [10.2.2016].
- AGES (Austrian Agency for Health and food security): Goldgelbe Vergilbung, http://www.ages.at/en/topics/harmful-organisms/goldgelbe-vergilbung/ [11.2.2016].
- Anderson, K.; Nelgen, S.: Global Wine Markets 1961 to 2009. A statistical compendium, University of Adelaide Press, Adelaide 2011.
- Arthold, M.: Die Bedeutung der alten Direktträger. Mitteilungen der Weinbau und Kellerwirtschaft des Hauptverbandes der Weinbautreibenden Österreichs (1924) No. 1-2.
- Association fruits oublies: Les cépages interdits. Analyse de LA 1101 du 24 decembre 1934 concernant les hybrides producteurs directs américains et français, http://association.fruits.oublies.pagesperso-orange.fr/contrib/cepagesinterdits/cepint01.html [1.12.2015].
- BMLFUW, 2014. Grüner Bericht 2014, 55. Auflage. Wien: Bundesminister für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft. Verfügbar in: http://www.gruenerbericht.at/cm4/jdownload/download/2-gr-bericht-terreich/1523-gb2015-pdf [15. 12. 2015.].
- BMLFUW, 2015. Sonderrichtlinie ÖPUL 2015. GZ BMLFUW-LE.1.1.8/0089-II/3/2014. Wien: Bundesminister für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft, http://www.bmlfuw.gv.at/land/laendl\_entwicklung/foerderinfo/sonderrichtlinien\_auswahlkriterien/srl\_oepul.html [15. 12. 2015)].

Bodega Pittacum, Oral Conversation [29.01.2016].

Boletín Official del Estado BOE Núm. 211. 30. julio 1955.

Boletín Official del Estado BOE Núm. 262. 31. octubre 1980.

Boletín Official del Estado BOE Núm. 291. 5 diciembre 1970.

- Börner, Horst: Pflanzenkrankheiten und Pflanzenschutz. 8. Auflage, Springer-Verlag, Berlin Heidelberg 2009.
- Breider, H.: Über resistente Reben-Arthybriden und ihre Qualitätsleistungen. Mitteilungen Rebe und Wein. Obstbau und Früchteverwertung Klosterneuburg (1972). Band 22, pp. 232-244.
- Bundesgesetzblatt für den Bundesstaat Österreich. Jahrgang 1937, ausgegeben am 24. September 1937, p. 1343.
- Décret n°2003-851 du 1 septembre 2003 relatif à la partie réglementaire du livre VI du code rural et code modifiant la partie réglementaire des livres II et Ш du même AGRX0300025D Version consolidée février 2016,http://legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000241817 [02.02.2016].
- Deutsches Reichsgesetzblatt 1904, No. 30, Page 261 265: Gesetz, betreffend die Bekämpfung der Reblaus.

Deutsches Reichsgesetzblatt 1930 Teil I pp. 355: Weingesetz.

Deutsches Reichsgesetzblatt 1934 Teil I p. 248: Verordnung über Saatgut.

Deutsches Weininstitut GmbH Deutscher Weinfonds A. d. ö. R. (editor): Deutsche Wein Statistik 2012/13, Mainz 2013.

Diez (Zentrumspartei), in Stenographische Reichstagsprotokolle Bd. 428, 200. Sitz. S. 6371.

Doré, Claire and Varoquaux, F.: Histoire et amélioration de cinquante plantes cultivées, INRA 2006.

Dubus, Claire, Noah, le vin qui rendait fou ?, Université de Bordeaux, Thèse, 21, 1999.

Couderc, Freddy, "Analyse de la Loi du 24 decembre 1934 concernant les hybrides producteurs directs américains et français", available at <a href="http://association.fruits.oublies.pagesperso-orange.fr/contrib/cepagesinterdits/cepint01.html">http://association.fruits.oublies.pagesperso-orange.fr/contrib/cepagesinterdits/cepint01.html</a>,

[1.12.2015.] From the same author, also see «Les Vins Mythiques de la Cévenne Ardéchoise et du Bas Vivarais ».

Eckhart, W.; Sommer, R.: *Uhudler* Legende. Vom Wein der Gesetzlosen zur regionalen Köstlichkeit, Mandelbaum Verlag, Wien 2008.

- Gaceta de Madrid. Núm. 257. 13. Septiembre 1932.
- Gale, George: Dying on the Vine. How *Phylloxera* Transformed Wine, University of California Press, Berkely 2011.
- Haag (DNV), in Stenographische Reichstagsprotokolle Bd. 428, 183. Sitz. S. 5780.
- Hartl, Birgit: Evaluierung der phenolischen Inhaltsstoffe und der antioxidativenAktivität von Weintraubentrester, -kernen und -schalen der Sorte *Uhudler*. Diploma thesis, University of Vienna 2009.
- Heim, S. (editor): Autarkie und Ostexpansion. Pflanzenzucht und Agrarforschung im Nationalsozialismus, Wallstein Verlag, Göttingen 2002.
- Heinrich, A.: Das Weinrecht in Österreich von 1880 bis 2003, Dissertation, Universität für Bodenkultur, Wien 2003.
- Hidalgo Fernandez-Cano et al.: Tratado de Viticultura. Ediciones Mundi-Prensa. Madrid, Mexico 2011.
- Hoernle (KP), in Stenographische Reichstagsprotokolle Bd.428, 181. Sitz. S. 5669.
- Hofmann, U., Kiefer, W.: Ökoweinbau: Ökologieforum Hessen, Auswirkungen von weinbaulichen Anbauverfahren am Beispiel von Marianneaue. Vergleich von herkömmlicher, integrierter und ökologischer Wirtschaftsweise, Hess. Ministerium d. Inneren u. für Landwirtschaft, Forsten u. Naturschtutz, Wiesbaden 1995.
- Imprensa Nacional de Lisboa, 11 de Fevereiro de 1935, Ministério da Agricultura Direcção Geral dos Serviços Agrícolas Divisão de Produção Agrícola, 33/35 SÉRIE I, p. 263, <a href="http://www.legislacao.org/primeira-serie/portaria-n-o-8004-256019">http://www.legislacao.org/primeira-serie/portaria-n-o-8004-256019</a> [26.11.2015].
- Imprensa Nacional de Lisboa, 23 de Março de 1935, Ministério da Agricultura, 67/35 SÉRIE I, p. 423, http://www.legislacao.org/primeira-serie/lei-n-o-1891-256326 [26.11.2015].
- Imprensa Nacional de Lisboa, Ségunda-feira 28 de Janeiro de 1935, Ministério da Agricultura Gabinete do Ministro, 22/35 SÉRIE I, p. 202, <a href="http://www.legislacao.org/primeira-serie/decreto-lei-n-o-24976-255904">http://www.legislacao.org/primeira-serie/decreto-lei-n-o-24976-255904</a> [26.11.2015].
- International Organisation of Vine and Wine. Resolution Oeno 19/2004 of the International Organisation of Vine and Wine, dated as 30<sup>th</sup> June 2004.
- Journal officiel de la République française. Débats parlementaires. Chambre des députés: compte rendu in-extenso. Éditeur: Impr. du Journal officiel (Paris). Date d'édition: 1934-12-14 <a href="http://gallica.bnf.fr/ark:/12148/bpt6k64689183/">http://gallica.bnf.fr/ark:/12148/bpt6k64689183/</a> [04.02.2016].
- Kerschbaum (DBP), in: Stenographische Reichstagsprotokolle Bd. 428, 182. Sitz. S. 5741.
- Kindleberger, C. P.: Die Weltwirtschaftskrise 1929-1939. München 2014.
- Kortekamp, Andreas: Charakterisierung der Plasmopara-Resistenz bei Weinreben (Vitis sp.), Dissertation Universität Karlsruhe 2001.
- Landesgesetzblatt für das Land Niederösterreich. Jahrgang 1924, Punkt 54, ausgegeben am 14. April 1924, p. 31.
- Le Midi Socialiste, Sunday 10 February 1935, p. 3: "L'application des lois viticoles", http://images.midi.bibliotheque.toulouse.fr/1935/B315556101\_MIDSOC\_1935\_02\_10.pdf [04.02.2016].
- Leinzinger, E. P.: Gutachtliche Stellungnahme zu den Ergebnissen der Direktträgerweinsorten (*Uhudler*weine), Graz 7.4.1988.
- Legislative resolution embodying Parliament's opinion on the proposal for a Council Regulation on the common organisation of the market in wine (COM(98)0370 final -Consultation procedure), *JOC* 279, 1.10.1999, p. 385
- Leuschner, F. and Leuschner A.: Der Einfluß von Hybridenwein im Vergleich mit dem Wein aus Europäerreben auf den Fettgehalt der Rattenleber bei länger dauernder Untersuchung. Vitis 5 (1966) No. 1-6.
- Loskill, B. J.: Untersuchungen zur Biologie und Epidemologie von Plasmopara viticola (Berk. & Curt.) Berl. & de Toni auf Basis serologischer und genetischer Studien. Dissertation Georg-August-Universität Göttingen 2005.
- Mees L, Nagel K.J., Puhle H.J.: Kampf um den Wein. Modernisierung und Interessenpolitik im spanischen Weinbau. Rioja, Navarra und Katalonien 1860-1940, Verlag für Geschichte und

- Politik, Wien 2005, p. 70.
- Meloni, G. and Swinnen, J.: The Political Economy of European Wine Regulations, Discussion Paper 320/212, LICOS Discussion Paper Series, Leuven 2012.
- Mision Biologica de Galicia, Oral Conversation [27.01.2016].
- Mitteilungen der Weinbau und Kellerwirtschaft: Direktträger. Mitteilungen der Weinbau und Kellerwirtschaft des Hauptverbandes der Weinbautreibenden Österreichs (1923) No. 1-3.
- Mohr, H. D.: Farbatlas Krankheiten, Schädlinge und Nützlinge an der Weinrebe. Stuttgart, Ulmer 2012.
- Neue Wein-Zeitung: Die Direktträgerfrage in Österreich und der Weinhandel. Neue Wein-Zeitung (1929) No. 11.
- Neue Wein-Zeitung: Das neue Direktträgergesetz in Burgenland. Neue Wein-Zeitung (1929) No. 44.
- Neue Wein-Zeitung: Zur Bezeichnung der Direktträgerwein-Verschnitte. Neue Wein-Zeitung (1929) No. 57.
- Neue Wein-Zeitung: Das österreichische Provenienzschutzgesetz. Neue Wein-Zeitung (1929) No. 58.
- Neue Wein-Zeitung: Der Verkehr mit Direktträgerwein in Österreich. Neue Wein-Zeitung (1932) No. 20.
- Neue Wein-Zeitung: Die Beschlüsse der Internationalen Weinkonferenz. Neue Wein-Zeitung (1932) No. 22.
- Neue Weinzeitung: Die Direktträger im Lichte des Massenweinbaus. Neue Wein-Zeitung (1935) No. 19, p. 4-5.
- Neue Wein-Zeitung: Das neue österreichische Weinbaugesetz. Neue Wein-Zeitung (1936) No. 19.
- Neue Wein-Zeitung: Erster Mitteleuropäischer Weinbaukongreß. Neue Wein-Zeitung (1936) No. 71.
- O'Connor, Brendon: Brief History of Anti-Americanism. From cultural criticism to terrorism, Australasian Journal of American Studies (2004) Vol. 23, No. 1.
- Pedastsaar, P., et al.:Chemical composition of red wines made from hybrid grape and common grape (*Vitis vinifera* L.) cultivars, Proceedings of the Estonian Academy of Sciences 2014, 63, 4, 444 453.
- Pedneaulta, K., Provost, C.: Fungus resistant grape varieties as a suitable alternative for organic wine production: Benefits, limits, and challenges. *Scienta Horticulurae*. 2016.
- Pettentaler, F. and Formayer, H., (ed.): Weinbau und Klimawandel. Erste Analysen aus Österreich und führenden internationalen Weinbaugebieten, Verlag der Österrecihischen Akademie der Wissenschaften Wien, Graz: 2013.
- Phillip, C.; Eder., R.: Der "Uhudler" und die Wahrheit von Methanol, http://www.derwinzer.at/?id=2500,5475279 [08.01.2016].
- Postmann, K. P.: Weinbuch Österreich. Alles über Wein und seine Geschichte, Krenn, Wien 2010.
- Proposal for a Council Regulation (EC) on the common organization of the market in wine, (COM/98/0370 final), *JOC* 271, 31/08/1998, p.21.
- Quéré, Michel: Cépages hybrides. Une expérience de viticulture et vinification en Berry, Michel Quéré Ed., 2012.
- Regierungsvorlage zum BG über den Verkehr mit Wein und Obstwein. 452 Beilage zu den stenografischen Protokollen des Nationalrats. 20.06.1961.
- Regiowiki.at: Amerikawanderung der Burgenländer, http://regiowiki.at/wiki/Amerikawanderung\_der\_Burgenl%C3%A4nder [10.2.2016].
- REGULATION (EEC) No 816/70 OF THE COUNCIL of 28 April 1970 laying down additional provisions for the common organisation of the market in wine.
- REGULATION (EEC) No 817/70 OF THE COUNCIL of 28 April 1970 laying down special provisions relating to quality wines produced in specified regions.
- REGULATION (COUNCIL) (EEC) No 1388/70 of 13 July 1970 on general rules for the classification of vine varieties
- REGULATION (COMMISSION) (EEC) No 3800/81 of 16 December 1981 determining the classification of vine varieties.
- REGULATION (EEC) No 2389/89 of 24 July 1989 on general rules for the classification of vine varieties.
- REGULATION (COUNCIL) (EC) No 1493/1999 of 17 May 1999 on the common organisation of the market in wine, JOL 179, 14.7.1999, p. 1–84.
- REGULATION (COMMISSION) (EEC) No 2005/70 of 6 October 1970 on the classification of vine varieties.

REGULATION (EU) No 1308/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013 establishing a common organisation of the markets in agricultural products.

Reichstag IV. Periode 1928 Drucksache Nr. 2055. Ausgegeben am 21. mai 1930. Mündlicher Bericht des 8. Ausschusses (Volkswirtschaft).

Reisenzein, Helga (AGES). oral conversation May 2016

Rühl, Ernst Heinrich: e-mail correspondence [19.1.2016].

Schreck (KP), in Stenographische Reichstagsprotokolle Bd.427, 165. Sitz. S. 5105.

Statistisches Bundesamt, Rebflächenstatistik vom 13. März 2008, Wiesbaden 2008 in Beschreibende Sortenliste des Bundessortenamtes 2008, 198ff.

Steiermark.orf.at: Hobbywinzer müssen Weingärten roden, http://steiermark.orf.at/news/stories/2673566/ [11.02.2016].

Stenographische Reichstagsprotokolle Bd. 428, 183. Sitz. 5808f.

Stoewsand, G., S.; Robinson, W., B.: Malnutrition: Cause of "Toxic" Response of Chicks Fed Varietal Grape Juices. American Journal of Enology and Viticulture (1972) Vol. 23, No. 2, 54-57.

Stoewsand, G.; Bertino, J., J.; Robinson, W., B.: Response of growing chicks to varietal Wines and Juices. American Journal of Enology and Viticulture (1969) Vol. 20, No. 1, 48-55.

Strauß, Gudrun (AGES): oral conversation [8.2.2016].

Verein Freunde des Uhudler, email correspondence. [18.12.2015]

Verein Freunde des Uhudler: Produkte, http://www.uhudlerverein.at/de/uhudler/produkte/ [14.01.2016].

Verein Freunde des Uhudler: Uhudler, das Original aus dem Südburgenland, http://www.uhudlerverein.at/de/uhudler/entwicklung/ [14.01.2016].

Verordnung zur Ausführung des Gesetzes, betreffend die Bekämpfung der Reblaus, im Weinbaugebiet vom 23. Dezember 1935.

Wienerzeitung.at: Chicago, die größte Stadt des heutigen Burgenlandes, http://www.wienerzeitung.at/nachrichten/archiv/200327\_Chicago-die-groesste-Stadt-desheutigen-Burgenlandes.html [10.2.2016].

Wikipedia: Baco Blanc, https://de.wikipedia.org/wiki/Baco\_Blanc [11.2.2016].

Wikipedia: Flavescence dorée, https://de.wikipedia.org/wiki/Goldgelbe Vergilbung [11.2.2016].

Wikipedia: Hybride producteur direct, https://fr.wikipedia.org/wiki/Hybride\_producteur\_direct [04.02.2016].

Wineterminator.com: Jahrgänge, http://www.wineterminator.com/content/jahrgaenge/1929.html 4.1.2016[04.02.2016].

Wobisch, F.: Österreichs Weingartenfläche. zur Frage ihrer Erhaltung, Vergrößerung oder Verringerung, 9. Österreichischer Weinkongress. Wien 1935.

Yravedra, Gabriel., e-mail correspondence [30.12.2015].

Yravedra, Gabriel: Análisis de la Ley 25/1970. Madrid 2011, <a href="http://yravedra.com/doc/legislacion2.pdf">http://yravedra.com/doc/legislacion2.pdf</a> [9.2.2016].

Yravedra, Gabriel: Los híbridos productores directos. Madrid 2010, http://www.yravedra.com/doc/hibridos.pdf [9.2.2016]

Zweigelt, Fritz, Stummer, A.: Die Direktträger. Hybrides producteurs directs, Weinland Verlag, Wien 1929

Zweigelt, Fritz: Die Wahrheit über die alten Direktträger. Mitteilungen der Weinbau und Kellerwirtschaft des Hauptverbandes der Weinbautreibenden Österreichs, Ferdinand Reckendorfer Ed. (1923) No. 11-12.

Zweigelt, Fritz: Erste Traubenschau der Elsässer Direktträger, Mitteilungen über Weinbau und Kellerwirtschaft (1924) No. 11



ARCHE NOAH, Forbidden Fruits: The fabulous destiny of Noah, Othello, Isabelle, Jacquez, Clinton and Herbemont, Brussels and Vienna, 2017

#### **About ARCHE NOAH:**

ARCHE NOAH is a seed savers association in Central Europe, founded in 1990, with more than 14,000 members, which closely and actively follows political processes regarding crop diversity. ARCHE NOAH is politically active in Austria and in Brussels: www.arche-noah.at

### **Contact us:**

Brussels: Ms. Fulya BATUR fulya.batur@arche-noah.at +32 (0) 484 77 86 18 FR, EN Austria:
Ms. Katherine DOLAN
katherine.dolan@arche-noah.at
+43 (0) 676 55 744 08
DE, EN