

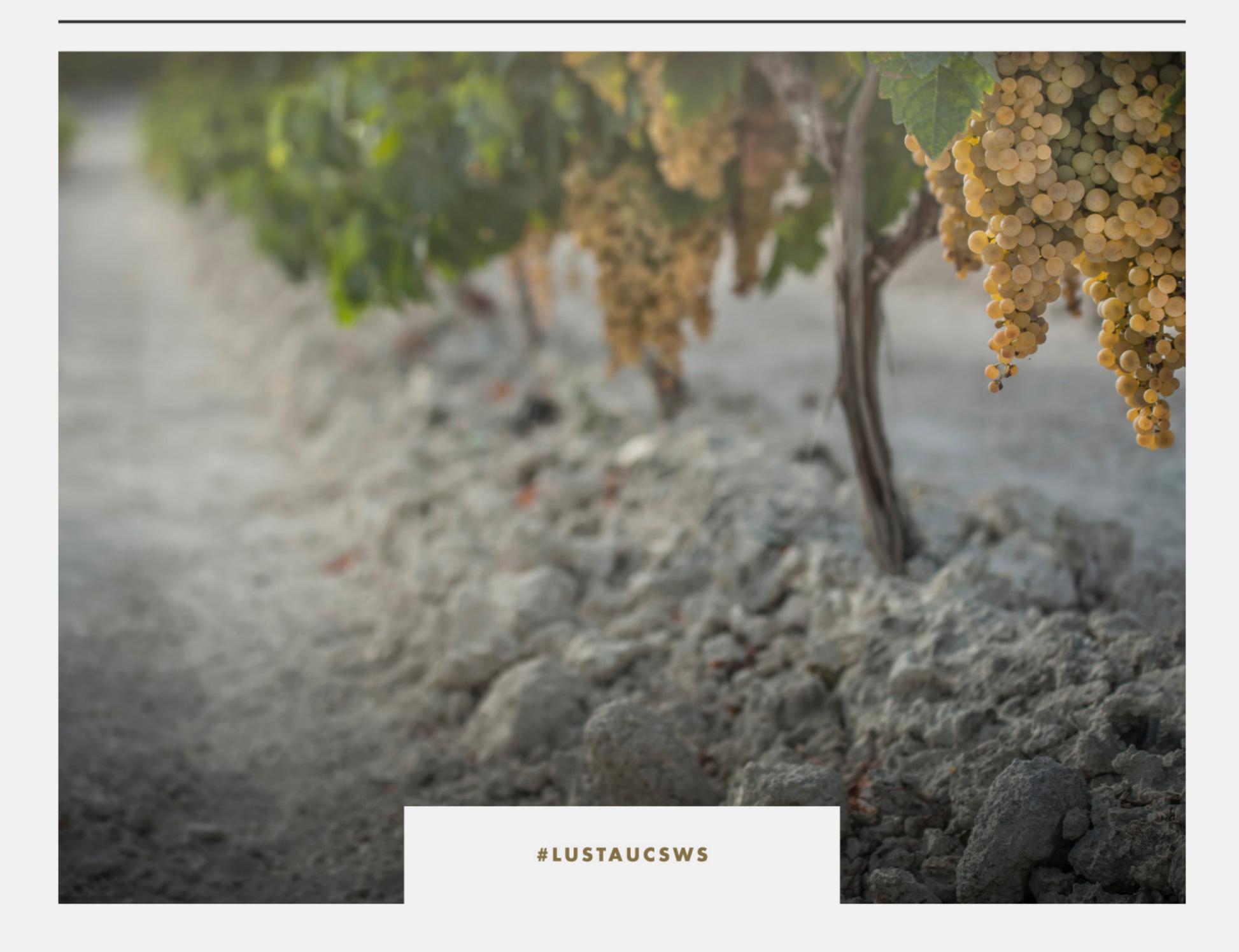
Digital only STUDENT MANUAL V.2

Produced and published by The House of Lustau.









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All content included in this manual, both textual and graphic, has been designed and created by Emilio Lustau S.A. and has been reviewed, overseen and approved by the Consejo Regulador de las DDOO Jerez-Xérèz-Sherry y Manzanilla-Sanlúcar de Barrameda.

Emilio Lustau SA

Calle Arcos, 53. Jerez de la Frontera. 11402.

Cádiz. Spain.

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Designed by The House of Lustau, Spain.

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Before we start

This is an interactive manual. You will find **buttons** to videos and expanded information on different websites and platforms.

To get the most of this manual:

- 1. Tap on the index numbers to jump to the section you want to read.
- 2. If you see the icon like the one below, tap on it! It will take you to multimedia content (blog posts, videos and even a virtual tour). Pay attention to it!
- 3. This publication has been designed for mobile devices. We recommend you to read it on an iPad or a tablet.



Sherry lover, welcome to the Certified Sherry Wine Specialist (CSWS®)

A letter from the CEO of The House of Lustau.

Dear CSWS Students,

All of us at The House of Lustau are **honored** by your decision to join us and the **Wine Scholar Guild's prestigious team** of experts for an in-depth immersion into the highest-level certified education outside of the Consejo Regulador of Jerez experiential accredited course in Spain. It is our desire and commitment that you walk away from this program with an expertise on sherry and the confidence to apply and share this knowledge.

It has been four years since the Certified Sherry Wine Specialist (CSWS®) program was launched in the US, an intermediate level of study completed by industry trade professionals, food and wine journalists, and others looking to achieve a higher knowledge about sherries. Due to the intense activity, success, and immense response received we renewed and enhanced the course content, considering the suggestions and proposals from the students who have already participated in it. Now Lustau is proud to have the invaluable collaboration of the Wine Scholar Guild, a leader in offering quality wine certification courses with a network of schools in 30 countries of the 5 continents, to bring to you the CSWS® Online.

Traditionally wine and spirit connoisseurs have found a complexity to these wines, probably also part of their allure and **mystique**, that most likely limited a broader enjoyment of them. This class offers the opportunity for professionals like you to **explore the world of sherry** turning that wonder into a **passion** for these unique wines and their region while bestowing the proficiency for you to communicate and recommend them confidently in future. There is a magnificence to sherry too grand to be kept veiled! The **CSWS**® is not only an educational tool to Lustau, additionally it represents an **official credential** for the sherry category connecting sherry aficionados and Lustau fans in a network of ambassadors to these very versatile wines and to the small region of Jerez.

Enjoy the program, we invite you to ask questions during the class and revert after it with more, we are here to support you in this educational journey. Using the tools at hand from the Lustau Sherry Journey, **www.sherryjourney.com** and its Concierge where you can personally reach Lucas Payà, Brand Educator, for further collaboration.

Luis Luengo CEO, The House of Lustau

A letter from the President of the Sherry Regulatory Council.

Dear student,

Welcome to the fascinating world of **Sherry Wines**. A world of amazing natural elements, **centuries-old traditions** and accumulated experience by men and women in the vineyards and the bodegas of Jerez, Spain. All resulting in a unique palette of wines of different colors, aromas and flavors.

You are about to begin an incredible journey that started some **40 million years ago**, when the Sherry region was at the very bottom of the ocean. The sedimentation of millions and millions of sea creatures formed the unique soil that later emerged to form the gentle slopes of albariza, the incredible white earth where sherry vines have been planted for almost **3,000** years.

With these solid foundations, the extraordinary diversity of **sherry** wines is the result of a very **genuine method of production** in which every step is important in order to define the final quality of the wine. From the cultivation of the vines to the long maturation process in the barrels, wine-makers need to follow precise methods and take wise decisions so that the fruit of the grapes ends up in incredible wines: from pale, dry and saline finos to deliciously rich and fruity moscateles; from intriguing palos cortados to lusciously sweet pedros ximénez.

A world of wines that involves a **certain degree of complexity**, no question to it; but that is definitely **worth discovery**. At the Consejo Regulador we are **strongly committed to sherry wine education**. We are absolutely convinced that the more that wine aficionados around the world get to know the quality factors and the key elements of our genuine production process, the more they will enjoy these **unique** and **versatile wines**.

This is why we strongly endorse The House of Lustau's **CSWS®** initiative. With this exceptional course you will not only learn the basics of sherry viticulture, wine-making and ageing, but you will also have the opportunity to experience how the different steps of the process result in different wines. And, even more important, how to best enjoy each of the them. A **true journey of discovery** that I strongly encourage you to take.

César Saldaña
President, the Consejo Regulador

Index and contents

Tap on the **index numbers** to jump to the section you want to read.

History

Origins and Ancient Times

The region of Jerez and its surroundings have been the setting of **numerous legends** and **myths** since ancient times, such as that of *Atlantis*.

The **oenological origin** of the Jerez region began with the **Phoenicians**, founders of *Gades (Cádiz)* in the year **1000 B.C.**, who introduced the cultivation of vines to the area.

From these early times, the wines of Jerez, Vinum Ceretensis, began to be marketed throughout the Mediterranean as well as other territories of the Roman Empire. Thus, the wines of Jerez, from their beginnings, earned the traveling reputation that they epitomize to this day.

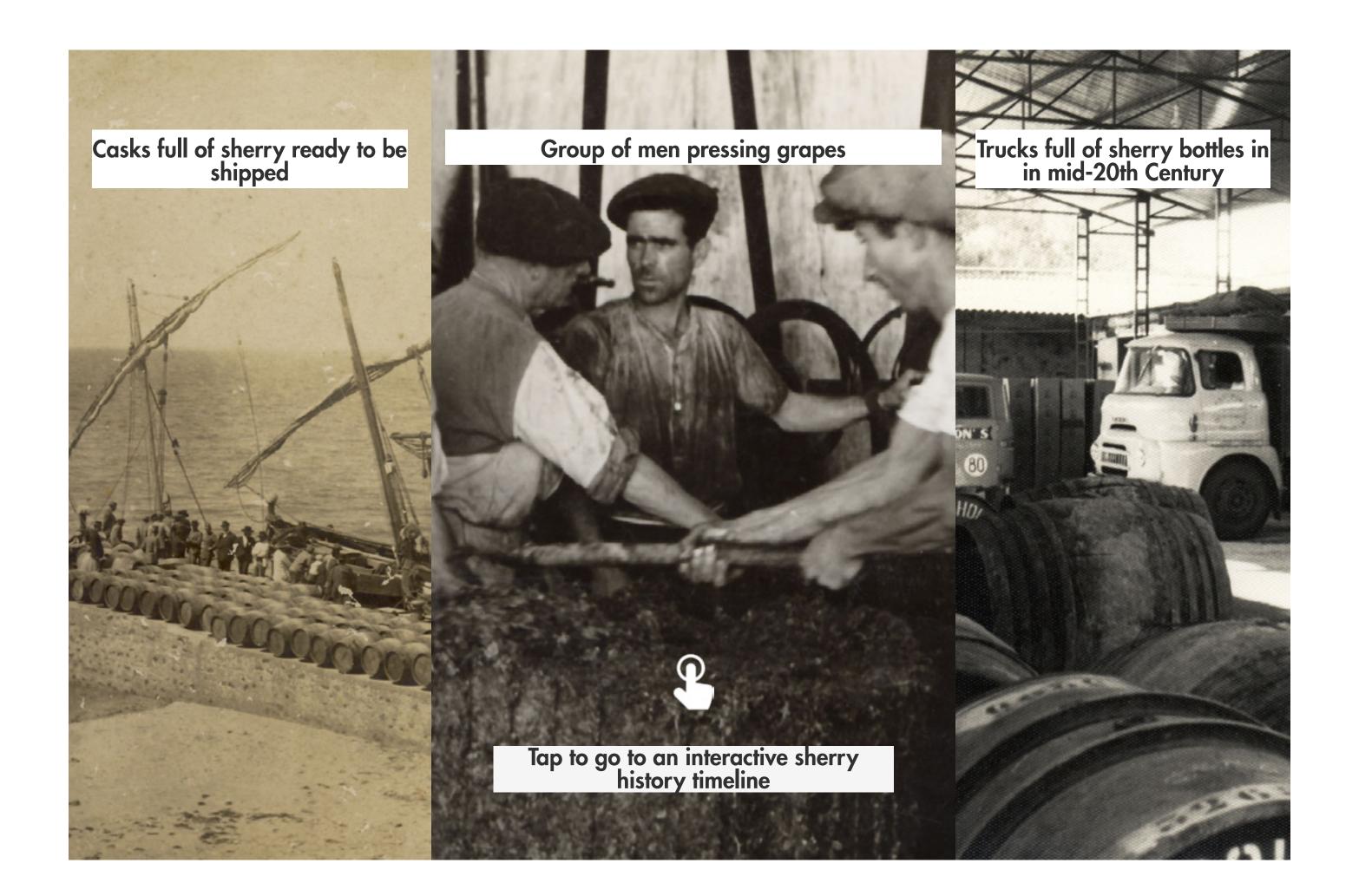


The Moors and Al-Andalus

During the Al-Ándalus period (711-1492), Jerez continued to be an important wine producer, in spite of the Koranic injunction against the consumption of alcoholic beverages. Vine cultivation was justified by the production of raisins, important in the feeding of the military, as well as for the distillation of wine in order to obtain alcohol for different uses such as perfumery and medicine.

Sherry first appears in 9th century texts under the name of Šeriš, pronounced Serish, and its wines were already known as the wines of Serish. This term is linked to the current use of sherry, an Anglo-Saxon adaptation of the ancient Arabic term.





Expeditions and Modern Era

European arrival in the Americas meant the opening of new markets and a new prosperous period for the ports of Southern Spain. Once again, the wines of the Jerez region were strategically positioned as the ports of Cádiz and Sanlúcar were primary embarkation points for trade between Europe and the Americas.

18th - 20th Century

Towards the end of the 18th century, trade opened up. During these decades, local and foreign entrepreneurs laid the foundations of what would become the present - day sherry industry in Jerez. In order to do this, large storage cellars were built, and innovative techniques were adopted such as the criaderas and solera system. These developments gradually gave rise to the styles of wine we know today as sherry.

XERA

Phoenician

CERET

Roman

SHERISH

Arabic

XEREZ
Ancient Castillian

JEREZModern Castillian

SHERRY
English Adaptation

Lustau History: a Sherry Winery Born in the Modern Ages

The origins of Emilio Lustau S.A. date back to 1896, when Mr. José Ruiz-Berdejo, a secretary to the Court of Justice, started cultivating the vines of the family's estate, Nuestra Señora de la Esperanza, in his spare time. At the time of these humble beginnings, he made wines which were sold to larger sherry producers. This activity was known as being an almacenista or stockkeeper. More than 125 years of experience, diversity, and sherry wine expertise by offering an outstanding collection of wines.



One the first PDOs in Spain

It the beginning of the 20th century, the region was preparing to create one of the 1st Denominación de Origen (D.O.), or Protected Designation of Origin, in Spain.

The first Spanish Wine Law, published in 1933 made reference to the existence of the Denomination of Origin Jerez-Xérèz-Sherry, one of the first DO to be legally constituted in Spain (1935)". This was fundamental in the development of business throughout the 20th century.

The protection of the names "jerez" and its English equivalent "sherry" as identifiers of the place of origin of the

wines, as well as the right of exclusivity of their use, have been longstanding issues of concern in the Marco de Jerez. Over the centuries, **imitators of sherry** have emerged in many other wine regions of the world, misusing the various names and terms associated with the region. Thus, true sherry has had to compete in the marketplace throughout history with imitations labeled as sher-

ry or Jerez from Australia, South Africa, California, and many other places.

The responsibilities of the Consejo Regulador are very diverse. Among these, for example, is the control and certification of products associated with the protected appellation of origin. In order to safeguard the principles

of independence and legality that preside over the control of producers and product certification, the appellations of the Marco de Jerez have opted to create an autonomous entity, legally distinct from the Consejo Regulador, which is responsible for verifying compliance with these specifications. Once the foundation has verified compliance with all requirements established in the specifications, the Con-

sejo Regulador only then authorizes wineries to use the protected appellation of origin designation on their wines, whether they are "Jerez-Xérès-Sherry" or "Manzanilla-Sanlúcar de Barrameda". Official certification is indicated on bottles of qualified wines with the appropriate seal of guarantee or, alternatively, by the inclusion of the Consejo Regulador's numbered logo on the label.



Lustau today

In 1931, José Ruiz-Berdejo's daughter, Jerez de la Frontera and moved all pre-existing soleras there, gaining renown and visibility.

In the 1940's, Maria's husband, Emilio Lustau Ortega, moved the winery to the old Santiago district in the historic quarter of Jerez de la Frontera. There, in buildings that were part of the historic Moorish walls of the city, he slowly began to expand the business, still acting as an almacenista. In 1945 Emilio Lustau stopped being an almacenista and began to commercialize their own brands: Papirusa, Jarana, Escuadrilla, Emperatriz Eugenia, and Cinta de Oro,

just to name a few. In 1950, the company began exporting its own sherry wines.

In the year 2000, Lustau acquired María Ruiz-Berdejo Alberti, acquired six 19th century bodega buildings in a small winery closer to the center of the center of Jerez. These picturesque buildings were restored to their original glory and today house Lustau's principal aging bodegas which head the Luis Caballero Group.



Region

The Southernmost Wine Region in Europe

The Marco de Jerez is the southernmost wine region in continental Europe. It is located northwest of the province of Cádiz in the extreme south of the Iberian peninsula very close to Africa. To the west, the region is flanked by the Atlantic Ocean and is located within the area delineated to the east by the Greenwich meridian 5° 49 West and to the north by the parallel 36° 58' North.



36° 58′ 00″ N 05° 49′ 00″ W



Tap on the map to take a virtual tour of the region

Barros and

Arenas

Albariza

Vineyards

Sherry Region

The region is constituted by the area located in Jerez de la Frontera, El Puerto de Santa Maria, Sanlucar de Barrameda, Trebujena, Chipiona, Rota, Puerto Real, Chiclana de la Frontera, Lebrija and San José del Valle, all of them located within the Greenwich meridian 5° 49' West and along the parallel 36° 58' North.



Tap on the hand to visit the Doñana Natural Reserve

#LUSTAUCSWS



Barros and

Arenas

Triangle

Vineyards

Lustau Vineayrds

Albariza

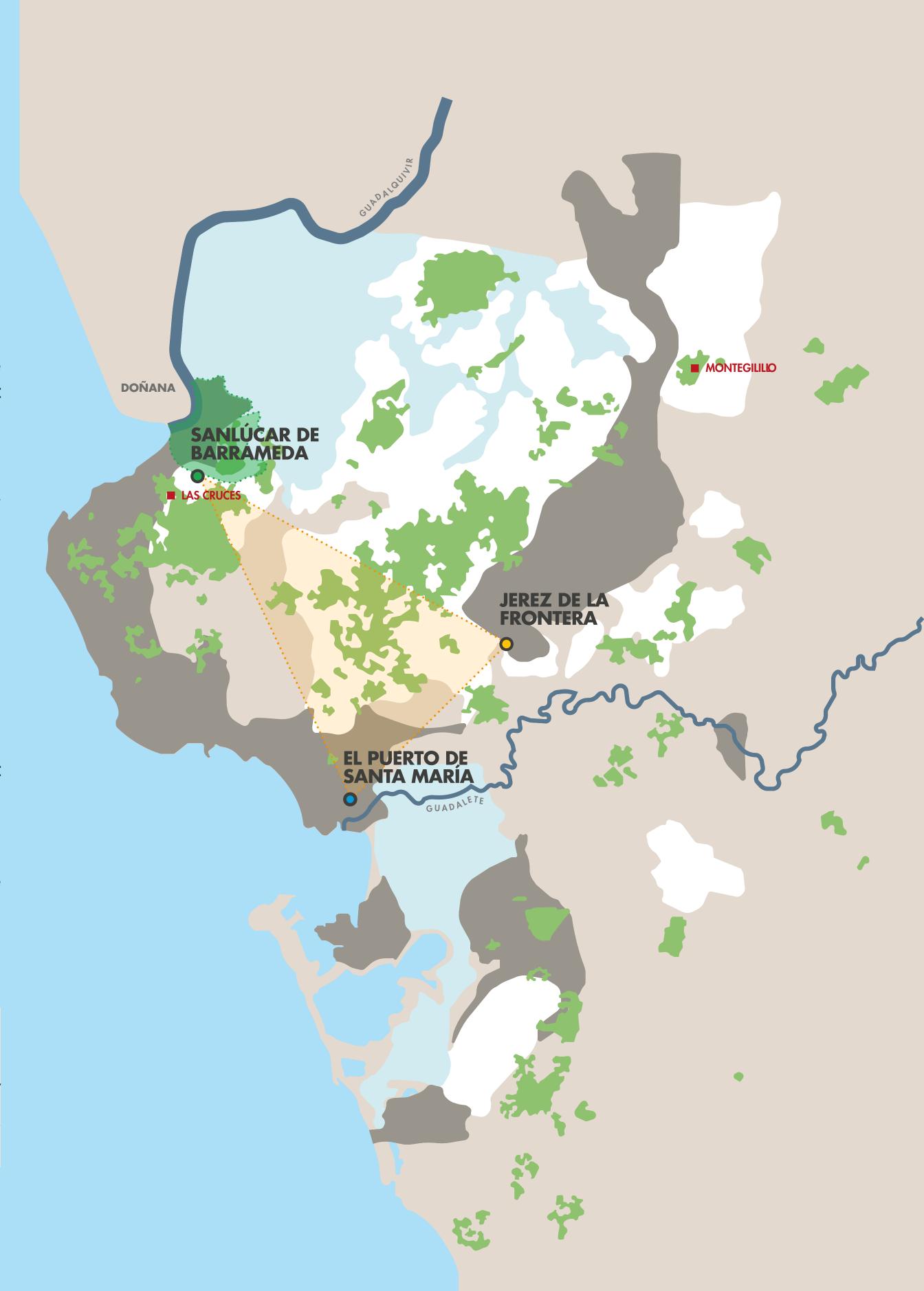
Manzanilla



The Sherry Triangle ("Triángulo de Jerez") is made up of the towns of Jerez de la Frontera, El Puerto de Santa María, and Sanlúcar de Barrameda. Jerez is the main city of the three. A few kilometers south of Jerez, at the mouth of the Guadalete River, lies El Puerto, a seafaring city located in the heart of the Bay of Cádiz. To the west of Jerez and El Puerto, at the mouth of Andalusia's longest river, the Guadalquivir, and opposite the Doñana Nature Reserve, lies Sanlúcar de Barrameda, the place of origin of manzanilla.

These three towns also represent the biggest and most important production and aging area of the region.

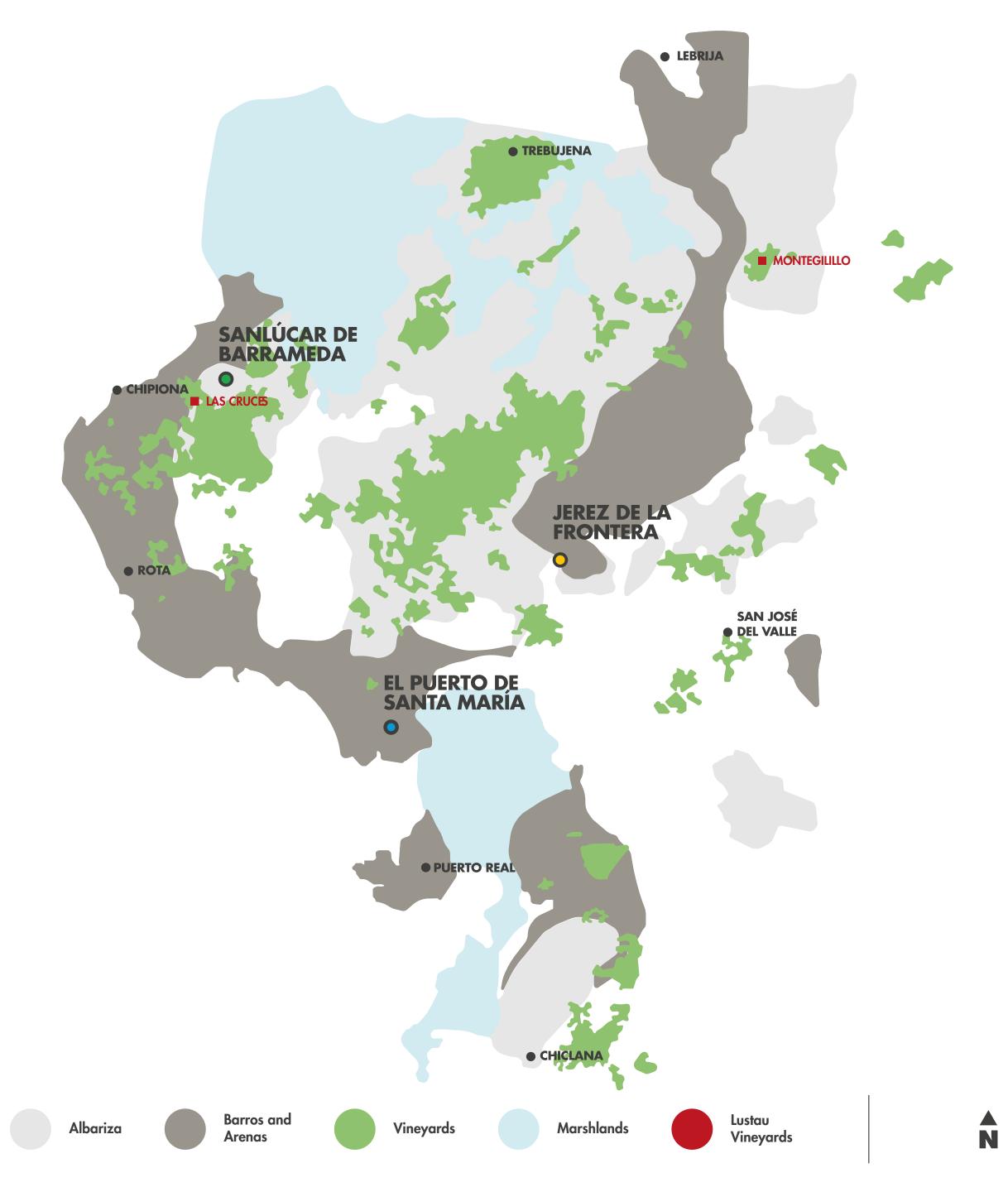
The House of Lustau is the only winery in the entire region that has presence in all three towns. This makes Lustau the only sherry winery with such diversity in its collection.



Where are the vineyards?

7,000 hectares (17,297 acres) of registered vineyards spread across approximately 2,300 vineyards. The large variety of vineyard sizes within the same region is notable with an average sur-

face area of around 10 ha (25 ac) in the case of Jerez de la Frontera and barely 1 ha (2.5 ac) in Trebujena, or San José del Valle. Most of the large vineyards belong to wineries that integrate the entire process, from the cultivation of the grapes to the final marketing of the wine, while almost all small winegrowers are grouped into one of the seven processing cooperatives that exist in the region. Independent vineyards account for only 22% of the total area.



Almacenistas vs. Exporters

Tithin the region there are two different types of wineries: do not bottle or market wines under "Bodegas de Crianza y Expedición" their own brands but rather sell their Almacenado", commonly referred to Crianza y Expedición wineries. Only simply as almacenistas.

to the aging of wines for the DO certification of the D.O.

"Bodegas de Crianza y wines in bulk to the Bodegas de the wineries registered in the former group (Crianza y Expedición) can sell Both types of wineries are dedicated their wines under the protection and

The House of Lustau: The Almacenista Who Became an Exporter

The House of Lustau, of almacenista origin, has always maintained the original almacenista values: controlled production, individual personality, and extreme passion for each of its products. For decades Lustau has led a revolutionary project: bottling a small range of these authentic wines unblended, thus preserving their genuineness. These wines pay tribute to the artisanal craftsmanship that lives in the past of the sherry trade. On the other hand, Lustau also reflects its exporting side with the original line

established by Emilio Lustau Ortega in the early 1950s. The Solera Familiar range is the clear example of the sherry of an exporting winery: wines made and aged by the winery itself that are sold under its own brand names. In the Solera Familiar collection almost all types of sherry are notably represented - from the lighter finos and manzanillas to full-bodied wines such as olorosos and palo cortados, as well as sweet moscatel and pedro ximénez.



Orography

by the presence of **gentle hills**, more undulating the further inland, and rising towards the mountains of the province of Cádiz to the northeast. The highest vineyards are located around 150 meters (492 feet) above sea level while others are practically at the shore of the beach. The **incline** rarely exceeds 12-14 degrees.

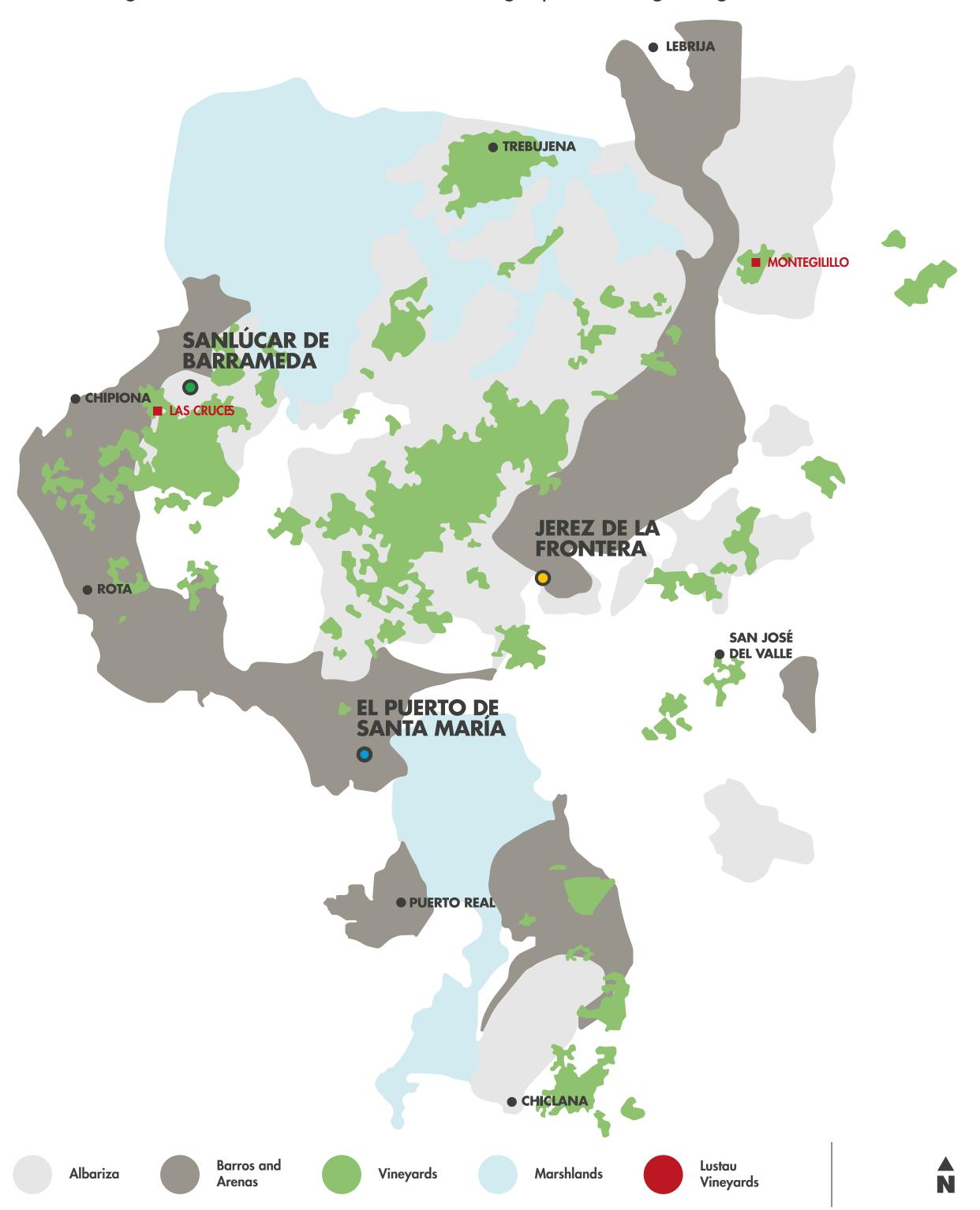


Jerez Superior

"Jerez Superior" vineyards, which include those that due to their agrogeological (those with albariza soil) and climatological characteristics, are ca-

pable of producing high quality grapes for the production of sherry wine.

The classification and designation of a vineyard as "Jerez Superior" is carried out by the Council through a technical committee established for this purpose and based on a certain climatic, orographic and geological criteria.



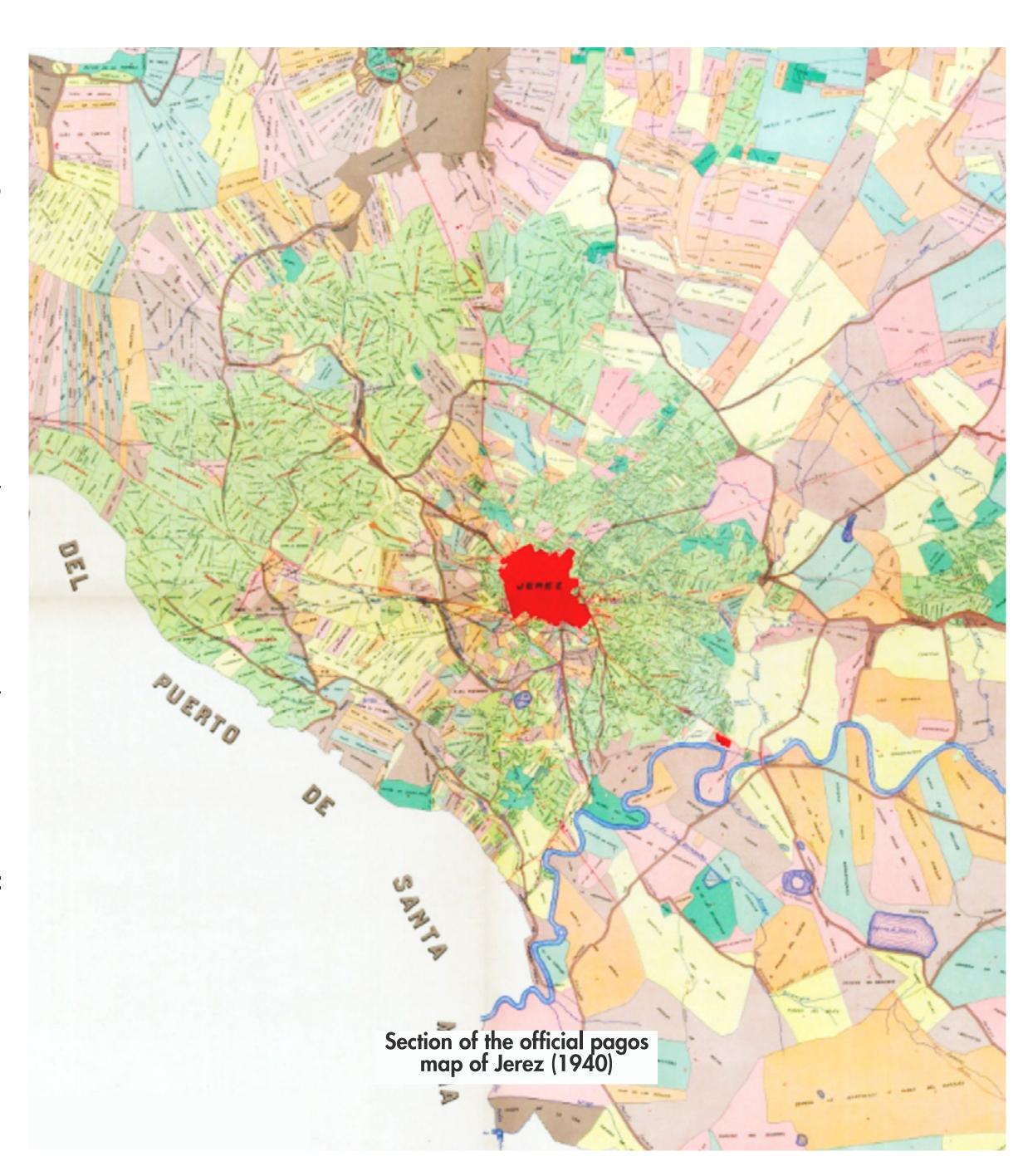
Pagos

vide production areas into pagos.

The Consejo Regulador defines a pago as a plot of vineyard land which, due to its location and microclimatic conditions, its proximity or remoteness from the sea, its soil composition, or its terrain, produces grapes with distinct characteristics. Each pago can be composed of an indeterminate number of vineyards that share similar characteristics.

Surviving historic documents from the 18th century previously defined the characteristics and locations of these pagos. This fact means that some of these historical pagos are not only the oldest in Spain but some of the oldest in all of Europe.

The great geological, orographic, and climatic diversity of the vineyards in the region represents an immense resource.



On which pagos are the Lustau vineyards located?

The House of Lustau owns 2 vineyards within Jerez Superior, each located in totally opposite places within the region: The vineyard named Montegilillo, is located in the pago de Montegil, 17 km/10.5 mi northeast of the city of Jerez, while the second vineyard, Las Cruces, is

located in the pago de Abulagar, in the municipality of Chipiona and less than 3 km/2 mi from the Atlantic Coast.



Tap on the map to take a look at one of our vineyards.

Pagos of the Region

In **2015**, the Regulatory Council completed the official page list and included it on the officials regulations.

Wineries may use a specific pago name on their wine labels if at least 85% of the grapes used come from the same pago.

Jerez de la Frontera

Alcántara Almocadén Anafera Añina

Balbaína Alta
Burujena
Carrascal
Cerro Pelado
Corchuelo
Cuartillo
Espartina
Gibalbín
Lomopardo
Los Tercios

Macharnudo Alto Macharnudo Bajo

Mariscalada Monte Corto Montealegre

Montegil*

Orbaneja Roboatún

San José de Prunes

Santa Lucía Tizón

El Puerto de Santa María

Atalaya Balbaína Baja Campix

Los Tercios

Sanlúcar de Barrameda

Atalaya
Barrameda
Cabeza de Vaca
Cabeza Gorda
Cabezudo o Cortijillo
Callejuela
Carrascal

Carrascal Charruado Cuesta Blanca Évora

Ferianes Hato de la Carne

Hornillos
Las Minas
Mahina
Majadillas
Martín Miguel
Miraflores
Pastrana
San Jerónimo

Lebrija

Cerro de las Vacas

La Palmosa
La Reyerta
Overo
Pedreras
Peñahoradada

San José del Valle

La Parrilla

Trebujena

Altajara Alventus Barrial Cambrón

Casita Palomares
Cerro Carrillo
Cordero
Corredero
Dehesa
El Duque
Jaranilla
Juana García

La Calerilla
La Cañada
La Carrera
La Flamenca
La Noria
Las Palomas
Morisco
Pago De la Cruz

Pago Dulce Redondón

Rematacaudales

Chipiona Abulagar*

Ahorcado Alcubilla Escalereta
Granadillos
La Laguna
Lomo Alta
Los Rizos
Majadales
Meca

Niño de Oro

Olivar
Pago Llano
Pavón
Quemados

Quemados Rincón Malillo Ventisquero

Rota

Bercial
Cebollares
Fontanal
Fuente de Oro
Pago Dulce
Tehigo

Chiclana de la Frontera

Cañadillas
Cantiruelas
Cuartillos
Espartina
El Inglés
La Vega
Los Llanos
Pago Del Humo
Pozo de los Frailes

Melilla

Puerto Real

Marquesado Villanueva

^{*}Pagos where Lustau vineyards are located.

Climatic factors

throughout the Jerez region. The distance of the vineyards from the sea creates important differences between pagos as well as individual vineyards. This variety of mesoclimates in a relatively small territory represents the enormous wealth of opportunity which exists in the area.



Tap on each section to go directly to the subject you want to read.

Sunlight

The climate in the Jerez region is warm as a result of its low latitude. The area is characterized by dry summers with high temperatures, although the proximity of the **Atlantic Ocean les**high temperatures, especially at night.

The average annual temperature is 17 °C/63 °F, with very mild winters, seldom reaching a minimum of 4 °C/39 °F and rarely freezing. Summers are very hot with temperatures reaching around 40 °C/104 °F.

The area has a remarkably high average annual number of hours of sunssens and humidifies the impact of the hine, between 3,000 and 3,200 with about 300 sunny days a year.

Jerez de la **Frontera**

Avg. 17.6°C / 63.8°F Summer avg. 31.8°C / 91.58°F Winter avg. 15.9°C / 60.62°F

El Puerto de Santa María

Avg. 18°C / 64.4°F Summer avg. 24.6°C / 76.28°F Winter avg. 11.9°C / 53.42°F

Sanlúcar de Barrameda

Avg. 17.7°C / 64°F Summer avg. 24.9°C / 76.82°F Winter avg. 11.4°C / 52.52°F

Rainfall

Rainfall is relatively high, with an average of about 620 mm/24.4 in annually, with rain falling primarily in **autumn** and winter.

The capacity of the vineyard soils to absorb and retain water also contributes to vines having sufficient water throughout the annual cycle without the need for irrigation. Irrigation is prohibited in vineyards designated as D.O.

Jerez de la **Frontera**

701.3 l/m² 0.119 gal/in² (from October to April)

El Puerto de Santa María

621 l/m² 0.105 gal/in² (from October to April)

Sanlúcar de **Barrameda**

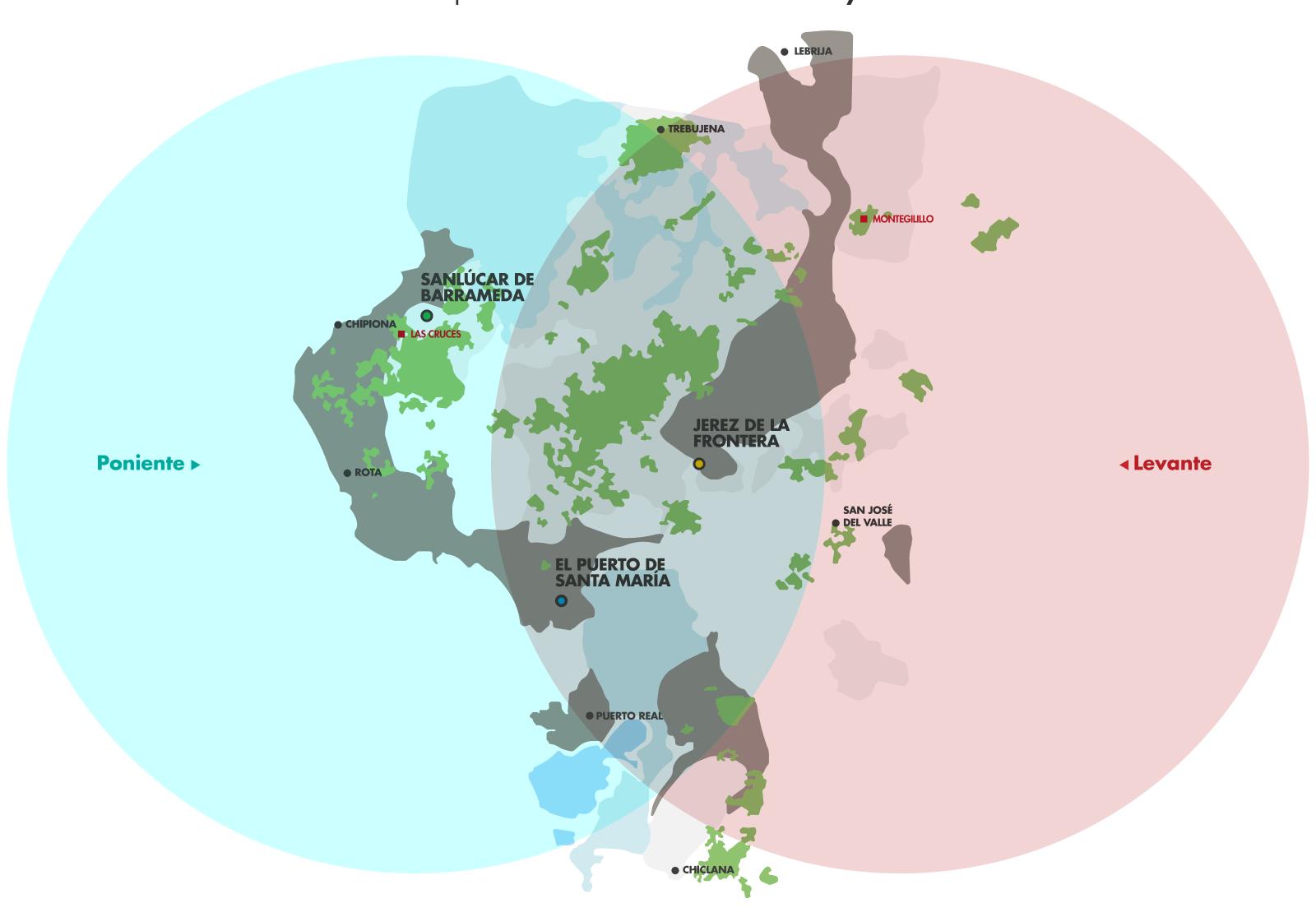
688.9 l/m² 0.117 gal/in² (from October to April)

Poniente and Levante

The region of Jerez is subject to two prevailing winds known as poniente and levante. The first, poniente, comes from the west, from the Atlantic Ocean and is therefore very cool and humid. The poniente cools the environment and it may reach humidity levels as high as 95%.

The levante wind comes from the **east** and originates in the northern **Sahara Desert**. It is **very hot** and **dry** with humidity levels around 30%.

The variation of both winds creates a favorable environment for **optimal vine health** and the creation of a unique **microclimate** within the **winery**.



Albariza

ost of the soil in the region is of Tertiary origin and remained submerged under the sea during the Oligocene. This explains the high accumulation of diatomaceous algae remains and other skeletons of marine microorganisms.

This soil is called albariza which refers to its color (intense white, alba) and is found on the surface of the upper slopes of the hills. It is rich in calcium carbonate, clay, and silica.

The main advantage of albariza soils is their high moisture retention capacity. Albariza stores the rainwater that falls in summer months. When albariza soils get wet, they swell like a sponge. In the hot, making the soil more manageable.

sunny months, the surface of the soil hardens, thus preventing evaporation of the water below. This soil is easy to work with and because of its retained moisture it allows for excellent distribution of the vine's root system. Roots have been detected in albariza soils up to 12 m/39 ft long. Albariza is poor in organic matter and nitrogen.

There are several sub-varieties of albariza. The tejón, hard rock of almost pure limestone, contains 80% active limestone and is generally located in deep in the soil. The barajuelas albariza also has an elevated degree of purity and a high concentration of diatoms; its laminar structure facilitates root development. The limestone content of tosca cerrada is 60%, and 50% winter to nourish the vine during the dry in the case of the lentejuelas, where limestone loams are mixed with clay and sand,



The two other soil types in the area are "barros" and "arenas". They are, however, far less prevalent than albariza soil.

Barros

Arenas

er areas of the hills and riverbeds. They and, in addition to the predominance of are dark grayish-brown in color and, al- sand, they contain clay and limestone, though they are very fertile, their **poor** the latter not exceeding 20%. Arena soils moisture retention makes it difficult to cul- are dedicated almost exclusively to the tivate vines. They are made up of between cultivation of moscatel de Alejandría, a 60% and 80% clay and sand.

Barros soils are dominant in the low- Arenas soils are found in coastal areas, minority variety in the D.O.



Viticulture

Grape Varieties

The Consejo Regulador authorizes the following varieties as suitable for the production of sherry: palomino, listán blanco/palomino fino, pedro ximénez, moscatel de Alejandría, beba, perruno and vigiriega.

All are white varieties and traditional in the region.

They belong to the species vitis vinifera.



Tap on each section to go directly to the variety.



Palomino

This variety has been the most traditional variety for centuries and today is the most abundant variety in the vineyards of Jerez.

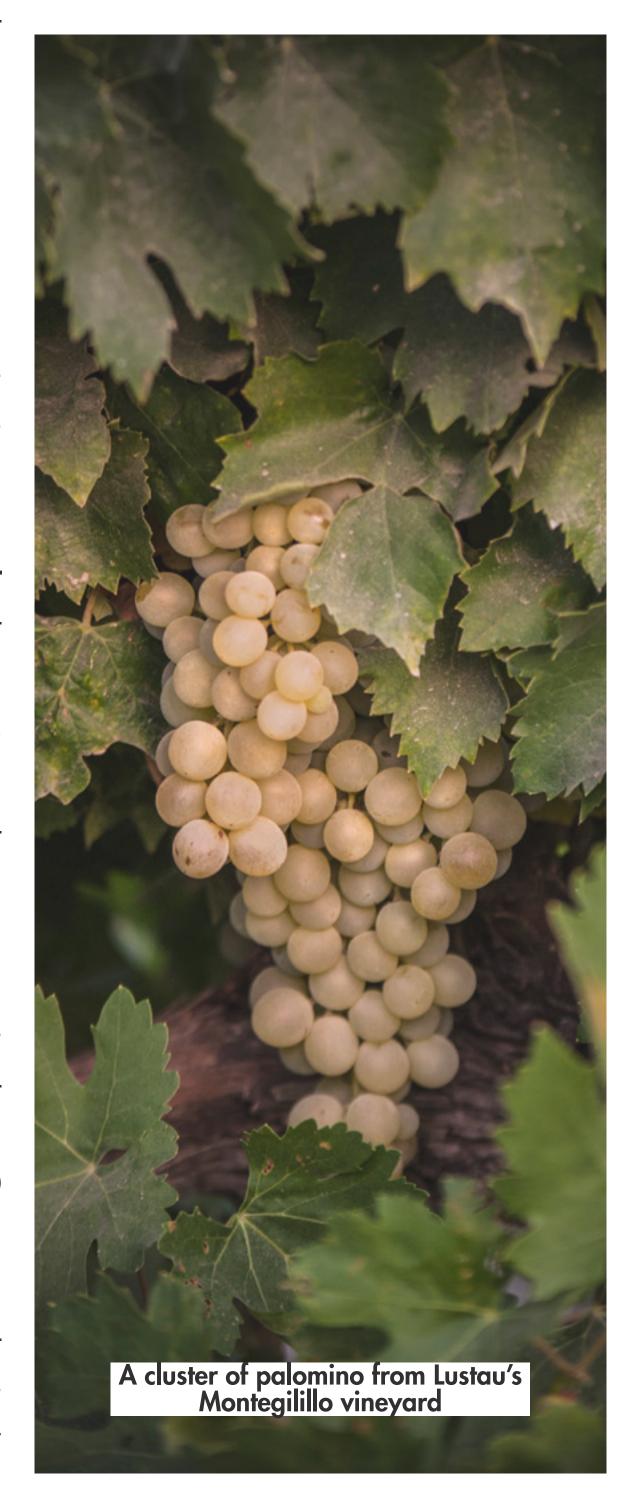
Palomino clusters are usually long, cylindroconical, with spherical, medium-sized, thin-skinned berries, yellow-ish-green in color, tending toward golden when ripe. Its musts reach an average Baumé degree of 11.2° and an average total acidity of 3.8 g/l.

The palomino fino sub-variety is the most common in the area. It buds in the last two weeks of March and ripens between mid-August and early September. It is very well adapted to the region and is not very susceptible to parasites if properly cultivated.

Yields limitation is 80 hectoliters/ha (2.47 ac). Beyond this amount the grape must, and therefore the wine, is automatically disqualified from the D.O. The average yield in the region is around 70 hl/ha (2.47 ac).

In past centuries many other grape varieties were used for winemaking, some of which are currently being studied for a possible recovery in the future. As in other regions of the world, phylloxera reduced the number of varieties in the region. There are several reasons why Palomino monopolized the vineyards of Jerez in the 20th century but the **symbi-**

otic relationship between palomino and albariza creates the potential for the production of wines destined for aging and has played a decisive role in the preference for this variety.



The majority of Lustau's palomino cultivation is found in the Montegilillo vineyard (Pago Montegil. Inland). There is also a small plot of palomino in our Las Cruces vineyard (Pago Abulagar. Atlantic)

Moscate

This variety is used for the production of wines with the same name, moscatel. In the area it is common to call this variety "moscatel de Chipiona" since it is in the sandy soils of this location where most of its vineyards are concentrated. Its proximity to the sea favors its development.

The region gives rise to special sweet wines from high-quality, sun-dried grapes as well as those made from late-harvest grapes.

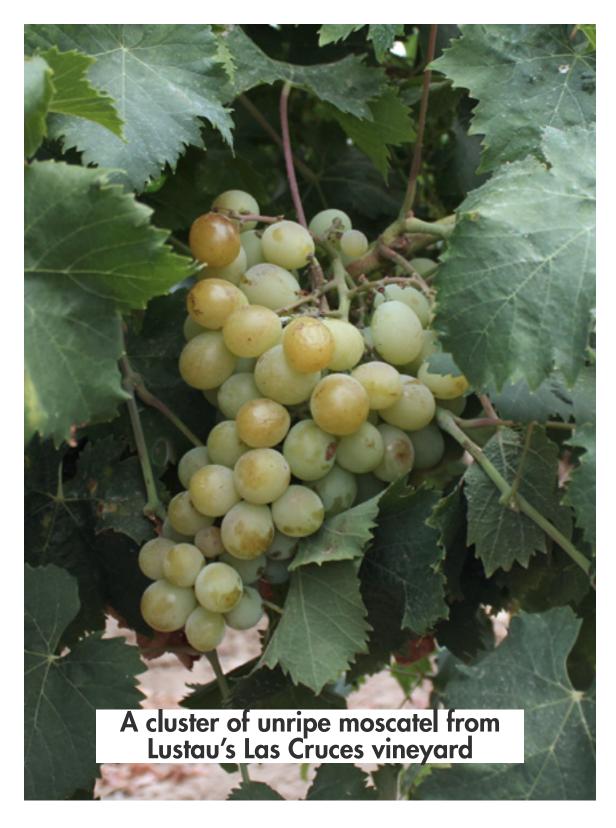
Lustau is the largest producer of moscatel grapes in the region and produces sweet wines from this variety through late, non-sundried, harvests. The moscatel plantings are located in the Las Cruces vineyard in the municipality of Chipiona.

Pedro Ximénez

Pedro ximénez is another very traditional variety in the region. Its **higher sugar content** (12.8° average Baumé) and acidity levels (4.5 g/l) are used for the aging of high-quality sweet wines.

asoleo (raisining) in the paseras (special sites utilized for the drying of grapes in the sun) before vinification to concentrate grape sugars. It is the least-planted variety of the three main authorized grape varieties.

Lustau grows pedro ximénez in the same vineyard as its moscatel, in the vineyard of Las Cruces, although with fewer plantings than that of moscatel.





Pre-Phylloxera Varieties

Perruno, beba and vigiriega are less ly cultivated across the region until the Phylloxera arrival and its following epidemic at the end of the 19th century.

Their current presence in the region is barely testimonial.

Perruno is a late ripening variety, strong. It gives numerous clusters that are medium long and slightly compact. With discoid, medium-sized, thick-skinned berries, yellowish in color, tending toward golden when ripe. Due to its characterwines it gives is an interesting option for light, oxidative sherry wines.

Beba is also a late ripening grape, with an early bud breaking and flowering. Like perruno it is vigorous and strong. The clusters, however, tend to be loose. The berries have been historically renowned for being suitable for long sundrying periods and therefore proving common varieties in the region, wide- high quality raisins thanks to their thin

> Vigiriega is a vigorous, resistant and high producing variety; it produces few medium-sized bunches, with large, loose berries. They are almost round and pale green, and they used to be consumed as table grapes too. The must is usually high in sugar and in acidity, and was prized for making finos and high end wines.

The wines made from vigiriega are not istics and the full-bodied, low alcoholic too aromatic, with the main notes being green apple, pear, citric fruits and fennel, depending on the ripeness.

Production

ows of vines or **liños** are planted with a north-south orientation (although there are exceptions) in order to allow maximum sunlight throughout the day. The vine needs to be well exposed to the sun so that its leaves receive the necessary sunlight for the plant to develop quality grapes.

Soil tillage, known in the region as "aserpiado", is a practice that aims to achieve two objectives: 1) in winter, to retain as much rainwater as possible in the soil, and 2) in spring and summer to conserve soil moisture, ensuring that the intense heat does not cause a significant water deficit.

When the vine reaches the fourth year of life it is considered a mature plant. From that moment on, specific pruning must be carried out to guide its growth and conimmense impact on the annual development of the vine. A mature vine usually remains in production for 30 to 35 years and develops seven to nine bunches per year on the producing cane. In a normal year, a vine produces about 3 kg/6.5 lb of grapes.

Vineyards have between 3,600 4,200 vines per hectare (2.47 ac). A vineyard's **production** is limited to a maximum of 11,428 kg/ 25,194 lb (80 hl/ha).

Rootstocks must be resistant to phylloxera and must also be resistant to limestone due to its high presence in albariza soils. Too much limestone can be detrimental the vines. The vine malady chlorosis is often related to excessive lime and too high a pH in the soil.

The ideal height for the vine is about 60 cm/24 in and after the fourth year the vine is split into two main "arms" on trol its yield. Pruning is vital as it has an which annual pruning will be carried out.

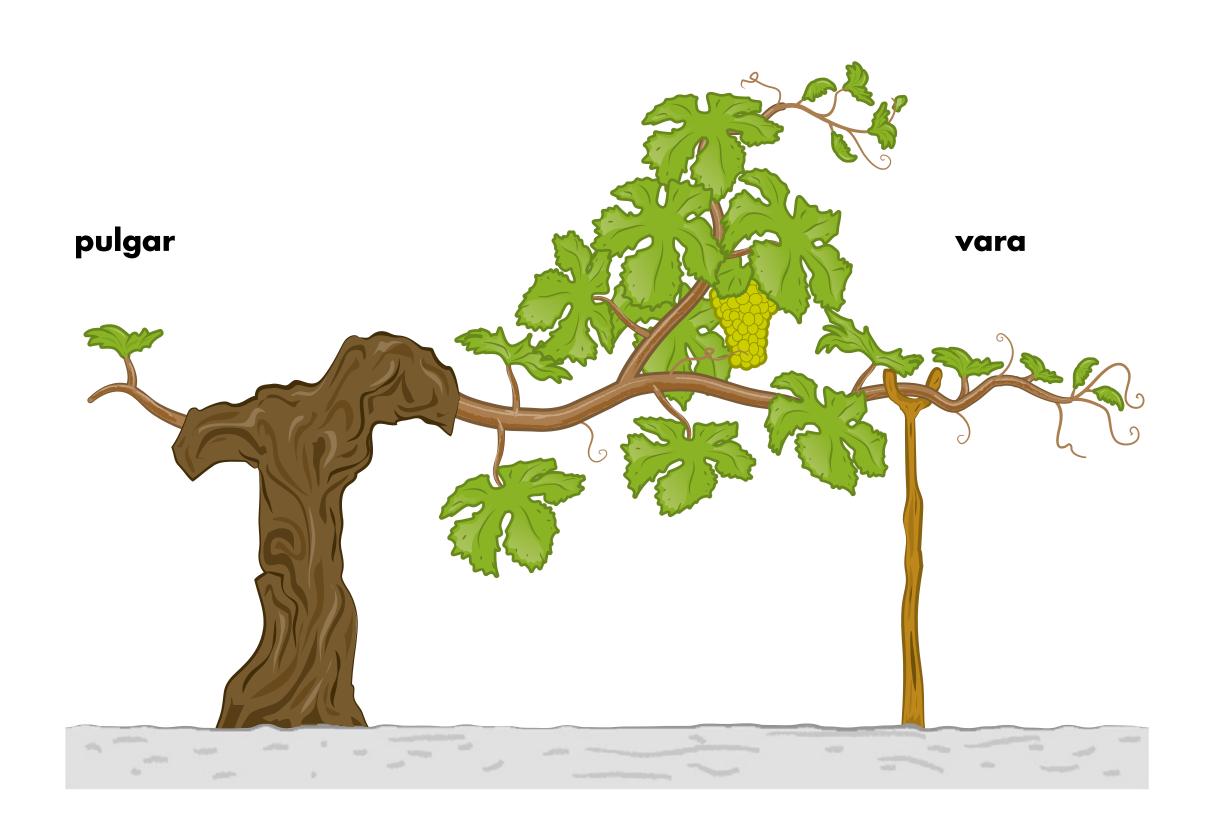
Vara y Pulgar

runing known as vara y pulgar ("stick and thumb") or poda jerezana is traditional and very specific to the area. It consists of forming, from the trunk of the vine, two arms (brazos). Each year a vara of at least eight buds and a pulgar of one or two buds are left alternately on these arms. The vara is used to produce the current season's harvest while the pulgar preserves a bud that will be the vara for the following year. During annual pruning, a pulgar is formed on the vara that has already produced fruit and it is then reserved for the following year. Each arm produces in rotation, vine and avoid damage to the plant.

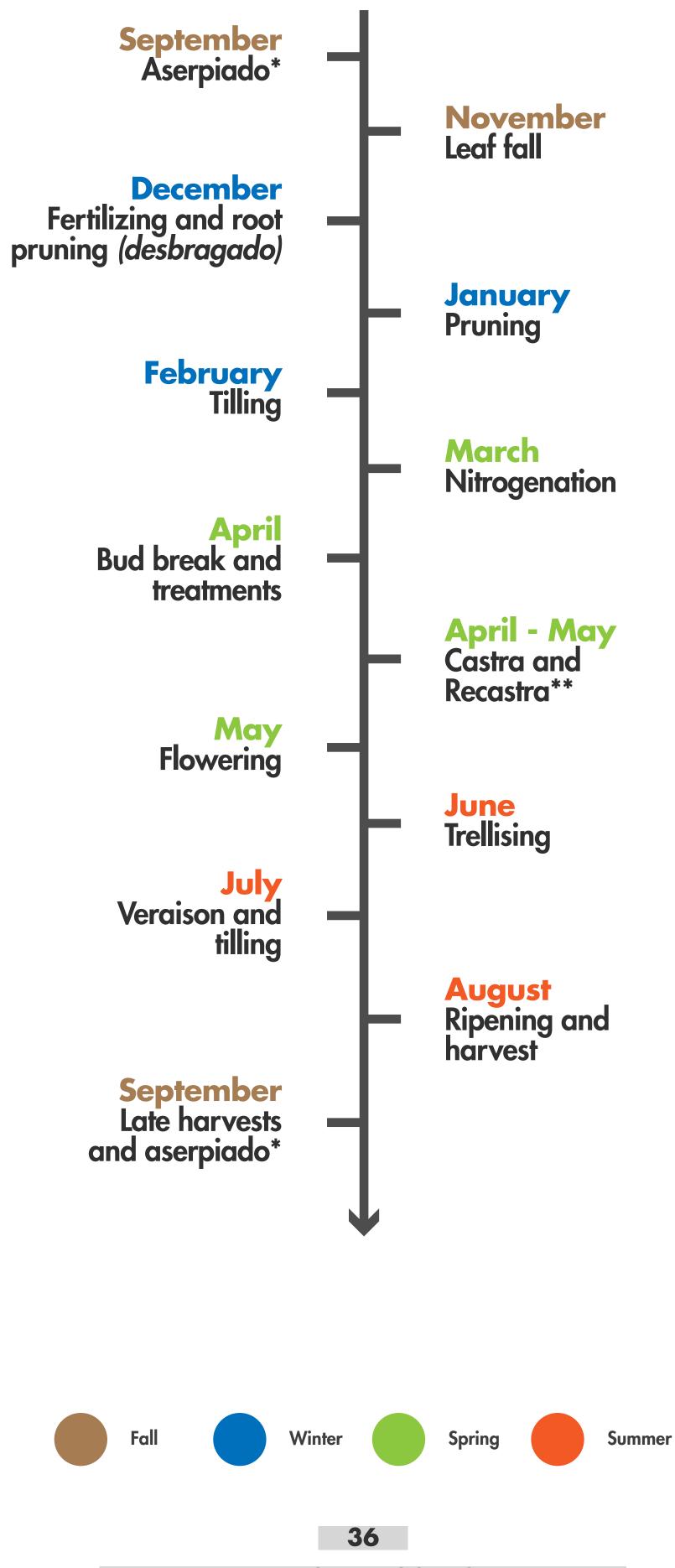
one season the vara produces and in the following season the pulgar, and so on, alternating between the two.

Doble Cordón

There has been a tendency in recent years to practice a less traditional type of pruning that seeks to facilitate a mechanized harvest. This pruning style is the double cordon which trains the vine to form two horizontal arms that distribute a total of three or four spurs and about between six and eight buds. This pruning style is intended to improve the formation of the



Cycles of the Vine and Labor



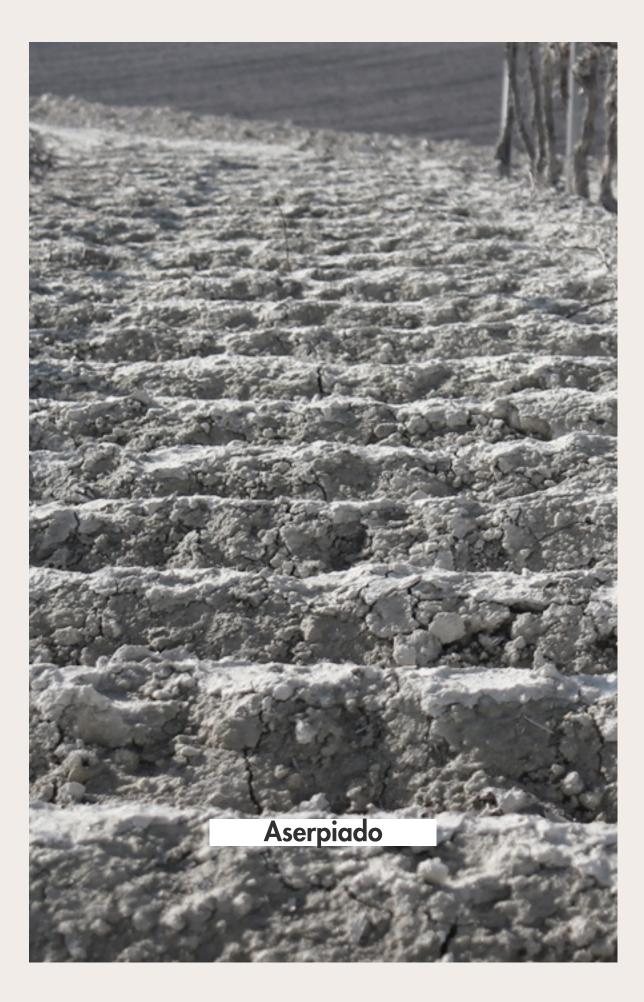
Cycles of the Vine and Labor

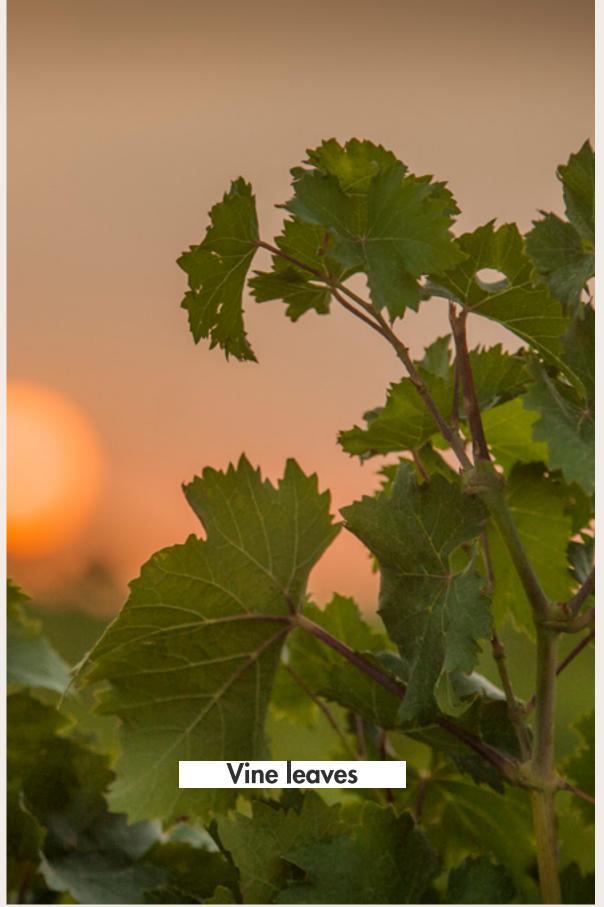
*Aserpiado

In order to **store water** during the winter, **aserpia** (also known as **alumbra**), work very specific to this region, is carried out on the slopes of the albariza hillsides. After harvest, vineyard **soil** is **banked up** to form **rectangular pools** in which the autumn and winter **rainwater** can then be **retained** and **stored**, thus preventing it from running down the slopes and being lost at the bottom of the hills.

**Castra y recastra

In spring, green pruning (castras) is carried out in Jerez, which eliminates unnecessary shoots that may compete with those that are really beneficial to the vine. The aserpia is also broken up and the soil is flattened by crumbling the albariza in order to seal the soil and thus avoid evaporation.





Harvest

During the month of August, grapes become soft, sweet, and take on golden hues. There is no exact date for the beginning of harvest as it depends on the degree of ripeness the grapes must reach, at least 10.5° Baumé (or potential alcohol), although the average is between 11° and 12.5° Baumé.

Vineyards are trained to appropriate vine height and wider spacing between vines. At present, **50**% of the total vineyard area registered in the D.O. has **mechanized harvests** and the other **50**% remains **manual**.



Night harvesting is becoming more frequent so that grapes reach the vats in better condition. The harvest of the **pedro ximénez** and **moscatel** varieties destined for the production of sweet wines have **special circumstances**.



Tap on the image to see how grapes are harvested.





Winemaking

The production of the wines of Jerez is the result of the combined effort of nature, experience, and tradition accumulated over centuries, as well as the incorporation of the latest technological knowledge in the world of wine.

Throughout the winemaking process, the cellar master or winemaker must make decisions that will determine the final style of the wine. These decisions begin to be taken as early as harvest, including the assessment of the level of ripeness of the grapes.

Pressing

nce the crushing and, if necessary, destemming steps have been carried out, the grapes are pressed. The pressure applied is crucial. During the extraction process different types of must are obtained depending on the level of pressure applied:

The first must is obtained by the pressure of gravity due to the weight of the crushed grapes or with intentional very light pressure. This first press (priproduction of fine wines such as **fino**, make sherry.

manzanilla, and amontillado. The second must (segundo pie) is obtained with higher pressure pressing. This second must has more structure due to the solid parts of the grapes and is used to produce oloroso wines.

Must resulting from applying pressures greater than 4 kg/cm² (3.9 bar) is not used for the aging of sherry wines and is generally destined for distillation.

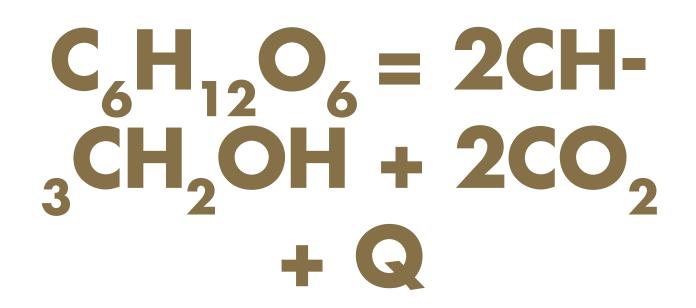
Denomination of origin regulations require that only must obtained with a maximum yield of 70 l/100 kg (18.5 mera yema) is preferably used for the gal/220 lb) of grapes can be used to



Fermentation

Solid particles in the must are removed by the settling process known as desfangado. Once inside the fermentation tanks, an additional must which is already in full fermentation is added. This fermenting must is known as pie de cuba and makes up between 2% and 10% of the total volume of new musts. This facilitates fermentation using a specific yeast strain previously selected to produce wines with the best enological and sensory characteristics.

Alcoholic fermentation is a natural biochemical process. During fermentation, the sugars present in the grape juice - mainly glucose and fructose ($C_6H_{12}O_6$) are transformed into alcohol ($2CH_3CH_2OH$). In addition to alcohol, the transformation of the sugars gives rise to significant amounts of carbon dioxide ($2CO_2$). At the same time heat (Q) is generated which raises the temperature of the must.



Complete fermentation time can be divided into two phases:

The **first phase** is referred to as **tumultuous fer**mentation. Tumultuous fermentation has a variable duration depending on the composition of the must and the temperature at which it is carried out. This first stage is usually carried out in **large capacity stainless steel tanks** extraction of the must and the wines. However, the **ju** ence of the experts supers is with their **noses** they will the most suitable prospect on its own characteristics.

(50,000 I/13,208 gal) at a temperature of approximately **24** °C/**75** °F. The **second phase** called **slow fermentation**. As fermentation progresses, the amount of sugar is reduced and after a few weeks a slow fermentation begins. In the following weeks, the remaining sugar will be converted into alcohol.

The must extracted from palomino is fermented to dryness.

The base wine produced is a young wine. During the months of January to March it is very popular in the ventas and bars across the region. Interestingly enough, this young dry wine is called **mosto (must)** in the region even though it is a finished base wine, and its alcohol content can vary between 11% and 12.5% depending on the conditions of the harvest.

From the beginning, a **veil of "flor"** begins to appear on this young wine. The flor del vino is formed by yeasts and is the most extraordinary natural element that contributes to the uniqueness of sherry.

Once fermentation is complete, the winemaker makes an **initial classification** of the wines produced from that vintage.

Tasters often make their decisions based on laboratory analysis. These results reveal the way in which the grapes were harvested, the extraction of the must and the fermentation of the wines. However, the judgment and experience of the experts supersedes all else since it is with their noses they will determine which is the most suitable prospect for each wine based on its own characteristics.

Fortification

ncabezado (fortification) is one of the unique characteristics of the wines of Jerez. It involves adding a certain amount of wine alcohol to the base wine in order to slightly increase its final alcohol content.

Base wines, once classified, are gradually fortified by adding mitad y mitad (half wine and half alcohol) until the desired alcohol content is reached which will depend on the type of aging that will follow this step. The grape spirit used in the region must be of high proof and show neutral character. The distilled wines do not necessarily have to come from grapes grown in the region.

Winemakers or cellar masters take samples of each of the base wine batches after the fermentation process and classify them into two main groups:

Those wines classified for aging as **finos and manzanillas** are fortified until they reach a total alcohol content of **15**% and marked with (/). Since the alcohol tolerance of the flor yeasts veil is around 16%, **this makes the wine a habitable environment for the "flor"** and thus initiating its biological aging. Wines classified for aging as **olorosos** (②) are fortified to reach at least **17**% of alcohol content. At this alcohol content the **"flor" does not survive**; therefore, oxidative aging will occur in these wines.



The two types of musts on the previous page will potentially produce different wines, this being one of the key factors in understanding the extreme diversity of sherry. After fortification at the end of the vinification process, young wines are ready to begin aging in American oak casks where they will remain until bottling.

Sobretablas

For wines **fortified** up to **15**%, an intermediate period is necessary between fortification and the beginning of aging to preserve the **"flor"**. This phase is called **sobretablas**.

The sobretablas period is of **enormous importance** since during the first months of its life the **wine** will show its **true character** for the definitive aging phase.

The "flor", vigorous after these first months, protects the wine from oxidation and subtly transforms its initial characteristics. Wine is marked with the traditional palmas (chalk mark) to indicate the degree of finesse it presents at that moment. Winemakers carry out the first classification when the wine is only a few weeks old. After a period that can vary between six months and a year, they must analyze each of the

barrels to carry out a second classification. This is now a much more arduous task because the lots that must be classified are 600-liter casks (158.5 gal), and not tanks of up to 50,000 liters (13,208 gal).

In instances when the "flor" is still present, but the wine's evolution is different for the one desired, it is marked with the classic palo cortado symbol by which the cellar master indicates it will then be aged oxidatively.

Nowadays, most wineries keep their sobretablas in smaller stainless steel tanks. This not only protects the wines more efficiently but also facilitates the second classification of those wines destined to be aged under the flor yeast in the future. As a consequence, the process to select wines to potentially become palo cortados is not as random anymore, as batches are typically pre-assigned in advance.



Moscatel and P. Ximénez vinification

his process has important differences compared to the dry wines of Jerez. Pedro ximénez wine is made only from overripe pedro ximénez grapes. It is harcentration in the vineyard from 16° Baumé. cohol up to levels near 10% alcohol.

As an exception, pedro ximénez base wines do not have to exclusively come from grapes grown within the region's boundaries.

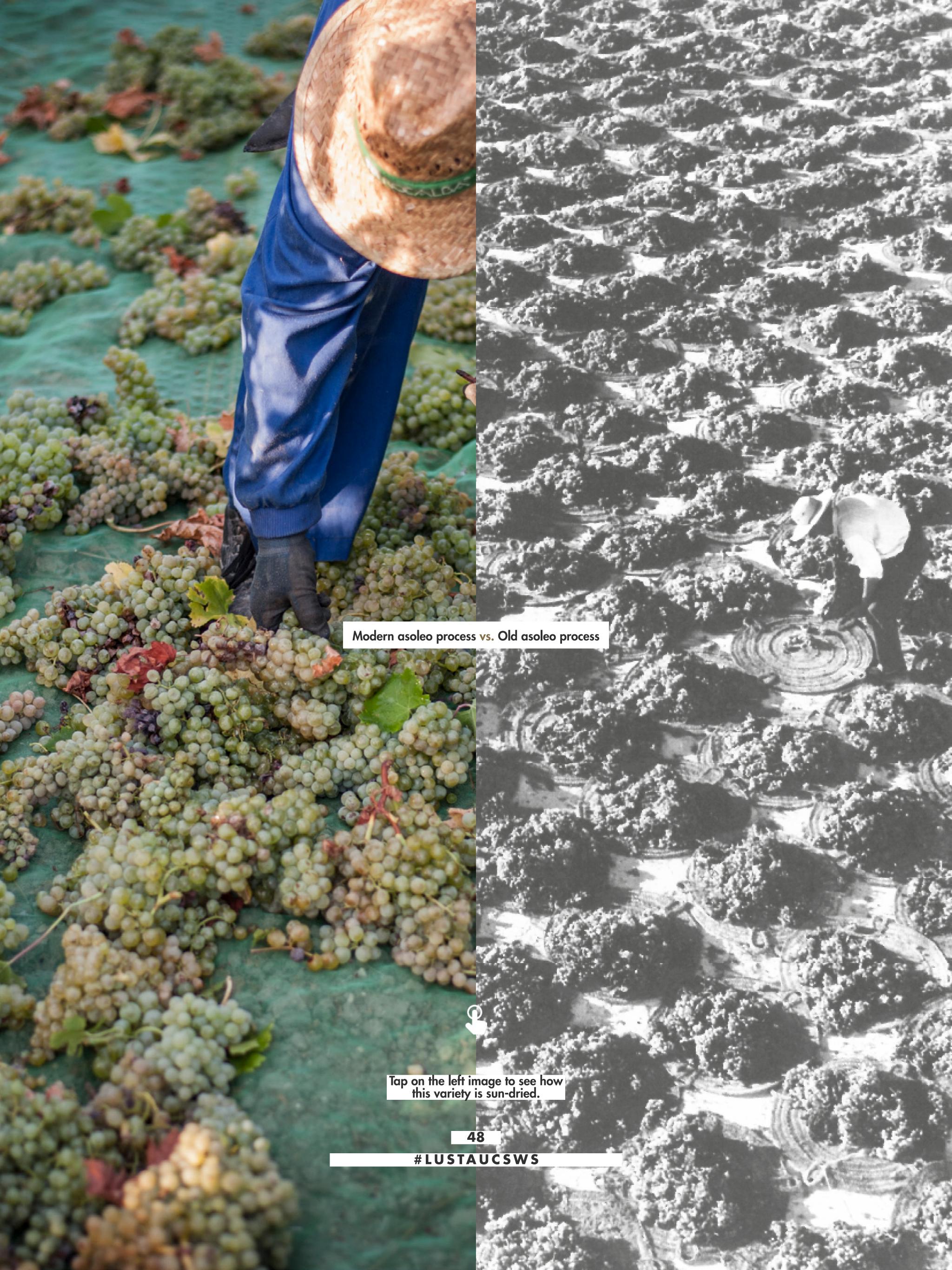
During this process, the berry loses a con-ximénez.

siderable amount of water and reaches a sugar content of 450-500 g/l of must.

The extraction of juice from raisined grapes is much more complex because little liquid remains inside the berries. Vertical presses are normally used to facilitate drainage and the extraction of the thick must. The must, once extracted, begins its fermentation. After a brief fermentation period, fermentavested when it reaches a high sugar con- tion activity is stopped by adding wine al-

> The wine, once fortified, is stabilized during the autumn and winter months before being aged in American oak barrels.

The harvested grapes are prepared for The moscatel is made exclusively from mossun-drying (asoleo) when they are almost catel de Alejandría grapes harvested at a dehydrated raisins. At night, the bunches high degree of ripeness. In most cases, the are covered so that they do not suffer from grapes are subjected to sunlight (asoleo) to the early morning breeze or the morning obtain the wine known as moscatel pasa, dew. The duration of the sun drying pro- (moscatel raisin), although at Lustau, the cess varies depending on weather condi- moscatel is simply subjected to a late hartions and can last for more than a week. vest. Its vinification is the same as pedro



Urban Terroir

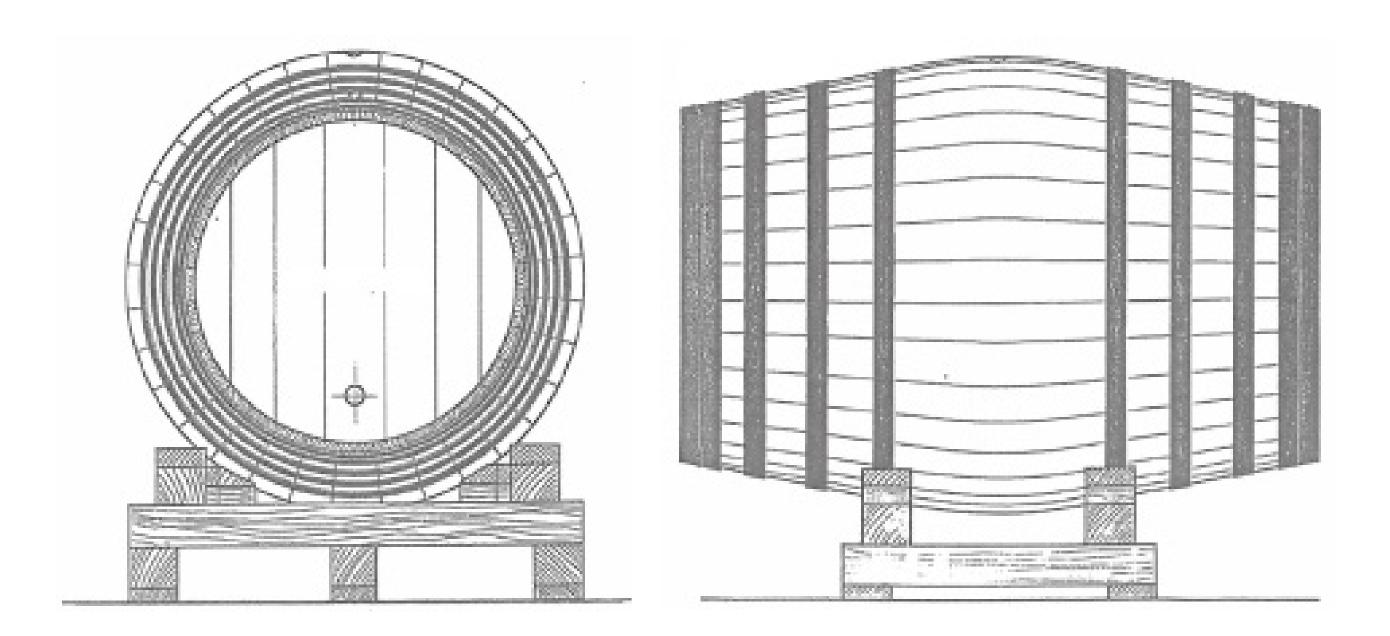
The Sherry Cask

n recent centuries, wooden barrels of 600-liter American oak (36@**), known as many sizes, capacities and types have the **bota bodeguera**. been used in the region, each with different names: toneles, toneletes, bocoyes, botas American oak is the most commonly used gordas, botas largas, botas cortas, medias wood for aging sherry in addition to its botas, cuarterones, barriles...and with dif-functionality and its long tradition. Since ferent capacities, from the 900 1/237 gal the beginning of trade with the Americas, of the toneles to the much smaller arroba*, wood was brought to Spain and used to which are 16.6 1/4.4 gal in size. Different make the barrels. The exchange continued types of wood have also been used: Chest- as the wines that filled the barrels were nut, local oak, American oak, etc.

Today the most commonly used barrel is the

then sent back to the Americas in return.

(@)16.6 arroba liters 4.4 gallons



**Bota bodeguera, also known as bota jerezana (36@ = 600 l)

Wine barrels are watertight but at the same time slightly porous. There is water loss through evaporation causing a loss of wine volume. The losses will increase as the level of humidity in the cellar declines. This loss or outcome is called ullage and represents about 3 to 4% per year of the total volume of wine stored. Mainly made up of the water in the wine which in turn concentrates the wine's other components. This effect is noticeable after many years of aging.

The absorption capacity of oak should also be taken into account; it should be noted that a sherry cask can contain up to 15 l/4 gal of wine inside its staves.

This natural absorption process is known as **envinado**, or seasoning, consequently **new barrels are never used in the region for aging quality wines**. New sherry casks are nevertheless valuable since they are used to age world-renowned distilled spirits.



Lustau's craftmanship 125 years of history and expertise combined with our team's passion and dedication shape the character and personality of our wines. The day-to-day work and the wisdom transmitted from generation to generation of craftsmen comes together in the care of our casks. Lustau's two master coopers work hard every day to maintain our century-old wooden legacy. Tap on the hammer to see two of our coopers in action. **52 #LUSTAUCSWS**

Cellars

The aging of sherry requires precise environmental conditions. Because of this, buildings capable of creating specific microclimates that promote optimal aging were constructed during the late eighteenth century and throughout the nineteenth century. For centuries, the winemakers of Jerez have had to adapt the architecture of the wineries to compensate for negative climactic factors and take advantage of the positive ones by developing unique architectural styles.

The wineries of the region are striking constructions in terms of their features, but if one looks beyond mere aesthetics, one discovers that they are also extremely functional.

In short, a whole set of calculated building designs provide the wine with the ideal environment for aging and allow it to develop in the proper conditions desired by the winemaker.

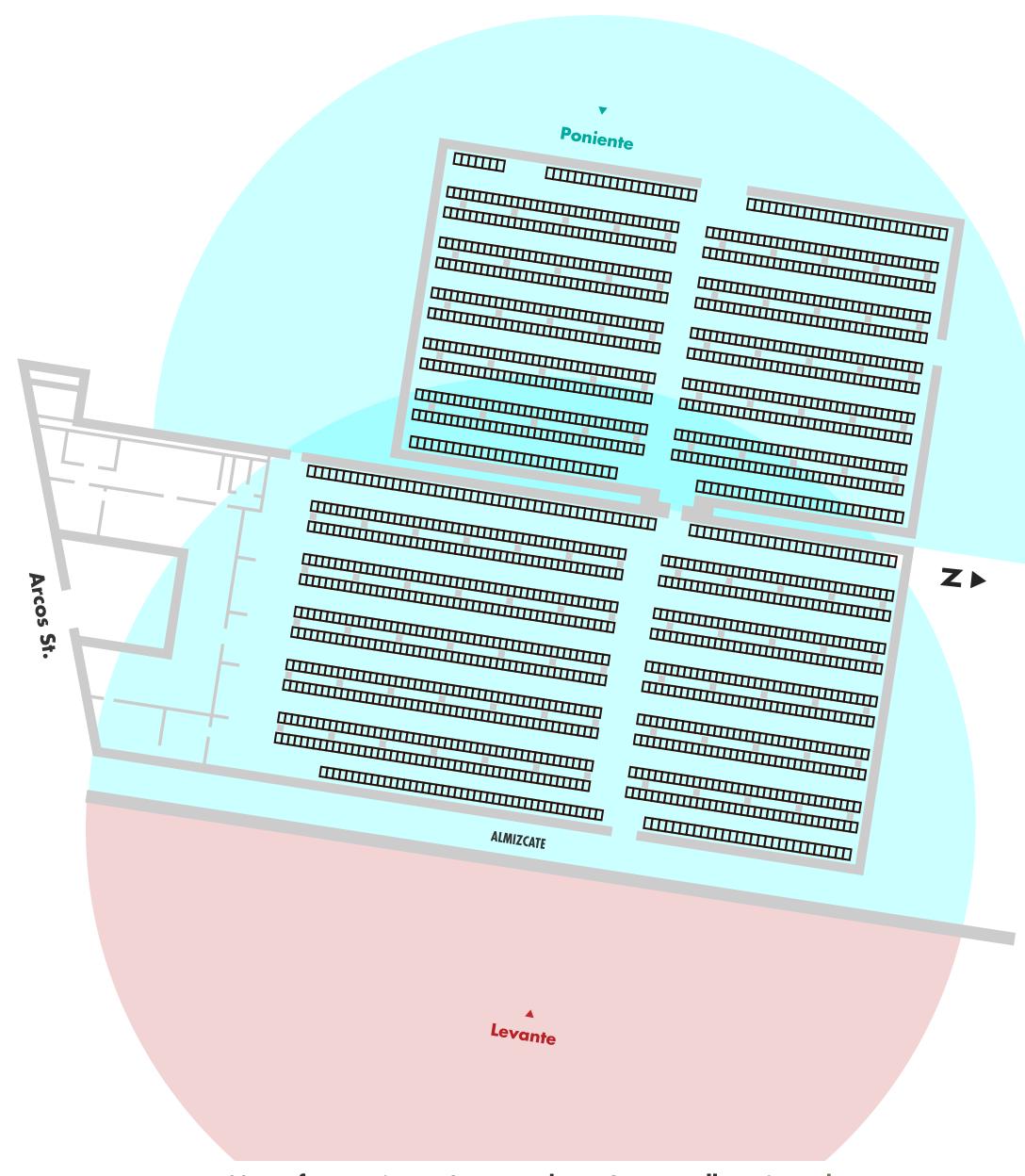


Tap on each section to go directly to the section you want to read.

Orientation

The orientation of the floor plan of each building, as well as the constructive characteristics of the winery, filter external climatic elements for the appropriate aging of the wine.

Cellars are built in **strategic locations** with **easy circulation** for the **poniente's westerly currents** or winds from the south, essential for the development of the flor yeast. Contrastingly, they **block the dry and warm winds** from the northeast and east. In addition, the orientation of the winery **minimizes the impact of the sun** on the roofs of the building.



Map of Lustau's Los Arcos and Las Cruces cellars. Note how the wall and the corridor (almizcate) stops the eastern winds.

Cellars from the indoors

Sherry bodegas are generally very tall buildings. Some wineries reach up to 15 m/49 ft in height at their central arch and are known as cathedral wineries because of their monumental appearance. The large empty space of the cellar acts as an insulating chamber, regulating temperature and humidity. The great height allows ventilation induced by temperature difference. Heat tends to rise and accumulate in the upper part of the cellar and therefore, by opening windows, a dynamic current is created that displaces the accumulated warm air to the outside.

Windows are generally located in the upper part of the walls and are of various sizes and shapes, arranged symmetrically. Sometimes they are covered with esparto (coarse grass) shades, providing diffused diagonal light. The shades, in addition to minimizing light, filter the air which prevents dust or undesirable insects from entering the cellar.

The interior pavement is covered with albero, a very porous material which increases and maintains cool conditions since once saturated, it gradually gives up water to the environment. The albero is watered according to the season of the year to achieve temperature and humidity regulation.





Cellars from the outdoors

ation and are natural filters allowing the of thermal insulation.

flow of the westerly poniente wind. In winter, when the trees shed their leaves, walls are left uncovered, allowing them to better capture solar radiation, store heat and transmit it during the night to utside, the facade and walls are the interior of the cellar. The side walls of protected with trees or pergolas in the cellars are never less than 60 cm/24 the adjoining streets which absorb radi- in thick in order to produce a high level



Capataz and Teams

nother factor to take into account in this urban terroir are the cellar masters (capataces) and winemakers. The work they perform, controlling all the aforementioned factors, coordinating the team, and taking care of the wines in the cellars makes them an indispensable part of the process, not only during vinification and winemaking, but also during the aging.

Sergio Martínez knows the wines and the soleras that Lustau has built up perfectly. For over 14 years he has done the daily rounds, chalk and venencia (the local sampling tool) in hand, along the andanas (rows of casks) which make up the Lustau solera aging casks. Over a decade analysing, understanding and caring for the jewels and the secrets which are hidden between the walls of this bodega. Sergio has been recognized as the Best Fortified Winemaker by the International Wine Challenge in 2021, for the fifth consecutive year.

In 1990, Fernando Pérez joined The House of Lustau as Master Blender and Quality Control Director, responsible for overseeing the production process of Lustau vermouths and brandies, from distillation to final product.

The vast experience Fernando has accumulated during a lifetime of dedication to spirits, liquors and fortified wines was reflected in his appointment in 2013 as a member of the Sherry Regulatory Board tasting panel.



Aging

Solera and Criaderas

The traditional and bona fide system of aging wines in the region is known as the solera and criaderas system. This is a dynamic system in which wines with different levels of aging are methodically blended to maintain a high level of quality, ensure a specific personality, and achieve a maximum degree of homogeneity, despite any organoleptic variations of wines from different vintages.



Doing inventory to check the amount of wine inside the casks is known as "Aspillado".



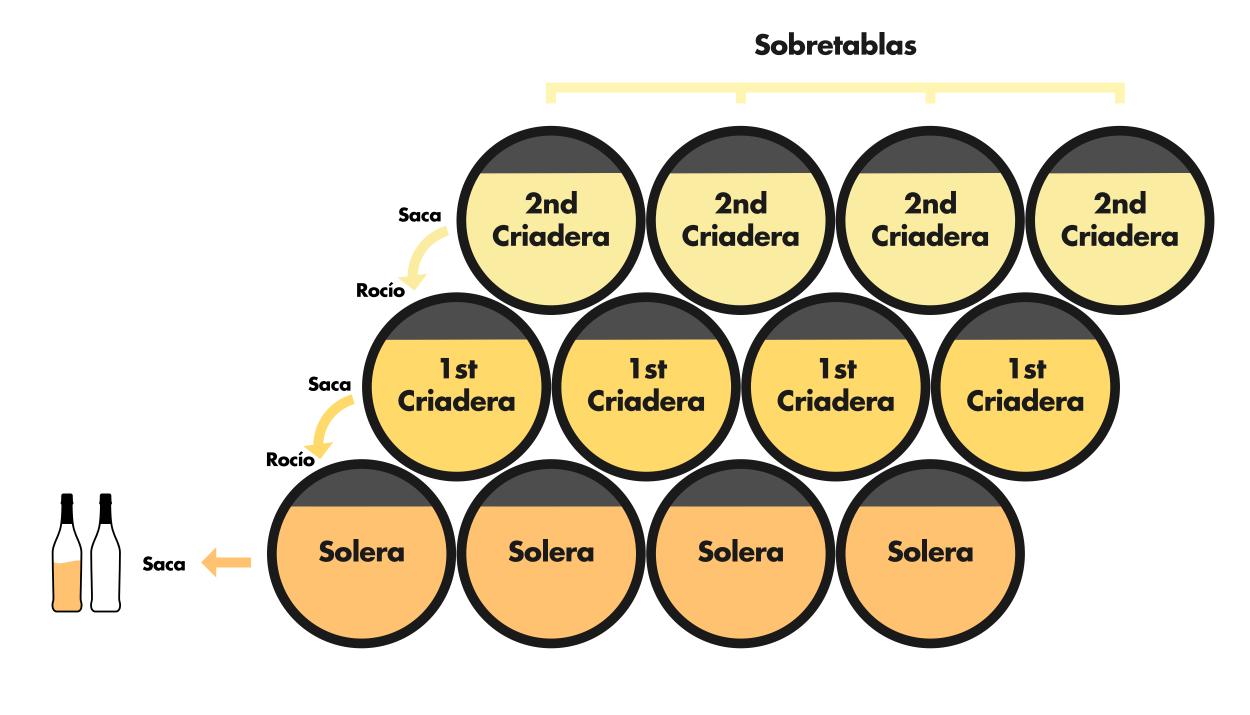
ber of criaderas. The escala containing of the different escalas (or criaderas) that on top. The criaderas are numbered according to their order of age within the solera: 1st criadera, 2nd criadera, etc.

The solera supplies the wine ultimately destined for consumption. The winemakis left in each barrel as a result. The next step is to replenish the solera barrels by adding the same amount of wine from the first criadera. The task of replenishing the voids in the barrels with wine from called cabezuelas.

Each complete system (or soleraje) is com- above the escala is known in the winery posed of several criaderas, or escalas as rocío. When wine is replaced in the (levels), made up of a certain number of solera, a new void is created in the 1st casks. These systems, however, can vary criadera which will be replaced with the greatly in their overall size and total num- same volume of wine extracted from the 2nd criadera. This operation is repeated the most aged wine is placed on the floor until all the levels have been completed. and is called **solera**. Above this, the barrels The void left in the last criadera will be replenished with wine from the sobretablas, follow it in decreasing age are arranged or in any case, with the freshly produced base wine.

> Correr escalas ("running the scales") is the term used for the combined tasks of saca and rocio in the soleraje.

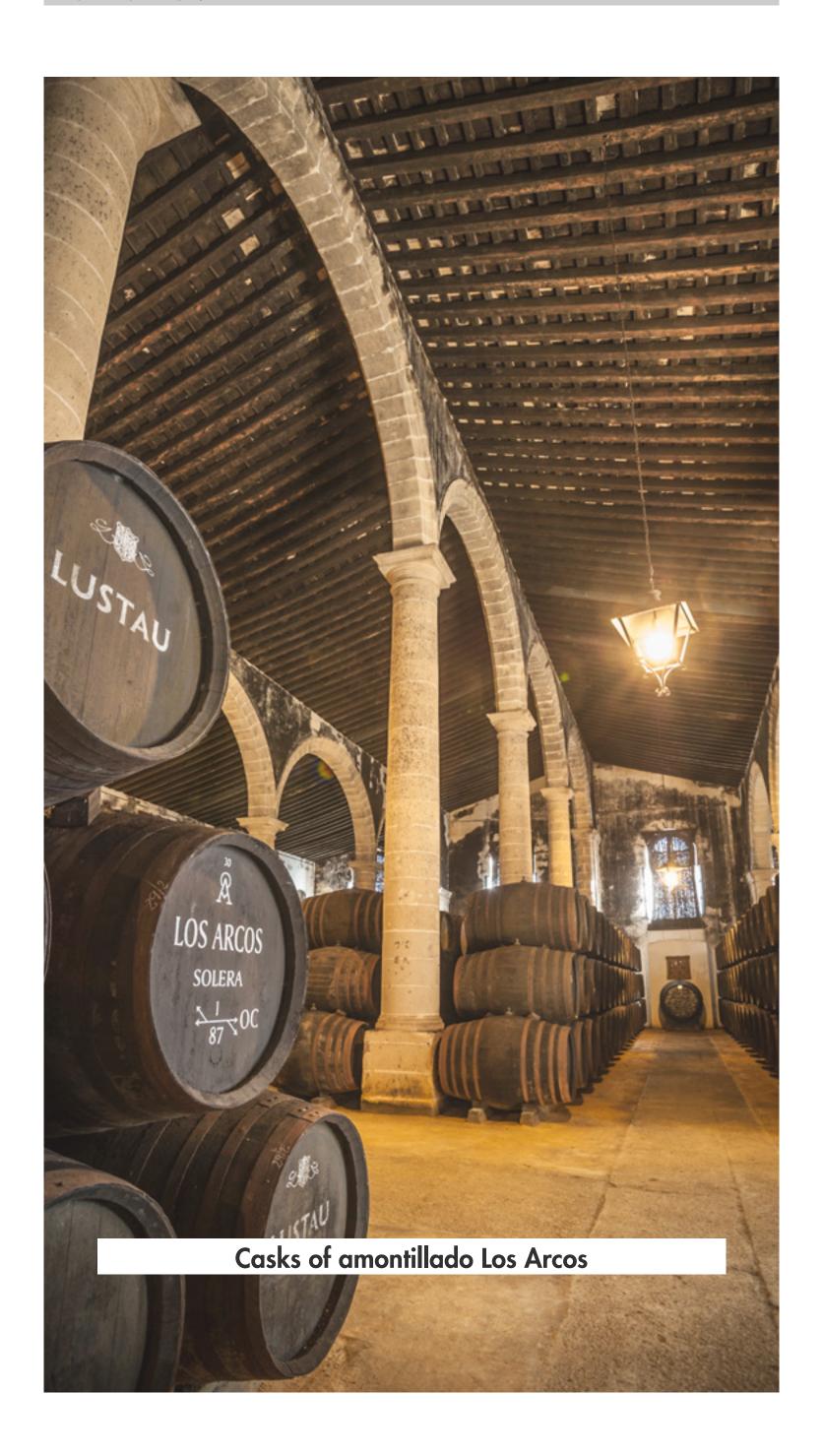
ers or cellar masters establish the frequen- This is a complex method that requires orcy and quantity of wine to be extracted derly and meticulous work since the rocios from the solera for final bottling. This ex- must result in a homogeneous blend of traction operation is called saca. When a the wines on each level. In the case of saca is extracted from the solera a void biological aging, there is the added challenge of **not altering** or **destroying the flor** that covers the surface of the wine or the fine deposits that accumulate at the bottom of the barrel over the years; these are





The solera and criaderas system results in wines of an overall average age. The average age of the wines of a solera depends on the rotation of the total volume of wine contained in the system and will depend on the number of levels of which it is composed, the percentage of wine extracted in each saca, and the frequency with which these sacas are made.

The rules of the Consejo Regulador regulate that the average age must be more than two years with the specific objective of not putting younger wines on the market.



Vintage aging

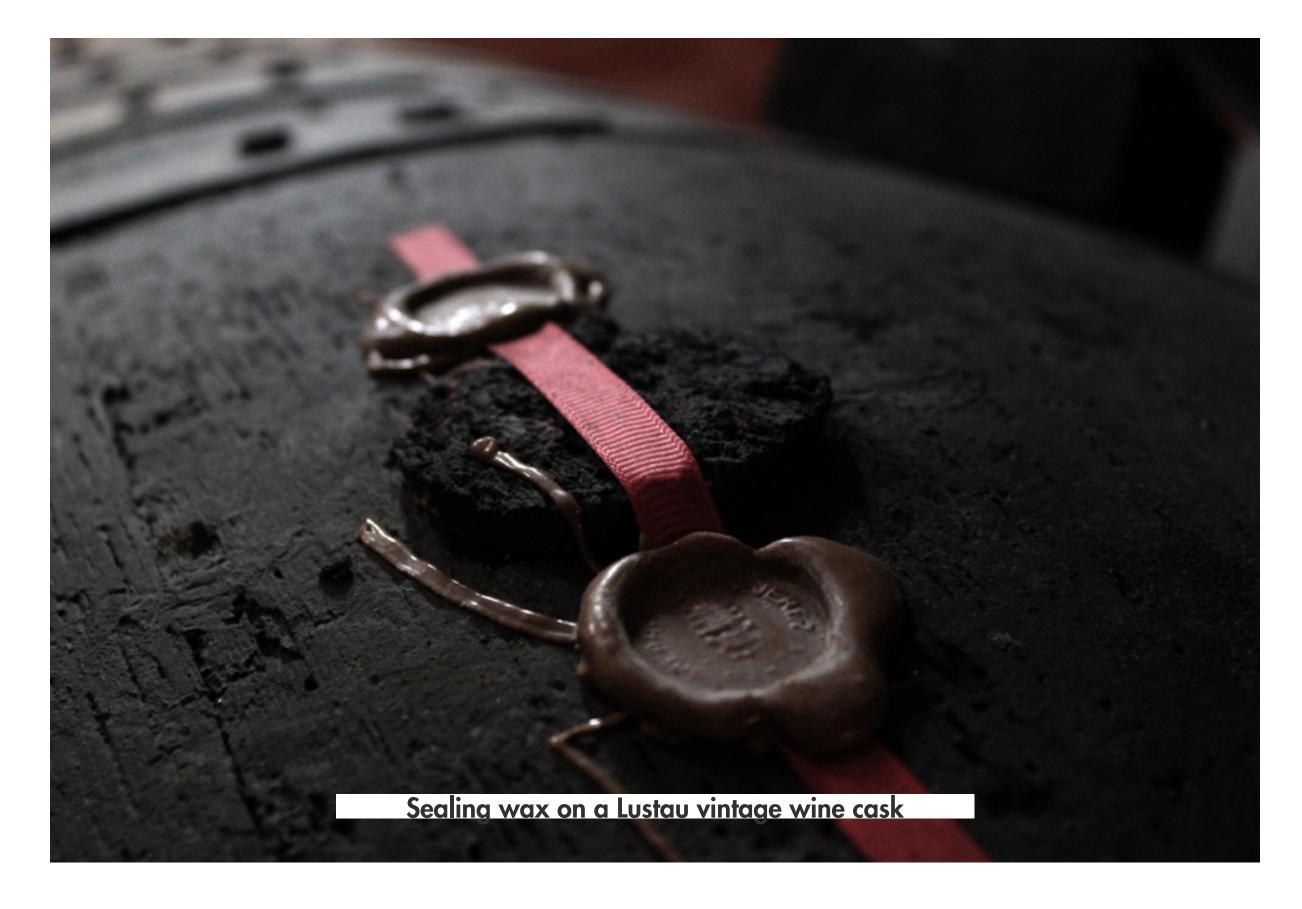
The solera and criaderas system is used for the aging of the vast majority of sherry, but vintage aging has always been present in the region as well.

This is a traditional aging system in which wines from each vintage are aged separately without any blending as in the solera and criadera system.

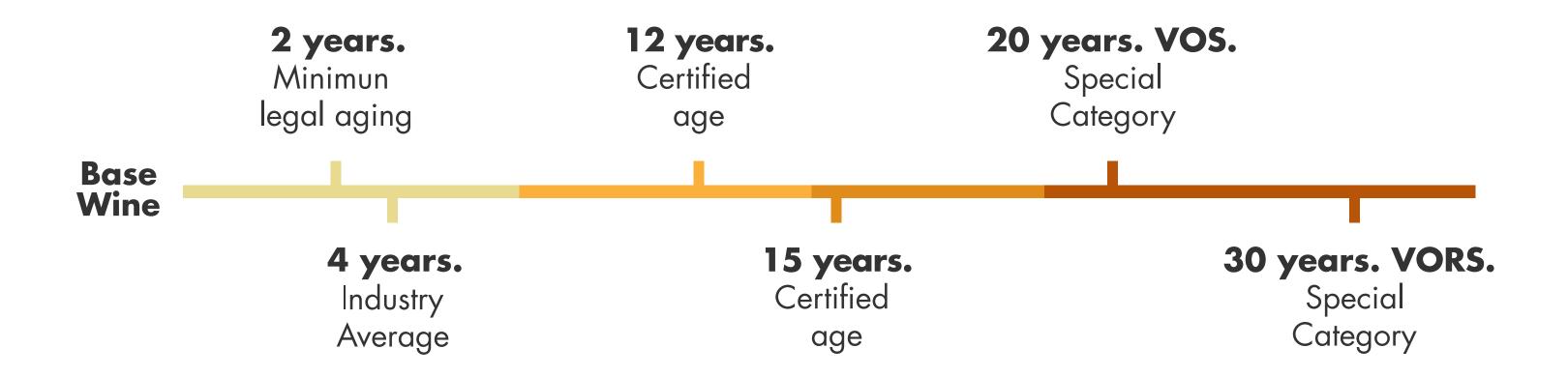
For the certification of a vintage within the D.O., it is necessary to **guarantee** that the wine comes exclusively from the **designated harvest** and that it is stored without any possibility of manipulation. Because of this, the **wine** must be kept completely **sealed** under the supervision of the Consejo Regulador. This limits air circulation inside the barrel and hence the possibility of the flor to survive. There-

fore, it is very difficult to carry out prolonged biological aging under the vintage system.

In 1986 Lustau began to allocate a small part of its Palomino production to the creation of a collection of sweet oloroso vintages made of 100% palomino. This collection of wines is doubly distinct - on the one hand, they are aged via the vintage system, and, on the other hand, they use a grape variety destined for dry wines to make a slightly sweet wine. In order to do this, Palomino is left to become overripe on the vine and then proceeds with a partial fermentation, thus maintaining a higher level of natural sugars. The result is a silky, complex, and rounded wine with a multitude of nuances and varying characteristics that appear depending on the vintage.



Aging levels



This **sherry age-reference** is always related to **average aging** or **"vejez media"** (solera and criaderas system).



Two types of aging are carried out in the Jerez region: 1) biological aging, the wine develops a layer called "flor", and 2) oxidative aging, the direct contact of the wine with oxygen.

Biological

n biological aging the wine develops a layer called "flor" formed on the surface by specific yeasts that causes it to evolve swiftly. The flor not only protects the wine from oxidation by preventing its contact with air but also interacts with the wine, causing it to evolve. On the one hand, the flor consumes alcohol, and on the other hand, it metabolizes other elements present in the wine such as glycerin or volatile acidity.

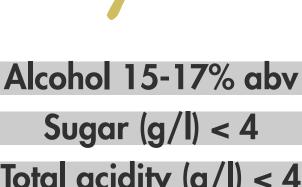
nose characteristic of finos and manzanillas. Like any living being, the velo the movement of the system's levels.

de flor requires a series of specific conditions for its development and survival. Adequate temperature (avg. 20 °C/ 68 °F) and humidity levels (>65%) must be extremely stable with mild temperatures and rather high humidity. The flor also needs aeration since oxygen is a vital element for its existence. Therefore, the barrels in which the flor develops cannot be hermetically sealed nor filled completely to insure adequate air circulation.

The solera system favors the biological aging of the wine. The yeasts that make up the flor develop an intense metabol-As a result, biological aging causes an ic reaction. To maintain them, essential increase in acetaldehydes, the element micronutrients must be added from time responsible for that sharpness on the to time, and this is achieved by the regular addition of younger wine through



Alcohol 15-17% abv Sugar (g/I) < 4Total acidity (g/l) < 4Volatile acidity (g/l) < 0.2Glycerine (g/l) < 2



Total acidity (g/I) < 4Volatile acidity (g/l) < 0.2Glycerine (g/l) < 2



Manzanilla



Fino



Tap on the text on the image to see the flor in video

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#LUSTAUCSWS

Same technique, same grape but different locations

Temperature and humidity levels affect the aging of finos and manzanilla. The flor will be influenced depending on the town where the casks are located. Below there is a comparison between manzanilla de Sanlúcar, , fino del Puerto t fino de Jerez that illustrates how each town affects the yeast in a slightly different way, resulting in different wine profiles.

Manzanilla de Sanlúcar

Alcohol 15%	Density (gr/cc) 0.985	pH 3.1	V. Acidity (gr/l) 0.2	T. Acidity (gr/l) 4.50	Transmitt. 83	SO2 t (mg/l) 28	Copper (mg/l) 0.2	Iron (mg/l) 2	Res.Sugar (g/l) 1
Fino del Puerto									
Alcohol 15%	Density (gr/cc) 0.985	pH 3.0	V. Acidity (gr/l) 0.2	T. Acidity (gr/l) 4.50	Transmitt. 84	SO2 t (mg/l) 21	Copper (mg/l) 0.2	Iron (mg/l) 1.5	Res.Sugar (g/l) 1
Fino de Jerez									
Alcohol 15%	Density (gr/cc) 0.985	pH 3.3	V. Acidity (gr/l) 0.2	T. Acidity (gr/l) 4.50	Transmitt. 84	SO2 t (mg/l) 14	Copper (mg/l) 0.2	Iron (mg/l) 2	Res.Sugar (g/l) 1

Slight differences in numbers. Substantial nuances and notes on the nose and the palate.

Oxidative aging

teristics radically different from that of biological aging. With a higher alcohol content and direct contact with oxygen, the wine gradually darkens. The phenomenon of wine concentration that occurs as a result of evaporation through the walls of the barrel is much more prominent.



Alcohol 17-22% abv

Sugar (g/l) < 4

Total acidity (g/l) < 5

Volatile acidity (g/l) < 0.8

Glycerine (g/l) 7-9



Oloroso

Biological vs. Oxidative

Biological wines	Wine parameters	Oxidative wines
V	Alcohol	^
V	Residual sugar	^
V	Volatile acidity	^
V	Glycerine	^
^	Acetaldehyde	
	Color	^

Dual aging

Some finos or manzanillas may be selected to continue aging and will progressively lose the flor veil either by the exhaustion of the nutrients dissolved in the wine or by the increase and strength of its alcoholic concentration. They then continue to age without the flor veil, exposed to oxidation and then emerge as a different type of wine known as amontillado.

Conversely, those wines that **do not suit** the **parameters** for finos or manzanillas after fortification will be raised to around 17% in order to suspend the activity of the flor veil and thus continue with **oxidative aging** as a **palo cortado**.



+

Alcohol 16-22% abv

Sugar (g/l) < 4

Total acidity (g/l) < 5

Volatile acidity (g/l) < 0.8

Glycerine (g/l) 3-5

Alcohol 17-22% abv

Sugar (g/l) < 4

Total acidity (g/l) < 5

Volatile acidity (g/l) < 0.8

Glycerine (g/l) 7-9





Amontillado

Palo cortado

Sweet wines

The must obtained from palomino, moscatel or pedro ximénez varieties undergoes partial fermentation. Once finished, the new wine is added to the youngest criaderas on its own oxidative aging process in the winery.



PX

Æ

Alcohol 15-22% abv

Sugar (g/l) >160

Total acidity (g/l) 4-5

Volatile acidity (g/l) ± 0.4

Alcohol 15-22% abv

Sugar (g/l) >212

Total acidity (g/l) 3-5

Volatile acidity (g/l) ± 0.5

Alcohol 15-22% abv

Sugar (g/l) >160

Total acidity (g/l) 4-5

Volatile acidity (g/l) ± 0.4



Dulce Pedro ximénez



Moscatel

Blends

nce the aging process is finished, tent greater than 4 g/l. these sweet wines (moscatel or pedro ximénez) can be bottled or they Once the blending has been carried can be used to create cabeceos or blends, out, the wine often spends some time in (vinos generosos de licor*). These wines casks to achieve a homogeneous and are the result of blending dry wine (vino definitive character. generoso*) as a base, to which a certain amount of pedro ximénez or moscatel Depending on the fortified wines used must, is added.

The wines produced from these blendings are sweet wines with a sugar con-

(vino dulce natural*), or concentrated as a base and the amount of final sugar, different types of wines are produced.







Pale Cream - The base wines are usually finos and manzanillass and their sugar ranges between 4 and 115g/l.

> Alcohol 15-22% abv Sugar (g/l) 4 - 115 Total acidity (g/l) < 3.5Volatile acidity (g/l) < 0.6

Medium - The base wines are usually amontillados and olorosos and their sugar ranges between 4 and 115 g/l.

Alcohol 15-22% abv Sugar (g/l) 4 - 115 Total acidity (g/l) < 3.5Volatile acidity (g/l) < 0.6 Cream - The most common base wine is oloroso, and the amount of final sugar is between **115** and **140 g/l**.

Alcohol 15.5-22% abv Sugar (g/l) 115 - 140 Total acidity (g/l) < 3.5Volatile acidity (g/l) < 0.6



Pale Cream



Medium



Cream

*See page 82 to learn more about the official naming

wo other types of sherry are aged and bottled as official categorized wines in the region: VOS/VORS, En Rama, Single Cask, Fino Viejo/Manzanilla Pasada and Single Vineyard.

VOS and VORS

The regulations of certified aged sherry stipulate the application of specific terminology. Thus, sherries over 20 years old use the initials V.O.S. which stand for the Latin phrase "Vinum Optimum Signatum" (Wine Selected as Optimal) or "Very Old Sherry" - the English term used so often on the labels of this type of sherry.

In the case of those sherries over 30 years old, the acronym V.O.R.S. is used, which stands for "Vinum Optimum Rare Signatum" (Wine Selected as Optimal and Exceptional), and which may be conveniently expressed in English as "Very Old Rare Sherry".

Both V.O.S. and V.O.R.S. (together with the full **Latin** expressions corresponding

to their initials) appear on the **special** seals which the Consejo Regulador uses to distinguish certified sherries and that also appear on their labelling.

In order to obtain this certification of quality and age, bodegas have to submit their wines to the judgement of an independent Tasting Committee. This is made up of specialists with accredited expertise and reputation who have no connection with the sherry bodegas. The wines must be **analyzed** utilizing various tests such as Carbon 14, ester content, ash or dry extract. Even so, the results of these analysis alone are not considered sufficient to merit the certification of the Consejo if the wine in question fails to satisfy the demanding qualitative standards set by the team of expert tasters. Only amontillado, palo cortado, oloroso and pedro ximénez are eligible for these age-designated categories.



Official VOS and VORS labels supplied by the Consejo Regulador de las DDOO Jerez-Xérèz-Sherry and Manzanilla-Sanlúcar de Barrameda

The "new" old style: En Rama

one consumed or bottled directly from barrel. This is something that is not difficult to do, as it prohibits any treatment other than a light filtering before bottling to remove any coarse solids from the barrel or remains of the flor veil.

The objective of en rama is to transfer to the bottle the purest example of the wine that is in barrel. This would be what we would experience if we were to enjoy it directly venenciado (sampling) from the barrel.

Depending on the style of the wine and its age, they will have greater intensity of color and less clarity in the glass.

In wines that have not undergone the stabilization process before bottling, their evolution in the bottle will begin earlier. As with any aged wine, they will acquire distinct nuances and a complexity whose quality and longevity through time will reflect the original qualities and characteristics of the original wine.

Lustau is the first and only company to offer a range of three "En Rama" wines, one from each of the three towns in the Sherry Triangle. Sherry lovers will be able to discover the influence of the local mesoclimate on the wines and identify the particular character of each town. These wines are produced in very small quantities.

The "3 En Rama" range includes a Fino from Jerez de la Frontera, a second Fino from El Puerto de Santa María, and a Manzanilla from Sanlúcar de Barrameda. Sergio Martínez carefully selects the most outstanding casks from every single solera to create this exclusive range.



Single Cask

Also single barrel. This special wine has features in common with other categories such as whisky or other distilled beverages. In the case of sherry, single casks are wines that have been bottled exclusively from just one cask only once (or any other authorized barrel or vessel). Sherry single casks are ephemeral, one of a kind. Independent, unsual bottlings that won't likely be replicated in time. Therefore, these wines are very rare and extraordinary, the perfect choice for wine collectors.

Fino Viejo/ Manzanilla Pasada

Fino viejo and manzanilla pasada are biological wines that are aged at least for seven years in the solera and criadera system. Due to their longer aging, both finos viejos and manzanillas pasadas have characteristics and notes that differ from conventional finos and manzanillas. These wines stand out for presenting light oxidative notes, a more intense color and deeper texture.

Single Vineyard

Those wines crafted with the same variety sourced from the same vineyard are known as single vineyard wines. They are interesting examples of the terroir and the soil expression in the case of young wines, with little aging in the solera and criadera system; or wines aged through a static aging system, such as vintage sherry wines.



Tap on the image to see how a single cask collection is generally established

This is undoubtedly the main characteristic of sherry wines. This variety of styles and unique characteristics is difficult to find in other wine regions.

Colors can range from the palest and brightest greenish yellow present in finos and manzanillas to the darkest and most opaque mahogany of sweet Pedro Ximénez, passing through a wide range of intermediate colors of golden, amber, and chestnut tones.



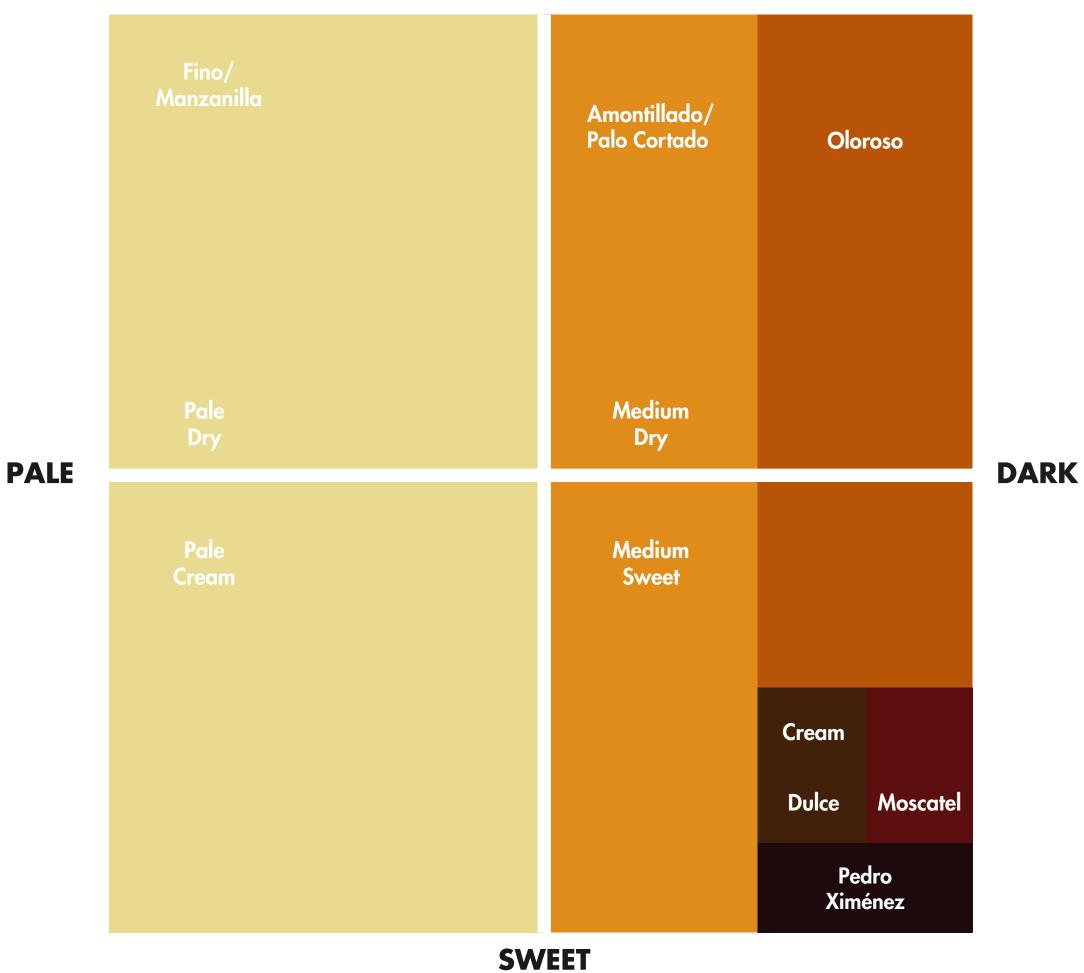
romas of sherry range from the **sharp**, fresh nose of finos and manzanillas to the **dehydrated** and candied fruit of the sweet wines, with a rich variety of **dried fruit**, **balsamic**, and **toasted aromas** in amontillados and olorosos.

In terms of taste, sherries range from very dry to **extremely sweet**, and from light and lean to full-bodied and mouthcoating. Between the two extremes there is a complete variety of variations that can be experienced and enjoyed.

Two Key Factors

Sweetness (X axis) (X axis)

DRY



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The great diversity of styles of sherry and their distinct personalities make them extremely versatile wines for food pairing, whether with traditional cuisine or the latest gastronomic trend, regardless of how exotic it may be!

They are a valuable tool for the sommelier or bartender when responding to any challenge posed by the chef or kitchen. For the wine lover, they are a guarantee of finding the perfect wine to enjoy at any time of day.

The main wine family of the wines of Jerez is the vinos generosos. These are dry wines which are made almost exclusively with the palomino variety. Fino,

manzanilla, amontillado, oloroso, and palo cortado all belong to this group.

On the other end of the spectrum is the family of dulces naturales, or naturally sweet wines which are almost always made from the moscatel or pedro ximénez varieties and named after the grape from which they are made. They may also be made from palomino or a combination of varieties in which case they are simply called dulce.

The third family of wines are the generosos de licor wines which are a result of the blending of wines from the two previous groups, a practice known as cabeceo. Starting with a dry wine as a base, a certain amount of natural sweet wine is added. medium and cream are the two most common examples.

Enjoying sherry

Sherry is wine. This fact is **vital** when it comes to working with or enjoying it. Although it may seem obvious, **many consumers think that sherry is another type of beverage** due to its marked expressiveness on the nose and palate.

The **great diversity** of wine styles make sherry a great substitute for other wines - white or reds, sparkling or sweet, aperitif or nightcap.

Chefs and sommeliers from all corners of the world consider these wines the perfect accompaniment to their dishes and elaborations.



Storage

dation, it should be noted that sherries (41 to 53.5°F). evolve over time and do not spoil or exthe bottle.

The general recommendation for most Storage of open bottles: Store bottles with sherries is to consume them in the year the cork inserted, standing upright; avoid after bottling. In spite of this recommen- light and refrigerate between 5 to 12 °C

pire if properly kept, like any other **great** Storage of unopened bottles: Store bottles wine. They will, however, acquire differ- standing upright and avoid light; protect ent nuances with the passage of time in from heat and maintain a stable temperature of around 13°C/55°F.

Biological Fino & Manzanilla

Closed: 2 years Opened: 2 weeks

Oxidative Oloroso, P. Cortado &

Amontillado

Closed: 3 years Opened: 3 months

Sweet

Pedro Ximénez & Moscatel

Closed: Indefinitely Opened: 12 months

Blends Medium & Cream

Closed: 3 years Opened: 10 months

Old Wines VOS, VORS & Añadas

Closed: 3 years Opened: 3 months



Tap on the grid to listen to a podcast about sherry's aging

Serving: Glass and temperature

Serve sherry in a wine glass. The most recommended option if one is enjoying sherry with a meal, is a high quality wine glass of fine crystal with a large goblet that allows the wine to breathe and express itself with a long stem so that it does not heat up.







Biological Fino & Manzanilla

Cold
7 - 9 °C/44 - 48 °F
5 oz serving

Oxidative Oloroso, P. Cortado & Amontillado

Slightly chilled

13 - 14 °C/55 - 57 °F

5 oz serving

Sweet Pedro Ximénez & Moscatel

Chilled

10 - 12 °C/50 - 54 °F

3 oz serving

Blends Medium & Cream

Chilled

10 - 12 °C/50 - 54 °F

5 oz serving



Tap on the image to listen to a podcast about sherry and food

Tomato and goat cheese tartar with cream sherry

Manzanilla

Smooth with saline notes; its slight acidity causes a pleasant sensation of freshness and a subtly bitter aftertaste.

Fino

Notes of almonds in the mouth, offering a pleasant sensation of freshness.



Snacks Tapas



Veggies Salad



Japanese food



Charcuterie Iberian ham



Seafood Oysters



Nuts Olives



Rice Soups



White

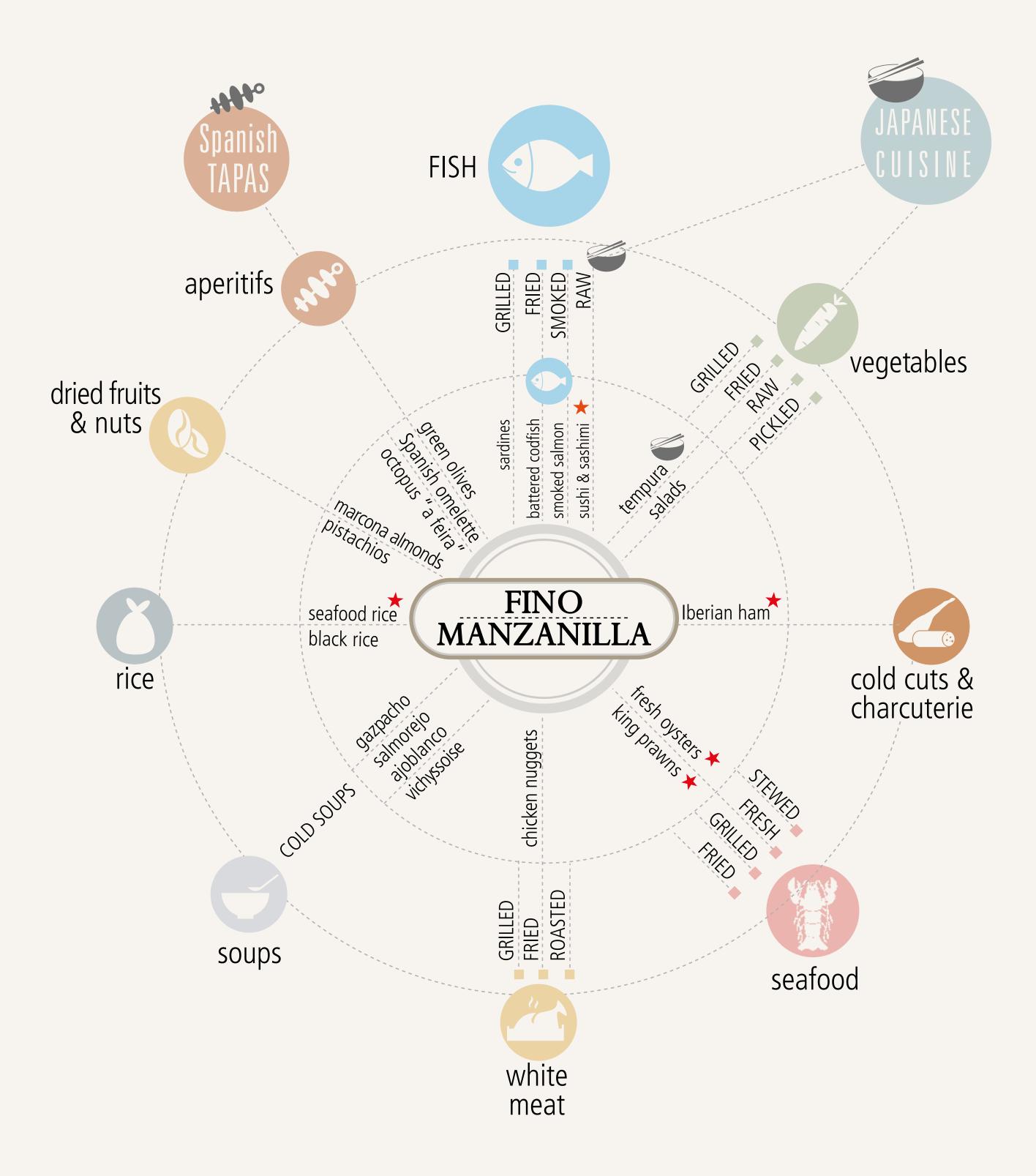
fish



Tap on the left circle to see a video recipe pairing for manzanilla



Tap on the right circle to see a video recipe pairing for fino



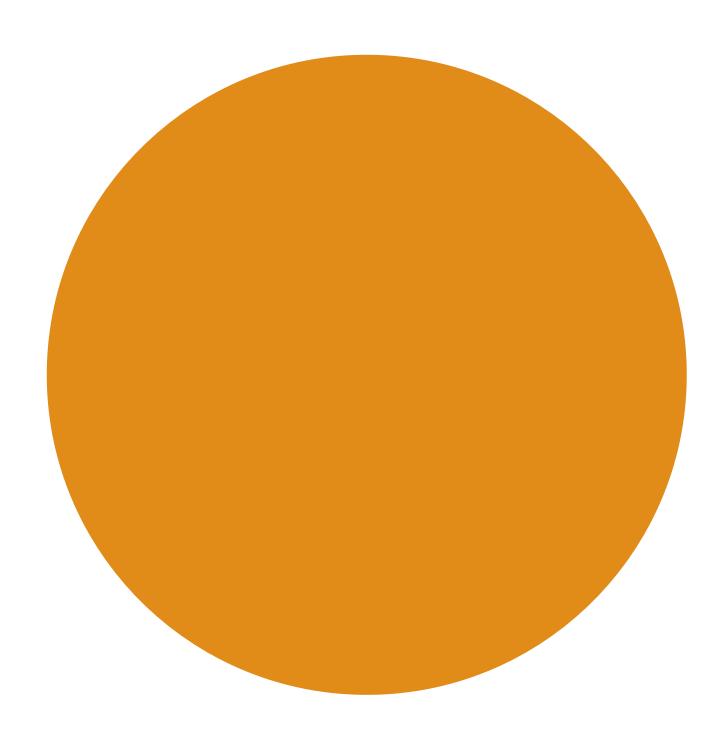
★ LUSTAU'S favourite pairings

Amontillado

Very expressive; balanced flavor and acidity; a dry finish and a long aftertaste with notes of toasted nuts, smoke, and wood.

Palo Cortado

Round, deep and voluminous on the palate; soft and delicate aftertaste, spicy, and lactic notes, tobacco leaf, pleasant finish.





Hot soups



Roasted veggies



Spicy cuisine



Poultry
White meat



Hard cheese



Mushroom Umami



Rice Soups

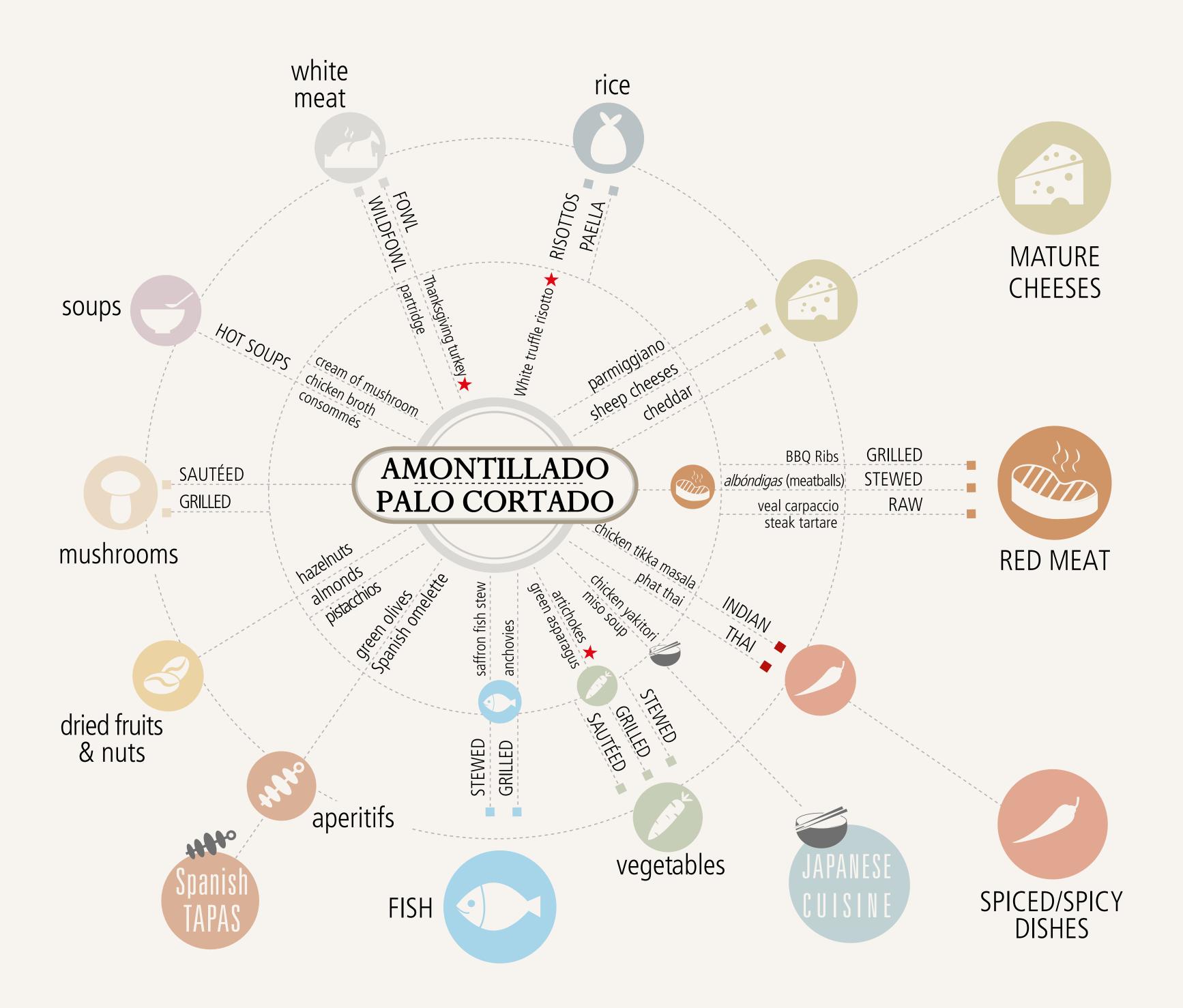


Blue

fish



Tap on the right circle to see a video recipe pairing for palo cortado



★ LUSTAU'S favourite pairings

Oloroso

Dry, flavorful, and structured; its generous glycerin makes it smooth and warm on the palate; notes of noble wood stand out, providing a very elegant dry finish.





White meat



Red meat



Hot soups



Hard cheese



Legumes Stews



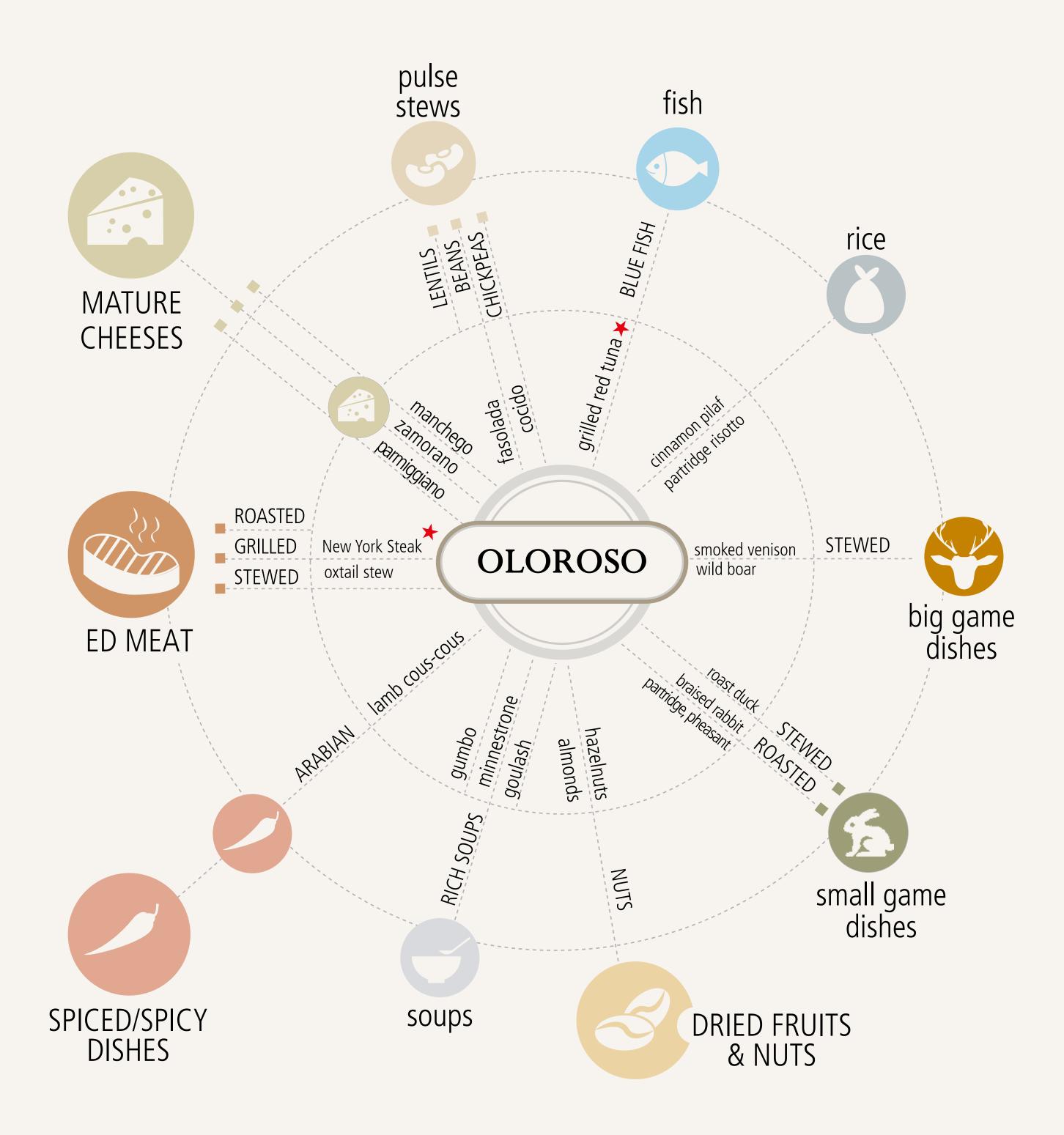
Rice Soups



Salmon



Tap on the circle to see a video recipe pairing for oloroso



★ LUSTAU'S favourite pairings

Pale Cream

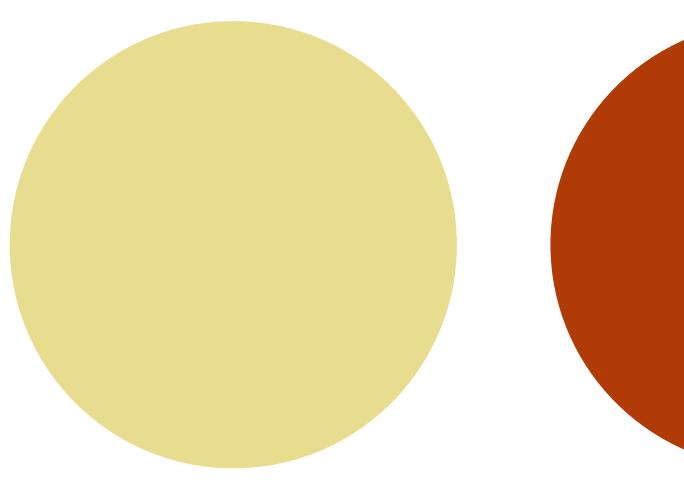
Light and fresh in the mouth but with a delicate sweetness which is pleasant on the palate. With hints of hazelnut and dough.

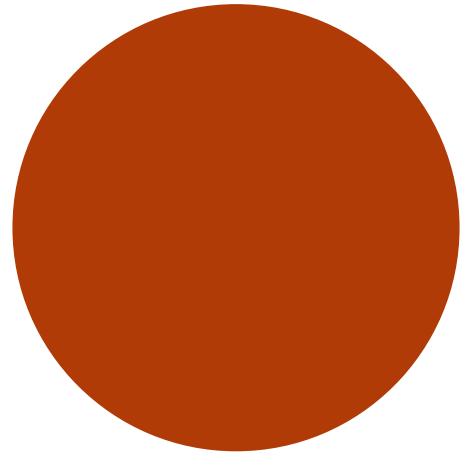
Medium

Slightly dry entry that turns sweet to a smooth aftertaste with hints of dried fruit and notes of chocolate.

Cream

Velvety on the palate; balanced sweetness and an elegant finish that leaves a long fruity and sweet aftertaste.







Nuts Caramel



Foie



Spicy cuisine



Red fruit Berries



Soft cheese



Pastry Pies



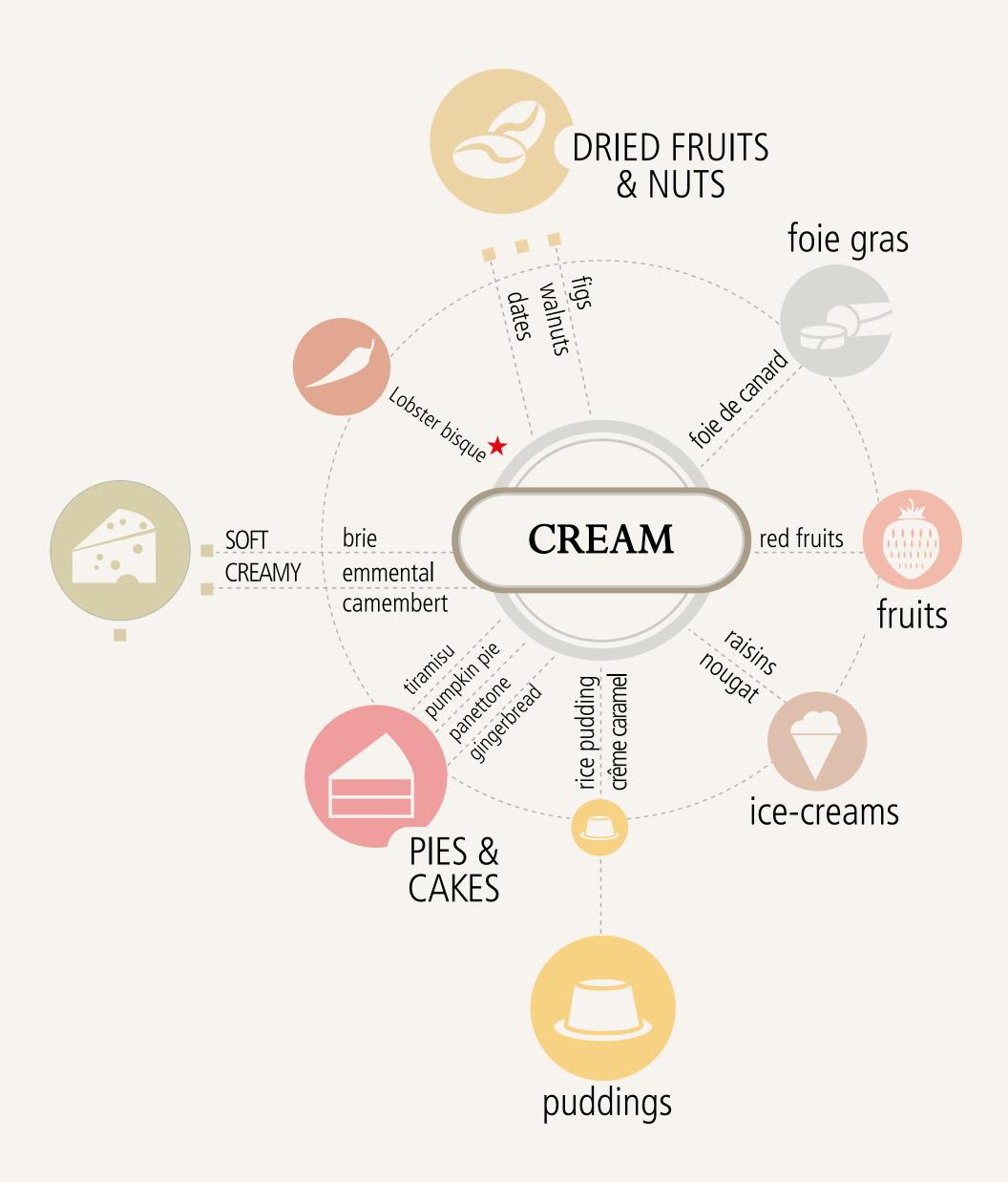
lce cream



Flan Mousse



Tap on the right circle to see a video recipe pairing for cream sherry



★ LUSTAU'S favourite pairings

Dulce

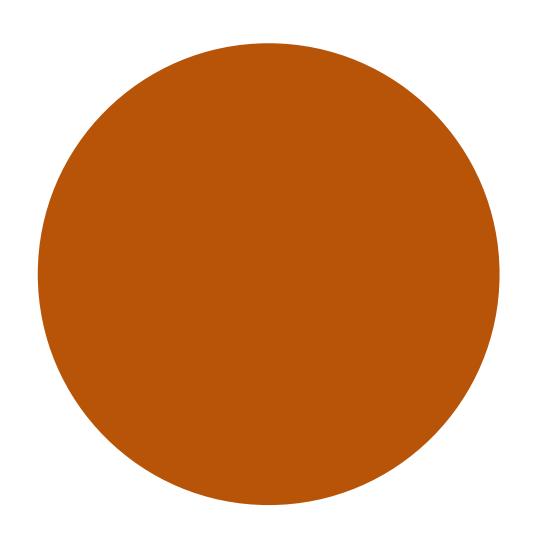
Intense and fragrant. Rich and mellow, with a clean acidity and a slightly bitter finish. Nutty and citrus aromas over a toasted backgrounds.

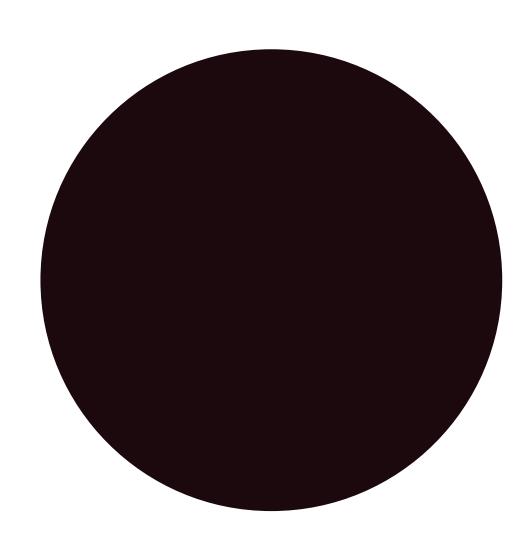
Moscatel

Fresh sweetness on the palate, with varietal and floral flavors; slightly dry and bitter finish.

P. Ximénez

Unctuous and velvety; some acidity balancing the extreme sweetness; very long and tasty finish with hints of coffee, cocoa, and raisins.







chocolate



Foie



Citrus Red fruit
fruit Berries



Soft cheese



Pastry Pies



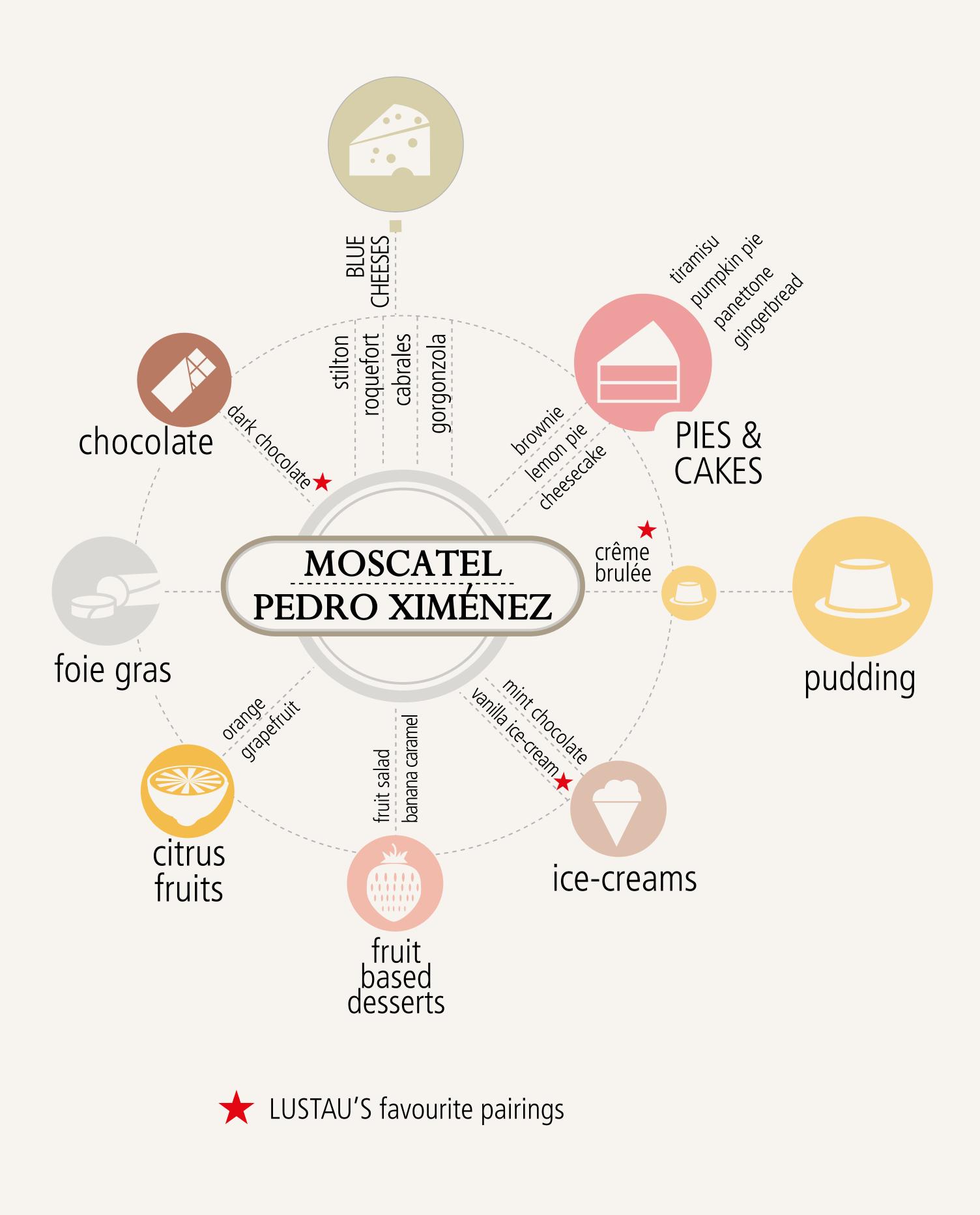
lce cream



Mousse

9

Tap on the left circle to see a video recipe pairing for moscatel



Vinegar: another player

Like sherry wines, sherry vinegar is aged in the traditional system of solera and criaderas, a genuine and prolonged aging that sometimes exceeds 10 or 20 years and accounts for the richness and high concentration that characterizes sherry vinegar.

Sherry vinegar is one of **gastronomy's star condiments** exhibiting extraordinary quality, high aromatic concentration, and **versatility**.

The House of Lustau has two vinegars that follow the same quality standards as its wines.

Vinagre de Jerez Gran Reserva 1/24

Aged by the solera and criaderas system with a deep mahogany color. Its incomparable flavor is round, ample, balanced, with notes of dried fruits and spices.

Vinagre de Jerez al Pedro Ximénez 1/5

Made with the addition of **Pedro Ximénez** wine, dark mahogany in color, its moderate sweetness on the palate is the feature that best defines it, together with a delicious smooth and unctuous flavor, with notes of dried fruits, roasted nuts or licorice.



Cocktails

is once again on the rise.

Sherry is gentler and lower in alcohol than spirits (average of 15% - 21%developed in the fermentation process that differ in structure and attack than the citric acids (lemon and lime juice) more commonly used in cocktails. Sherry can also provide (in most cases, fino and manzanilla being exceptions) natural glycerol, a key com-

herry cocktails have been made in ponent found naturally in grapes that the **US** since the invention of **mix**-can provide **roundness** and **body**, ology. Many of the American classic act as a flavor binder and enhancer, recipes call for sherry, and their use and give the impression of sweetness. today in top-notch bar craftsmanship This is very important because studies have shown that people respond to mouthfeel in a cocktail just as much as they do flavor. Remember to think of sherry the next time your cocktail abv). It also can provide wine acids lacks a little mid palate or mouthfeel!

> The development of a winning and memorable, sessionable cocktail is one that hits on as many of the tactile sensations as possible while offering pleasing aromas, flavor and mouthfeel and, of course, balance!



Tap on the text to listen to a podcast about cocktails and sherry

Fino & Manzanilla

(15% abv on average)

- Spirits to work with: vodka, gin, tequila, white and younger aged rums and pisco.
- Works well with: herbs, dry vermouths, maraschino, honey, apples and citrus.
- Cocktail suggestions: 50/50 martinis, mojitos and daiquiris.



Tap on the cocktail to see a video cocktail recipe with fino

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Amontillado & Palo Cortado

(18% abv on average)

- Spirits to work with: white (gin, mezcal, etc.) and aged spirits (genever, rum, etc.)
- Works well with: amaros, curaçaos, seasonal berries (especially strawberries and raspberries), dry and sweet vermouths, fig, apricot, stone fruits, herbs and mint.
- Cocktail suggestions: Manhattan and old fashioned variations, modifier in daiquiris, cobblers with fruits and collins.



Tap on the cocktail to see a video cocktail recipe with amontillado

103

Oloroso

(20% abv on average)

- Spirits to work with: full-bodied brown spirits, such as whiskies, scotches, brandies and aged rums and tequilas.
- Works well with: stone fruits, red fruits, sweet vermouths, amaros, plums, figs, chocolate, and coffee.
- Cocktail suggestions: Manhattan and old fashioned variations, sherry cobblers or adonis.

Tap on the cocktail to see a video cocktail recipe with amontillado



Tap on the cocktail to see a video cocktail recipe with oloroso

104

Medium & Cream

(20% abv on average)

- Spirits to work with: full-bodied brown spirits, such as whiskies, scotches, brandies and aged rums and tequilas. Gin can bring a fresh citrusy lift as well.
- Works well with: vermouths and amaros. Stone fruits, honey, fig, fresh herbs like basil and mint, aromatic spices like cinnamon, nutmeg, and pepper.
- Cocktail suggestions: Negroni, manhattan and old fashioned variations, punches, flips, fizzes, sour variations, cobblers or adonis.



Tap on the cocktail to see a video cocktail recipe with cream sherry

105

Moscatel & Pedro Ximénez

(17% abv on average)

- Spirits to work with: full-bodied brown spirits, such as whiskies, scotches, brandies and aged rums and tequilas. Pisco and gin work well with moscatel.
- Works well with: vermouths, amaros, curação, seasonal fruits, apple, ginger, fig, date, citrus, cherry, stone fruits, etc.
- Cocktail suggestions: Manhattan and old fashioned variations, as a sweetening modifier in cobblers and shaken cocktails like daiquiris and sours, flips, fizzes or nogs.



Tap on the cocktail to see a video cocktail recipe with pedro ximénez

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Tour CSWS exam

Questions?

nce you have read the manual and begin studying, we recommend that you ask your tutor and educator Lucas Payà questions. You may do this through the Wine Scholar Guild online classroom forum.

The **exam** consists of **50** multiple choice and essay **questions**. All questions are taken directly from the content included in the manual. Please make sure to ask questions during the lecture and/or tasting.

You are strongly encouraged to attend the theory class (Session 1) as it will help you better understand and reinforce the information from this manual.

Good luck!

Post Nominal

Post nominal

nce you have passed the exam, you will receive a certificate signed by Luis Luengo, CEO of Lustau, and César Saldaña, President of the Consejo Regulador of the D.O. Jerez-Xérèz-Sherry y Manzanilla-Sanlúcar de Barrameda.

Your pin will identify you as a CSWS graduate. You will also receive a kit of digital resources so that you may take advantage of your official qualification.

In addition, your CSWS qualification gives you **one-year free access** to the

Sherry Concierge, an exclusive service created by The House of Lustau for professional consulting. Here you can also interact with Lucas Payà, brand educator of The House of Lustau. Simply access the link we will provide, and Lucas will be ready to advise you on how to create a unique experience with your Lustau wines.

From the moment you receive notification that you have been approved, you officially become a sherry ambassador for both the Jerez region and The House of Lustau. We may contact you as an ambassador and/or collaborator for brand events.





V.2
STUDENT MANUAL
#LUSTAUCSWS