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MADEIRA, THE ISLAND

Madeira is a gift from nature. Its landscape displays a perfect continuum and symbiosis between sea and forest, mountains and valleys. Writing about Madeira is to reveal its roots, its culture and its traditions. It is the absorption of unique knowledge, textures and tastes. It is the Island of flowers, of hot summers and mild winters.

The island, a part of Portugal, lies in the Atlantic Ocean and, together with the Island of *Porto Santo*, the *Desertas* and the *Selvagens* Islands, makes up the Archipelago of *Madeira*.

The profoundly rooted viticultural landscape of the island is a stage where a myriad of ever-changing colours, from different hues green to reddish-browns, play their part as the year goes by. The building of terraces, upheld with walls of stone, reminds the observer of staircases which, in some parts of the island, go all the way from sea level to the brim of the mountain forests and resemble gardens imbued in the landscape.

Known in the whole world as a *par excellence* tourist destination, the notoriety of the Island of *Madeira* is also owed to the wine that bears its name and which, in the most various regions of the globe, gained fame and prestige. A Wine with the name of an Island and an Island with the name of a Wine.



MADEIRA WINE, A SECULAR HISTORY

In 1419, at the very beginning of the period of Portuguese discoveries, João Gonçalves Zarco, Tristão Vaz Teixeira and Bartolomeu Perestrelo discovered an island in the middle of the Atlantic which they named Madeira Island. The three Donee Captains received the captaincies from Infante D. Henrique (Henry, the Navigator) and immediately took to cultivating its lands with wheat, vines and sugarcane.

The first colonisers were members of the Portuguese nobility and brought labourers and craftsmen from the north of Portugal to the island. During these first years, the special privileges conceded to those who colonised the island, also enticed important European merchants who, right from the start, became aware of the potential of Madeira in terms of exploring routes with important export markets.

The denseness of the vegetation on the island made it necessary to burn large areas and this was an increased contribution to the fertility of its soil. During the first years of colonisation, and up to 1461, the first system of "levadas" (water channels) was built, a system which was little by little gradually expanded throughout the centuries.

Agriculture prospered with a great focus on the cultivation of sugarcane, though also on vines and wheat. In 1466, sugarcane had become the main produce and, in addition to the expeditions which until then were directed to mainland *Portugal*, the Gulf of Guinea and African markets, sugarcane was taken to the markets of the Mediterranean and Northern Europe.

Although it remains impossible to pinpoint the exact time when the first vines were planted and what their varieties were, it is thought that the first colonisers brought with them varieties which already existed in *Minho*, North of Portugal. However, historical records which dated from 1450 by the Venetian navigator Alvise da Mosto, known as Luís de Cadamosto, show that the Malvasia Cândida (Candid Malmsey) variety had been brought to the island during the first years of colonisation. The navigator states that "... of the various vine varieties, Infante D. Henrique ordered that lands should be planted with Malmsey brought from Candia (the capital of Crete) and these are growing very well...", while praising, in his diary of voyages, the wine export and its good quality. These documents are extremely important as they prove that, admiringly, 25 years after the beginning of the island's colonisation, the export of Madeira Wine had already begun!

Throughout the fifteenth-century, the area occupied by the culture of vines steadily grew. The consequence of



this was an increase of exports but it is, undoubtedly, the discovery of America by Christopher Columbus that constitutes a landmark for the history of Madeira Wine.

Of this time tales are told involving historical figures and in which the notoriety of Madeira Wine abroad is already evidenced. The saying goes that, in 1478, George, Duke of Clarence, the brother of Edward IV, the King of England, when sentenced to death by the High Chamber, chose to be drowned in a butt of Malmsey Wine.

Sixteenth-century

The beginning of the sixteenth-century is marked by a decrease in the cultivation of sugarcane owing to a variety of different factors, amongst which an excessive produce and the exhaustion of the soil. By the end of the century the situation is one of crisis with the competition of sugar from Brazil offered at much cheaper prices. The lands with sugarcane plantations are now converted into vineyards. Foreign colonisers continue to disembark in *Madeira*, amongst them Simão Acciaioly who was responsible for bringing over the Malmesy Babosa vine variety.

Throughout this century there are many references to Malmsey by visitors like the Venetian Giulio Landi and the Italian Pompeo Arditique. Giulio states that "The whole island produces a great quantity of wines that are considered to be excellent and very similar to Candia Malmsey".

Seventeenth-century

Throughout the seventeenth-century the production and export of Madeira Wine grew substantially, and it is thought that during this period exports may have tripled. Although the major exporters were foreigners, British influence in the sector will only become notorious and predominant with the development of colonial markets in America and through commercial concessions made to British merchants.

These concessions enabled British merchants living on the island to occupy a privileged position in commercial trade with the Indies and Americas, having these markets supplanted the importance Brazil had occupied until then as the major market for the export of Madeira Wine. This was how triangular commerce came to be between *Madeira*, the New World and Europe (with Great Britain occupying a prominent position).

This triangle also included the transportation of goods from the Portuguese and the British colonies back to Europe.



The close of this century foresaw even more fame and prestige for a wine that had become known and desired all over the world owing to a great quantity of commercial trade routes which, undoubtedly, offered unlimited advantages for its expansion.

Eighteenth-century

At the very beginning of this century, the Methuen Treaty is signed (1703) between England and Portugal, and establishes that Portuguese wines would pay less one third of the customs rates upon entering England in relation to wines coming from other countries. In turn, English textiles entering Portugal would not pay any rates whatsoever. Despite this measure, which greatly benefited, as was intended, Oporto Wine, exports of Madeira Wine were still primarily directed towards the Indies and North America. Exports to Europe remained secondary.

The association of Madeira Wine with North America is very close and to witness this proximity one may evoke the fact that the celebration of the Declaration of Independence of the United States of America, on the 4th of July 1776, by its first President, George Washington, was marked by a toast with a chalice of Madeira Wine.

Present on the most refined tables of European Courts, it was the wine preferred by kings, emperors and statesmen. Thomas Jefferson, as did all the other "Founding Fathers", greatly appreciated the most exquisite wines of his time, but elected Madeira Wine as his favourite.

Besides the fact that it was an epoch of great notoriety and fame for Madeira Wine, the period which expands throughout the eighteen-century is particularly interesting and rich in what concerns the development of the character of this wine. The introduction of two new techniques significantly contributes to this development and these new techniques are fortification and heating "estufagem". By the middle of this century, most producing companies already fortified their wines by the addition of spirits.

Curiously, export distribution per market registers a change at the close of this century. This was probably due to the war of independence of the United States of America which brought many English citizens back to Great Britain. This, in turn, led to the progressive growth of the English market in terms of import of Madeira Wine.

Nineteenth-century



The beginning of the nineteenth-century is marked by a "boom" in exports, inflated by the Napoleonic Wars. However, this was not to be a favourable century for Madeira Wine. The post-war depression, already during the first decade, is prejudicial to Madeira Wine and there is a substantial decrease in its exports. The reopening of the French and Spanish ports, until then closed, also played a role in this. With French and Spanish ports closed, Portuguese wines entering the British market had no competitors.

Of the many occurrences related to this post-war period, one continues to arouse much interest. The protagonist was Henry Veitch, the English Council in Madeira who, upon Napoleon Bonaparte's calling at the island in 1815 on his way to exile in the island of Saint Helena, presented the emperor with a barrel of Malmsey. The saying goes that owing to the emperor's refusal to down his exile miseries in Madeira Wine, the barrel with the precious nectar was returned to the Island of Madeira upon claim of the donor. In 1840, the wine of that one barrel was then divided into hundreds of bottles which were to delight innumerable English citizens, amongst whom Sir Winston Churchill who, upon visiting Madeira in 1950, had the privilege of savouring it.

The instability in North America brought about by the Civil War of 1861 will dramatically affect the exports of Madeira Wine to that market. Moreover, despite that fact that Madeira Wine was fashionable in post-war England, the truth is that this was not sufficient to cover the contraction of the American market.

Other factors play a role in the decrease verified in wine exports, namely the opening of the Suez Canal in 1869. From this moment onwards, ships going west no longer call at the Island of Madeira.

The expansion of the Russian market by mid-century comes as a breath of fresh air. This market was to rival for some time with the British market in terms of trade turnover.

However, the second half of the century is marked by the devastating effects of the diseases that attacked the vineyards all over the world: oidium and philoxera.

During this period, and notwithstanding the increase of the American vine, which is introduced as a means of combating philoxera, the majority of the production of Madeira Wine consisted of "Verdelho" and "Tinta Negra". There are also reports mentioning the frequent existence of "Bual", "Bastardo" and "Terrantez". The wine produced with Malmsey vines continued to produce in small quantities, maintaining its fame and the quality awarded by the mythic malmsey "cândida" of the "Fajã dos Padres", a location initially owned by Jesuits.



Despite the recurring crises, by the turn of the century the production and commercialisation of Madeira Wine had recovered and would project itself in the market of the future.

Twentieth and Twenty-first-centuries

The twentieth-century will be a relatively stable one for Madeira Wine if compared to the previous century. During the first decade of this century and up to the First World War, export markets change and the German market gains enormous projection and a foremost position as the top export market. However, during the span of time between the two World Wars, the main destinies of export for Madeira Wine undergo some oscillations with the Scandinavian market, especially that of Sweden and Denmark, arising to the position of consumers of the best Madeira Wine.

This century is equally marked by efforts in terms of regulating Madeira Wine in view of achieving greater quality. It also witnessed the merging of a great number of producing companies, Portuguese and English, thus completely changing the scenario of the entrepreneurial tissue of Madeira Wine producers.

As from the 80s onwards, the tendencies in terms of export markets are delineated and will not undergo significant changes until our days.

The Revolution of 25th April of 1974 in Portugal and its subsequent entry in 1986 into the European Union brought about significant development in the Autonomous Region of Madeira which had an impact in the vitivinicultural sector. The reinforcement of pro-quality control becomes one of the priorities of governmental policies alongside a significant and healthy development of the vitivinicultural industry.

The twenty-first-century opens with the reinforcement of the quality of a wine with over 500 years of history.

Today, wine-growers and the whole of the companies related to the production and commercialization of Madeira Wine are highly committed to constantly improving the quality of this wine. They seek, from the planting of the vines to the bottling of the wine, to contribute towards the preservation of the fame and prestige of one of the world's best wines.



ROUND TRIP WINE

From the seventeenth-century onwards, one of the main markets for Madeira Wine was the Indies. This trade route was to become famous for Madeira Wine, not only because of the quantity of exports that were to take place throughout two centuries, but also due to the famous "Vinho da Roda" (Round Trip Wine).

The transportation of Madeira Wine to those regions was made in the hold of the ships, which reached very high temperatures on the passing through the tropics. On certain occasions, the wine would return to Europe, and it was then verified that these journeys greatly enhanced the quality and complexity of the wine due to the ageing acceleration. It was then that the barrels of Madeira Wine were sent to the Indies with the sole objective of enriching and valorising it. It was this wine that, on its return to Europe, conquered an unprecedented fame. This wine became known as "Vinho da Roda" or "Vinho Torna Viagem" because it embarked the ships in direction to India and then returned to be sold. In England, Madeira Wine gains an extraordinary reputation which was responsible for the astronomic commercialisation prices the wine reached in the market.

Motivated by the evidence that heat greatly augmented the quality of Madeira Wine and probably enticed by the valorisation of the Round Trip Wine, by mid-eighteenth-century, Madeira Wine producers were to invest in the "estufagem", a technique that consists in producing the same effect of the Round Trip method, done through various ways: either by direct heating, or through circulation of hot air and ultimately by the use of water steam which circulated in serpentines of copper inside the wine, still in use even today.



VITICULTURAL REGION

The vine landscape is unique and characterised by the steep orography of the terrain. The particular conditions of the soil (of volcanic origin), the proximity of the sea, the climatic conditions and the one-of-a-kind production process give the wine its unique and singular characteristics.

Vine cultivation may be found all over the island of Madeira and on the island of Porto Santo. In all, there are about 500 hectares of vineyards for the production of Wines with Protected Designation of Origin "Madeira" (DOP Madeira) and of Wines with Protected Designation of Origin "Madeirense" (DOP Madeirense) and Protected Geographical Indication (IGP "Terras Madeirenses").

The main viticulture councils are "Câmara de Lobos", situated on the south coast, with about 186 ha, followed by São Vicente with about 143 ha and Santana with approximately 86 ha, both on the north coast.

The Soils

The soils of volcanic origin are, in their majority, of basaltic. In general, they have a clayey texture and are, from a chemical perspective, acid, rich in organic matter, magnesium and iron, poor in potassium and suffice in phosphorous.

The Climate

The climate of the Island of Madeira, characterised by its microclimates, has hot and humid summers and mild winters. In the viticultural areas, one may find sub-humid or sub-arid climates, depending on whether one is referring to the north coast, at the topmost limit for the plantation of vines, or the south coast, at elevations below 150 metres of altitude.

In terms of rainfall, the island present annual average figures which range from over 3000 mm, at high altitudes, and around 500 mm, along the south coast near the sea level. As a norm, about 75% of the total annual rainfall falls in autumn and in winter.

In spring there is little rain, over 20% and in summer less than 5% of the annual rainfall. Precipitation increases with altitude and this effect is more significant on the southern coast.



The Relief

The total area of the island is of 732 Km². The greatest part of this area is to be found in slopes above 25%. The flatter regions are to be found in the urban and suburban areas of Funchal or located where the climate and the altitude do not allow agricultural practice. In the areas where slopes vary between 16 and 25%, where agricultural lands are to be found, agricultural practice is only possible with the construction of bench terraces, called "poios" on the island, sustained by walls of basaltic stone that so characteristically mark the agricultural landscape of *Madeira*.

Irrigation Water

Irrigation water in Madeira is collected in the higher regions and conducted throughout the island through canals called "levadas". The building of these "levadas" began at the time the island was populated, dating from the second half of the fifteenth-century. Nowadays, this system consists of about 2150 Km of canals of which 40 Km are in tunnels.

Vine Cultivation

The landscape of Madeira, of which viticulture is an inherent part, is characterised by the small size of the plots which, together, make up a sort of patchwork. Even though vineyards may be seen to occupy relatively large areas one should not be fooled into thinking they belong to one owner. Rather, they belong to many different wine-growers. Viticultural explorations have, in average, about 0,3 hectares, divided into more than one plot.

The vines planted in these small terraces makes mechanisation almost impossible. For this reason, in most cases, the whole cultivation cycle of vines, from pruning to harvesting, requires the use of manpower.

The most tradition **system of conducting** the vine is the "latada" or trellised vine, also known as pergola. In this system, the vines are conducted horizontally along wires and suspended off the ground from stakes, which makes the whole process of treating the vine and harvesting a difficult job. The height of the trellis varies between one and two metres and the densities of the plantations between 2500 and 4000 plants per hectare. During the second half of the twentieth-century another conduction method was introduced on the island: that of "espaldeira" or espalier. This method is usually used in lands that have a hardly any inclination. This system



of conducting vines vertically is used with densities of plantation that range from 4000 to 5000 plants per hectare.

Pruning takes place between the end of February and the month of March. In general, wine-growers. of the north coast begin pruning at the end of February and those on the south coast on the second fortnight of March. However, after harvesting and from November onwards, they traditionally undertake the "espoldra", a regional term for the chore of eliminating the shoots which will not be necessary for pruning.

From the end of the month of August until mid-October, harvesting of the grapes is carried out in a majestic ritual. The inclined relief and the system of small estates make the whole harvesting process a difficult affair. Therefore, farmers need to get together and join efforts. Men, women and youngsters participate in the harvesting of grapes, still a wholly manual process today. It is also an occasion to get the family together.

Once the grapes are picked, they are taken in boxes with a capacity between 25 Kg and 50 Kg to the wine cellars.



THE VINIFICATION PROCESS

Once at the wine cellars, grapes are triaged in order to assess their sanitary condition. Once they are weighed and the probable degree of alcohol has been verified using a refractometer (an instrument that measures the sugar content of the grapes), a selection of the grapes is made in accordance with the type of wine that one wishes to obtain. From here, the beginning of the delicate transformation process takes place. The must which results from the pressing is subjected to a fermentation, that may be partial or total, and subsequent fortification. The fortification process consists in stopping the fermentation with the addition of vinous alcohol at 96% Vol. The interruption of the fermentation is done in accordance with the degree of sweetness one wishes the wine to have. With this process, four types of wine may be obtained: dry, medium dry, medium rich and rich wines.

Once this process is terminated, wines may be subjected to one of the following production processes: "Estufagem" or "Canteiro", two different heating processes.

"Estufagem" – The wine is placed in inox stainless steel vats that are heated via a serpentine method. Hot water, at a temperature between 45 and 50 degrees Celsius, runs through this serpentine system for a period of never less than three months. Once the "estufagem" is completed, the wine is subjected to a period of "estágio" or let rest for at least 90 days in order to acquire the conditions that will make it possible for the oenologist to finish the wine so that it may be placed in a bottle with the required quality guarantee. These wines may never be bottled and commercialised before the 31st October of the second year following the harvesting and are typically batch wines.

"Canteiro" – The wines that are selected to age in "Canteiro" are put in casks, usually in the top floors of the wine cellars, where the temperature is higher, for a minimum period of two years. This denomination comes from the fact that casks are placed on wooden support beams called "canteiros". It has a type of oxidative ageing in the cask, through which the circulation of air originates the wine evaporation, and therefore it becomes more concentrated, making the wine develop unique characteristics of intense and complex aromas.

"Canteiro" wines may only be commercialised once at least three years have elapsed, counting from the 1st January of the year following the harvest.



GRAPE VARIETIES

Of all the accredited and recommended varieties of grape, those that are used most and that have the longer tradition in Madeira Wine making are the Sercial, Verdelho, Boal, Malvasia and Tinta Negra varieties.

The "Wine of Madeira" obtained exclusive or predominantly from the grape varieties of Sercial, Verdelho, Boal, Malvasia-Cândida, Malvasia-Cândida-Roxa, Malvasia and Terrantez may only be associated with the following types of wine, classified according to its sugar degree:

- . Dry or extra dry in the case of wine obtained from the "Sercial" vine;
- . Medium dry in the case of the wine obtained from the "Verdelho" grape variety;
- . Medium Rich in the case of wine obtained from the "Boal" grape variety;
- . Rich in the case of wine obtained from the "Malvasia" grape variety.
- . Medium dry or medium sweet in case of the wine obtained from the "Terrantez" grape variety.

DESIGNATIONS OF MADEIRA WINE

Madeira Wine has a set of designations that allow the identification of its different varieties.

With indication of age – Madeira Wine with right to the use of the designation of age, when its quality is in conformity with the respective standards, with the permitted age indications being the following: 5, 10, 15, 20, 30, 40, 50 and over 50 years old.

Traditional designations:

Frasqueira or Garrafeira – reserved reference to the wine with indication of the vintage year and recommended variety, produced by the canteiro system and submitted to minimum continuous aging of 20 years in wood, showing organoleptic characteristics of exceptional quality, where the bottling year should be indicated and it should have a specific current account, before and after bottling.

Colheita – reserved reference to the wine with indication of the vintage year, that it has been aged continuously in wood during at least 5 years and shows special organoleptic characteristics, where the start of the aging



process should be indicated to the IVBAM, IP – RAM at least 5 business days in advance, as well as its end, with indication of the bottling year and it should have a specific current account.

Canteiro – Madeira Wine fortified during or right after fermentation, being submitted to aging in wood for a minimum period of 2 years, it should have a specific current account and cannot be subject to the heating production process (estufagem) nor bottled aged with less than 3 years, counted as of 1 January of the year following that of the harvest.

Reserve (or Old) – Madeira Wine in conformity with the standard of 5 years old.

Old Reserve ((or Special reserve or Very Old) - Madeira Wine in conformity with the standard of 10 years old.

Extra Reserve - Madeira Wine in conformity with the standard of 15 years old.

Selected, **Choice ou Finest** – Madeira Wine showing special quality for the age in question.

Fine - Madeira Wine of quality with perfect balance in the freshness of the acids, combined with the aromas evolving with the aging in wood.

Solera – reserved reference to wine produced by the canteiro system, which shows special organoleptic characteristics and whose base wine is of only one harvest and just one recommended variety and submitted to a minimum continuous aging of 5 years in wood, which constitutes the base of a batch. After this period, a quantity that does not exceed 10% can be removed annually from each of the casks, which is replaced by the same quantity of another younger wine of the same variety, up to the maximum of 10 additions. Only after the existing wine has been submitted to this process can it be bottled as Solera. Each of the additions and each bottling should be communicated to the IVBAM, IP – RAM, at least 5 business days in advance. This reference should be accompanied by indication of the harvest year of the base wine, the variety and the bottling year and it should have a specific current account before and after bottling.

Rainwater – Wine with a pale to golden colour, with a Baumé degree between 1.0 and 2.5, which may also be associated to the indication of maximum age of 10 years or other equivalent.



Types of Madeira Wine in accordance with their degree of sweetness are as follows:

Dry – Madeira Wine with a Baumé degree measurement of less than 1.5°. The term Extra-Dry may be used when the Baumé measurement is equal to or less than 0.5°.

Medium Dry – Madeira Wine with a Baumé measurement of between 1° and 2.5°.

Medium Sweet - Madeira Wine with a Baumé measurement of between 2.5 ° and 3.5°.

Sweet - Madeira Wine with a Baumé measurement greater than 3.5°.



MADEIRA WINE AT YOUR TABLE

Madeira Wine, owing to its complexity of aromas and organoleptic characteristics, may be drunk at any hour of the day or night. At the table, Madeira Wine offers diverse possibilities in terms of accompaniment in accordance with the four types of wine.

Madeira Sercial or Dry Wine, of a light colour, full bodied and perfumed it is perfect as an aperitif and goes well with olives, toasted almonds, caviar or salmon canapés and hors-d'oeuvre with mayonnaise. It is equally subtle with smoked fish like salmon, sword fish, tuna or black scabbard, shellfish, sushi or fish mousses, and delicate with fresh goat or sheep cheeses. Refreshing as a long-drink "Madeira Wine with tonic water, slice of lemon and ice" – Dry Madeira Wine is very refreshing.

Madeira Verdelho or **Medium Dry Wine**, structured, of a golden colour, it is also excellent as an aperitif. It combines perfectly with olives, toasted almonds and dry fruits and is pleasant with consommé, fresh cream soups and onion soup au gratin. It is equally exuberant with Serrano ham or smoked game, soup bowls of game, curd cheese, mushrooms with garlic or stuffed, and tasty with duck or goose pâté de *foie-gras*.

Madeira Boal or **Medium Rich Wine**, full bodied and fruity, it is harmonious with fresh tropical fruits, dry fruits, cakes and fruit tarts. Young *Boal* is perfect to accompany with soft cheeses and older *Boal* goes very well with matured cheese. Delicate with cheese or wild fruits with butter soufflés, this Madeira Wine reveals itself exotic with milk chocolate, pralines, petit-fours, fresh cream cakes and traditional "bolo de mel". Old *Boal* is also perfect to associate with pipe tobacco and with cigars.

Madeira Malvasia or Rich Wine, of a dark colour, full bodied and aromatic, it may be appreciated with tropical fruits and dry fruits such as walnuts and hazelnuts. It is gracious with dry fruit cakes and fruit tarts, "bolo de mel", butter biscuits, dark or milk chocolate, pralines and petit-fours. It is equally elegant and combines very well with Portuguese cheeses like the one from Serra, Serpa, Azeitão, that of Rabaçal and from the Ilha, and likewise with blue cheeses like Danish Blue, Roquefort, Stilton or Gorgonzola. The «Frasqueiras» of the Malvasia variety are exceptional with Havana cigars.



THE MADEIRA WINE, EMBROIDERY AND HANDICRAFTS INSTITUTE, IP - RAM

Considering the extreme importance of Madeira Wine, the Autonomous Region of Madeira created the Madeira Wine Institute in 1979. Succeeding the Delegation of the "Junta Nacional do Vinho" (National Wine Council) on the island, the main mission of the Madeira Wine Institute was to ensure the convenient discipline with the production and commercialisation of Madeira Wine and, in general, to coordinate all viticultural activities in the Autonomous Region of Madeira.

Once the priorities had been set in terms of lines of action, the Madeira Wine Institute proposed and presented a series of measures and legal dispositions of administrative nature in order to adequate the viticulture, production and commerce of wine in the Region to the standards and demands of the then European Economic Community. As a result, during the years that followed a legal framework was in force and would discipline the vine and wine sector in the Autonomous Region of Madeira.

Internally, the Institute organised itself with the necessary services in order to respond to the requests coming from the economic agents of the sector and, at the same time, while, at the same time, complying to its role within the normative framework that had been created. The Services relating to Viticultural Promotion supervises and controls the manufacturing of wines and spirits, implementing the registration of fermentation, distillation, rectification, preparation and storage facilities, establishing an inventory for incoming, outgoing and existing stock, proceeding to take samples of the wine for analysis and issuing seals of guarantee and certificates of origin.

Alongside the Services relating to Viticultural Promotion, another operative service was set up, no less important than the first. It was the Viticultural Laboratory, which was responsible for carrying out the laboratory assay and testing that was deemed necessary in order to issue bulletins that would lead to the respective certification. Besides the chemical testing of the wines, the Institute was concerned with having a Tasting Panel from the very beginning the members of which had to test the wines at the sensorial level and, through a binding advisory report, ensure their quality and that they were genuine.

The Madeira Wine, Embroidery and Handicraft Institute PI - RAM, (Instituto do Vinho, do Bordado e do Artesanato da Madeira, IP - RAM, IVBAM) is created in June 2006. This new Institute is the result of the



merging of the Madeira Wine Institute with the Madeira Embroideries, Tapestries and Handicrafts Institute and succeeds them in their policies of coordination, support, valuation, preservation and promotion of the vine, wine and handicrafts of Madeira. In the areas directly related to Madeira Wine, the competencies given to the Wine Sector Control and Certification Services, the Viniculture Services, the Quality Support Services, wherein the Vitiviniculture Laboratory and the Promotion Services are located, are of fundamental importance.

To this end IVBAM, IP – RAM seeks to offer continuity to the support that it offers the wine and spirit sector and Regional Embroidery and Crafts sector, preserving all the credibility earned by the then IVM and IBTAM.

Within the scope of its powers is the fact that it is an issuing body of certificates of quality for Madeira Wine and Embroidery and it is also the entity responsible for the promotion and marketing of these regional products, whether within the domestic or overseas market.

WINE SECTOR CONTROL AND CERTIFICATION DIRECTORATE

The Wine Sector Control and Certification Directorate (Direcção de Serviços de Controlo e Certificação - DSCC) is the operative service of the IVBAM which is responsible for the coordination and supervision of the production and commerce of wines and all other products of vinic nature and origin, as well as spirituous drinks produced in the Autonomous Region of Madeira (RAM). This service also deals with collaboration with other entities, the control and overseeing of support to the wine, spirits and sugarcane-based drinks sector.

Since IVBAM, IP - RAM is the certifying body of Madeira Wine, of "Madeiran" wine with Protected Designation of Origin and wine with Protected Geographical Indication, "The Island of Madeira", all the necessary physical and administrative checks are carried out via DSCC, issuing in turn the documentation relating to the shipping or exporting of these products, including spirits produced in the Autonomous Region of Madeira.

Through this Service, the IVBAM, IP - RAM also controls the stocks in the wine and spirituous drink producing companies of the RAM and is equally responsible for the issuing of certificates of assay of origin, for the



attribution of the lead seals that are necessary for the commercialisation of Madeira Wine and all the other vinic products as well as for the approval of the labels and packaging used.

VITIVINICULTURE DIRECTORATE

The Vitiviniculture Directorate (Direcção de Serviços de Vitivinicultura - DSV) is the Operative Service of the IVBAM, IP - RAM with the responsibility of coordinating, ensuring, regulating and supervising the culture of the vines and the making of the Quality Wine of the Autonomous Region of Madeira.

Within the scope of its functions, this Service stimulates and promotes the regional vitivinicultural production, regulates and coordinates the management measures of the viticultural patrimony and the restructuring of vineyards, along with promoting the quality of wines entitled to the Denomination of Origin or Geographical Indication, namely by means of rendering Oenological Services.

It is also up to the DSVV to implement a viticultural register and to it keep up to date, to issue licences for plantation and new plantation rights and to give technical assistance to wine-growers by disseminating the good agricultural practices associated with this type of culture. It is also responsible for the plantation of vines of an experimental nature, for demonstrating and safeguarding the regional viticultural patrimony. It is equally the only regional nursery pertaining to viticultural material.

THE QUALITY SUPPORT DIRECTORATE

The Quality Support Directorate (Direcção de Serviços de Apoio à Qualidade - DSAQ) is the operative Service of the IVBAM, IP - RAM that is responsible for the coordination and for ensuring the quality of the wine and all the other products of vinic origin, of spirituous drinks and all other alcoholic drinks produced in the RAM.

This Service includes the Vitivinicultural Laboratory and the Tasting Panel in its structure.



The Laboratory

The Laboratory has, since October 2006, the statute of "Accredited Laboratory, in accordance with the NP EN ISO/IEC 17025 referential – General Requirements for the Competence of Testing and Calibration Laboratories" and is the Official Vitivinicultural Laboratory of the RAM. Within the context of its competencies, it is up to the Laboratory to carry out all the laboratory testing that is deemed necessary in conformity and to comply with the attributes of the IVBAM for the vitivinicultural sector and that of spirituous drinks and all other alcoholic drinks, including the physical and chemical testing that are necessary in order to prevent and repress anti-economic offences and against public health. For this, the Laboratory issues testing bulletins or corresponding documents. It also promotes and participates in carrying out inter-laboratorial studies envisaging the improvement of reproducibility and reliability of the assays carried out in the laboratories of the vitivinivultural sector. It also participates in studies which aim to characterise products and the conditions under which these are obtained or commercialised or for the improvement of technological processes. Finally, it carries out and participates in studies that develop new testing methods and proposes these as official methods, reference methods or usual methods.

The Tasting Panel

The Tasting Panel, consisting of oenologists or other persons of renowned and undisputed competence in the area of oenology, in variable number though never above ten, is responsible for the sensorial testing of the wines and is expected to provide a binding advisory report concerning the possible commercialisation of these wines. It is also expected to technically assist the IVBAM in the area of oenology.

THE PROMOTION SERVICES DIRECTORATE

The Promotion Services of the IVBAM, IP - RAM are the operative Services that are responsible for the coordination and management of the dissemination and promotion of the wine, the regional handicrafts, and all other traditional products and regional agri-foodstuffs. It is up to these Services to organise the participation of the IVBAM, or that of some of its services or representatives, in all events of promotional nature and is responsible, to that end, in fulfilling all requirements and protocol that are of its competence. In general, it must also ensure that the role of public relations and communication of the IVBAM is seen to, while also coming up with and developing strategies and marketing and publicity campaigns. Finally, it must undertake market



surveys, detect business opportunities, observe how competition behaves and identify commercialisation and distribution channels at the national and international levels.

THE MADEIRA WINE ASSOCIATION "CONFRARIA"

The Madeira Wine Association was founded in 1985, with its headquarters at the Madeira Wine Institute. It is a cultural and associative institution whose purpose it is to promote the good reputation of Madeira Wine all over the world.

The Association is constituted of the following organs:

- The Chancellery, which administers and governs the activities of the Association;
- The Table of the Inspectors, which is the Fiscal Council of the Association;
- The Chapter, which is the General Assembly of the Association.

The High Chanceller presides over the Chapter, this being a title of honour of the greatest prestige, and it is his obligation to welcome the new members into the Association according to the habits and other rules of the Association. Whenever the members meet officially, a CHAPTER takes place.

The Association's costume is made up of:

- The cape, a long velvet piece, in a dark Wine colour, reminiscent of the ruby Malmsey originating from Greece:
- The hat, in black velvet, with ostrich feathers in several colours, reminiscent of the "gentlemen" and wealthy merchants of the first century of Madeira's colonization, who contributed much to the economic development of the island, planting the vines that they used to bring in from distant lands:
- The *Tambuladeira*, a piece with which the new members are toasted, normally made of tin, which is a small short cup, and with a bottom which allows the light to reflect through the fine layer of Wine, so that its state of clearness and the colour of the precious liquid may be visible.



MADEIRA WINE FIGURES

Production of Grapes and Wine with DO or IG in RAM

In the 2017-2018 Wine Campaign, in addition to the production of 3,95 million liters of fortified wine with Designation of Origin (DO) "Madeira" or "Madeira Wine", 1.522 hectoliters of wine were also produced and certified with the Designation of Origin (DO) "Madeirense", and 136 hectoliters of wine with the Geographical Indication (IG) "Terras Madeirenses".

In the 2018 vintage (2018-2019 Wine Campaign), the total production of *Vitis vinifera* grapes in the Demarcated Region of Madeira was 3.624 tonnes. With the exception of some small quantities that grape growers reserved for their own consumption, 92,1% of the production was sold to companies engaged in the production and trade of Madeira wine, about 5,7% to companies engaged in the production and trade of wines with the DO "Madeirense".

The estimated data for 2018-2019 Wine Campaign (21-12-2018) is of about 3,22 million liters of fortified wine with the Designation of Origin (DO) «Madeira» or «Vinho da Madeira», 1.519 hectoliters of wine with DO «Madeirense».

(1) The Wine Campaign goes between 1st Auguts of each year until the 31st July of each year.

Commercialization of Madeira Wine

In 2018, the commercialization of Madeira wine was 3,37 million liters, representing the EU countries with a market share of 77,5%, being the main destination of this wine, with special emphasis on France (32%), Portugal (18%) Germany (6,9%), the United Kingdom (6,4%) and Belgium (5,3%). Naturally, the national market, with a share of 18%, is a major consumer of Madeira wine, especially here where Madeira wine is marketed in the region itself (15,6%), driven largely by tourists visiting the island. Outside the EU, according to the figures listed in the table below, the major markets for Madeira wine are Japan (7,9%) and the United States of America (6,4%), followed by Switzerland (2,7%) and China and Canada (1,2%).

Upon further analysis of the commercialization of Madeira wine according to different types and ages, it can be seen that the most traded wines, depending on the degree of sweetness, are the sweet and medium dry wines,



and among the wines named after their grape variety, the most popular wines are of the Malvasia variety, followed by Boal grape.

The commercialization of Madeira wine is focused mainly on new wines (circa 3 years of age), and for those wines with an indication of age, at the level of 5 to 10 year-old wines. In regards to Madeira wines named after their grape variety, the trading volume is equally higher in the range of wines with 5 and 10 years of age, with exception for the grape varieties «Terrantez» whose commercialization volume is superior for the 20 years of age and «Bastardo» whose commercialization volume is superior for the 50 years of age "Frasqueira" and the grape variety «Tinta Negra» whose commercialization volume is superior for the 5 years old and "Colheitas".

Commercialisation of Wine with the DO "Madeirense" and Wine with the IG "Terras Madeirenses"

In 2018, the sales of wine with DO or IG were 1.301 hectoliters, from which 1.001 hectoliters with the DO "Madeirense" and 300 hectoliters of wine with the IG "Terras Madeirenses". The wines more commercialized were the whites (56,4%), the reds (25,3%) and the roses with 18,3%.



Commercialisation of Madeira Wine by Market - 2010 to 2018 MARKET 2018 540.00 318.00 85.50 216.00 234.00 162.00 321.00 138.00 340 671.00 289 613.00 253 580.25 235 244.10 268 982.15 290 202.05 266 594.85 324 016.60 231 098.25 3 553,50 5 898.00 2 760.00 3 660.00 3 372.00 5 162.25 5 178.00 3 510.00 4 050,00 34 235,50 Austria 26 428,50 27 411,50 43 071,00 17 806,51 35 899,50 33 201,00 19 222,50 33 807,00 171 550,00 181 833,50 217 684,50 159 823,00 181 670,00 175 789,00 168 326,75 152 827,25 179 843,75 13 552,00 22 608,00 15 351,00 22 756,50 10 056,00 11 491,50 11 019,00 21 135,00 11 238,00 94,50 94,50 378,00 945,00 472,50 450,00 44 365,50 32 791,50 42 439,50 27 577,50 40 323,90 21 846,00 34 916,40 39 615,00 42 973.50 290.25 765.00 486.00 742.50 2 245 20 1 485 00 3 061 50 7 188 50 32 917 00 43 666 65 139,50 94,50 90,00 139,50 193,50 225,00 7 315,50 2 223,00 711,00 174,00 390,00 1809,75 4 177,51 3 354,75 Croatia 144,00 61 072,50 55 284,50 48 952,50 41 668,50 51 798,75 50 982,00 60 880,30 41 384,50 54 164,00 Dubai 597,00 300,00 1 762,50 USA 145 823,25 186 463,25 160 355,50 185 019,25 213 915,25 159 081,00 193 256,25 222 081,00 214 456.50 **United Arab Emirates** 414,00 Slovakia 148,50 Spain 7 036,50 7 798,50 6 171,00 7 437.00 8 424,50 8 996,50 12 092,25 11 404,50 16 073.50 Estonia 922.50 27 072.00 26 406,00 23 985.00 17 161.20 15 411.90 13 026.00 12 393.75 10 989.00 11 235.00 France 1 121 397,00 835 323,00 1 148 650,00 1 022 317,50 1 014 741,95 1 130 563,00 940 854,50 850 881,00 1 075 959,00 472,50 676,50 685,50 1 222,50 945,00 1786,50 373,50 1 108,50 630,00 84 457,60 51 352,95 68 807,70 54 509,40 61 118,85 52 851,00 73 645,50 64 495,80 53 510,25 1 870,50 1 401,00 1 330,50 2 560,50 1 821,25 1 732,50 6 816,00 2 096,00 630,00 441,00 3 982,50 3 583,50 4 626,00 4 362,75 4 512.75 5 393.25 5 650,50 5 508.00 6 531,75 217 779,40 219 485,25 280 239,00 273 428,50 282 011,00 284 603 50 222 557,25 270 891,00 266 695,50 90.00 529,50 2 470,50 387,00 445,50 162.00 564,00 733,50 363.00 1 597.50 3 496,80 3 489,30 5 710,80 3 801,30 3 538,80 3 741,00 3 506,70 4 011,60 3 927,30 472,50 1 798,50 1 093,50 450,00 745.50 136,50 224,00 Madeira 525 880,52 396 118.59 479 010.25 444 578,70 520 984.97 525 596.16 440 682.82 459 886.51 495 714.55 Malta 42,00 Mexico 1 116,00 5 409,00 1 953,00 252,00 2 652,00 2 727,00 1 975,50 630,00 621,00 12 460,50 Norway 15 505,50 11 874,00 11 589,75 13 860,75 14 017,50 13 933,00 15 389,75 17 778,25 New Zealand 108.00 103,50 283,50 705,00 450.00 568,50 378,00 Others 2 791.50 4 684 50 2 185.50 11 673.00 13 224 00 6 699 75 12 493.50 10 920 75 Others (EU) 990.00 360.00 1 444.50 1 522.50 4 456.50 5 646.00 1 461 00 5 178 25 45 441.00 Poland 5 845.50 7 782.00 33 448.50 8 208.00 50 829.75 14 691.00 39 651.00 18 552.50 Portugal Mainland 60 422,30 47 625,30 50 308,20 46 258,50 68 781,10 67 549,35 70 617,05 101 818,70 80 261,40 United Kingdom 270 472,50 306 122,27 355 464,27 296 849,75 314 166,30 310 470,35 306 869,60 214 247,76 325 628,02 Czech Republic 2 091,00 3 696,25 3 937,00 5 071,25 3 177,50 3 293,00 3 797,00 3 067,25 3 558,00 1 678,50 11 499,00 22 230,00 16 495,50 23 766,00 5 805,00 7 830,00 13 801,50 2 385,00 3 118,50 1 935,00 2 475,00 1917,00 1 998,00 1 113,75 1 462,50 1 107,00 117 721,50 95 589,00 94 885,50 94 809,00 71 398,50 81 835,50 71 258,75 80 152,50 68 115,75 114 274,00 83 856,00 71 672,00 87 186,55 87 597,50 102 400,50 107 379,00 73 462,25 91 989.00 18 423.00 1 890,00 1 890,00 1 260,00 472,50 1 890,00 1 260,00 3 329 995,07 3 277 614,94 3 012 265,82 3 407 343,17 3 187 680,98 3 372 160,11 3 218 242,85 3 169 834,34 3 365 720,63

Madeira Wine is exported for over than thirty countries.



Commercialisation of Madeira Wine By Vine Varieties - 2010 a 2018

VINE VARIETY		Quantity (litres)									
		2010	2011	2012	2013	2014	2015	2016	2017	2018	
Recommended and Autorized Vine Varieties	Sweet	1 162 120,85	1 260 360,33	1 199 311,31	1 128 757,79	1 311 841,88	1 301 190,86	1 072 796,80	1 149 960,56	1 248 158,49	
	Medium Sweet	678 419,95	399 349,29	749 392,69	706 523,79	713 070,42	793 337,98	691 567,77	615 549,21	616 777,11	
	Medium Dry	1 021 891,14	670 787,59	765 616,73	645 143,48	683 545,57	680 003,67	664 960,31	761 423,00	813 636,18	
	Dry	222 922,25	454 543,22	484 308,93	455 831,52	410 204,01	332 668,59	511 329,67	421 856,04	417 791,21	
Malvasia		78 894,75	83 748,95	78 786,85	97 159,88	90 941,80	86 045,72	79 545,25	89 639,25	93 852,75	
Malvasia Cândida									48,00	15,00	
Boal		48 239,75	59 249,20	57 017,85	63 843,01	65 887,45	58 702,25	61 915,73	62 411,39	71 844,68	
Verdelho		28 098,00	36 720,46	31 729,35	38 718,38	44 039,83	36 788,75	38 935,30	46 413,76	44 201,05	
Sercial		35 927,25	44 503,58	38 549,10	47 021,63	48 970,20	36 232,50	42 092,63	46 727,14	45 805,91	
Terrantez		1 096,50	2 903,45	2 546,36	4 581,00	3 553,95	3 550,25	3 486,00	4 117,50	3 106,50	
Moscatel Graúdo							13,50	157,50	2,25		
Tinta Negra							1 389,00	2 986,63	19 780,50	10 318,75	
Bastardo		4,50	99,75	84,00	100,50	105,00	72,00	60,75	314,25	213,00	
TOTAL		3 277 614,94	3 012 265,82	3 407 343,17	3 187 680,98	3 372 160,11	3 329 995,07	3 169 834,34	3 218 242,85	3 365 720,63	

 $Commercialisation of Madeira\ Wine\ by\ Age\ and\ Traditional\ Mentions\ with\ indication\ of\ the\ year\ of\ harvest\ -\ 2010\ a\ 2018$

AGE and TRADITIONAL	Quantity (litres)										
MENTIONS	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Madeira without additives	180 050,00	205 075,00	193 840,00	172 850,00	216 310,00	189 460,00	204 395,00	193 940,00	142 255,00		
Modified	729 750,00	362 900,00	791 350,00	638 510,00	618 200,00	634 280,00	704 800,00	590 400,00	662 400,00		
Current	2 006 028,33	2 018 338,37	2 014 650,04	1 918 402,69	2 068 525,92	2 059 445,74	1 801 958,08	1 916 193,11	2 057 328,39		
5 years	250 244,36	281 507,99	267 700,52	305 853,25	316 287,45	299 422,64	303 367,09	332 071,20	326 407,67		
10 years	73 385,75	93 159,33	93 819,60	97 598,91	108 662,36	95 363,19	99 018,06	115 648,88	117 328,88		
15 years	9 805,50	16 161,00	14 785,50	14 459,75	9 378,50	10 308,25	11 821,75	16 221,50	12 538,80		
20 years	476,25	3 155,00	1 934,50	3 727,50	3 379,50	3 663,50	4 397,25	4 371,50	2 855,50		
30 years	15,00	18,00	42,75	3,75	567,75	559,75	481,00	510,00	226,75		
40 years	214,50	71,25	305,50	1 399,50	402,00	57,00	12,75	21,00	357,75		
50 years							929,00	724,50	215,75		
Colheita	19 378,00	21 915,50	18 549,50	22 177,75	18 672,00	24 005,50	26 719,75	29 378,14	27 077,25		
Frasqueira	8 267,25	9 964,38	10 365,26	12 697,88	11 774,63	13 429,50	11 934,61	18 763,02	16 728,89		
TOTAL	3 277 614,94	3 012 265,82	3 407 343,17	3 187 680,98	3 372 160,11	3 329 995,07	3 169 834,34	3 218 242,85	3 365 720,63		

For more information, please visit: http://www.vinhomadeira.pt/Statistics-234.aspx



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