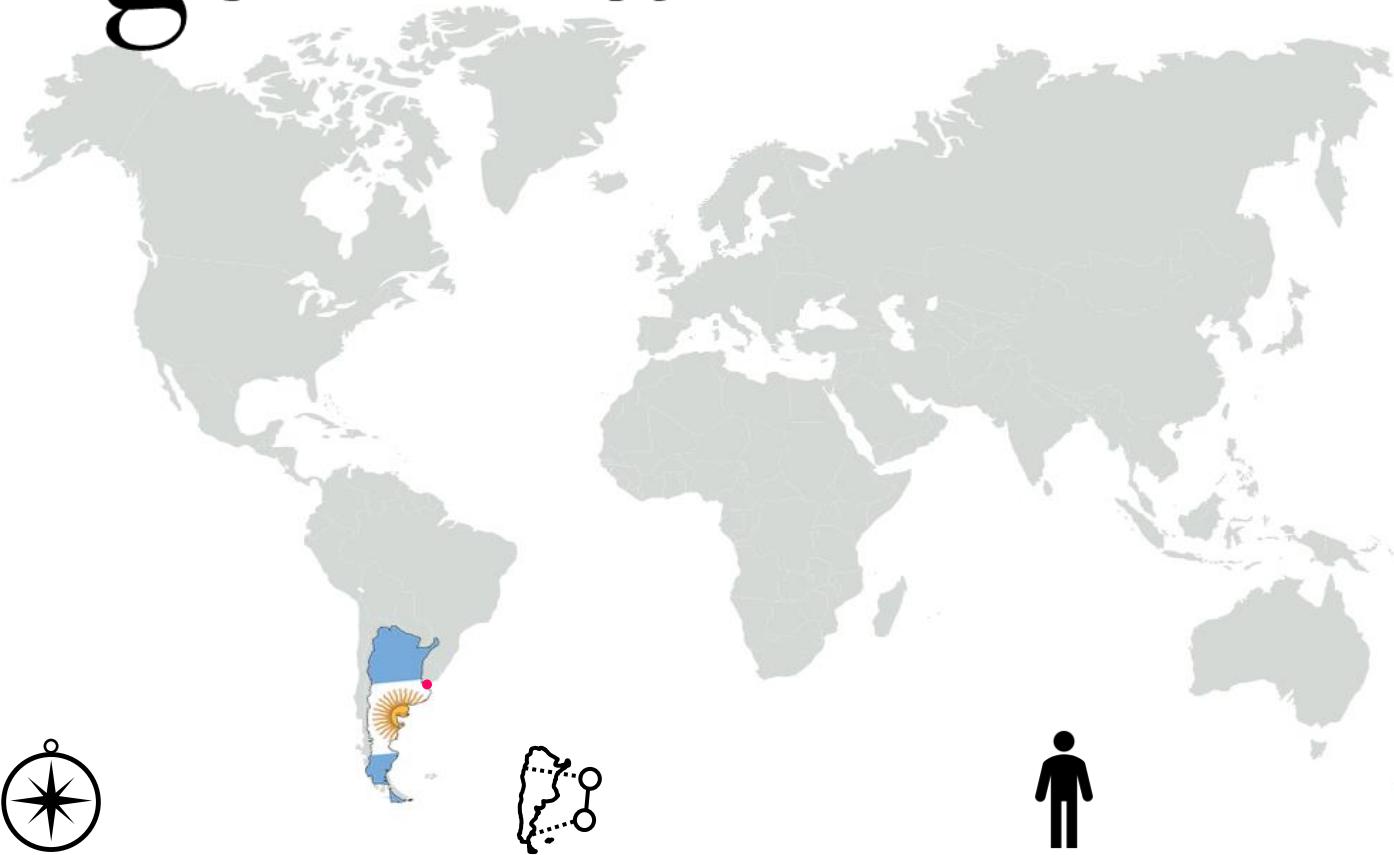




WINE REGIONS IN ARGENTINA



Argentina



LOCATION

22° | 55°

SOUTH LATITUDE

53° | 74°

WEST LONGITUDE



TOTAL SURFACE

(continental)

2.791.810 km²

8th WORLD'S LARGEST
COUNTRY

2nd LARGEST COUNTRY IN
SOUTH AMERICA



POUPULATION

Estimations (July 2020)

45.4 M
INHABITANTS

49%  **51%** 



CAPITAL

BUENOS AIRES



A UNIQUE HABITAT

for the creation of great wines



A series of natural factors combined with a deeply-rooted popular wine culture lend our wines a unique **identity and quality**.

- | **TERROIRS** | Extension & diversity
- | **ALTITUDE** | Distinctive character
- | **CLIMATE** | Dry & continental
- | **SOILS** | Low fertility
- | **WATER** | Great purity
- | **WINE PRODUCERS** | Strong commitment



TERROIRS

Extension and diversity



- Argentina's vast extension is unique. It offers the possibility of cultivating high-quality vineyards across larger areas, creating a great diversity of *terroirs*.
- This allows to play with various grape varieties and wine styles: reds (*from young and light, to full-bodied and structured*), whites (*from dry to fruity and aromatic*), sparkling (*from nature to dulce*) and rosés.

KEY FACTORS

- Altitude and latitude
- The presence of the Andes range
- Rainfall regime
- Variability in soils



8th

WORLD'S LARGEST COUNTRY

3.800 km

EXTENSION (from north to south)

23 | 45°

SOUTH LATITUDE (Cultivated area)

20°

LONGITUDE (from east to west)

The Andes range offers variable altitudes, generating a unique variety of terroirs and microclimates.

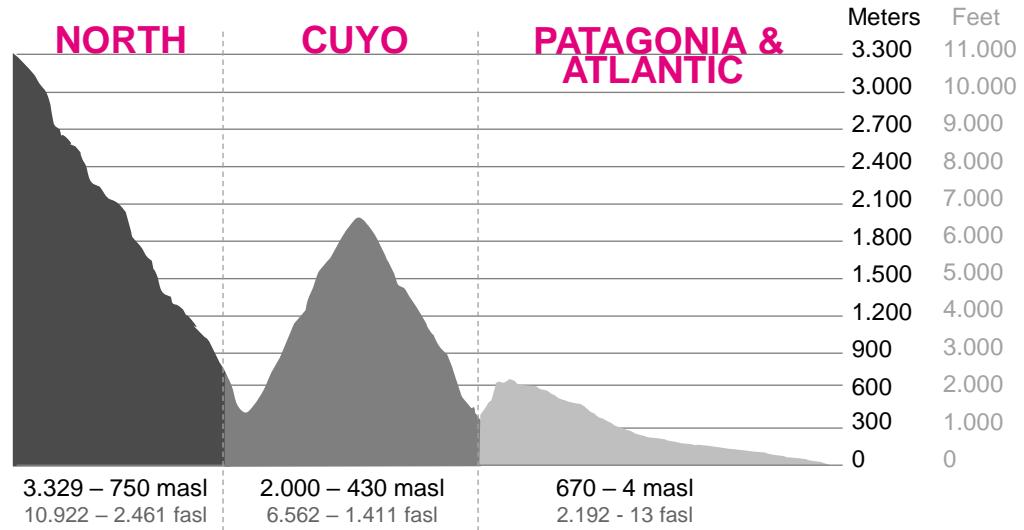
Altitude serves as a temperature regulator: For every 150 meters of linear rise over a point on the map, the average temperature will drop by 1°C.

This is reflected in the expression and diversity of Argentine wines.

Argentina is the only country that adds altitude as a key factor of terroir.



VINEYARD'S ALTITUDE IN ARGENTINA



CLIMATE

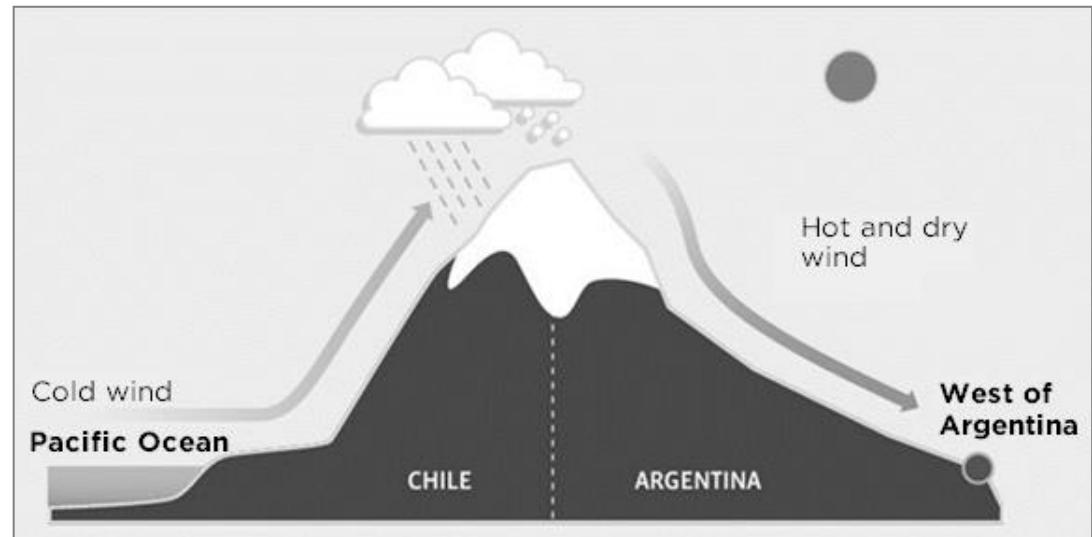
Dry & continental



Argentina's traditional wine regions are located in high-altitude valleys far from the oceans, which makes us **one of the few continental viticultural areas in the world**.

Argentine wines are “**naturally natural**”. The majority of vineyards are located in arid areas, with dry climates and plenty of sunshine, with no need of artificial intervention.

This leads to healthy vineyards and contributes to the production of organic wines.



SOILS

Low fertility



- | The soil becomes increasingly defining as a viability factor for the vine.
- | Young and nutrient deprived soils, with low organic matter, which leads to restricted vine growth. Nitrogen is a fundamental macronutrient in soils. As a result of the harsh climate, nitrogen content and availability is very low.
- | This arid fruitfulness favors the natural development of premium grapes with genuinely distinctive flavors.



| The main source of irrigation in mountain valleys is the **meltwater from the Andes**. Therefore, water is completely **pure** and free from the influence of any contaminating activity.

| There are two irrigation methods: flood irrigation (especially used in old vineyards) and drip irrigation (introduced in the 90's).

DRIP IRRIGATION



FLOOD IRRIGATION



WINE PRODUCERS

Strong commitment



- | Argentina's restless producers are **BREAKING NEW GROUND** and reshaping the country's wine offering.
- | They're developing their own national identity in winemaking by increasingly focusing on terroir.
- | Combination of tried-and-true traditions with cutting edge technology and modern techniques.
- | New projects and new ways of producing wine to showcase the country's diverse and unique terroir.
- | Experimentation with new regions, making them wine regions from scratch, leading to the emergence of new GIs.





ARGENTINA MAIN WINEGROWING FIGURES



ARGENTINA TODAY

Main winegrowing figures



5th

WORLD'S LARGEST
WINE PRODUCER*

1. ITALY
2. FRANCE
3. SPAIN
4. UNITED STATES
5. **ARGENTINA**

7th

LARGEST COUNTRY
IN CULTIVATED
SURFACE*

1. SPAIN
2. CHINA (mainland)
3. FRANCE
4. ITALY
5. TURKEY
6. UNITED STATES
7. **ARGENTINA**

10th

WORLD'S LARGEST
WINE EXPORTER*

1. SPAIN
2. ITALY
3. FRANCE
4. CHILE
5. AUSTRALIA
6. SOUTH AFRICA
7. GERMANY
8. UNITED STATES
9. PORTUGAL
10. **ARGENTINA**

2019

EXPORTS**

315.4 M L

TOTAL EXPORTS
in volume (liters)

895

PRODUCING
WINERIES

U\$S 811.5 M

TOTAL EXPORTS
in value (U\$D FOB)

Source: *OIV - State of the Vitiviniculture World Market (July 2019)

**INVEX – December 2019

ARGENTINA TODAY

Main export markets 2019 (U\$D FOB)*



1st



UNITED STATES

U\$D 234.184.473

6th



CHINA

U\$D 23.496.923

2nd



UNITED KINGDOM

U\$D 93.665.103

7th



MEXICO

U\$D 20.551.646

3rd



BRAZIL

U\$D 62.274.703

8th



PARAGUAY

U\$D 14.795.888

4th



CANADA

U\$D 60.376.600

9th



FRANCE

U\$D 13.680.106

5th



NETHERLANDS

U\$D 26.345.956

10th



SWITZERLAND

U\$D 13.187.859

ARGENTINA TODAY

Main winegrowing data



9th

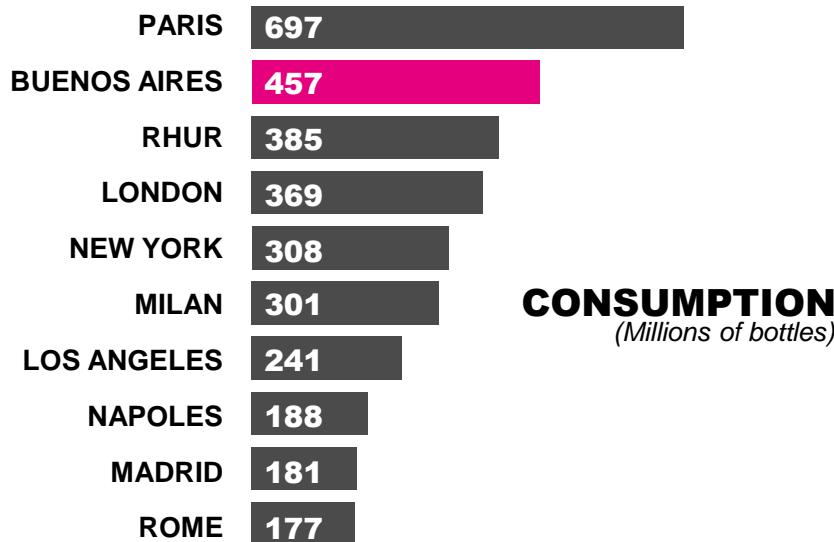
LARGEST COUNTRY
IN WINE
CONSUMPTION*

1. UNITED STATES
2. FRANCE
3. ITALY
4. GERMANY
5. CHINA (mainland)
6. UNITED KINGDOM
7. RUSSIA
8. SPAIN
9. ARGENTINA

BUENOS AIRES

2nd

LARGEST CITY IN WINE
CONSUMPTION
AFTER PARIS**



Source: *OIV - State of the Vitiviniculture World Market (July 2019)

**INSEEC Wine & Spirits Institute



HISTORY OF WINEMAKING IN ARGENTINA



TIMELINE

Argentina's winemaking history



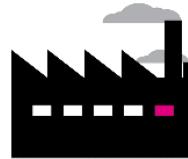
XVI



1551

- The first specimens of *Vitis Vinifera* were introduced in Argentina by the Spanish colonizers.
- The Catholic priests planted vineyards near their monasteries to ensure wine for the celebration of Holy Mass.
- The soil and weather conditions favored the growth of the *Vitis vinifera*, especially near the Andes.

XIX



1850 - 1880

- Development of viticulture as a national industry.**
 - Expansion of the railway.
 - Expansion of vineyard acreage and increase in the amount of wine production.
 - European immigrants introduced new vinegrowing techniques and grape varieties.
 - Implementation of measures promoting agricultural development.



1853



- The first School of Agriculture (Quinta Normal de Agricultura) is inaugurated.

XX



70's

- Collapse of the model based on the production of large volumes of low quality wines for domestic market.



90's

- Introduction of Neoliberalism in the national economy.
- Modernization of the wine industry.
- Incorporation of Argentina into the global market: local & foreign investments increased and were complemented by a search for new markets.

- Argentine wines exported worldwide.**

| XXI

| 1993

| 2019

| Exporting wineries

10

| Main export varieties

**Malbec &
Torrontés**

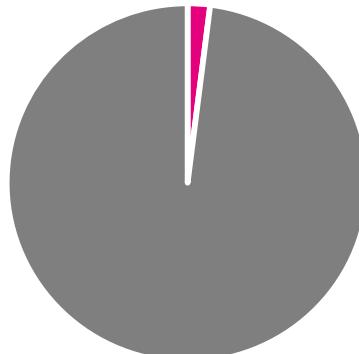
| Total Exports in U\$S

U\$S 24 millions

| Total Exports in liters

25M liters

► **2%**
Exports
► **98%**
Domestic
consumption



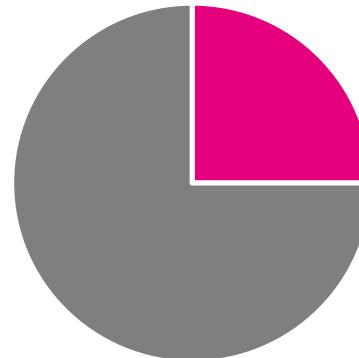
521

**Malbec, Torrontés &
Others**

U\$S 807 millions

313.8M liters

► **25%**
Exports
► **75%**
Domestic
consumption



WINE LEGISLATION

in Argentina



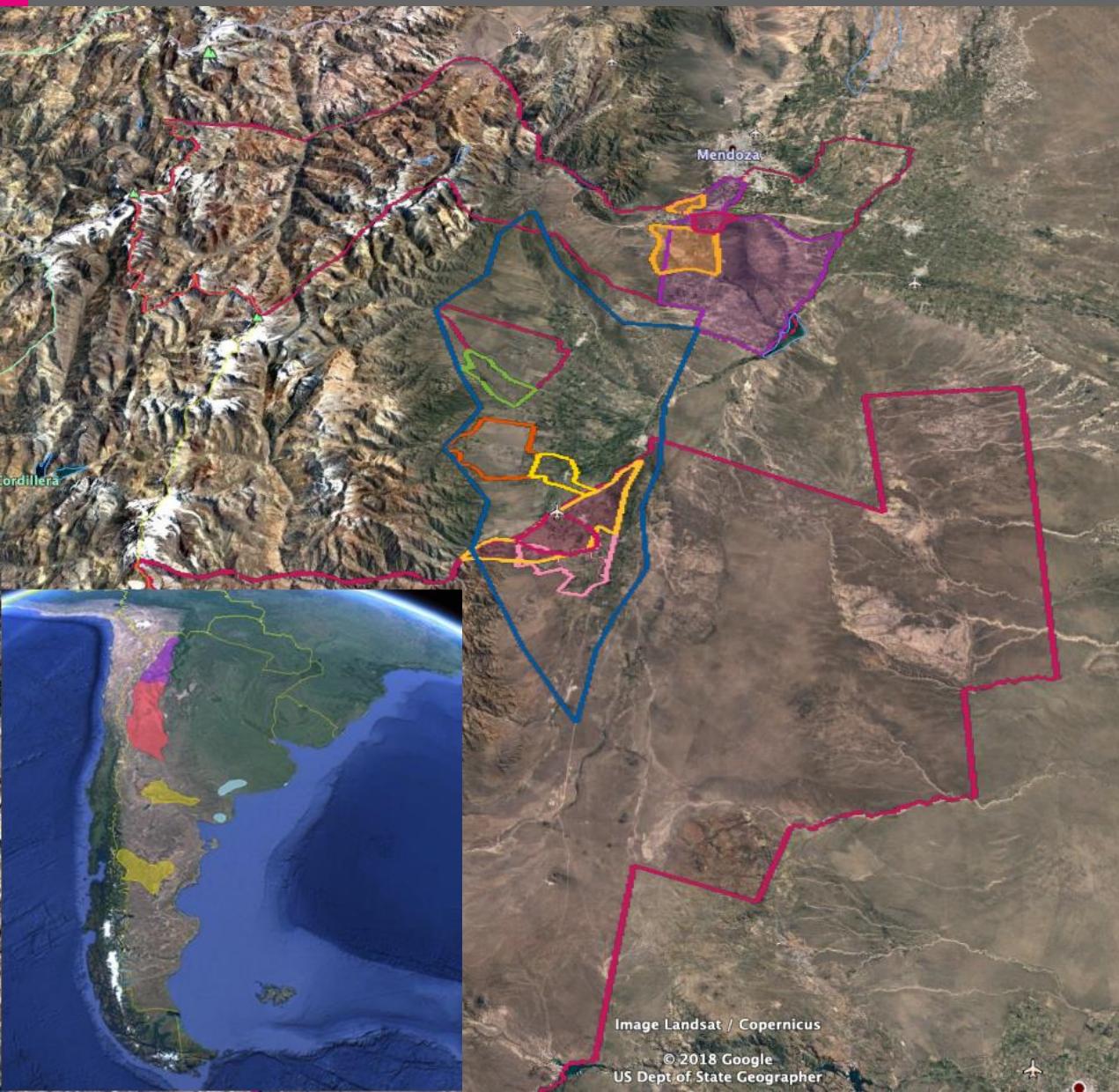
- | In 1959, wine law 14.878 was promulgated. It created the **National Institute of Vitiviniculture** (INV), and established that wine is considered “food” in Argentina.
- | INV Function:
 - Control quality and fraud prevention
 - Labeling and wine normatives
 - Analytic and statistical control
- | INV works as a Regulation Council within the European Union.
- | In 1999 Argentine Wine Law equaled that of the EU in order to improve the export process.

WINE LEGISLATION

in Argentina



- | In 1999, the law 25.163 gave a legal framework for wine origins. It established **Geographical Indications (GIs)** and also **Designations of Origin (DO)**.
- | **GIs** are used for quality wines, whereas flavor is attached to origin. There are **101 GIs approved in Argentina**, most of them established following political boundaries.
- | **DOCs** are GIs with wine style rejugation. There are two DO in Argentina, Luján de Cuyo (DOC) and San Rafael (DOC). Only Luján de Cuyo is used today.
- | GIs today are developing in a new way, as viticultural areas, attached to soil and climatic conditions.



WINE REGIONS

Argentina from north to south



LOCATION & EXTENSION

23° - 45°

SOUTH LATITUDE

22° from north
to south



CULTIVATED SURFACE

for vinification*

Ha: **198.220**

Ac: **489.821,44**



KEY FACTORS of terroir

Altitude and latitude

The presence of the Andes range

Rainfall regime

Variability in soils



THE NORTH

Jujuy
Salta
Tucumán
Catamarca

CUYO

La Rioja
San Juan
Mendoza

PATAGONIA

La Pampa
Neuquén
Río Negro
Chubut

ATLANTIC

Buenos Aires



THE NORTH

The North



LOCATION

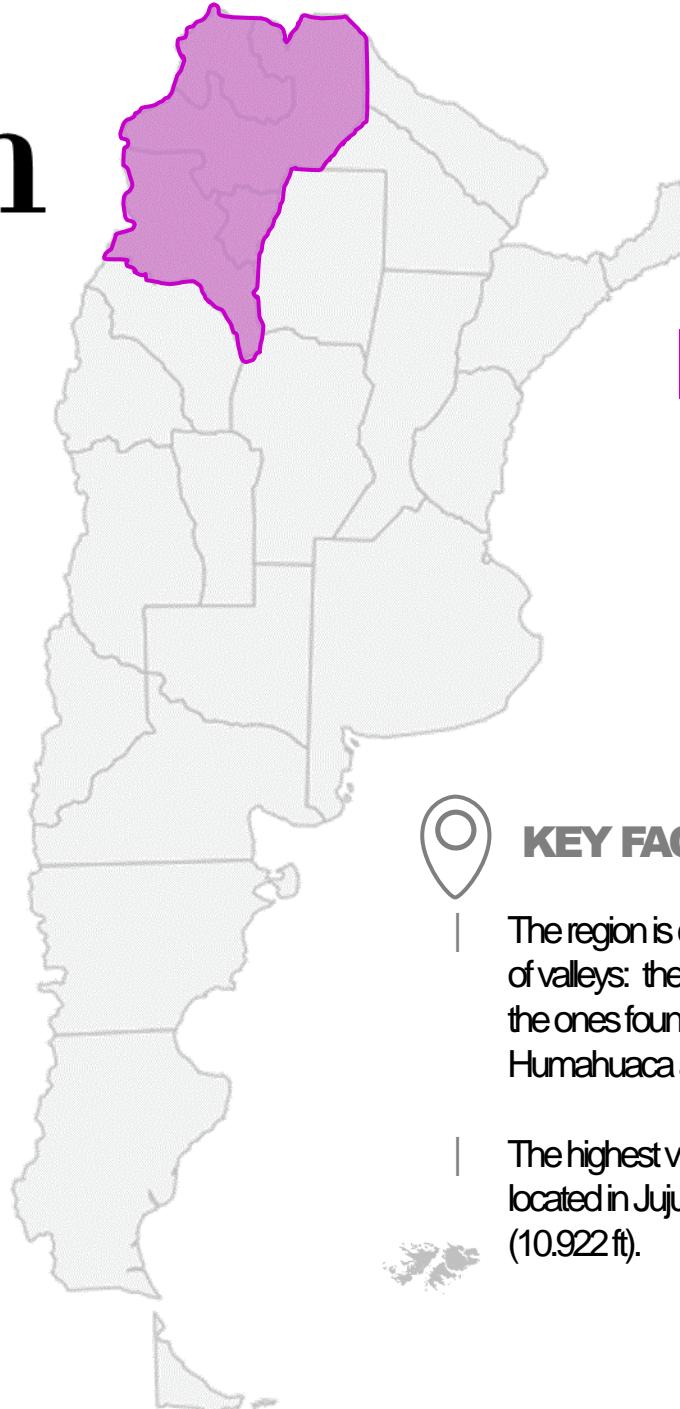
Latitude & longitude

23° 12' | 28° 10'

SOUTH LATITUDE

61° 21' | 66° 12'

WEST LONGITUDE



PROVINCES

Jujuy
Salta
Tucumán
Catamarca



CULTIVATED SURFACE

for vinification*



3%
of the country

Ha: **5.979,9**

Ac: **14.776,96**



ALTITUDE

of the vineyards

750 - 3.329 masl

2.461 – 10.922 fasl



KEY FACTORS

The region is crisscrossed by a series of valleys: the Calchaquí Valley and the ones found in Jujuy (Quebrada de Humahuaca and Valles Templados).

The highest vineyard in the world is located in Jujuy (Uquia) at 3.329 masl (10.922 ft).

THE NORTH



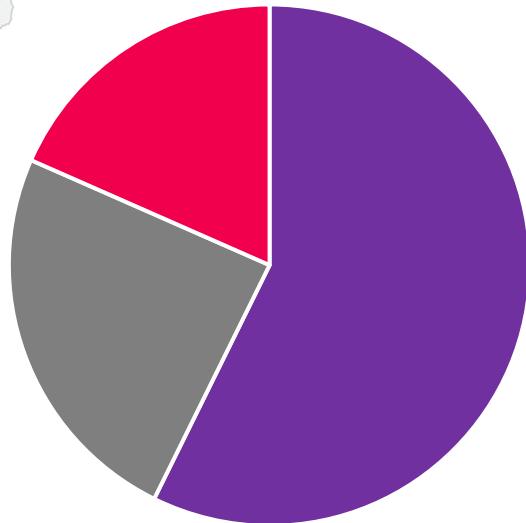
MAIN GRAPE VARIETIES

Distribution by colour*

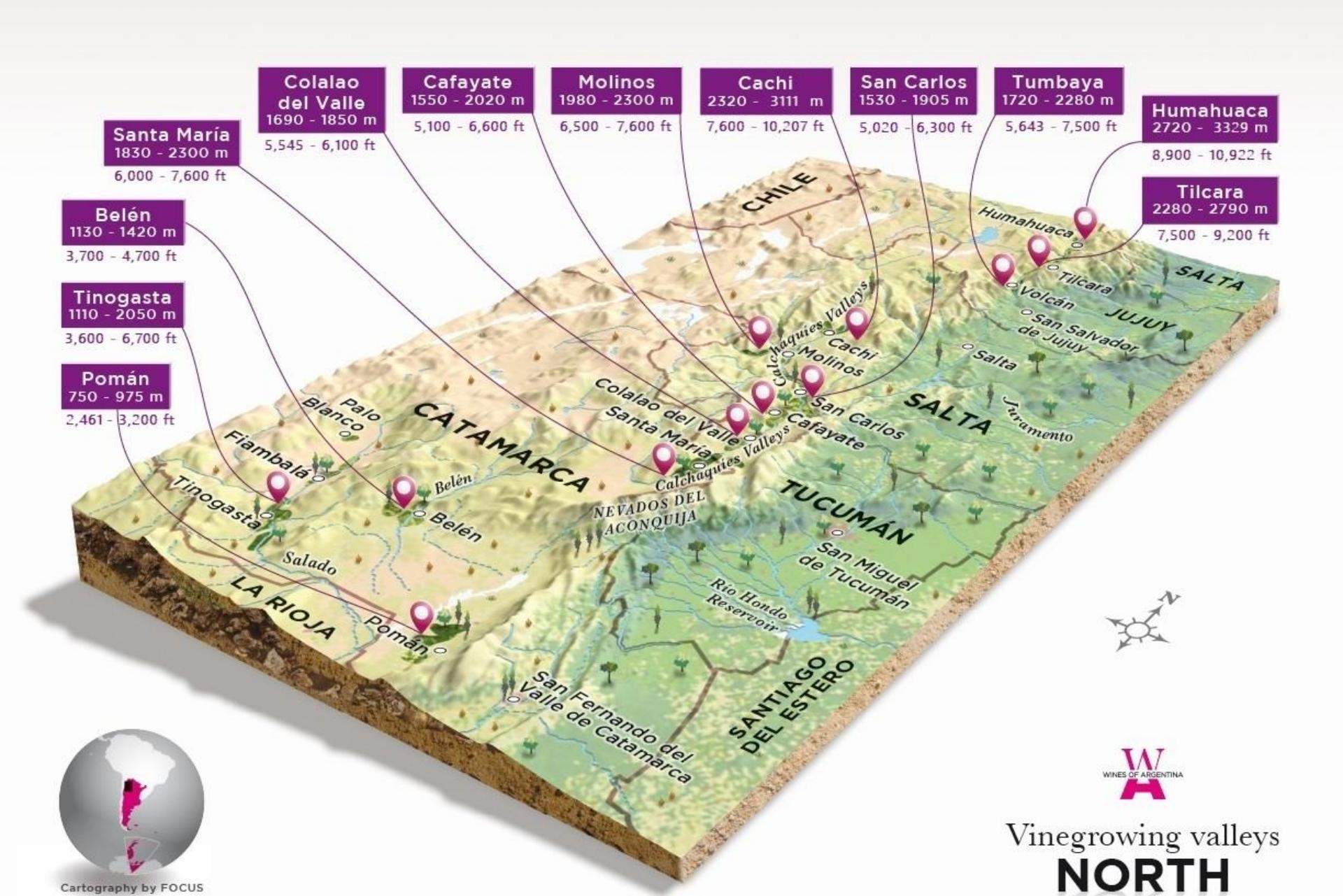
	Hectares	Acres	%
RED VARIETIES			
	3.432,5	8.482,1	% RED
Malbec	1.786,4	4.414,4	52,0%
Cabernet Sauvignon	792,5	1.958,3	23,1%
Syrah	256,6	634,1	7,5%
Tannat	145,5	359,5	4,2%
Bonarda	160,3	396,1	4,7%
Merlot	114,7	283,4	3,3%
Cabernet Franc	44,9	110,8	1,3%
Tempranillo	28,0	69,2	0,8%
Pinot Noir	28,7	70,9	0,8%
Petit Verdot	23,4	57,7	0,7%
Other red varieties	51,5	127,4	1,5%
WHITE VARIETIES			
	1.446,1	3.573,5	% WHITE
Torrontés Riojano	1.280,6	3.164,6	88,6%
Sauvignon Blanc	50,8	125,5	3,5%
Chardonnay	40,1	99,1	2,8%
Chenin	10,7	26,5	0,7%
Riesling	6,4	15,8	0,4%
Viognier	4,6	11,4	0,3%
Semillón	0,2	0,5	0,0%
Other white varieties	52,6	130,0	3,6%
PINK VARIETIES			
	1.101,30	2.721,42	% PINK
Criolla Chica	65,00	160,6	5,9

- Red grapes
- White grapes
- Pink grapes

57,4%
24,2%
18,4%



The wines of the region show remarkable influence of terroir, strongly marked by altitude, and great varietal character. Although Malbec is the most cultivated variety, Torrontés is the emblem par excellence of the region.





JUJUY

W
A
WINES OF ARGENTINA

JUJUY

Terroir characteristics



LOCATION

Viticultural area

23° 12' | 23° 51'

SOUTH LATITUDE

65° 21' | 65° 28'

WEST LONGITUDE



TEMP.

Annual Average

17,1° C

63° F



RAINFALL

Annual Average

140 mm/year

5,5 / 7,4 in/year



CULTIVATED SURFACE

Ha: **25.80**

Ac: **63.75**



of the country

of the region

0.01%

0.43%



ALTITUDE

of the vineyards

1.720 - 3.329 masl

5.643 - 10.922 fasl



HIGHLIGHTS

- Located in the extreme northwest of the country.
- Viticultural activity developed in two areas: Quebrada de Humahuaca (GI) and Valles Templados.
- The **highest vineyard in the world** is located in Uquia at 3.329 m (10.922 ft).

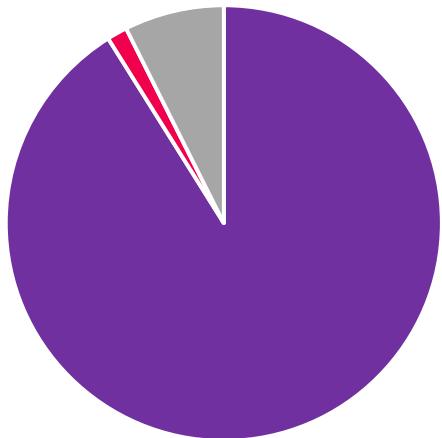


DISTRIBUTION

by colour*



Red grapes	91,1%
White grapes	7,4%
Pink grapes	1,5%

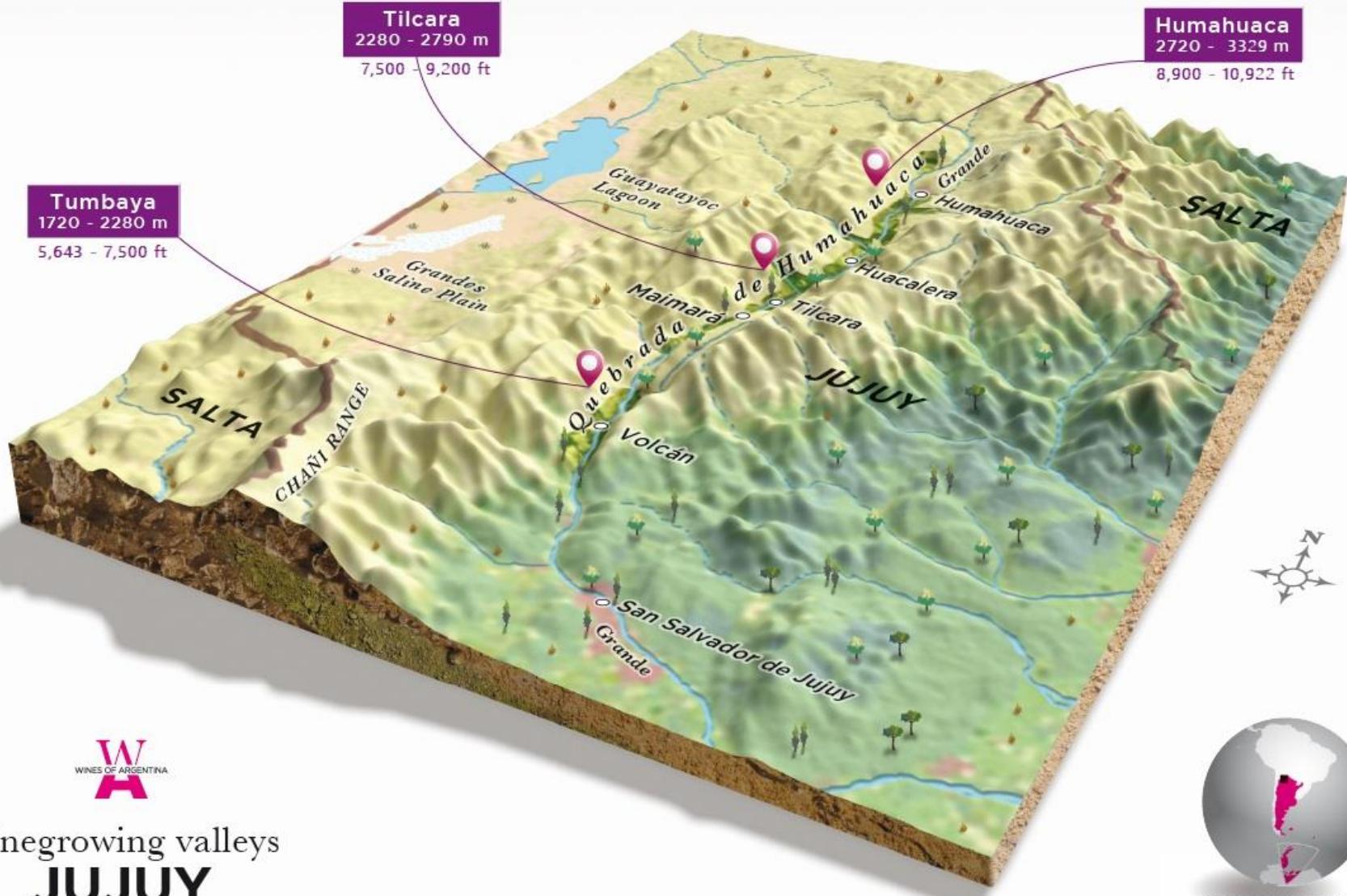


MAIN GRAPE VARIETIES

Most planted*

Malbec
Syrah
Cabernet Sauvignon
Merlot
Sauvignon Blanc

	Hectares	Acres	%
JUJUY	25,80	63,75	
Red varieties	23,50	58,07	% Red
Malbec	12,70	31,38	54,04%
Syrah	3,10	7,66	13,19%
Cabernet Sauvignon	2,50	6,18	10,64%
Merlot	2,40	5,93	10,21%
Cabernet Franc	1,70	4,20	7,23%
Bonarda	0,40	0,99	1,70%
Tannat	0,40	0,99	1,70%
Pinot Noir	0,20	0,49	0,85%
Petit Verdot	0,05	0,12	0,21%
Tempranillo	0,02	0,05	0,09%
White varieties	1,90	4,70	% White
Sauvignon Blanc	1,80	4,45	94,74%
Chardonnay	0,05	0,12	2,63%
Torrontés Riojano	0,03	0,07	1,58%
Pink varieties	0,40	0,99	% Pink
Criolla Chica	0,30	0,74	75,00%



Vinegrowing valleys
JUJUY



SALTA

W
WINES OF ARGENTINA
A

SALTA

Terroir characteristics



LOCATION

Viticultural area

25° 07' | 26° 05'

SOUTH LATITUDE

65° 58' | 66° 09'

WEST LONGITUDE



TEMP.

Annual Average

15° C

59° F



RAINFALL

Annual Average

203 mm/year

8 in/year



CULTIVATED SURFACE

Ha: **3343,50**

Ac: **8.262,12**

1.7%

56%



of the country
of the region



ALTITUDE

of the vineyards

1.530 - 3.111 masl

5.020 - 10.207 fasl



HIGHLIGHTS

- The viticultural activity is located mainly in the Calchaquí Valley.
- Strongly marked by the presence of high altitude vineyards.
- Cafayate is the main wine producer of the region.

SALTA

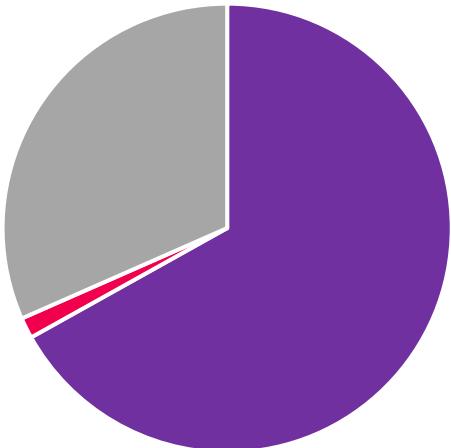
Varieties



DISTRIBUTION by colour*



Red grapes | **67,1%**
White grapes | **31,3%**
Pink grapes | **1,6%**

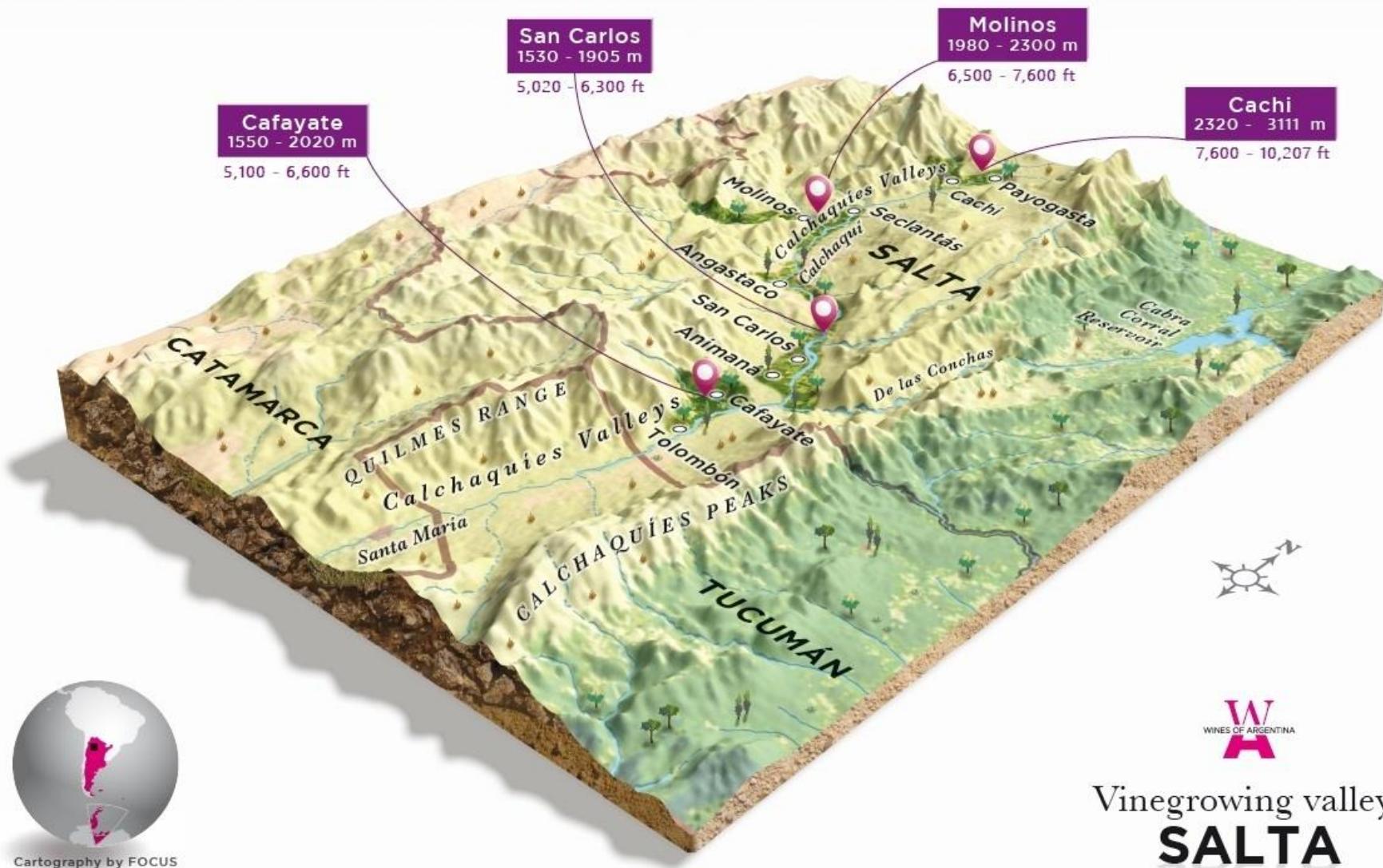


MAIN GRAPE VARIETIES

Most planted*

Malbec
 Torrontés
 Cabernet Sauvignon
 Tannat
 Merlot

	Hectares	Acres	%
SALTA	3343,50	8.262,12	
Red varieties	2243,90	5.544,90	% Red
Malbec	1398,70	3.456,33	62,33%
Cabernet Sauvignon	457,70	1.131,02	20,40%
Tannat	133,50	329,89	5,95%
Merlot	52,00	128,50	2,32%
Bonarda	47,70	117,87	2,13%
Cabernet Franc	36,70	90,69	1,64%
Syrah	33,10	81,79	1,48%
Petit Verdot	20,90	51,65	0,93%
Pinot Noir	19,10	47,20	0,85%
Tempranillo	9,00	22,24	0,40%
Other red varieties	35,50	87,72	1,58%
White varieties	1046,60	2.586,25	% White
Torrontés Riojano	915,10	2.261,30	87,44%
Sauvignon Blanc	47,00	116,14	4,49%
Chardonnay	37,70	93,16	3,60%
Chenin	10,70	26,44	1,02%
Riesling	6,40	15,82	0,61%
Viognier	4,60	11,37	0,44%
Semillón	0,20	0,49	0,02%
Other white varieties	24,90	61,53	2,38%
Pink varieties	53,00	130,97	% Pink
Criolla Chica	40,8	100,82	76,98



SALTA | Cafayate

Terroir characteristics



- | Cafayate is the most important valley in Salta and the main wine producer of the region.
- | It concentrates 60% of the vineyards in the Calchaquí Valley.



LOCATION

Viticultural area

26°05'
SOUTH
LATITUDE

65°58'
WEST
LONGITUDE



TEMP.

Annual Average

16,2° C
61° F



RAINFALL

Annual Average

186 / 250 mm/year
7,3 / 9,8 in/year



SOIL

Profile

Sandy-loam soils made from thick grains with gravel and fine sands on the surface. These characteristics are similar to the layers of subsoil but with fractions of finer sand located deeper and with presence of round stone.



CULTIVATED SURFACE

for vinification*

Ha: 2.488,00
Ac: 6.148,10



60%
of the
Calchaquí
Valley



ALTITUDE

of the vineyards

1.550 - 2.020 masl
5.100 - 6.600 fasl



MAIN GRAPE VARIETIES

Most planted*

Malbec
Torrontés
Cabernet Sauvignon
Tannat
Merlot



TUCUMÁN

W
WINES OF ARGENTINA
A

TUCUMÁN

Terroir characteristics



LOCATION

Viticultural area

26° 22' | 26° 36'

SOUTH LATITUDE

65° 57'

WEST LONGITUDE



TEMP.

Annual Average

16° C

61° F



RAINFALL

Annual Average

100 mm/year

3,9 in/year



CULTIVATED SURFACE

Ha: **121,81**

Ac: **301,00**



0.06%

2.04%

of the country
of the region



ALTITUDE

of the vineyards

1.690 - 2.230 masl

5.545 - 7.317 fasl



HIGHLIGHTS

- Anchored in the Calchaquí Valley, viticulture takes place in Amaicha del Valle and Colalao del Valle (department of Tafí del Valle).
- In spite of being the 2nd smallest province in size, Tucumán is the most densely populated province in the country.

TUCUMÁN

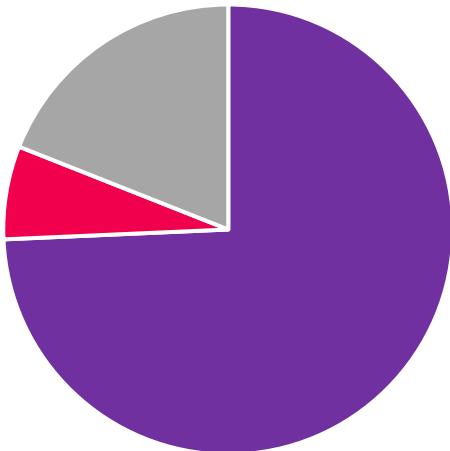
Varieties



DISTRIBUTION by colour*



Red grapes | **74,3%**
White grapes | **19%**
Pink grapes | **6,7%**

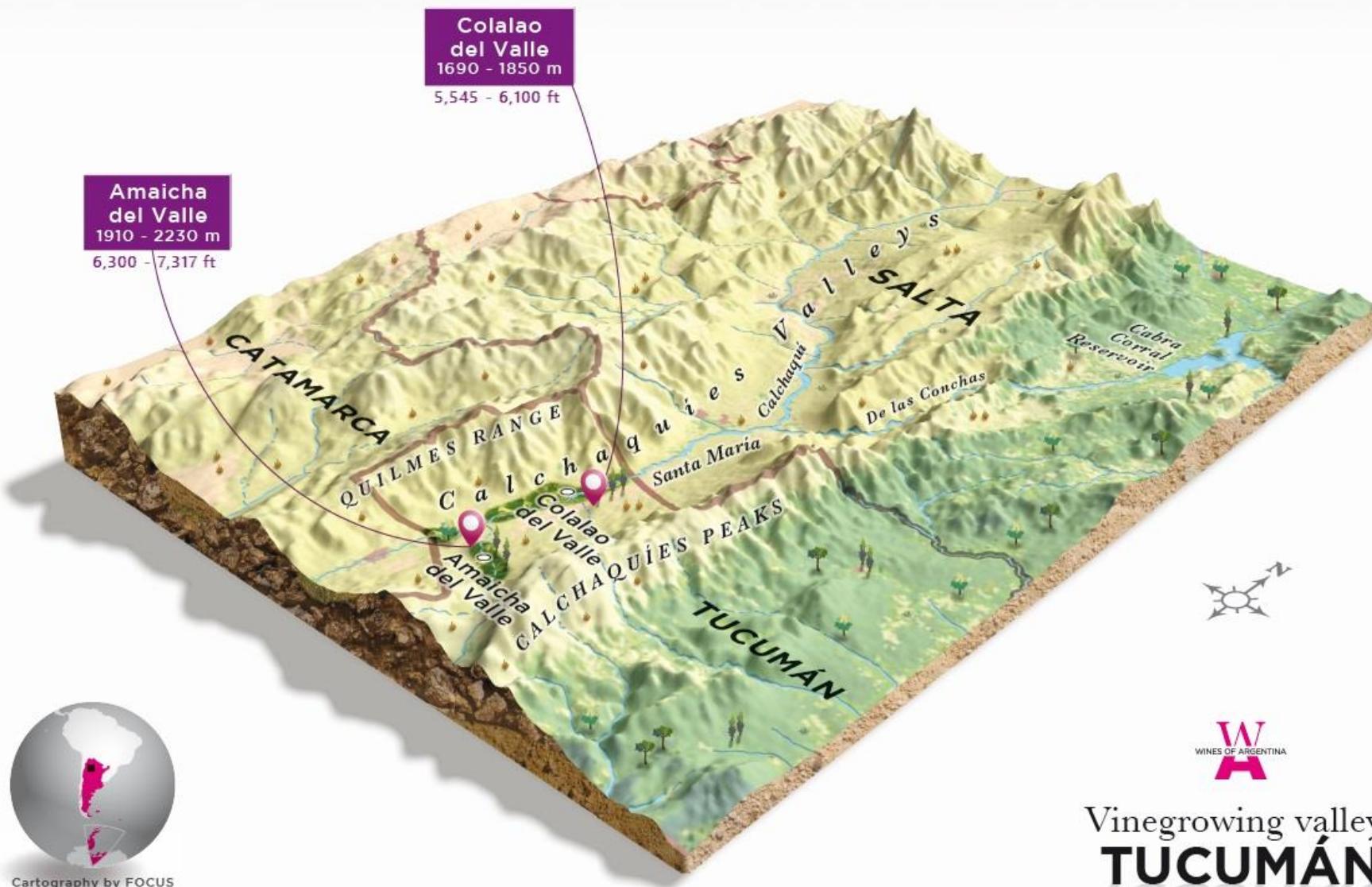


MAIN GRAPE VARIETIES

Most planted*

Malbec
Torrontés
Cabernet Sauvignon
Cabernet Franc
Criolla Chica

	Hectares	Acres	%
TUCUMÁN	121,81	301,00	
Red varieties	90,51	223,66	% Red
Malbec	53,60	132,45	59,22%
Cabernet Sauvignon	20,90	51,65	23,09%
Cabernet Franc	6,40	15,82	7,07%
Merlot	5,10	12,60	5,63%
Petit Verdot	1,70	4,20	1,88%
Tannat	1,50	3,71	1,66%
Syrah	1,30	3,21	1,44%
Pinot Noir	0,01	0,02	0,01%
White varieties	23,10	57,08	% White
Torrontés Riojano	20,90	51,65	90,48%
Sauvignon Blanc	1,60	3,95	6,93%
Chardonnay	0,04	0,10	0,17%
Torrontés Sanjuanino	0,01	0,02	0,04%
Other white varieties	0,55	1,36	2,38%
Pink varieties	8,20	20,26	% Pink
Criolla Chica	6,00	14,83	73,17%



Vinegrowing valleys
TUCUMÁN



CATAMARCA



CATAMARCA

Terroir characteristics



LOCATION

Viticultural area

26° 41' | 28° 23'

SOUTH LATITUDE

66° 02' | 67° 34'

WEST LONGITUDE



TEMP.

Annual Average

18° C

64° F



RAINFALL

Annual Average

432 mm/year

17 in/year



CULTIVATED SURFACE

Ha: **2488,80**

Ac: **6.150,07**



of the country



1.26%

41.6%



ALTITUDE

of the vineyards

750 – 2.300 masl

2.461 – 7.546 fasl



HIGHLIGHTS

The viticultural activity takes place mainly in a succession of valleys located in the western departments, in the axis between the towns of Tinogasta - Fiambalá, and Santa María (which integrates the Calchaquí Valley).

CATAMARCA

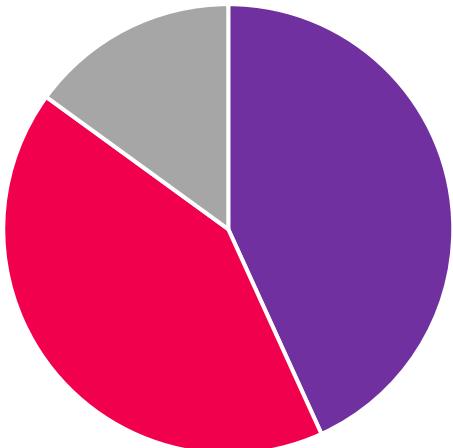
Varieties



DISTRIBUTION by colour*



Red grapes | **43,2%**
White grapes | **15%**
Pink grapes | **41,8%**

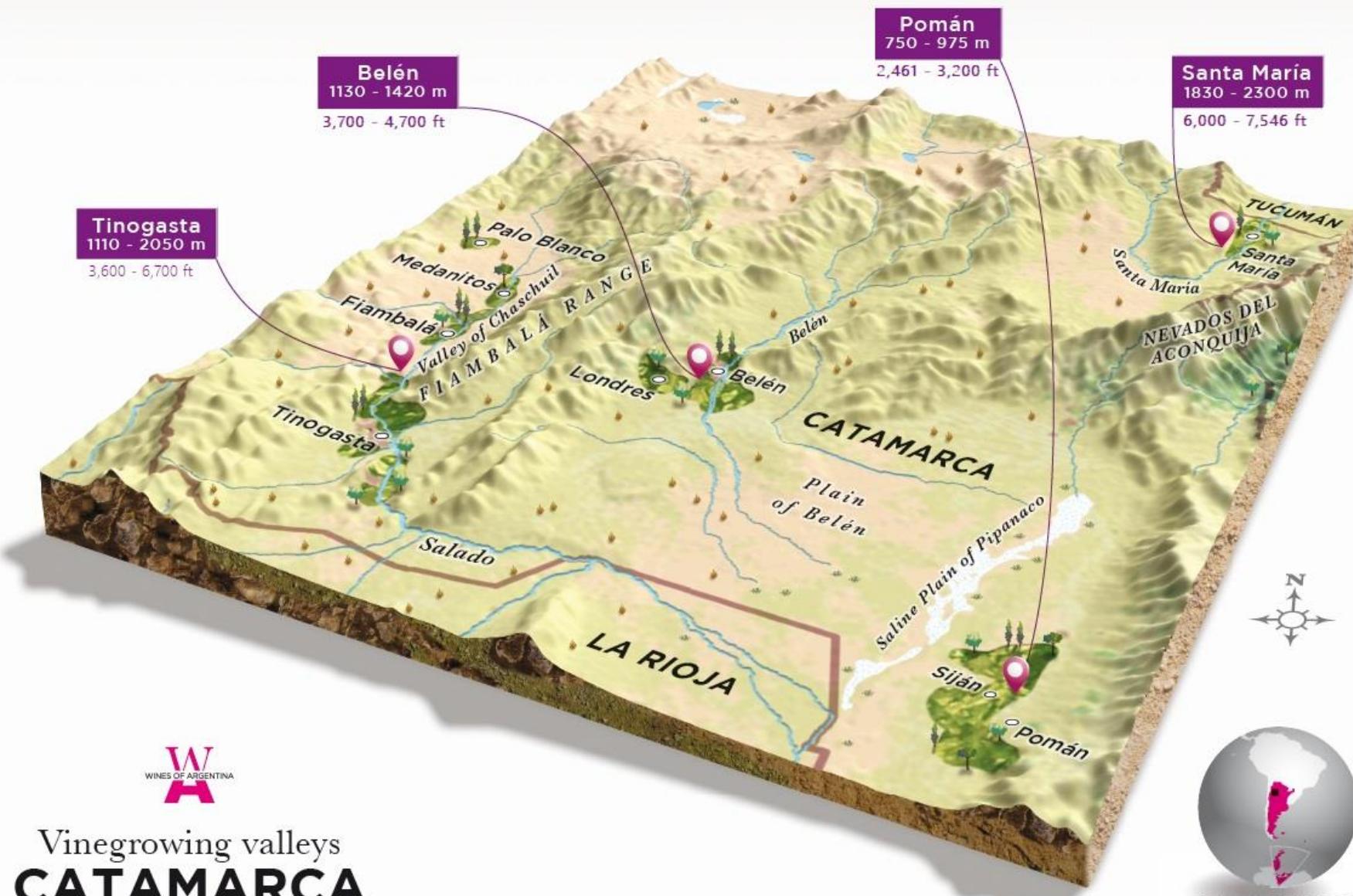


MAIN GRAPE VARIETIES

Most planted*

Torrontés
 Malbec
 Cabernet Sauvignon
 Syrah
 Bonarda

	Hectares	Acres	%
CATAMARCA	2488,80	6.150,07	
Red varieties	1074,60	2.655,44	% Red
Malbec	321,40	794,21	29,91%
Cabernet Sauvignon	311,40	769,50	28,98%
Syrah	219,10	541,42	20,39%
Bonarda	112,20	277,26	10,44%
Merlot	55,20	136,40	5,14%
Tempranillo	19,00	46,95	1,77%
Tannat	10,10	24,96	0,94%
Pinot Noir	9,40	23,23	0,87%
Petit Verdot	0,70	1,73	0,07%
Cabernet Franc	0,05	0,12	0,00%
Other red varieties	16,05	39,66	1,49%
White varieties	374,50	925,43	% White
Torrontés Riojano	344,60	851,54	92,02%
Chardonnay	2,30	5,68	0,61%
Sauvignon Blanc	0,40	0,99	0,11%
Chenin	0,03	0,06	0,01%
Other white varieties	27,18	67,15	7,26%
Pink varieties	1039,70	2.569,20	% Pink
Criolla Chica	17,90	44,23	1,72%



CATAMARCA | Tinogasta

Valleys



The Tinogasta-Fiambalá area holds a string of valleys located at the mountain foothill in the southwest of Catamarca.



LOCATION

Viticultural area

28°04' | **67°34'**
SOUTH LATITUDE WEST LONGITUDE



TEMP.

Annual Average

17,3° C
63,1° F



RAINFALL

Annual Average

148 mm/year
5,8 in/year



CULTIVATED SURFACE

for vinification*

Ha: 1.481,10
Ac: 3.659,95



60%
of the cultivated surface of the province



ALTITUDE

of the vineyards

1.110 - 2.050 masl
3.600 - 6.700 fasl



MAIN GRAPE VARIETIES

Most planted*

Syrah
Bonarda
Torrontés
Cabernet Sauvignon
Malbec



EXPLORING THE **CALCHAQUÍ VALLEY**



THE CALCHAQUÍ VALLEY



 **CULTIVATED SURFACE**
for vinification*

 **2.13%**
of the country

| Ha: **4.218,61** | Ac: **10.424,61**

- | Mountain valley of **270km** that crosses **3 provinces**: Salta, Tucumán and Catamarca.
- | Formed **5 million years ago** with the ascent of the Sierras de Quilmes and Aconquija.
- | More than 2.000 years of Calchaquí Diaguita's history.
- | Viticultural tradition since the **18th century**.
- | Remarkable **effect of terroir**: Reds with character & Torrontés.



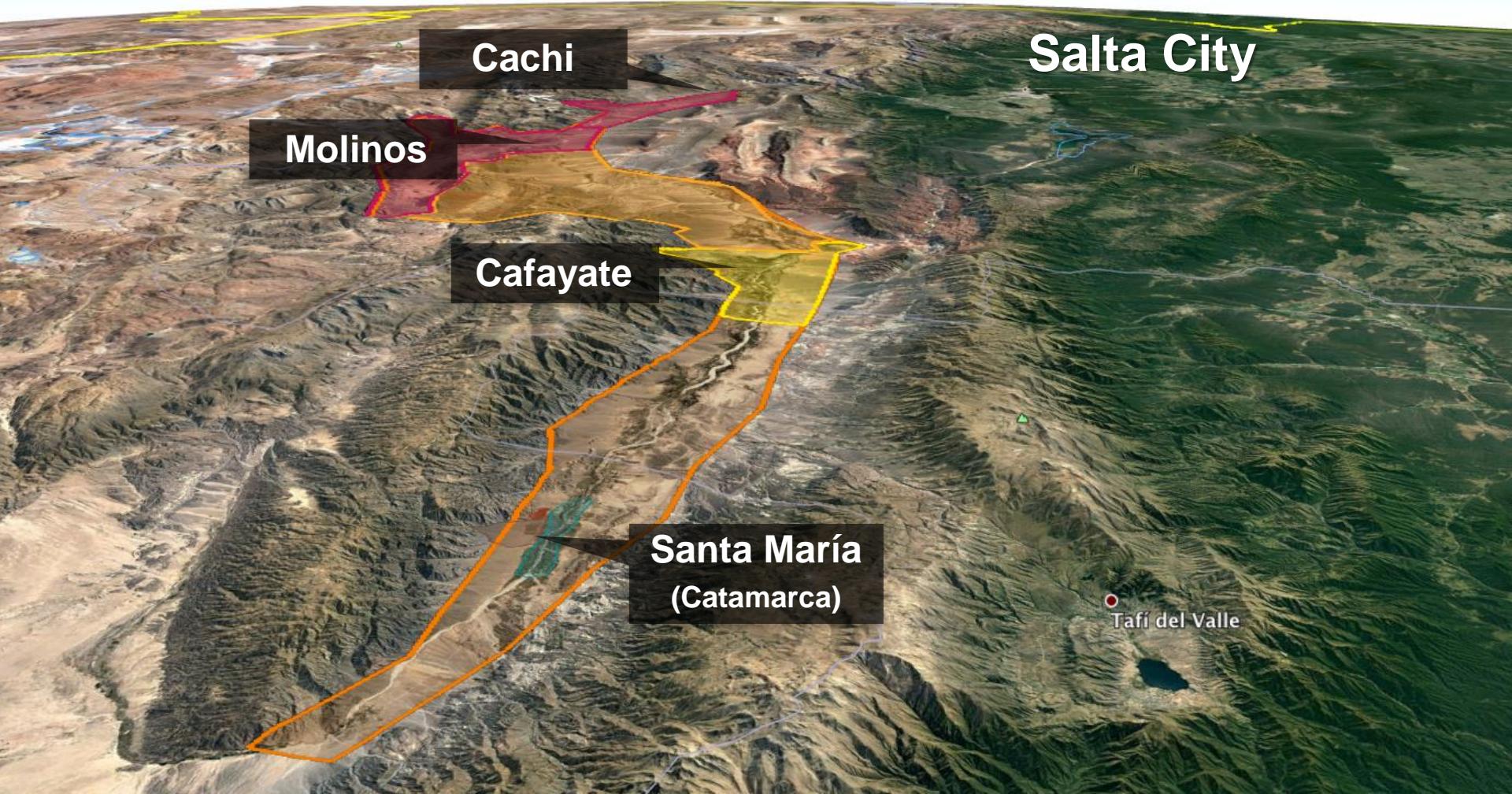
THE CALCHAQUÍ VALLEY



- | Vineyards range from **1.650 masl** (5.410 ft) on the valley base around Cafayate, to **3.111 masl** (10.201 ft) in Altura Máxima (Payogasta, Cachi).
- | Six of the **world's highest vineyards in Argentina** are located in the Calchaquí Valley and, compared to other regions, it's a high point in the world map of wine.
- | **23 small producers are working at over 2.200 masl** (7.220 ft) in Upper Calchaquí Valley and the neighboring province of Jujuy.
- | Producing wine in the Calchaquí Valley is **more complicated and more expensive than Mendoza** due to the lower yields at higher altitudes and the lack of infrastructure and suppliers (located mainly in Mendoza).

THE CALCHAQUÍ VALLEY

Geography



Cachi

Molinos

Cafayate

Salta City

Santa María
(Catamarca)

Tafí del Valle

THE CALCHAQUÍ VALLEY

Altitude effect



- | All of the best aspects of wine come from the skins, including **color, flavor intensity, and concentration of polyphenols**.
- | The thick skins of the grapes created by extreme conditions of the terroir also produce a different flavor profile compared to other regions, **with strong, spicy aromas of black olives, black fruits, herbal notes and muscular tannins**.
- | Research on high altitude wine health benefits confirm that **regular consumption of these wines contributes to a longer and more active life**.
- | This is due to the higher concentration of polyphenols, **a naturally occurring antioxidant**.



CUYO



Cuyo



LOCATION

Latitude & longitude

28° 23' | 34° 58'

SOUTH LATITUDE

67° 04' | 67° 42'

WEST LONGITUDE



CULTIVATED SURFACE

for vinification*



95%

of the
country

Ha: **188.028,70**

Ac: **464.637,72**

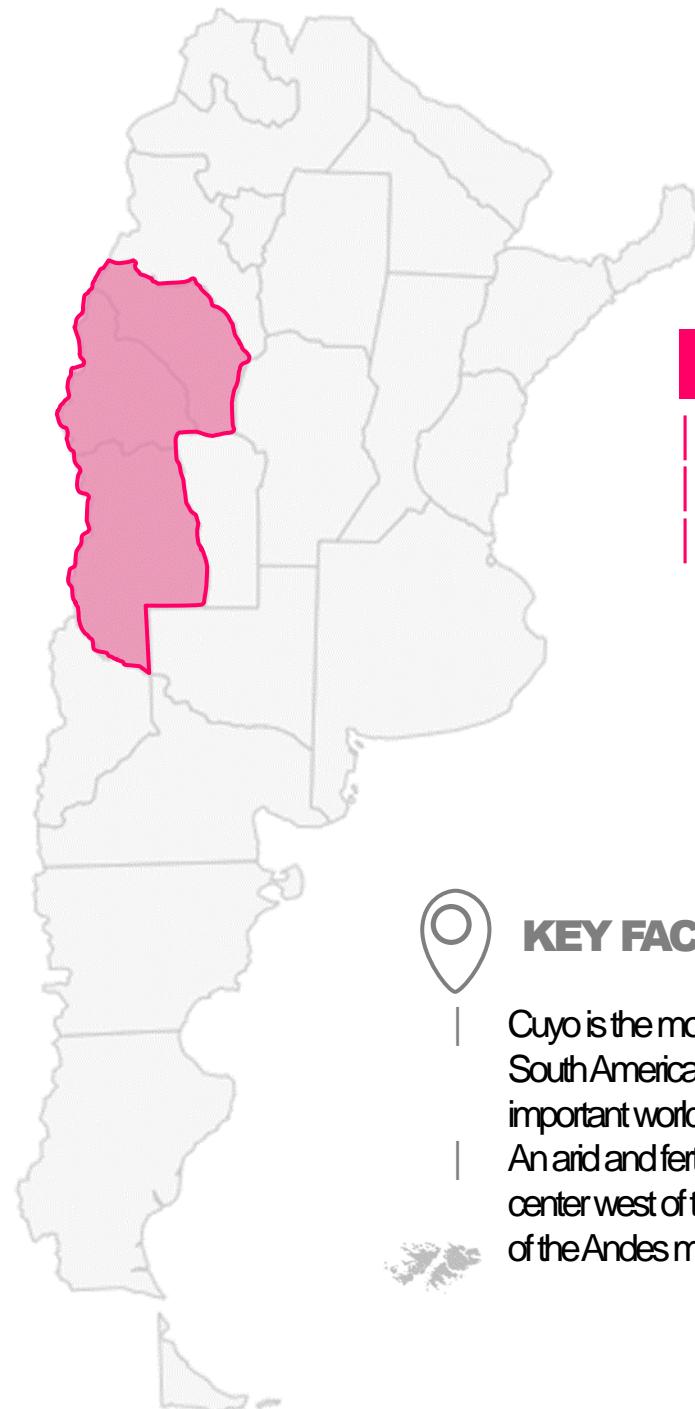


ALTITUDE

of the vineyards

430 – 2.000 masl

1.411 – 6.562 fasl



PROVINCES

La Rioja
San Juan
Mendoza



KEY FACTORS

- | Cuyo is the most prolific region in South America and one of the most important worldwide.
- | An arid and fertile region located in the center west of the country, at the foot of the Andes mountain range.



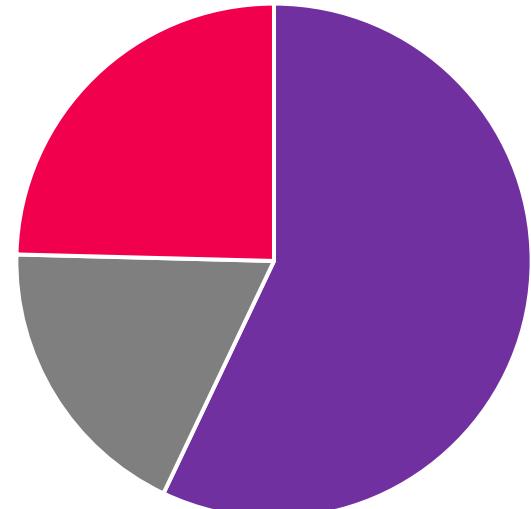
MAIN GRAPE VARIETIES

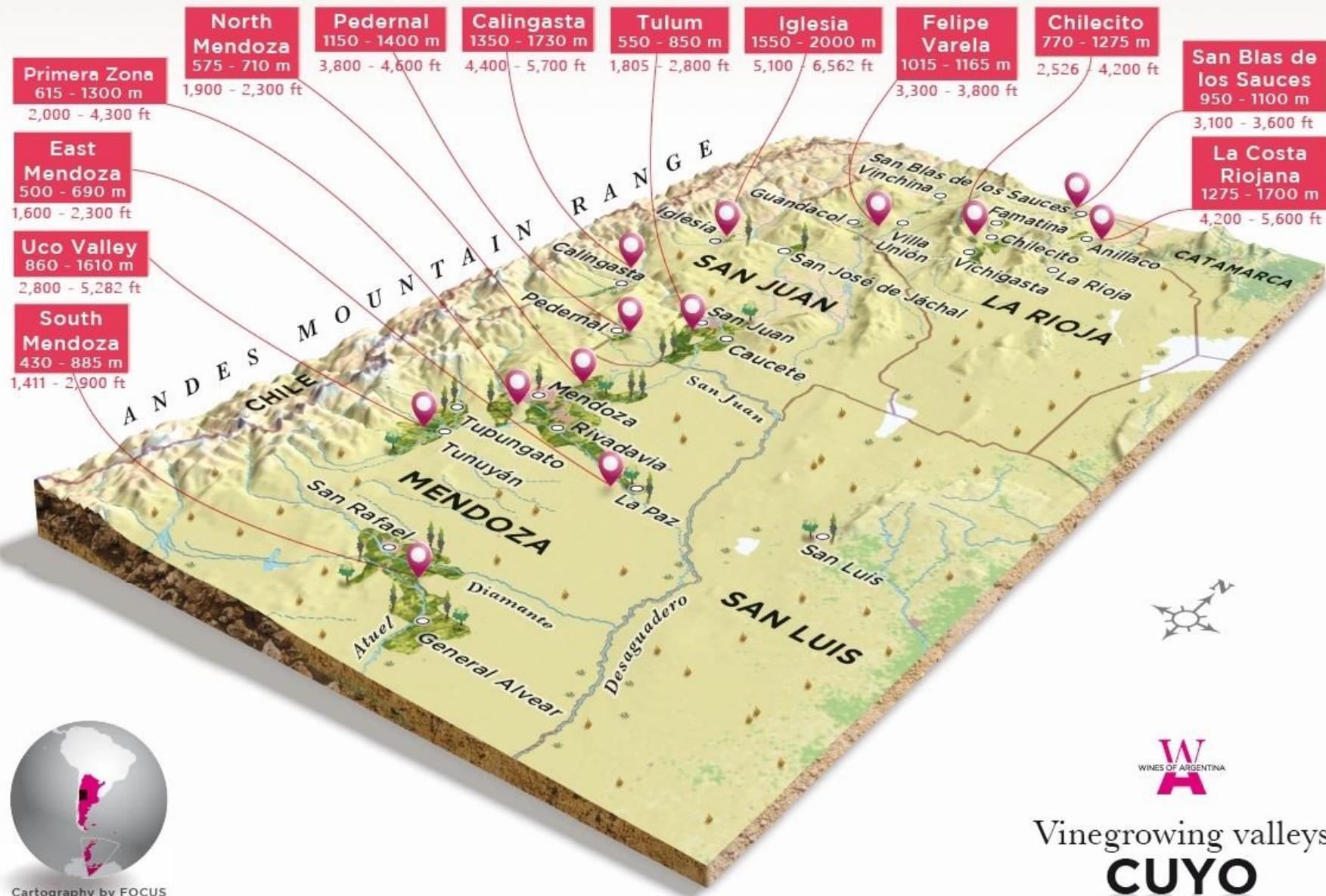
Distribution by colour*

	Hectares	Acres	%
RED VARIETIES	108.309,7	267.644,1	% Red
Malbec	41.323,4	102.114,3	38,2
Bonarda	18.118,5	44.772,6	16,7
Cabernet Sauvignon	13.034,9	32.210,5	12,0
Syrah	11.509,4	28.440,9	10,6
Tempranillo	5.516,9	13.632,8	5,1
Merlot	4.466,9	11.038,2	4,1
Pinot Noir	1.520,5	3.757,3	1,4
Cabernet Franc	1.133,3	2.800,5	1,0
Tannat	681,9	1.685,0	0,6
Petit Verdot	605,2	1.495,5	0,6
Other red varieties	10.398,8	25.696,5	9,6
WHITE VARIETIES	34.093,1	84.247,46	% White
Torrontés Riojano	6.344,9	15.678,88	18,6
Chardonnay	5.646,4	13.952,82	16,6
Chenin	1.815,3	4.485,79	5,3
Sauvignon Blanc	1.745,9	4.314,29	5,1
Torrontés Sanjuanino	1.610,8	3.980,45	4,7
Semillón	596,3	1.473,52	1,7
Torrontés Mendocino	505,5	1.249,14	1,5
Viognier	701,7	1.733,97	2,1
Riesling	60,5	149,50	0,2
Other white varieties	15.065,8	37.229,10	44,2
PINK VARIETIES	45.625,90	112.746,16	% Pink
Criolla Chica	283,3	700,06	0,6

- Red grapes
- White grapes
- Pink grapes

57,6%
18,1%
24,3%





THE ANDES RANGE

Importance

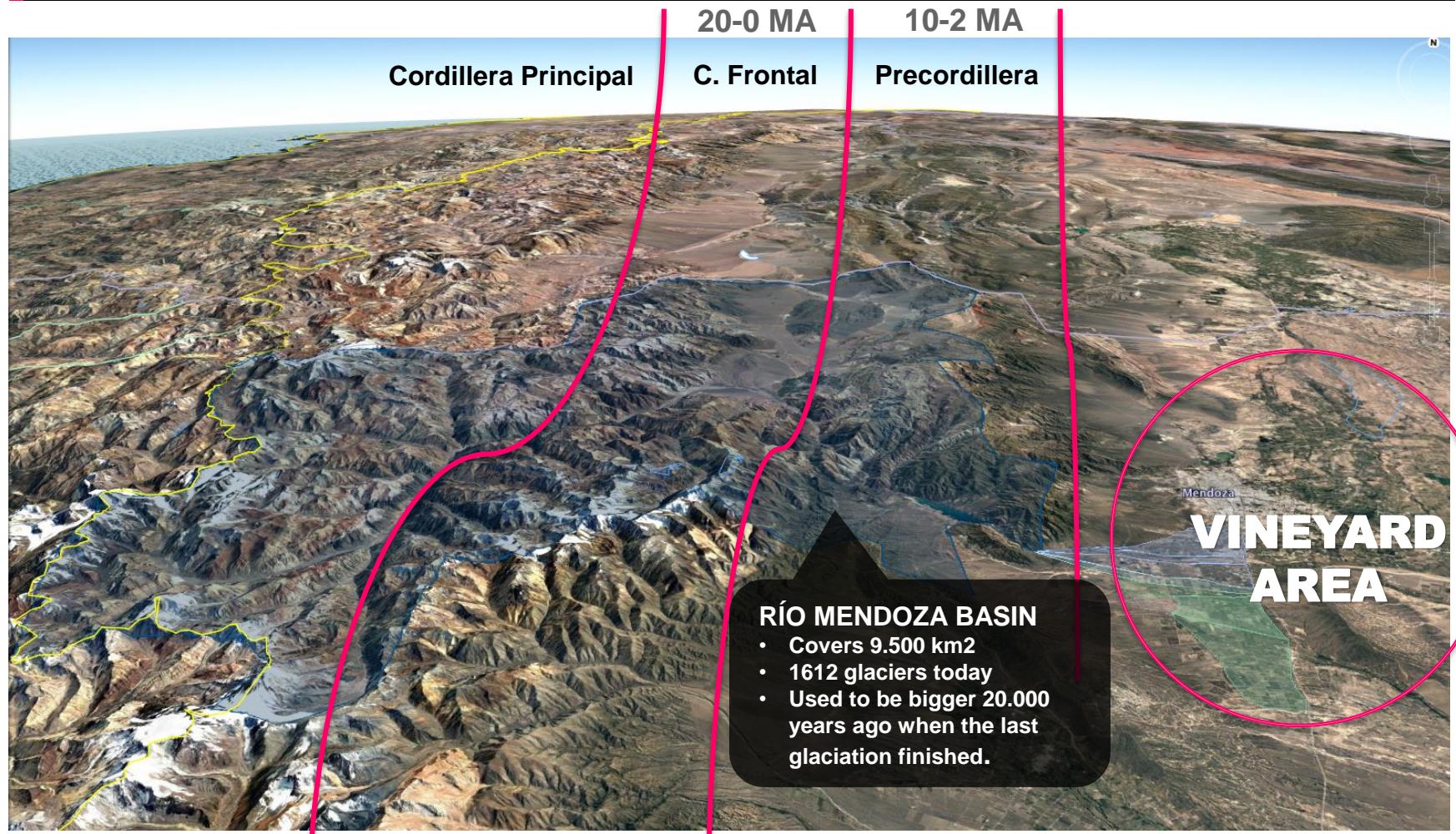


THE ANDES RANGE

Importance | Soils



THE ANDES RANGE IS A MULTI-TIME & MULTI-EPISODIC EVENT 5-0

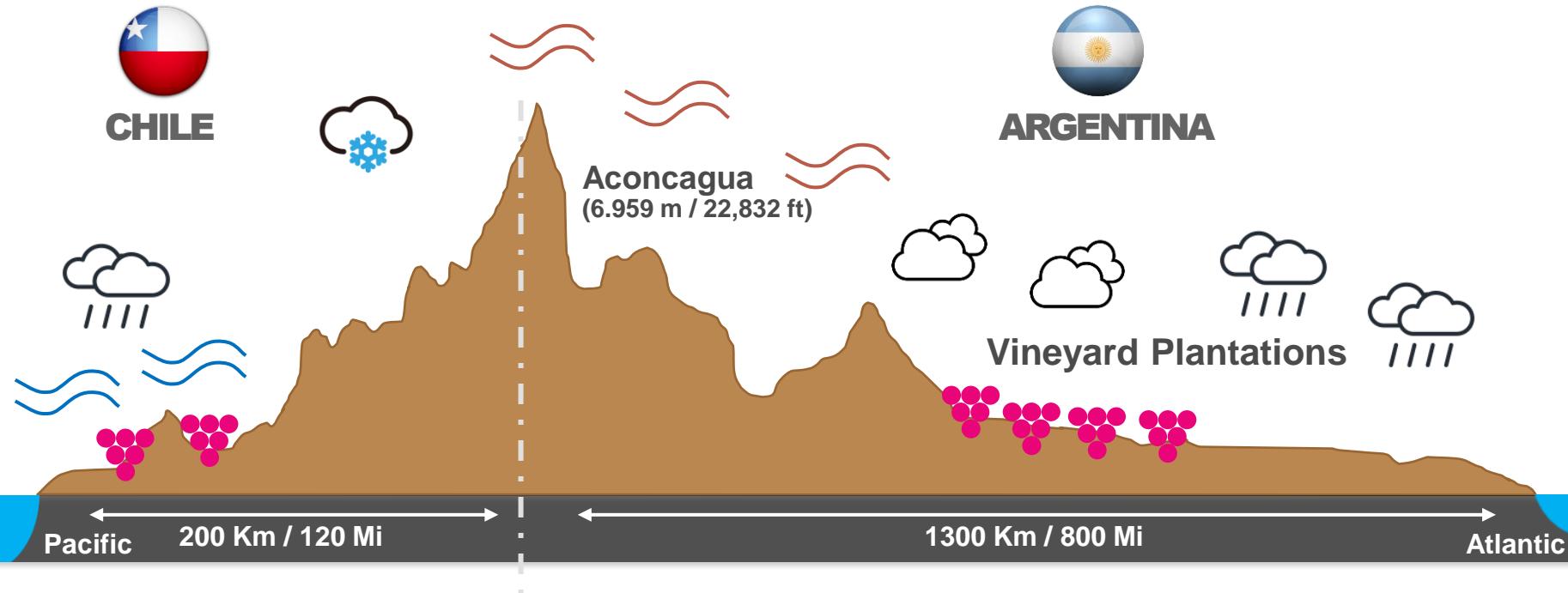


ALTITUDE EFFECT

A singular vineyard at the foothills of the Andes



THE ANDES MOUNTAIN RANGE



Decreased temperatures
Higher diurnal temperature change



Soil composition
changes



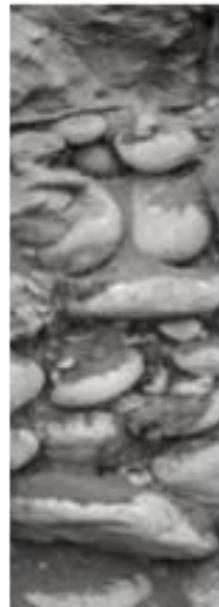
Solar
radiation

THE ANDES RANGE

Importance | Soils



SLOPES



ANDES RANGE

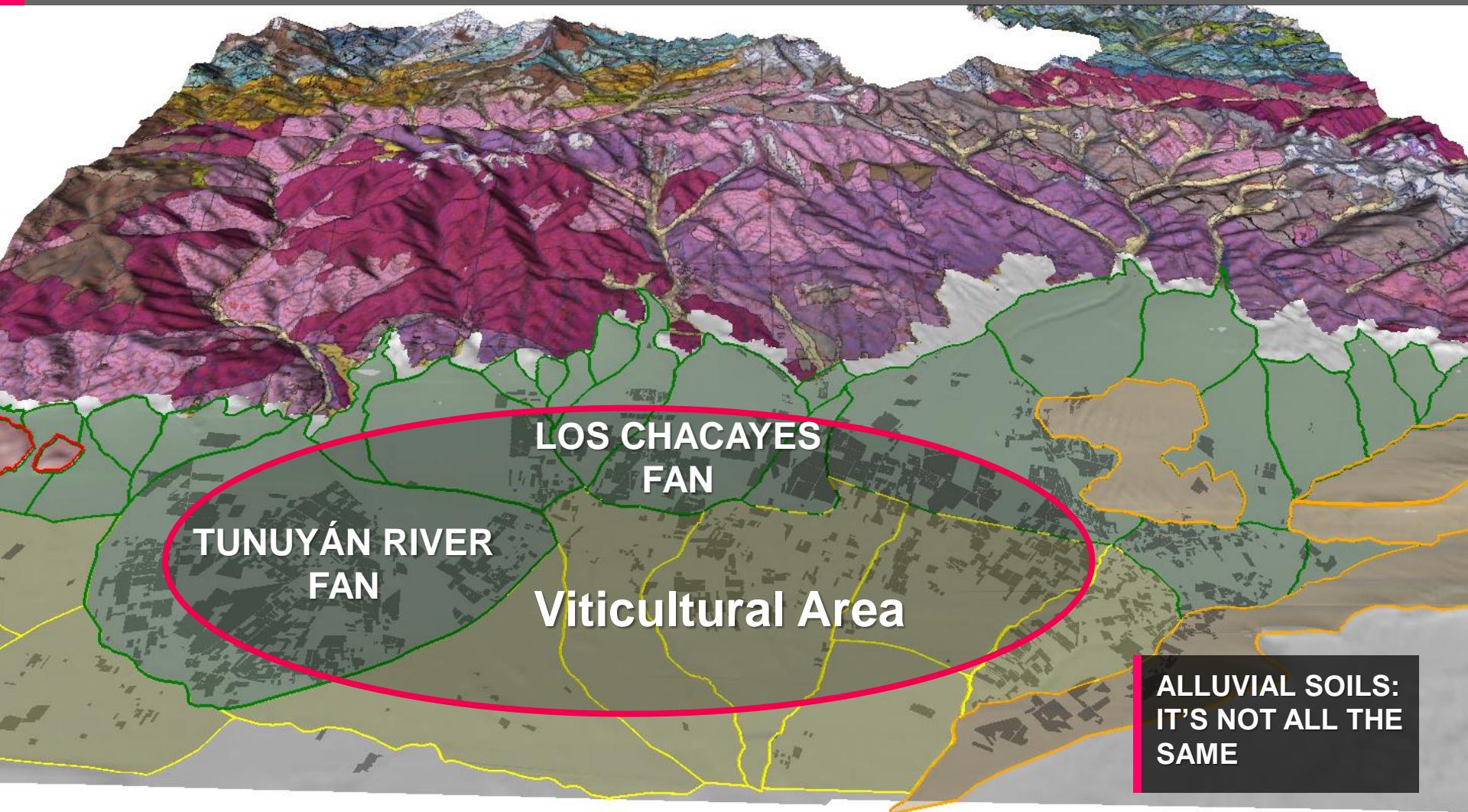
COLLUVIAL
SEDIMENTS

ALLUVIAL
SEDIMENTS

FLUVIAL
SEDIMENTS

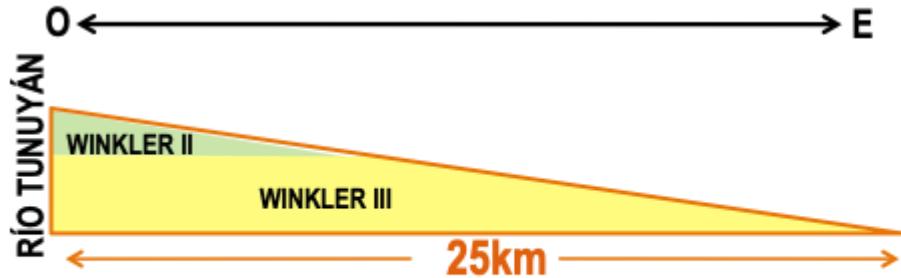
THE ANDES RANGE

Importance | Soils



THE ANDES RANGE

Importance | Soil examples



- 2000km² catchment area
- 1% slope
- 260km² fan
- Alluvial & fluvial soils
- 250m altitude difference



- 300km² catchment area
- 4% slope
- 100km² fan
- Colluvial & alluvial soils
- 600m altitude difference



LA RIOJA

W
WINES OF ARGENTINA
A

LA RIOJA

Terroir characteristics



LOCATION

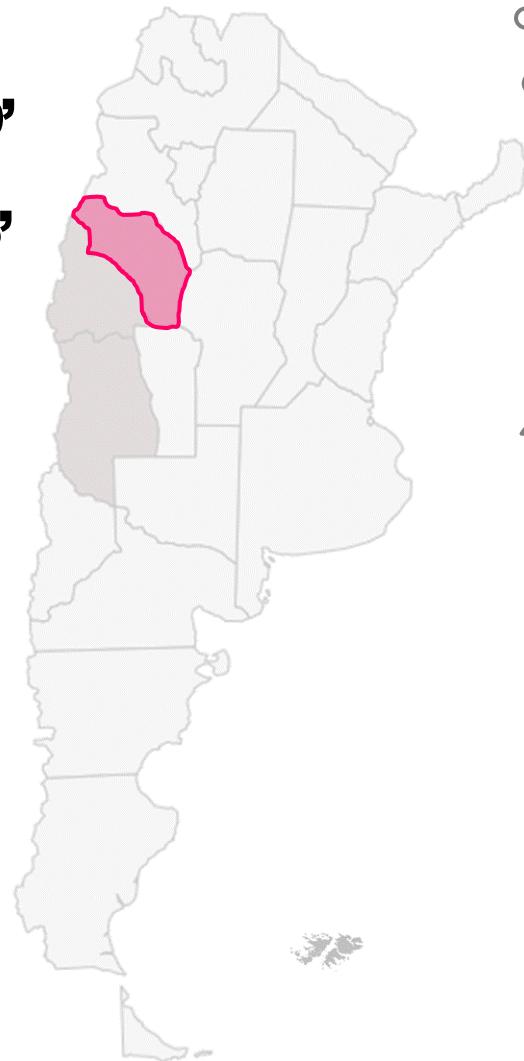
Viticultural area

28° 24' | 29° 19'

SOUTH LATITUDE

68° 13' | 66° 56'

WEST LONGITUDE



TEMP.

Annual Average

19° C

66° F



RAINFALL

Annual Average

130 mm/year

5,11 in/year



CULTIVATED SURFACE

for vinification*

Ha: 6.527,6

Ac: 16.130,35

3,3% of the country

3,5% of the region



ALTITUDE

of the vineyards

770 - 1.850 masl

2.526 – 6.070 fasl



HIGHLIGHTS

The cultivated surface is located in the Famatina Valleys, to the west of La Rioja, between the Sierras de Velasco and Famatina.

LA RIOJA

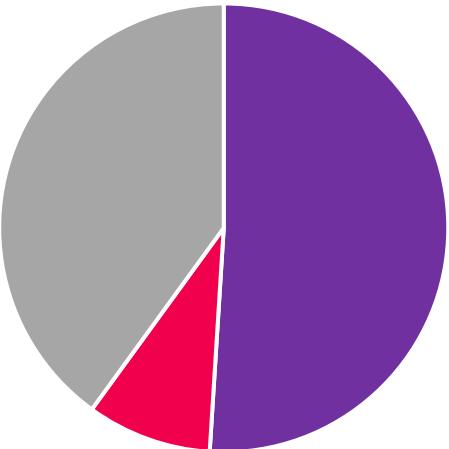
Main varieties



DISTRIBUTION by colour*



Red grapes | **51,6%**
White grapes | **39,1%**
Pink grapes | **9,3%**



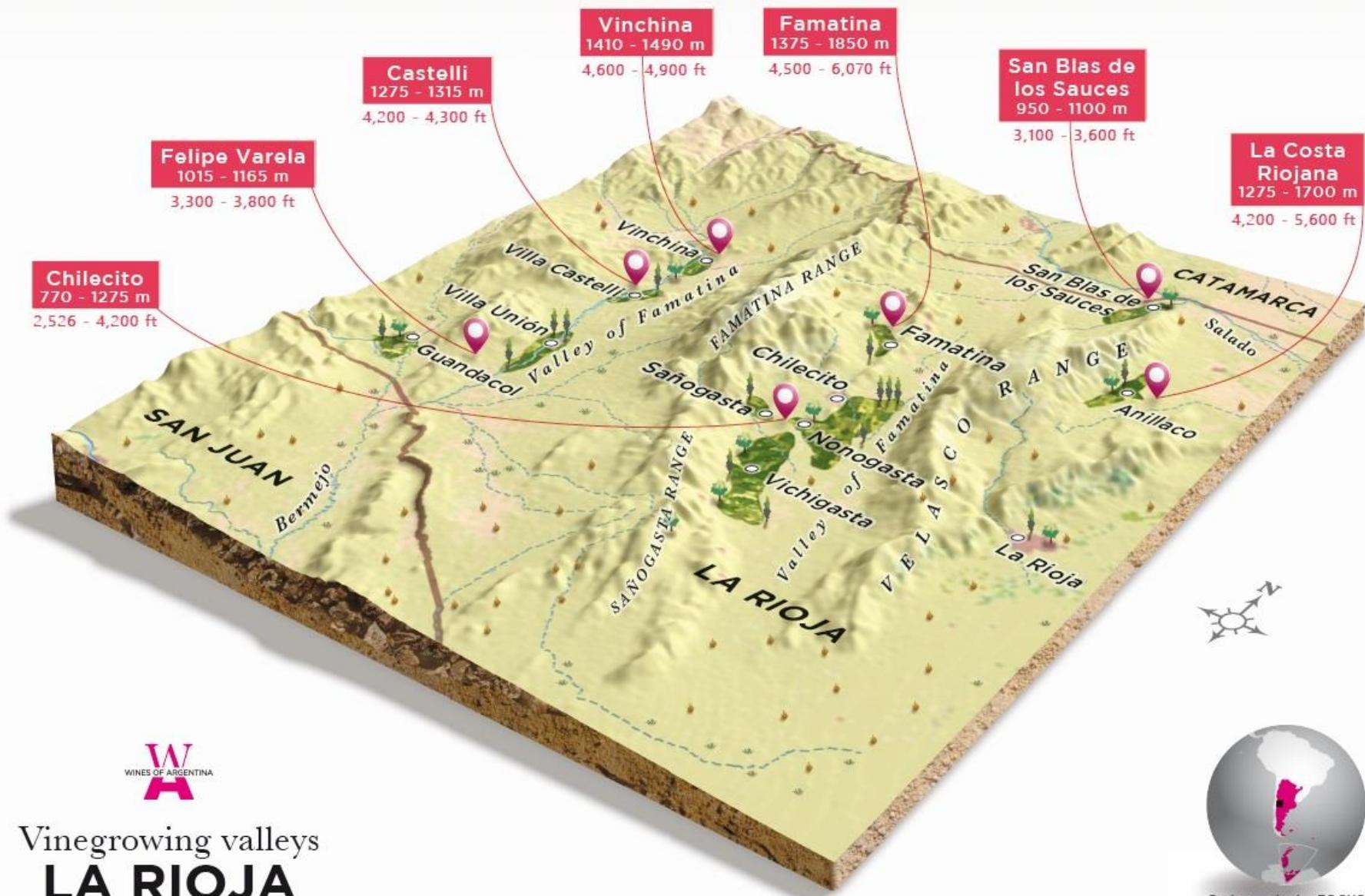
MAIN GRAPE VARIETIES

Most planted*

Torrontés
 Malbec
 Cabernet Sauvignon
 Bonarda
 Syrah

	Hectares	Acres	%
LA RIOJA	6.527,6	16.130,35	
Red varieties	3.366,7	8.319,45	% Red
Malbec	776,6	1.919,06	23,07%
Cabernet Sauvignon	718,9	1.776,47	21,35%
Bonarda	601,7	1.486,86	17,87%
Syrah	598,8	1.479,69	17,79%
Merlot	128,0	316,30	3,80%
Tempranillo	52,2	128,99	1,55%
Petit Verdot	39,4	97,36	1,17%
Cabernet Franc	23,9	59,06	0,71%
Tannat	13,2	32,62	0,39%
Pinot Noir	4,6	11,37	0,14%
Other red varieties	409,4	1.011,67	12,16%
White varieties	2.555,7	6.315,39	% White
Torrontés Riojano	2.054,5	5.076,87	80,39%
Chardonnay	64,7	159,88	2,53%
Viognier	19,4	47,94	0,76%
Chenin	17,2	42,50	0,67%
Sauvignon Blanc	14,9	36,82	0,58%
Torrontés Sanjuanino	6,5	16,06	0,25%
Semillón	5,6	13,84	0,22%
Riesling	0,6	1,48	0,02%
Other white varieties	372,3	919,99	14,57%
Pink varieties	605,2	1.495,51	% Pink
Criolla Chica	34,7	85,75	5,73%

*Source: National Viticulture Institute – Annual Surface Report (12/31/2019 database).



Vinegrowing valleys
LA RIOJA





SAN JUAN



SAN JUAN

Terroir characteristics



LOCATION

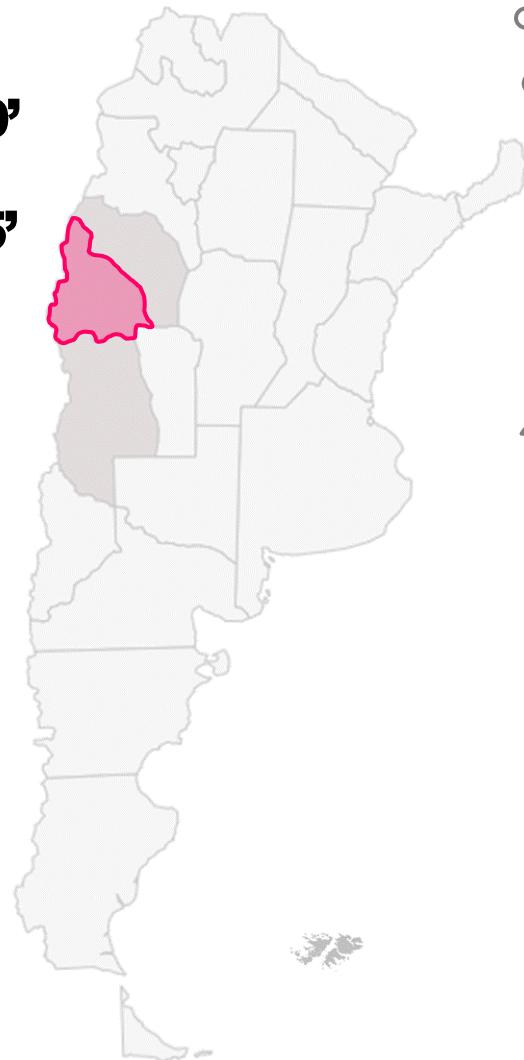
Viticultural area

30° 13' | 31° 59'

SOUTH LATITUDE

68° 25' | 69° 25'

WEST LONGITUDE



TEMP.

Annual Average

17° C

63° F



RAINFALL

Annual Average

150 mm/year

5,5 in/year



CULTIVATED SURFACE

for vinification*

Ha: 32.274,2

Ac: 79.752,78



16.3% of the country

17.2% of the region



ALTITUDE

of the vineyards

550 - 2.000 masl

1.805 – 6.562 fasl



HIGHLIGHTS

| 2nd most cultivated wine province in Argentina after Mendoza.

| The viticultural activity is positioned in a series of valleys spread across the center-west of the province.

SAN JUAN

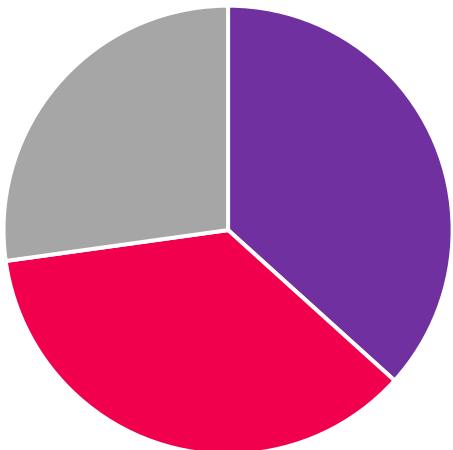
Main varieties



DISTRIBUTION by colour*



Red grapes | **37,6%**
White grapes | **26,3%**
Pink grapes | **36,1%**

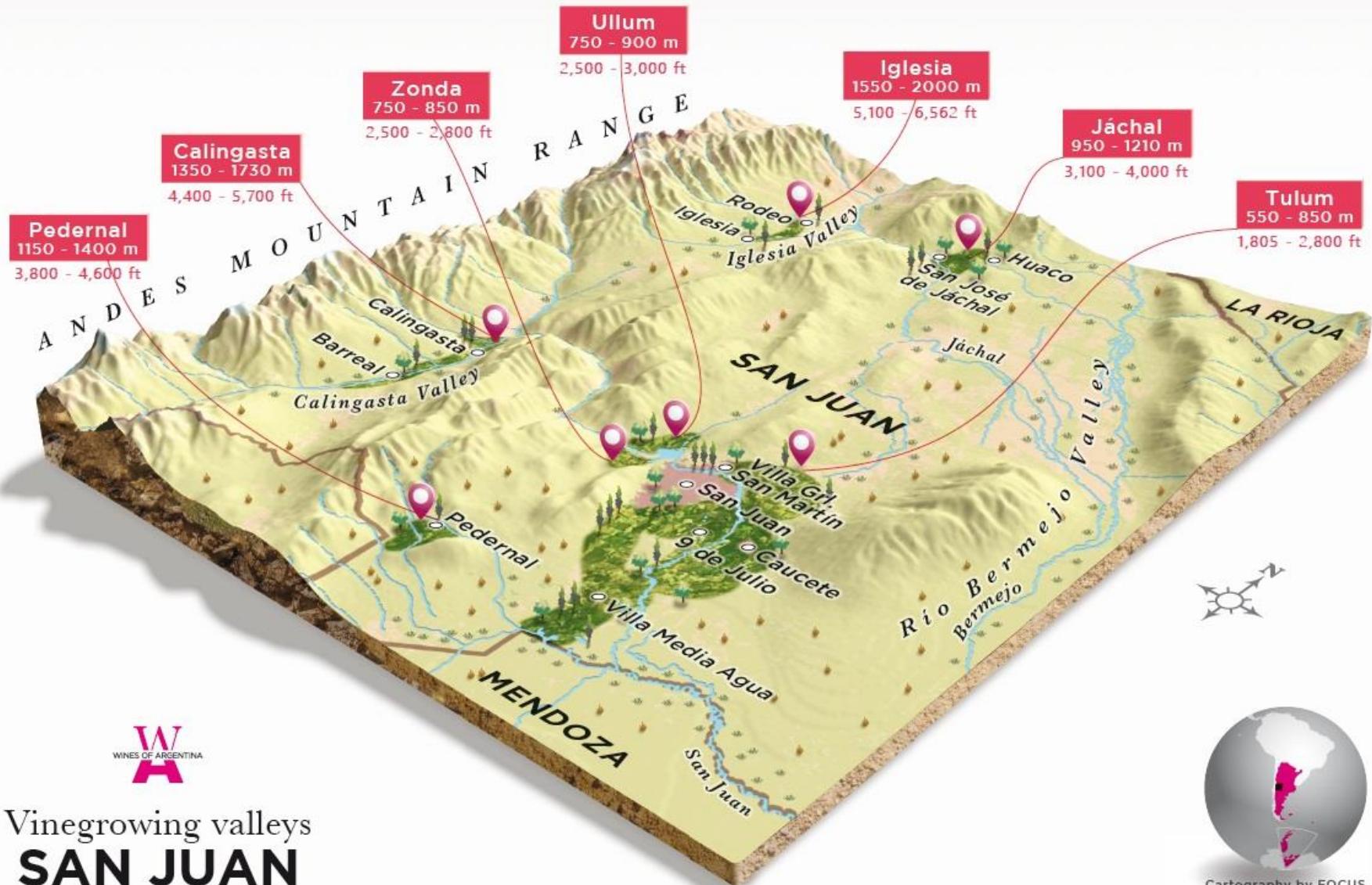


MAIN GRAPE VARIETIES

Most planted*

Malbec
Torrontés
Syrah
Bonarda
Cabernet Sauvignon

	Hectares	Acres	%
SAN JUAN	32.274,2	79.752,78	
Red varieties:	12.148,7	30.020,65	% Red
Malbec	2.792,7	6.901,04	22,99%
Bonarda	2.266,9	5.601,74	18,66%
Syrah	2.563,2	6.333,92	21,10%
Cabernet Sauvignon	1.427,4	3.527,25	11,75%
Tannat	316,0	780,87	2,60%
Tempranillo	169,4	418,60	1,39%
Cabernet Franc	130,5	322,48	1,07%
Petit Verdot	95,3	235,50	0,78%
Pinot Noir	27,6	68,20	0,23%
Other red varieties	1.951,4	4.822,10	16,06%
White varieties:	8.497,7	20.998,67	% White
Torrontés Sanjuanino	1.460,5	3.609,04	17,19%
Torrontés Riojano	815,9	2.016,17	9,60%
Chardonnay	695,5	1.718,65	8,18%
Torrontés Mendocino	346,6	856,48	4,08%
Chenin	244,7	604,68	2,88%
Viognier	233,3	576,51	2,75%
Sauvignon Blanc	223,7	552,79	2,63%
Semillón	35,1	86,74	0,41%
Riesling	8,9	21,99	0,10%
Other white varieties	4.433,5	10.955,62	52,17%
Pink varieties:	11.627,8	28.733,46	% Pink
Criolla Chica	95,4	235,74	0,82%

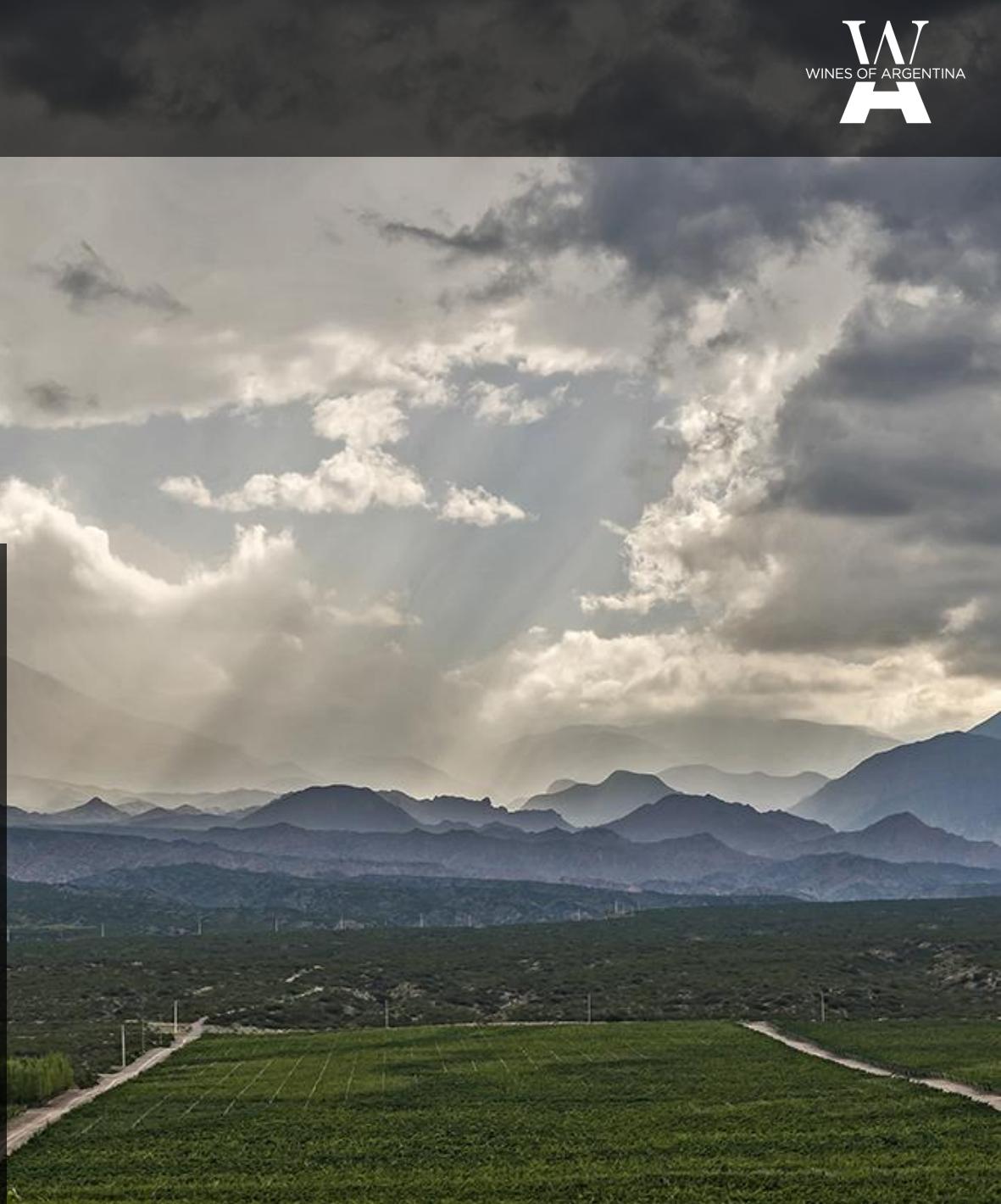


Vinegrowing valleys **SAN JUAN**

SAN JUAN

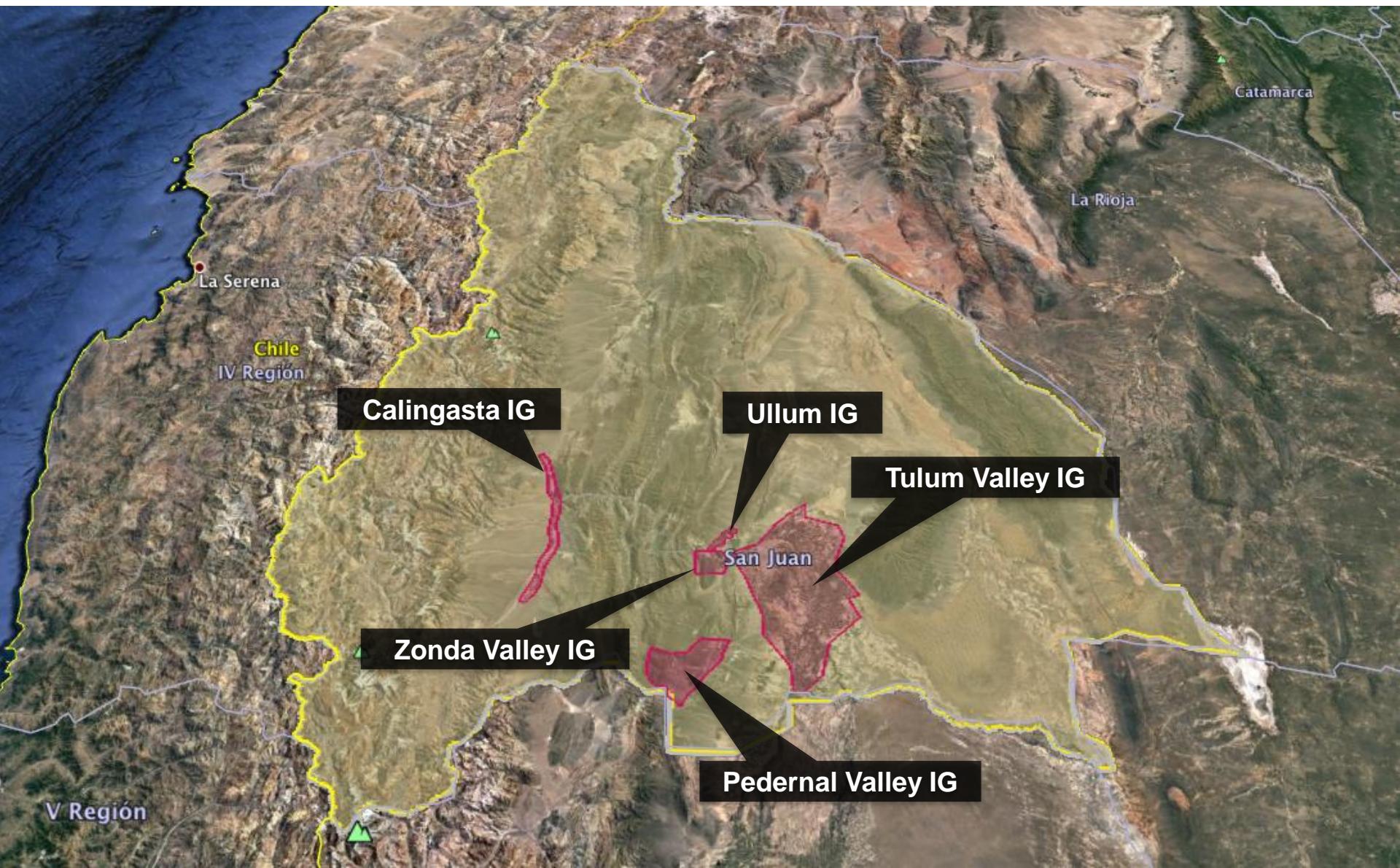


- | Key role in the wine industry.
- | Wine tradition since the 17th Century. Historical producer of table wines.
- | 1990's - Regions of altitude, cold climates.
- | 2000's – Global recognition for its wines.
- | Continental climate, dry and warm. (Winkler V, IV, III and II)
- | Excellent luminosity.



SAN JUAN

GIs



PEDERNAL VALLEY GI

San Juan



| Valley located to the south of San Juan (90km south west of the city) between two pre cordilleras and protected by hills.

| Landscape of hillsides with different orientations, exposures, altitudes and slopes.

| GI approved in 2007.

PEDERNAL VALLEY GI

Terroir characteristics



- The province of San Juan is located on the western edge of Argentina, at the foot of the Andes. A territory dominated by mountains that occupy more than 80% of its surface.
- Pedernal Valley is located in the southwest part of the province, 90 km (56 miles) from the city of San Juan.



LOCATION

Viticultural area

32° 08'
SOUTH LATITUDE
68° 53'
WEST LONGITUDE



TEMP.

Annual Average

28° C
82° F



RAINFALL

Annual Average

150 mm/year
5,5 in/year



MAIN GRAPE VARIETIES

Malbec
Cabernet Sauvignon
Syrah

Merlot
Chardonnay



CULTIVATED SURFACE

for vinification*

Ha: 800
Ac: 2.000



0.40% of the country

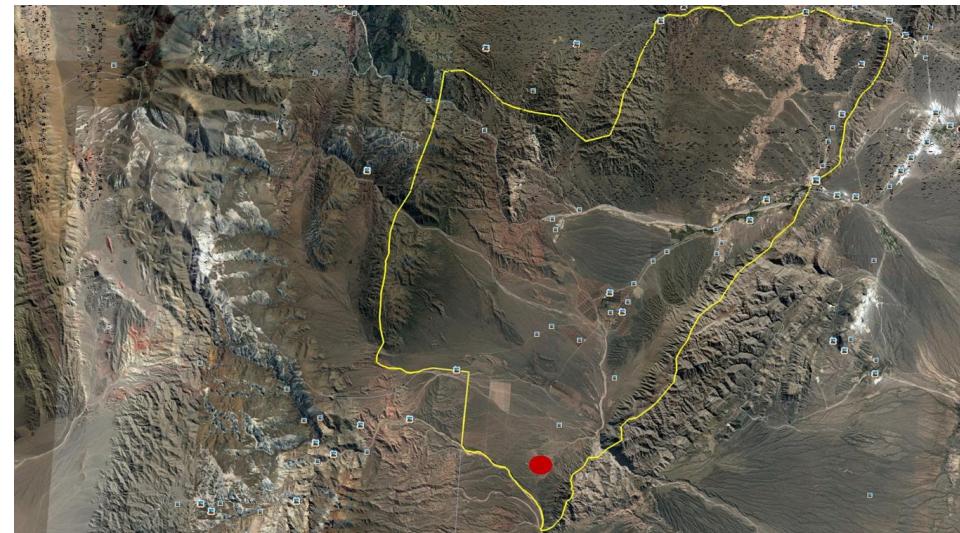
2.47% of the region



ALTITUDE

of the vineyards

1.250 – 1.500 masl
4.500 – 5.000 fasl



PEDERNAL VALLEY GI

San Juan

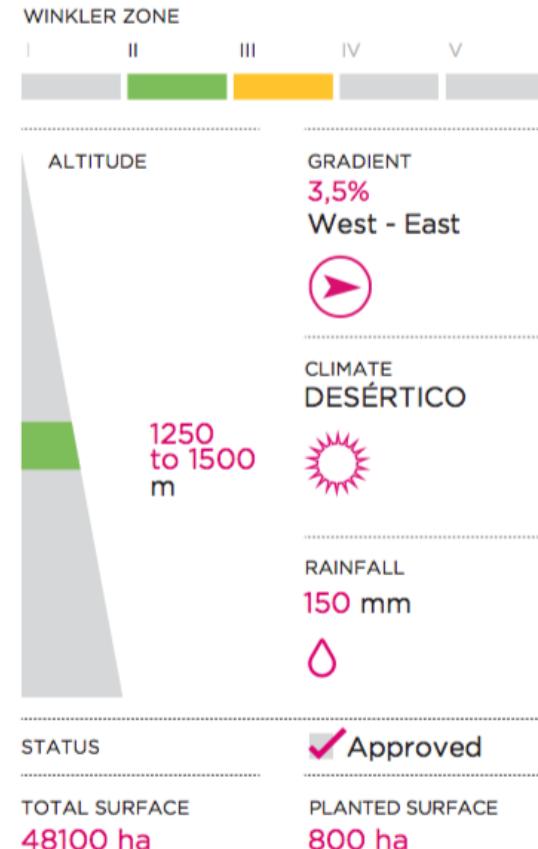


CLIMATE

- | Continental, arid and desert with a regime of precipitation that oscillates between 150/200 mm/year so that it resorts to pressurized irrigation.
- | For its average temperatures, it is Winkler III zone.

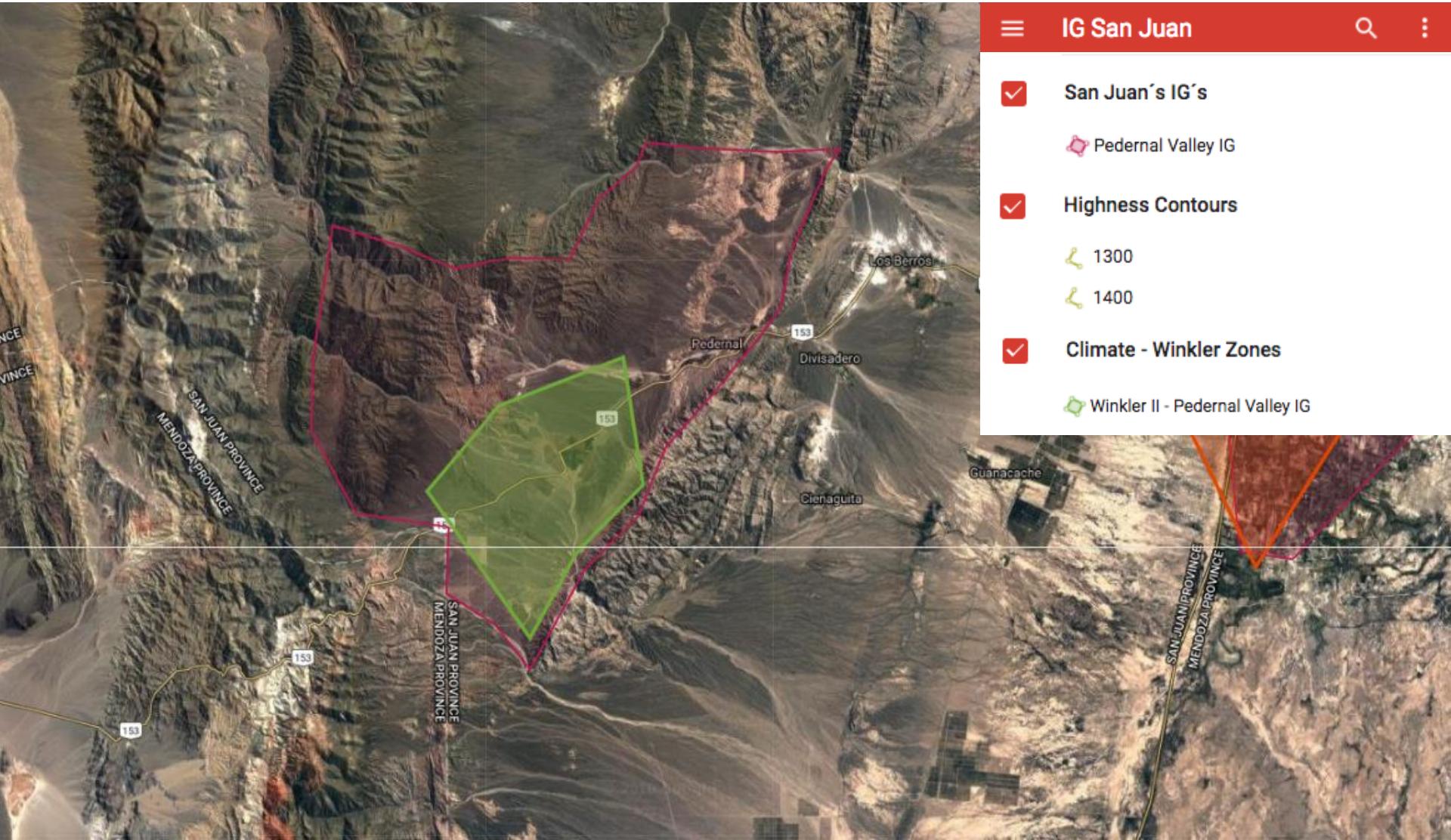
MAIN CULTIVATED VARIETIES

- | Malbec, Cabernet Franc, Syrah, Sauvignon Blanc, Chardonnay, Gewurztraminer
- | The vineyards are trellis trained (VSP)



PEDERNAL VALLEY GI

Climate



PEDERNAL VALLEY GI

Soils origin



The Sierras of Pedernal and the Sierra de Los Pozos constitute a unit of the Eastern Precordillera, which is composed of rocks from the Cambrian period, from the Paleozoic geological era, formed more than 485 million years ago.

The rocks of these ranges are of marine origin, formed in a marine sedimentary environment of carbonaceous platform, composed mainly of limestones and alternating dolomites with Black Flint (a silicon oxide).



PEDERNAL VALLEY GI

Soil formation



ANDES MOUNTAIN RANGE

DEVONIAN
416-359 million years (detritic sedimentary rocks, no limestone)

CENTRAL PRECORDILLERA

Fragments of different mineralogical composition that moved eastward.

EASTERN PRECORDILLERA

PEDERNAL HILL

ORDOVICIAN
510 to 480 million years. Marine sedimentary environment - Limestone.

Limestone soils of geological source

PEDERNAL VALLEY GI

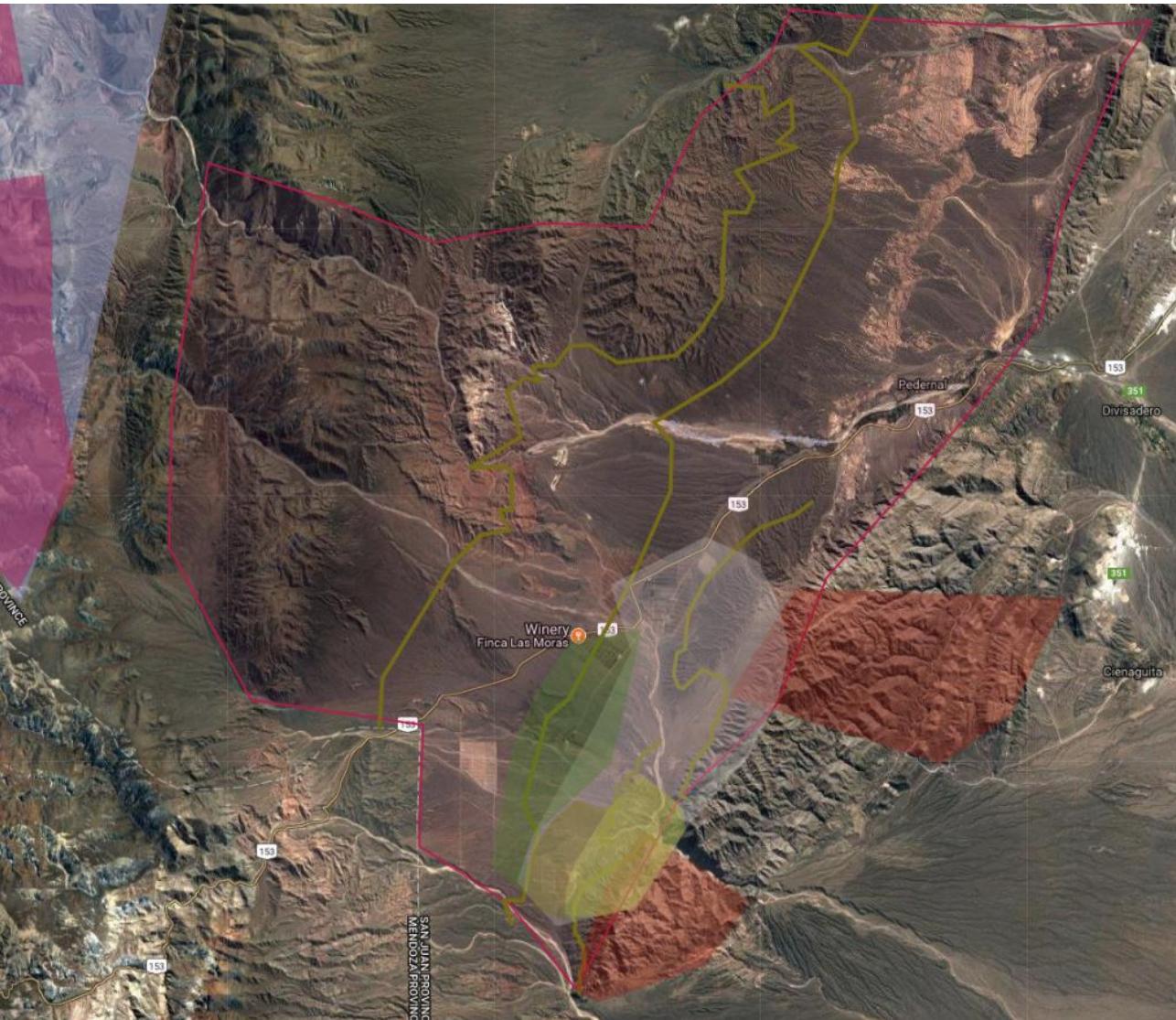
Soils



- | The soils of Pedernal mix elements of **varying antiquity**.
- | **Eastern slopes** (Sierra de Pedernal and Los Pozos) Cambrian origin, from the Palaeozoic era (485 million years). Rocks of marine origin: limestones, dolomites and Pedernal negro. Calcareous material of geological origin.
- | **Western slopes** (Sierra del Tontal and Santa Clara) Upper Cretaceous origin (85 million years). Colluvial and alluvial material with trailing rocks that define the sedentary filling of the valley combined with calcareous rock.

PEDERNAL VALLEY GI

Soils



IG San Juan

- San Juan's IG's
- Pedernal Valley IG
- Highness Contours
 - 1300
 - 1400
- Different Soils Types
 - Central Pre Cordillera
 - East Pre Cordillera
 - Pedernal Mountain Range
 - Los Pozos Mountain Range
 - Tontal Mountain Range
 - Santa Clara Mountain Range
 - Geological Calcareous Soils
 - Hillsides soils
 - Central valley soils
 - West valley area

PEDERNAL VALLEY GI

Soils

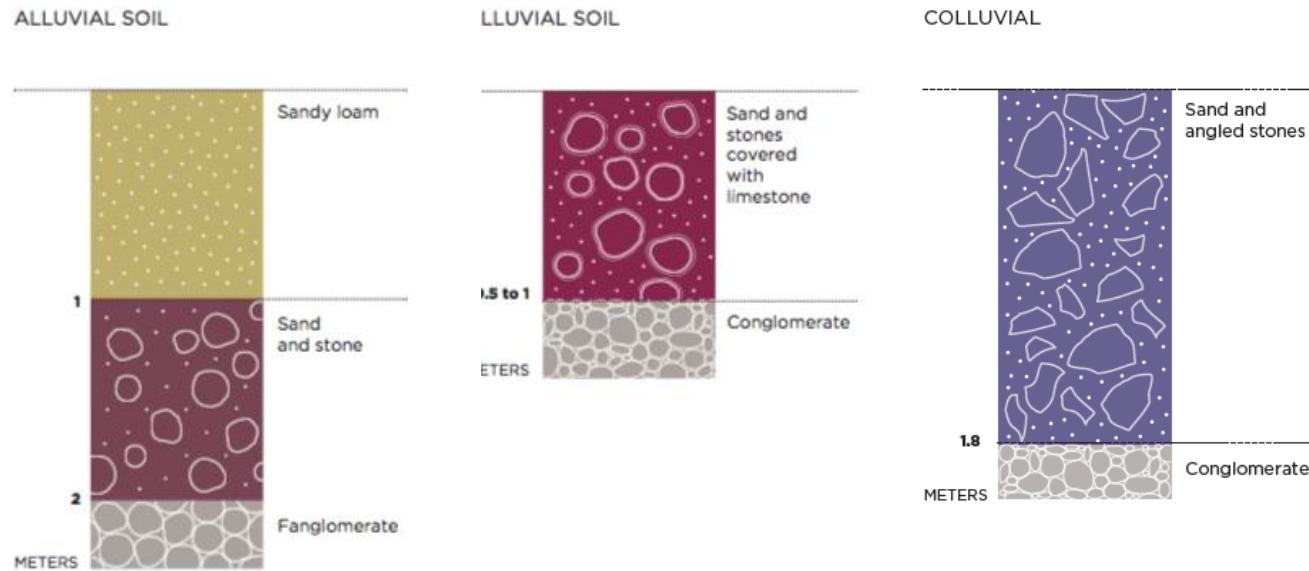


- | Sandy loam rich in calcareous and flint (pedernales) rocks.
- | Good porosity in all the pit, this allows the roots explore it completely.

LANDSCAPE MORPHOLOGY Sierra de Tontal and Sierra de Pedernal

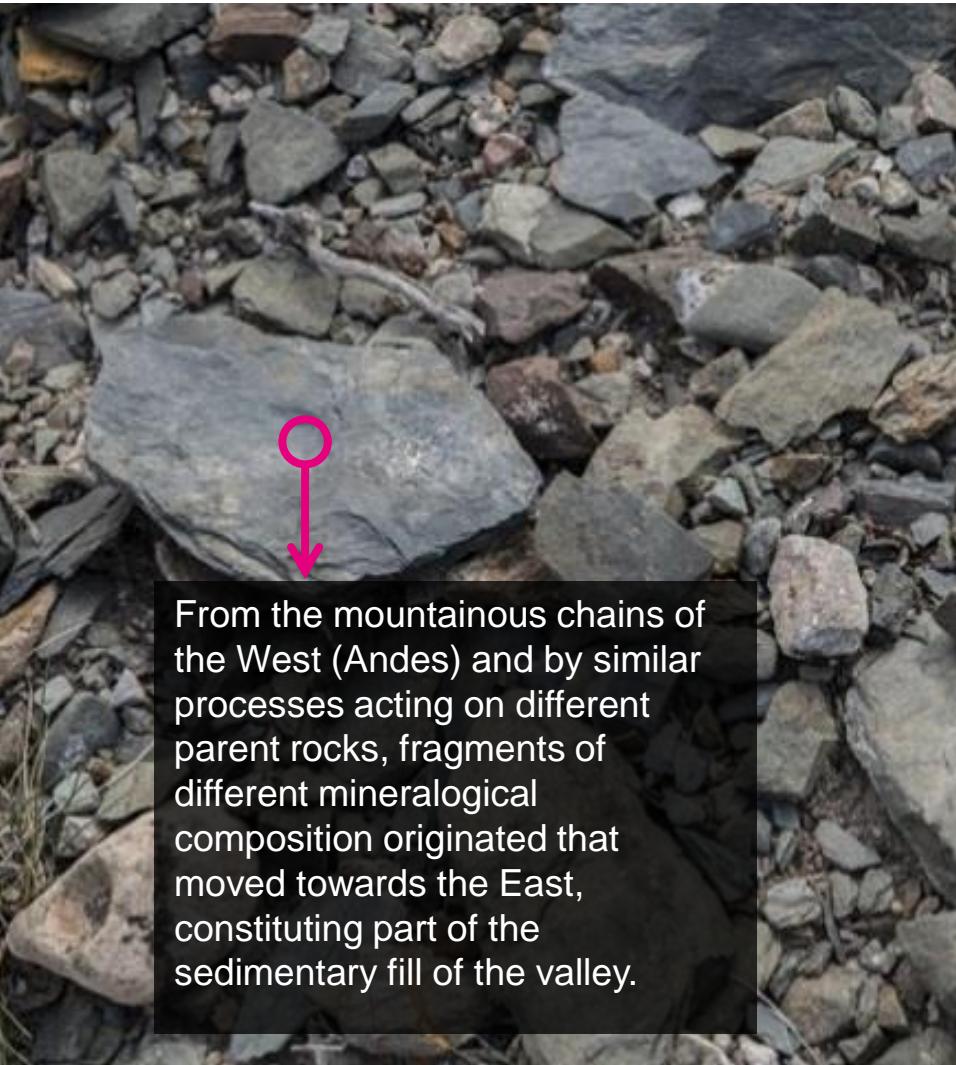
SOIL TYPE
Alluvial and colluvial. Sandy loam soil with small calcareous stones.
Up to 1,5 m depth.

VARIETIES
Malbec
Syrah
Cabernet Sauvignon
Chardonnay
Sauvignon Blanc



PEDERNAL VALLEY GI

Soils



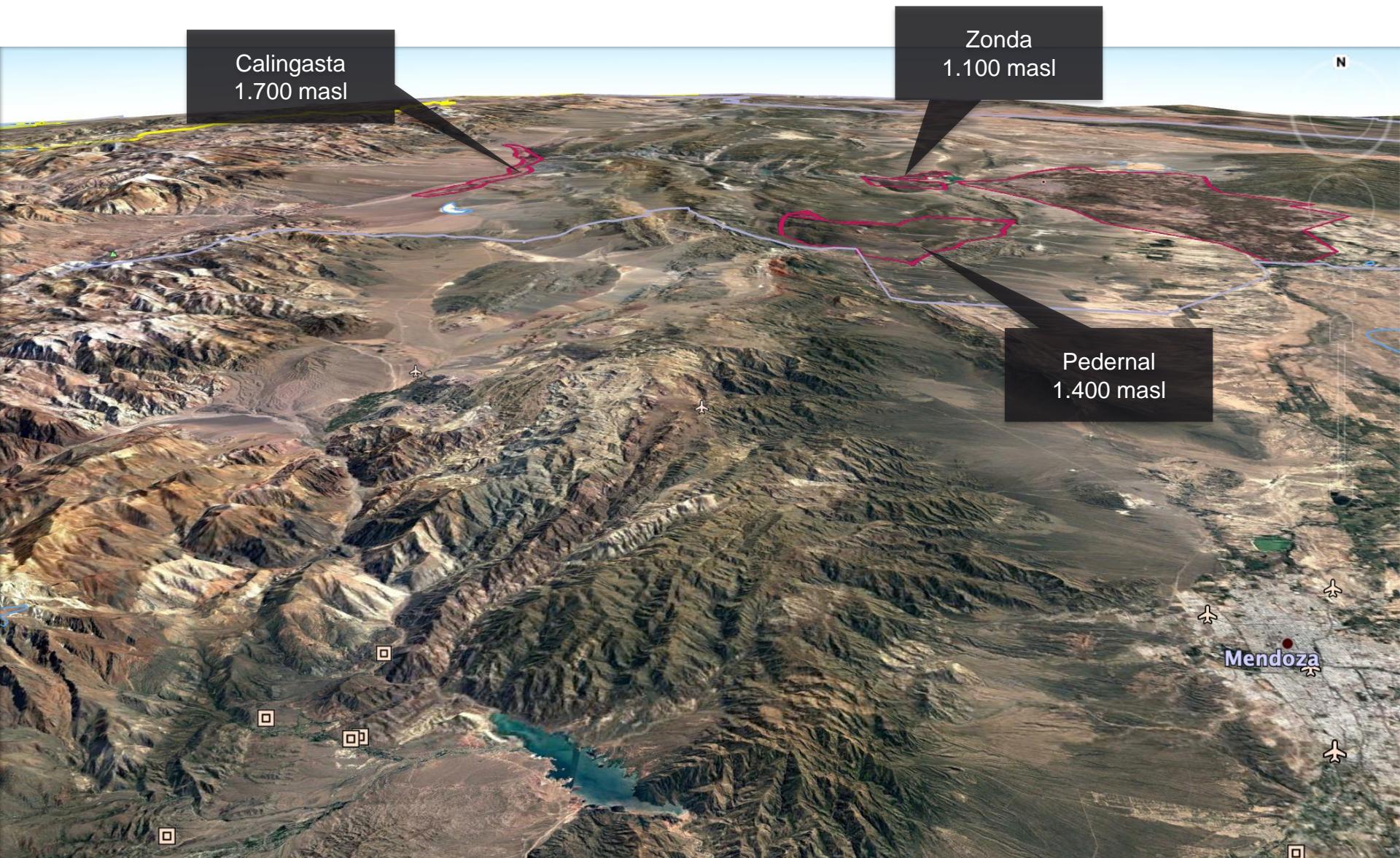
From the mountainous chains of the West (Andes) and by similar processes acting on different parent rocks, fragments of different mineralogical composition originated that moved towards the East, constituting part of the sedimentary fill of the valley.



Calcareous rocks that by different weathering processes and with the passage of time were fragmented and displaced by natural transport agents from the mountains to the west of the valley.

PRECORDILLERA

Other interesting wine zones



Calingasta
1.700 masl

Zonda
1.100 masl

Pederal
1.400 masl

CALINGASTA GI

San Juan



- | 100km long valley, located between the Cordillera de los Andes (W) and Precordillera (E).
- | Planted in mid 20th Century mainly with Criolla grapes: Moscatel blanco, Torrontés Sanjuanino y Listán Prieto.
- | Development is currently focused on red varieties: **171 ha** (red varieties)
 - 109 ha Malbec,
 - 37 ha Cabernet Sauvignon.
- | Altitude: 1350 - 1750 masl.
- | Rainfall regime: >50-100 mm/y
- | Winkler III, with 350 days of sun a year; thermal amplitude 23°
- | Mainly alluvial soil, with several deposits, some coluvial.





MENDOZA



MENDOZA

Terroir characteristics



LOCATION

Viticultural area

32° 43' | 34° 58'

SOUTH LATITUDE

67° 33' | 69° 15'

WEST LONGITUDE



TEMP.

Annual Average

15/19° C

59/66° F



RAINFALL

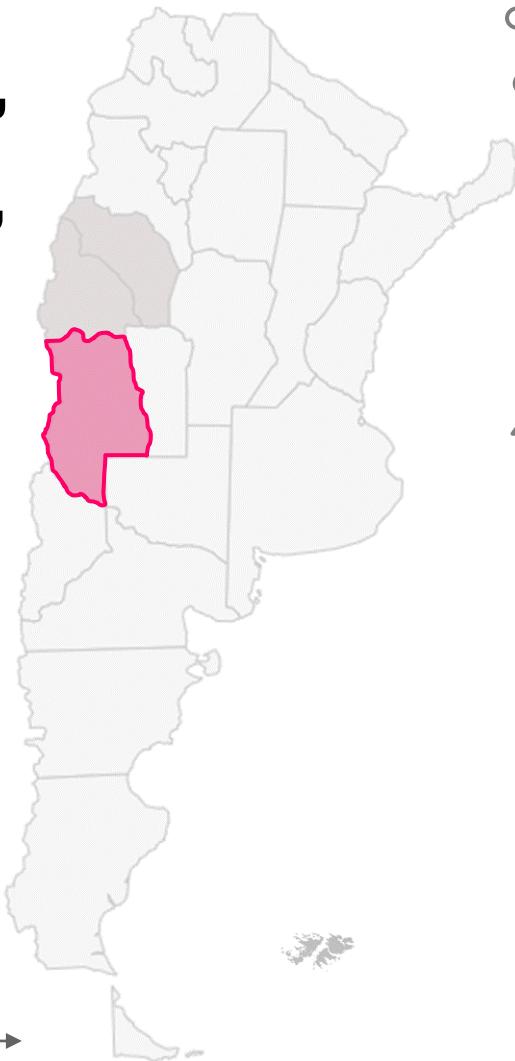
Annual Average

Mendoza
220 mm/year

Melbourne **656**

Bordeaux **851**

Napa **599**



CULTIVATED SURFACE

for vinification*

Ha: 149.226,9

Ac: 368.754,59

75%

79%



of the country
of the region



ALTITUDE

of the vineyards

430 - 2.000 masl

1.411 – 6.562 fasl



HIGHLIGHTS

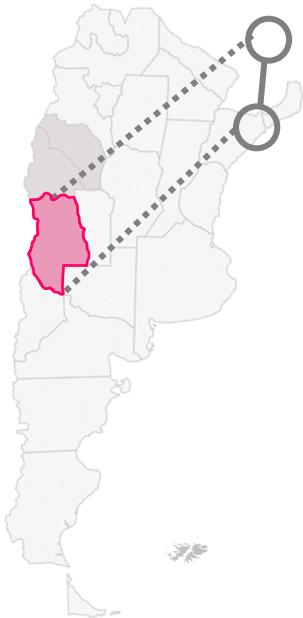
- The most important wine province and one of the main producing centres in the world.
- The presence of the Andes shape the climate generating ideal conditions for the cultivation of vines.
- It is divided into five large sub-regions: Valle de Uco; Primera Zona; Northern oasis; the East and the South.

MENDOZA

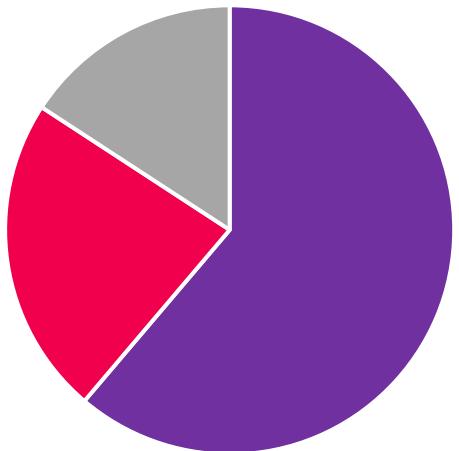
Main varieties



DISTRIBUTION by colour*



Red grapes White grapes Pink grapes	62,2% 15,4% 22,4%
---	--



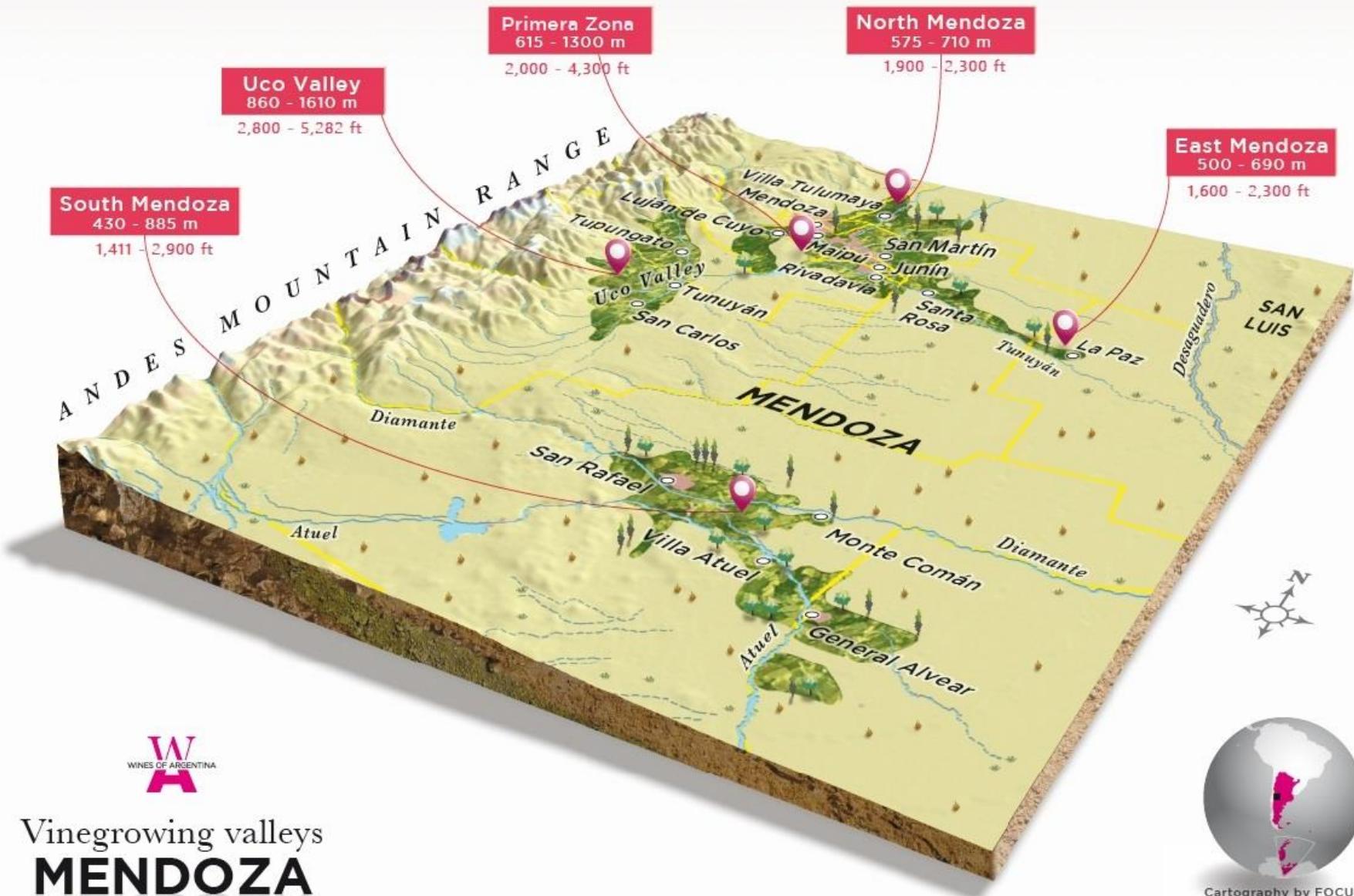
MAIN GRAPE VARIETIES

Most planted*

Malbec Bonarda Cabernet Sauvignon Syrah Tempranillo

	Hectares	Acres	%
MENDOZA	149.226,9	368.754,59	
Red varieties	92.794,3	229.303,99	% Red
Malbec	37.754,1	93.294,16	40,69%
Bonarda	15.249,9	37.684,03	16,43%
Cabernet Sauvignon	10.888,6	26.906,82	11,73%
Syrah	8.347,4	20.627,26	9,00%
Tempranillo	5.295,3	13.085,22	5,71%
Merlot	3.930,6	9.712,91	4,24%
Pinot Noir	1.488,3	3.677,74	1,60%
Cabernet Franc	978,9	2.418,96	1,05%
Petit Verdot	470,5	1.162,65	0,51%
Tannat	352,7	871,56	0,38%
Other red varieties	8.038,0	19.862,70	8,66%
White varieties	23.039,7	56.933,40	% White
Chardonnay	4.886,2	12.074,29	21,21%
Torrontés Riojano	3.474,5	8.585,84	15,08%
Chenin	1.553,4	3.838,61	6,74%
Sauvignon Blanc	1.507,3	3.724,69	6,54%
Semillón	555,6	1.372,94	2,41%
Viognier	449,0	1.109,52	1,95%
Torrontés Mendocino	158,9	392,66	0,69%
Torrontés Sanjuanino	143,8	355,34	0,62%
Riesling	51,0	126,03	0,22%
Other white varieties	10.260,0	25.353,49	44,53%
Pink varieties	33.392,9	82.517,20	% Pink
Cariolla Chica	153,2	378,57	0,46%

*Source: National Viticulture Institute – Annual Surface Report (12/31/2019 database).



Vinegrowing valleys **MENDOZA**



MENDOZA
PRIMERA ZONA
Luján de Cuyo & Maipú

W
WINES OF ARGENTINA
A

Luján de Cuyo
690 - 1300 m
2,300 - 4,300 ft

1. Agrelo
2. Carrodilla
3. Chacras de Coria
4. El Carrizal
5. La Puntilla
6. Las Compuertas
7. Luján de Cuyo
8. Mayor Drummond
9. Perdriel
10. Ugarteche
11. Vistalba

Maipú
615 - 940 m
2,000 - 3,100 ft

12. Coquimbito
13. Cruz de Piedra
14. Fray Luis Beltrán
15. General Ortega
16. Gutiérrez
17. Las Barrancas
18. Lunlunta
19. Luzuriaga
20. Maipú
21. Rodeo del Medio
22. Russell
23. San Roque



Vinegrowing valleys
MENDOZA
PRIMERA ZONA



Cartography by FOCUS

PRIMERA ZONA

Location

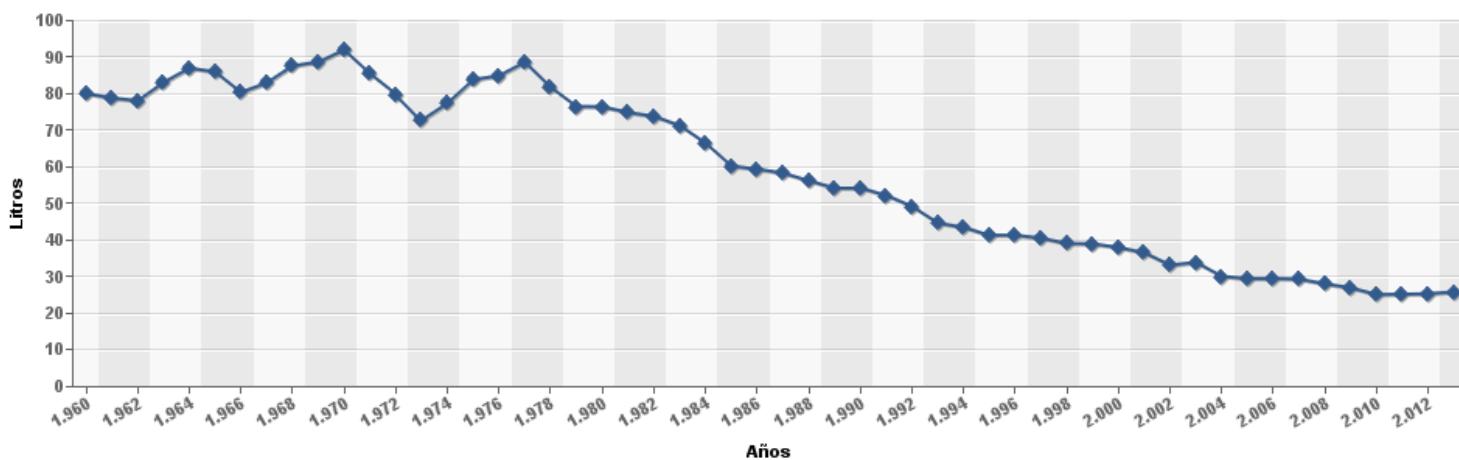


BRIEF HISTORY | The beginnings

Primera Zona



- | **17th and 18th century:** 1st vineyards in Mendoza. Family own and handcraft viticulture of 'criollas' grapes.
- | **1850's:** beginning of industrial viticulture. European varieties planted.
- | **1880:** Railway arrives to Mendoza bringing European immigration, also helping to develop the wine consumption market in Buenos Aires.
- | **70's:** Maximum historical consumption per capita: **90 lts.**
- | **80's:** Changes in consumer habits. Viticultural crisis.
- | **90's:** Commercial opening to the world. International advisors. Wine reconversion.



20 lts
Per capita 2017

BRIEF HISTORY | 20th Century

Primera Zona



| Large scale irrigation network using water from Mendoza River.

| Primera Zona holds 40% of Argentina's wineries (881 in total)

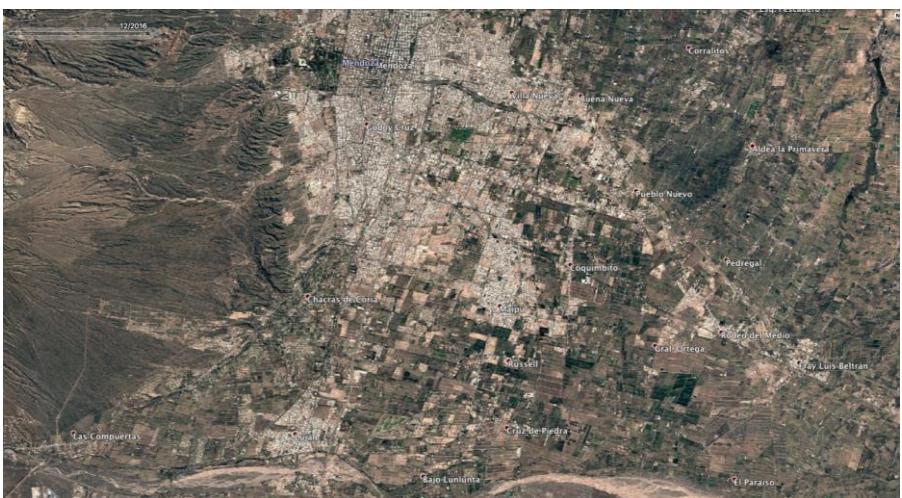
| 1990: D.O.C.
Luján de Cuyo



- | Some GI's:
- Agrelo
 - Las Compuertas
 - Lunlunta
 - Barrancas
- | City advancement over vineyard areas.



1990



2016

ORIGINS

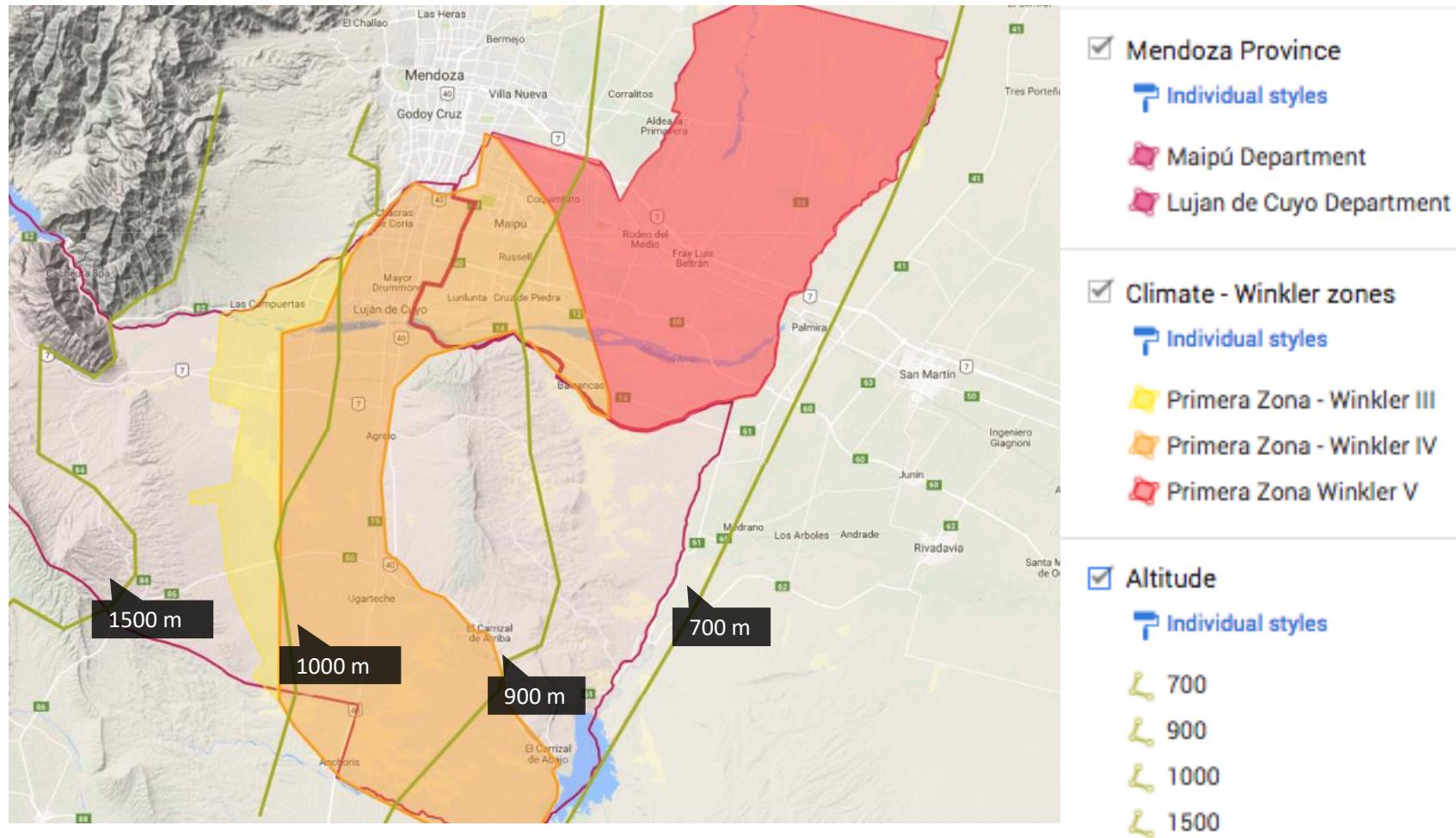
- | Flood Irrigation only
- | Trellising: low trellis VSP and Parral.
- | High density cultivation: 1.80 m X 1 m (5000 to 6000 pl / ha)
- | Root-stock.
- | Mass selections.
- | Vines: French, Italian, Spanish and Criolla.
- | Fine wines and table red and white wines

PRESENT DAY

- | Flood and drip irrigation.
- | Conduction system: low trellis and high trellis.
- | Low density cultivation: 2.2 meters X 1.2 meters (3000 to 4000 pl / ha)
- | Grafted/ungrafted rootstock.
- | Mass selections of old vineyards and clones.
- | French varietals.
- | Fine wines, mainly reds.

CLIMATE

Primera Zona



CLIMATE

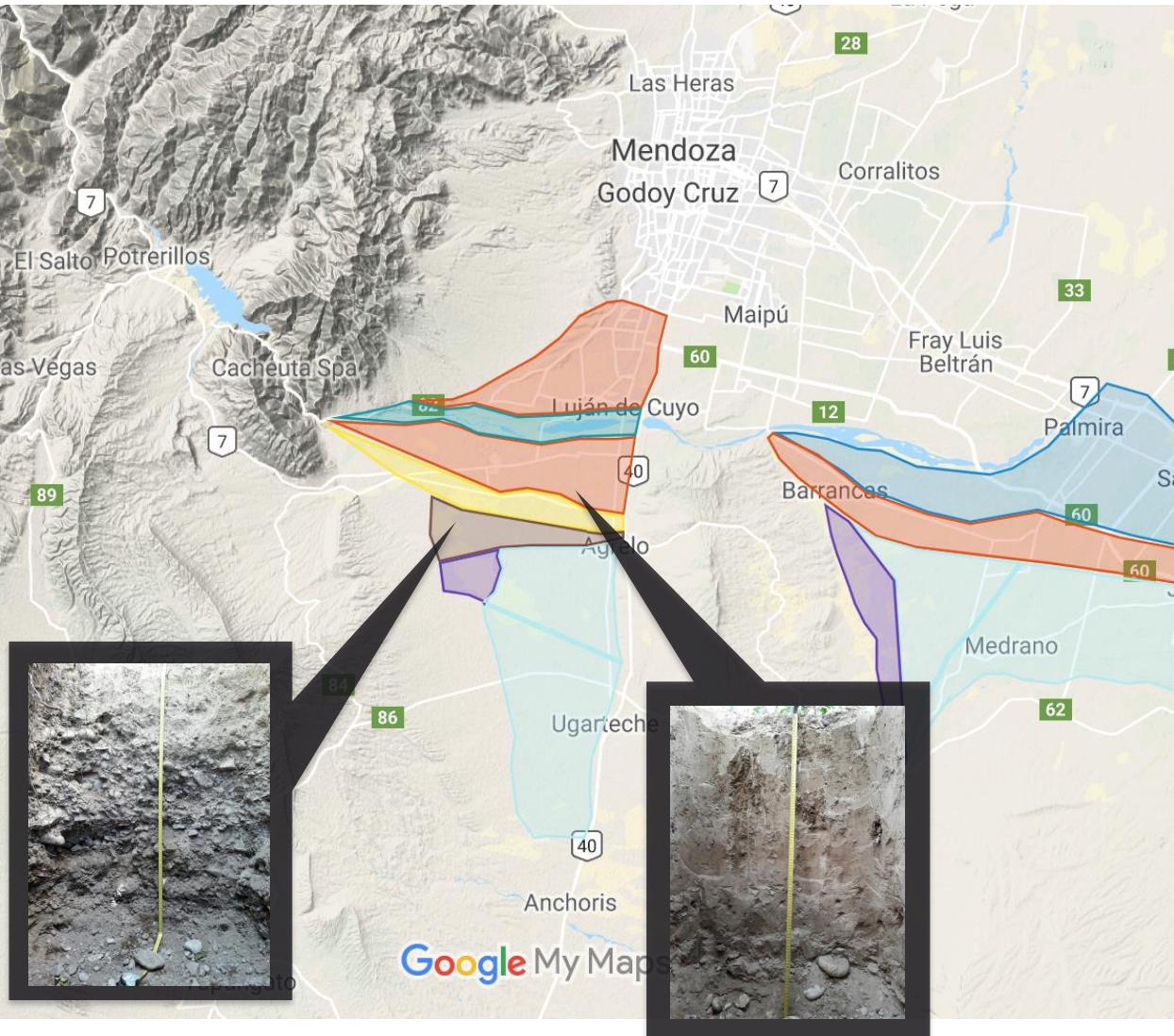
Primera Zona



Country	Wine Region	City	GST (°C)	GDD (C° units)	Winkler Region	
Washington	Puget Sound	Port Angles	13,4	710	Region Ia	Gualtallary, Cachi, Chubut
Germany	Ruwer	Kasel	13,8	800	Region Ia	
England	Kent	East Malling	14,1	850	Region Ia	
Australia	Tasmania	Launceston	14,4	932	Region Ia	
New Zealand	Central Otago	Queenstown	14,5	945	Region Ia	
France	Champagne	Reims	14,7	985	Region Ia	
Australia	Coonawarra	Coonawarra	16,6	1401	Region II	Gualtallary, San Pablo
Spain	Rias Baixas	Vigo	16,8	1437	Region II	
Italy	Piedmont	Torino	17,7	1626	Region II	
France	Bordeaux	Mérignac	17,7	1627	Region II	
France	Northern Rhône	Valence	17,8	1664	Region III	Gualtallary, Paraje Altamira, Agrelo, Las Compuertas
Italy	Friuli	Udine	18,0	1694	Region III	
Spain	Rioja	Logrono	18,2	1742	Region III	
Australia	Yarra Valley	Healesville	18,6	1829	Region III	
California	Napa Valley	St Helena	19,3	1983	Region IV	Lunlunta, Cruz de Piedra, Cafayate
California	Northern Sonoma	Healdsburg	19,5	2010	Region IV	
Australia	Barossa Valley	Nuriootpa	19,8	2069	Region IV	
France	Roussillon	Perpignan	19,8	2076	Region IV	
Portugal	Alentejo	Evora	20,1	2134	Region IV	
Italy	Tuscany	Firenze	20,2	2153	Region IV	Coquimbito, La Paz, Santa Rosa
Portugal	Madeira	Funchal	21,0	2339	Region V	
Italy	Apulia	Brindisi	21,1	2343	Region V	
Greece	Patras	Patras	21,2	2367	Region V	
Australia	Hunter Valley	Cessnock	21,7	2481	Region V	
Spain	Jerez	Jerez de la Frontera	21,9	2524	Region V	

PROXIMAL ALLUVIAL FAN

Primera Zona



Soils, climate & altitude

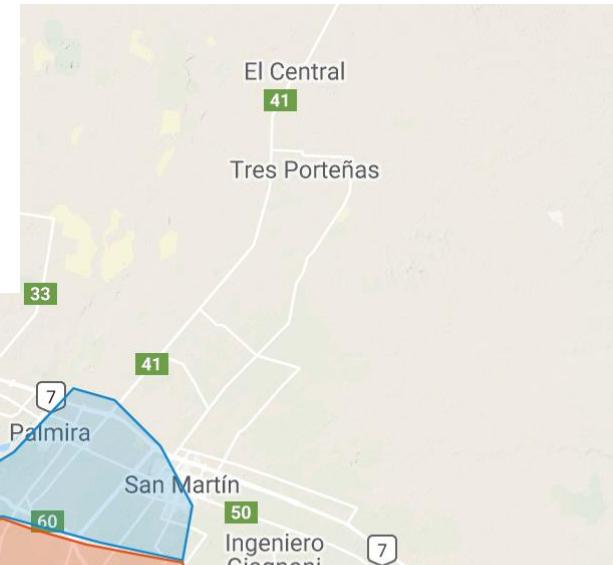
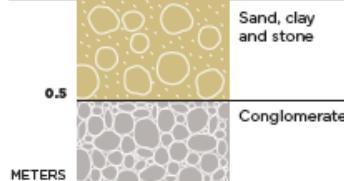
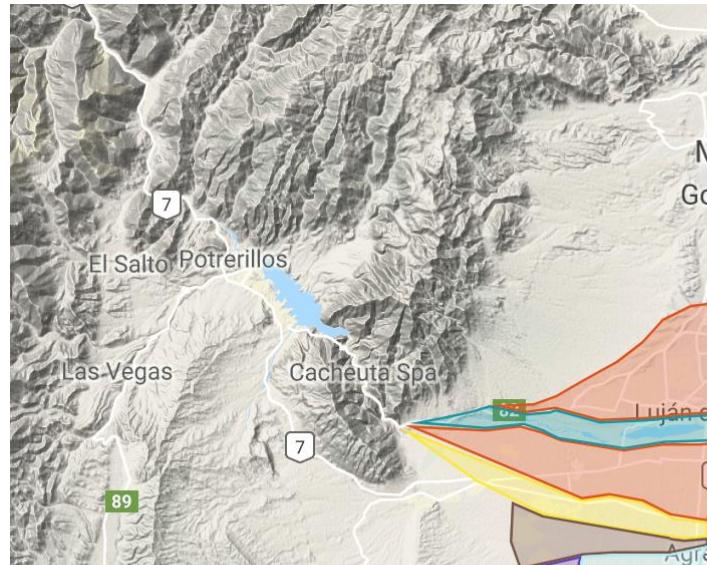
- Luján de Cuyo - Colluvial - alluvial clay lo...
- Luján de Cuyo - Second alluvial terrace ...
- Luján de Cuyo - colluvial - alluvial silt san...
- Luján de Cuyo - Second alluvial terrace ...
- Maipú - First Alluvial Terrace Mendoza Ri...
- Maipú - Second Alluvial Terrace Mendoz...
- Maipú - Colluvial-Alluvial Mix
- Maipú - Colluvial deep soil
- Maipú - Deep silt to alluvial silt from Tun...
- Luján de Cuyo - First Alluvial Terrace Me...
- Luján de Cuyo - colluvial - alluvial silt to d...
- Luján de Cuyo - Coarse sand and gravels...
- Luján de Cuyo - Colluvial - alluvial clay lo...

PROXIMAL ALLUVIAL FAN

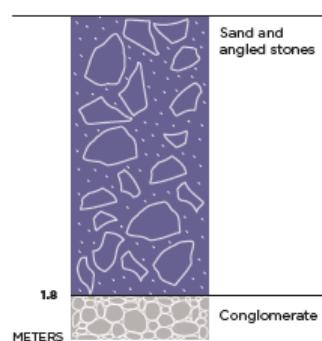
Primera Zona



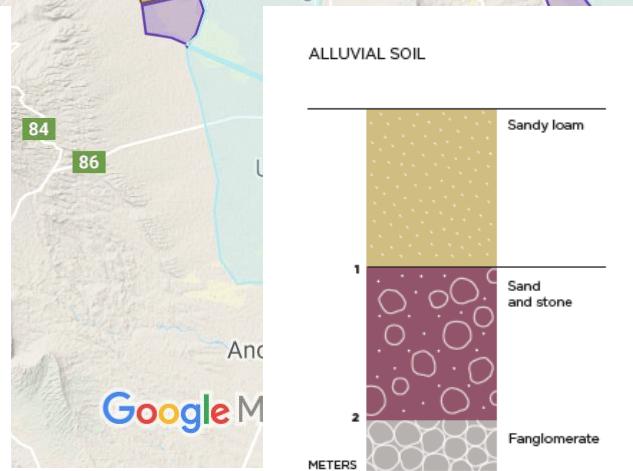
ALLUVIAL SOIL



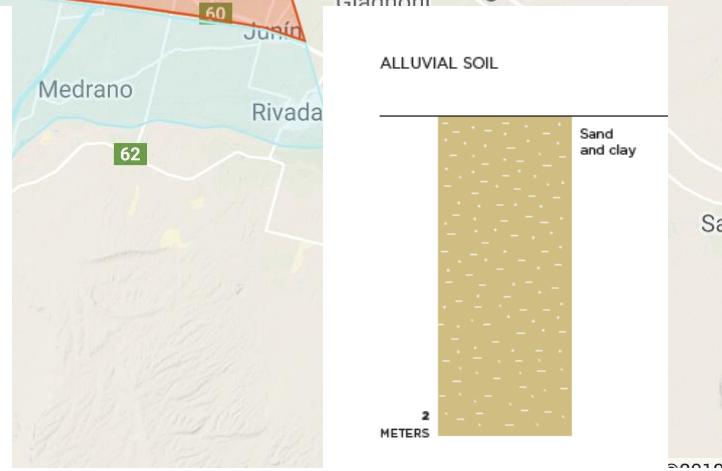
COLLUVIAL



ALLUVIAL SOIL



ALLUVIAL SOIL



LUJÁN DE CUYO

Primera Zona



CULTIVATED SURFACE for vinification (INV - 2019)

Ha: **15.495,1**
Ac: **38.289,94**

7,8%
10,3%
of the country
of the province

MALBEC

Ha: **8.765,4**
Ac: **21.633**

19,7%
of the country



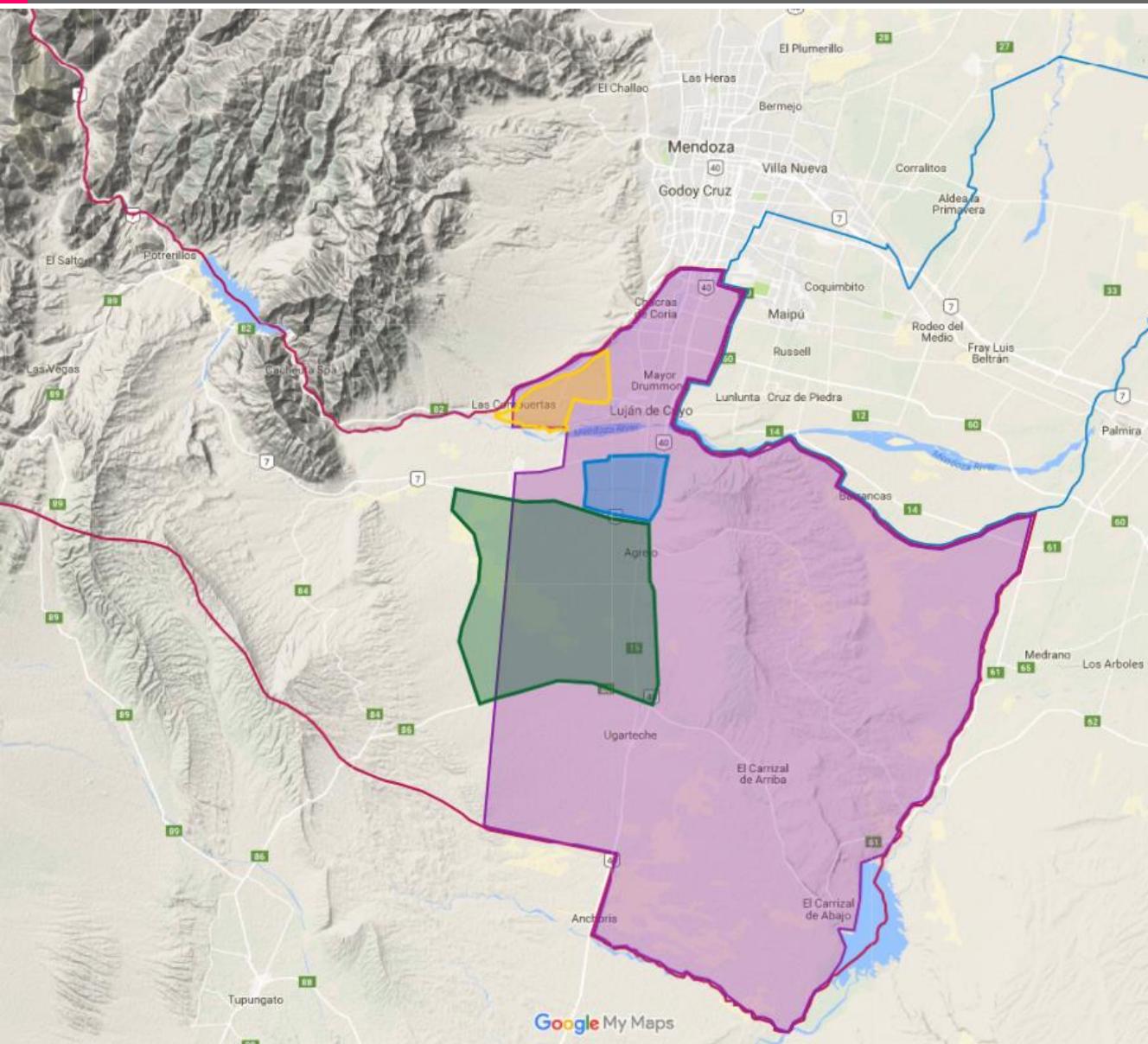
Located to the south of Mendoza City, on the pre-cordillera.

It is composed of 15 districts, some of them are GIs:

- Agrelo
- Las Compuertas

LUJÁN DE CUYO

Primera Zona



Mendoza Province

Maipú Department

Luján de Cuyo Department

Soils

D.O.C. Luján de Cuyo

D.O.C. Luján de Cuyo

Agrelo

Agrelo IG

Las Compuertas IG

Las Compuertas IG

Perdriel

Perdriel IG

Climate - Winkler zones

Altitude

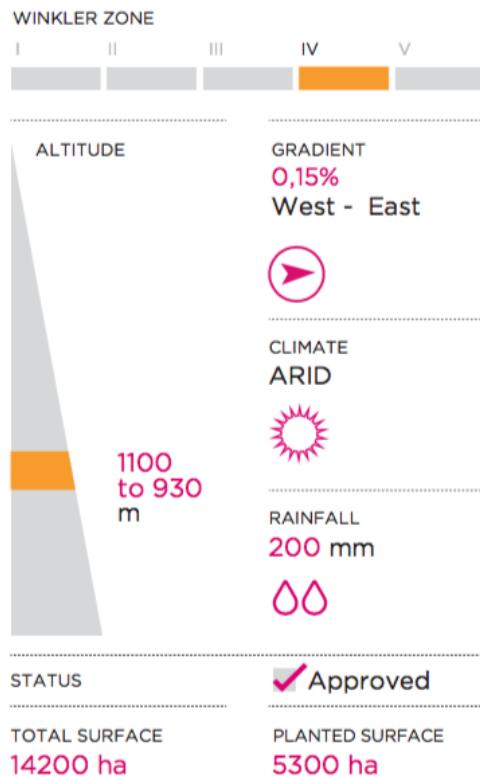
LUJÁN DE CUYO

GIs



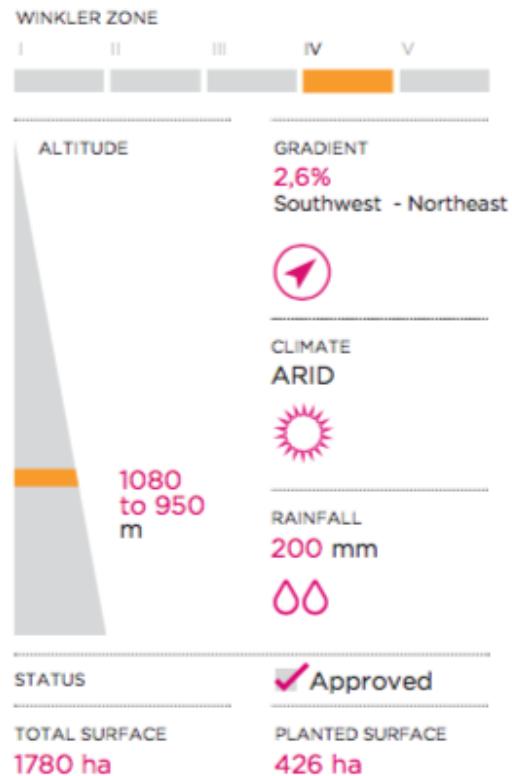
LUJÁN DE CUYO > AGRELO

AGRELO



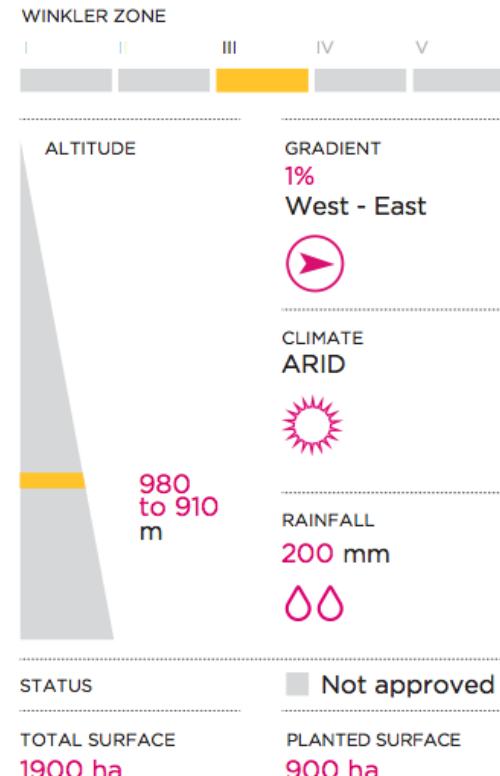
LUJÁN DE CUYO > LAS COMPUERTAS

LAS COMPUERTAS



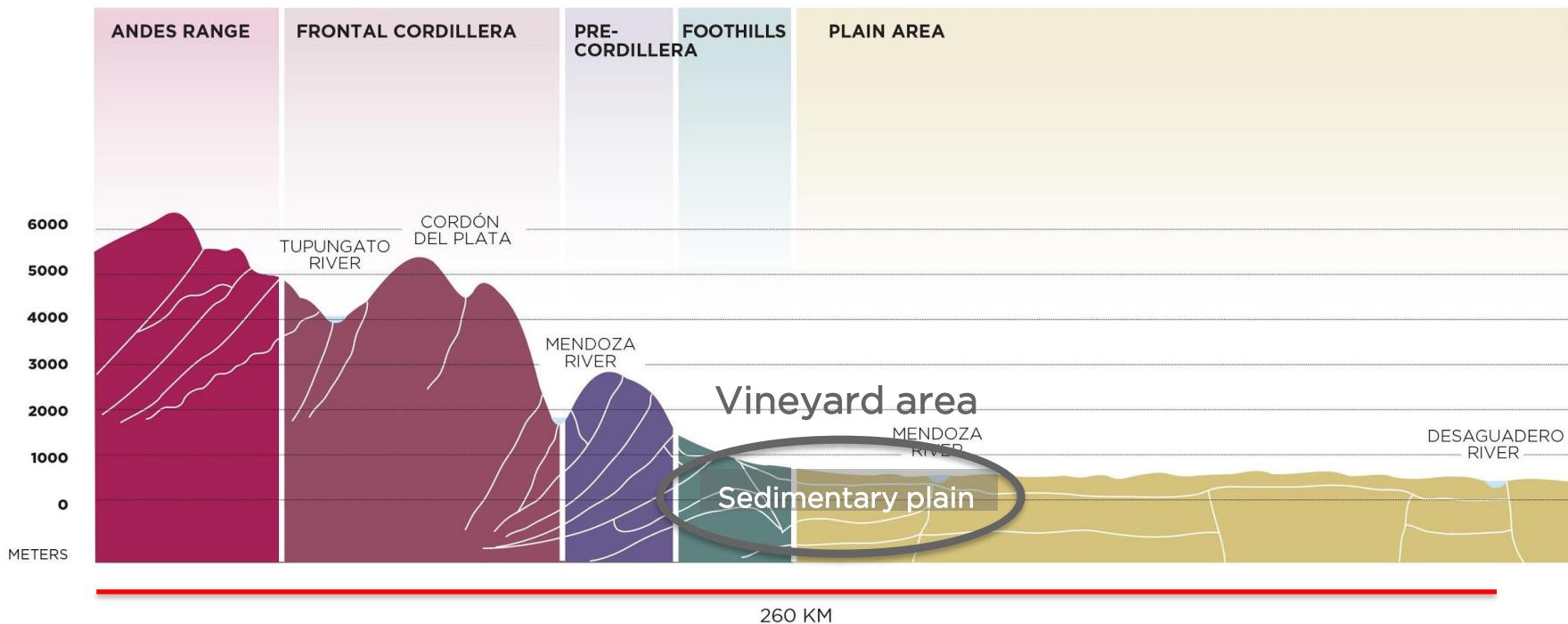
LUJÁN DE CUYO > PERDRIEL

PERDRIEL



TYPE OF SOIL

Las Compuertas | Luján de Cuyo





CULTIVATED SURFACE

(for vinification – INV 2019)

Ha: **11.242,6**

Ac: **27.781,59**

5,7%

of the country

MALBEC

Ha: **4.011**

Ac: **9.911,58**

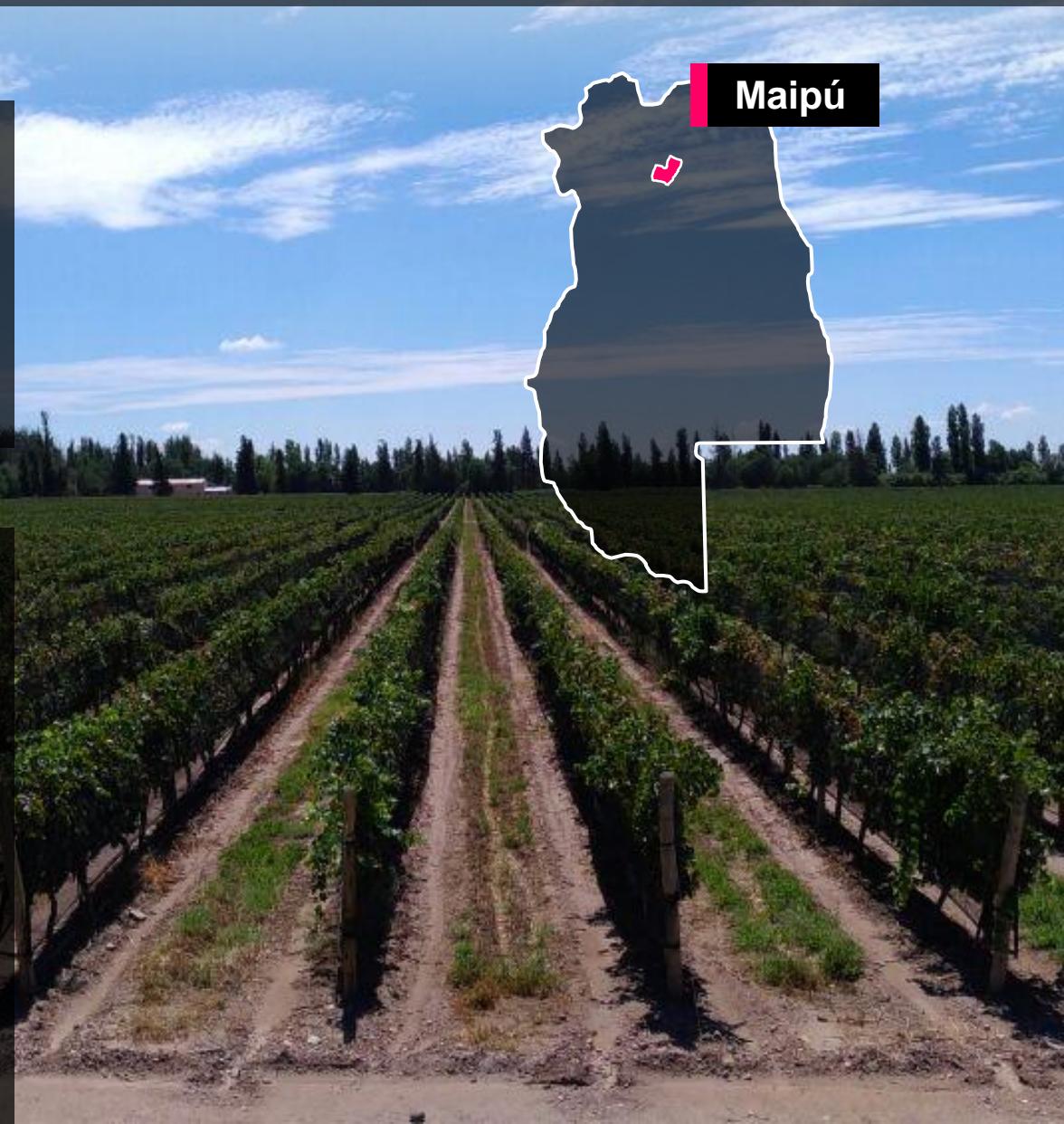
9,04%

of the country

| Located in Mendoza city's southeast boundary, between Luján de Cuyo and the eastern departments of Mendoza.

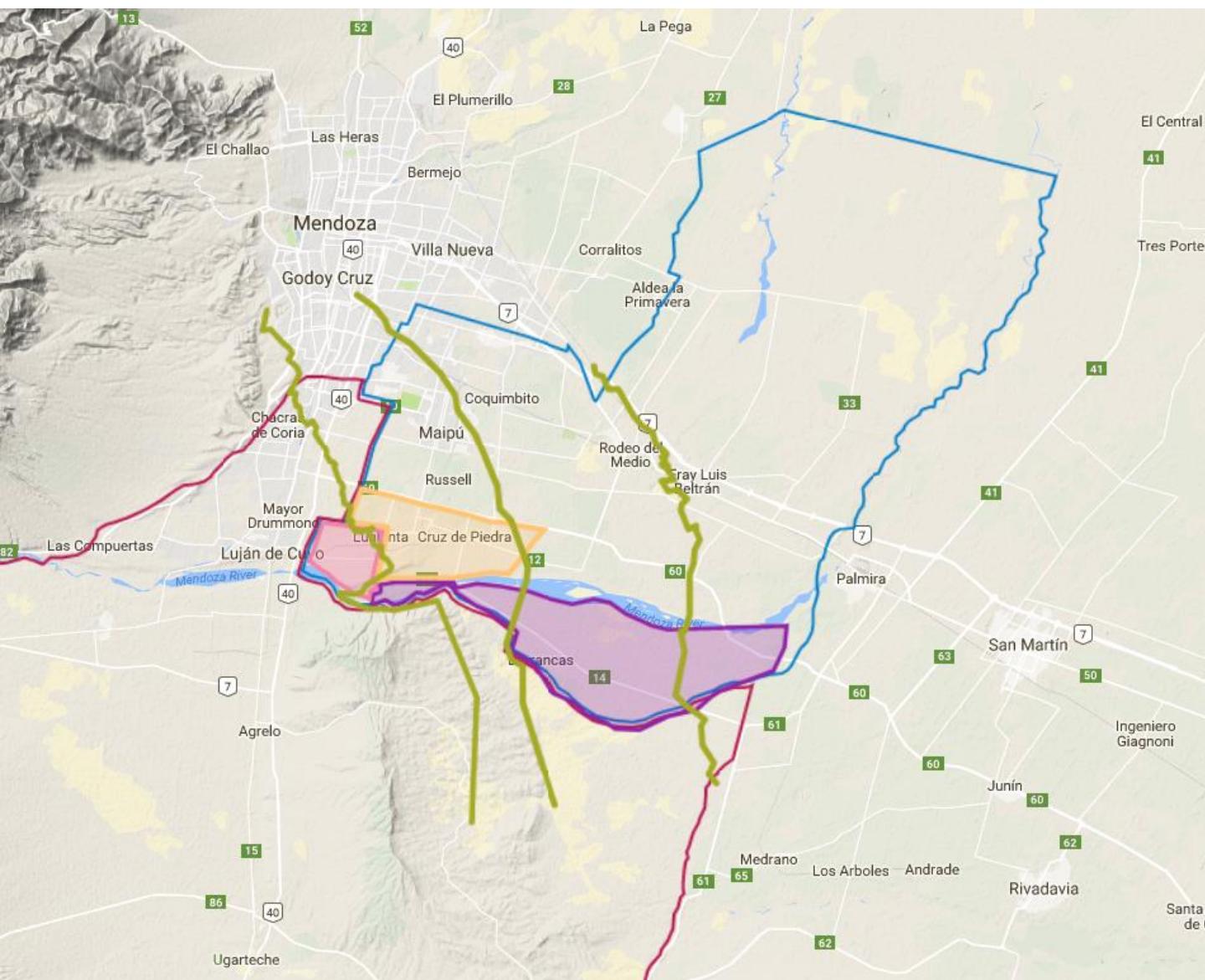
| It is composed of 12 districts, some of them are GIs:

- Barrancas
- Cruz de Piedra
- Lunlunta



MAIPÚ

Primera Zona



- Mendoza Province
- Maipú Department
- Lujan de Cuyo Department
-
- Barrancas GI
- Barrancas IG
-
- Lunlunta GI
- Lunlunta IG
-
- Cruz de Piedra GI
- Cruz de Piedra IG
-
- Climate: Winkler zones
-
- Wineries
-
- Contours
 - 700 m
 - 800 m
 - 900 m

MAIPÚ > LAS BARRANCAS

LAS BARRANCAS

WINKLER ZONE



ALTITUDE

GRADIENT

1%

Northwest - Southeast



CLIMATE

ARID



840
to 680
m

RAINFALL
200 mm



STATUS

Approved

TOTAL SURFACE
7000 ha

PLANTED SURFACE
2923 ha

MAIPÚ > LUNLUNTA

LUNLUNTA

WINKLER ZONE



ALTITUDE

GRADIENT

1,6 %

Southwest - Northeast



CLIMATE

ARID



930
to 880
m

RAINFALL
200 mm

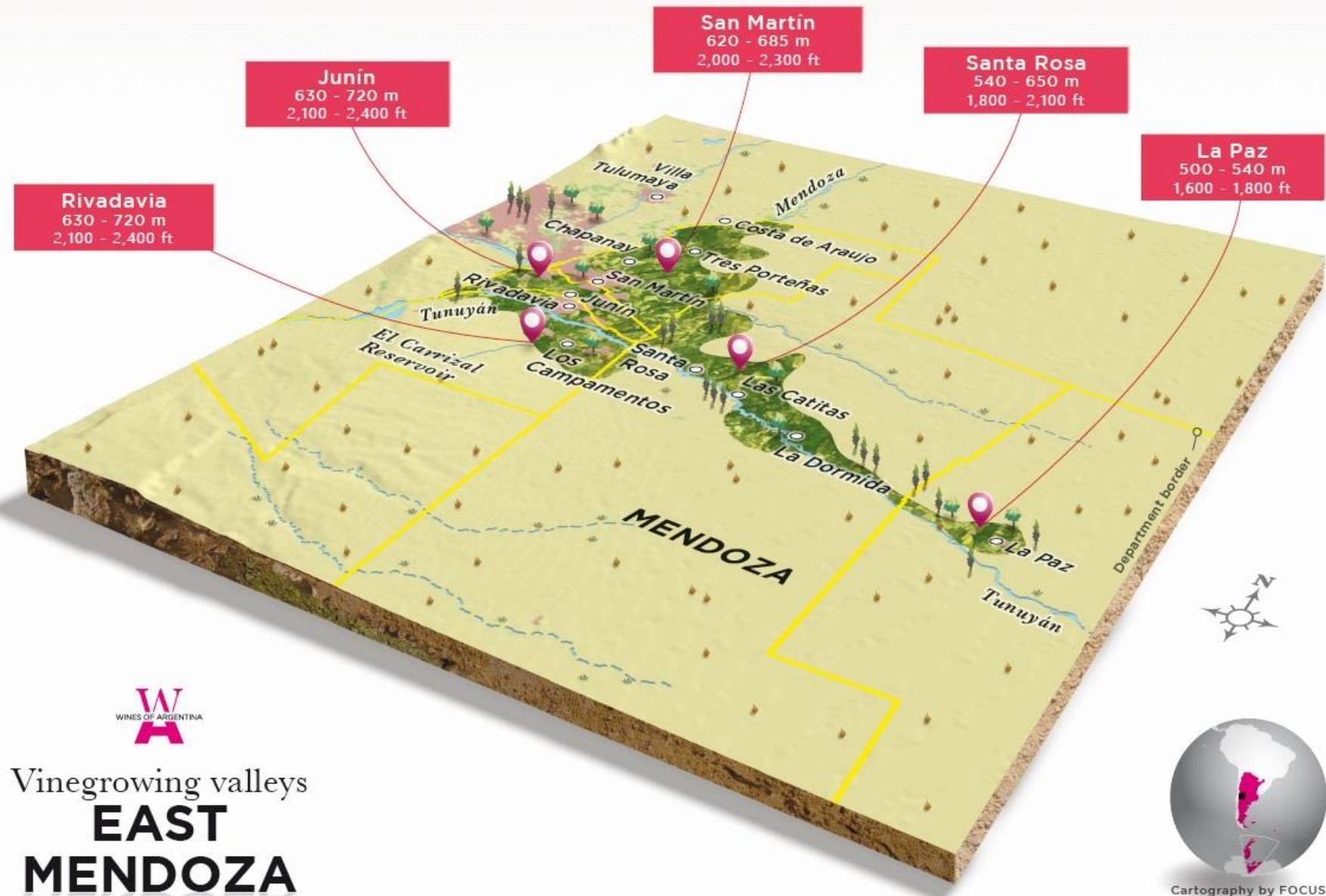


STATUS

Approved

TOTAL SURFACE
1600 ha

PLANTED SURFACE
600 ha





Vinegrowing valleys
**SOUTH
MENDOZA**



Cartography by FOCUS



MENDOZA
UCO VALLEY

W
WINES OF ARGENTINA
A

Tunuyán
870 - 1330 m
2,900 - 4,400 ft

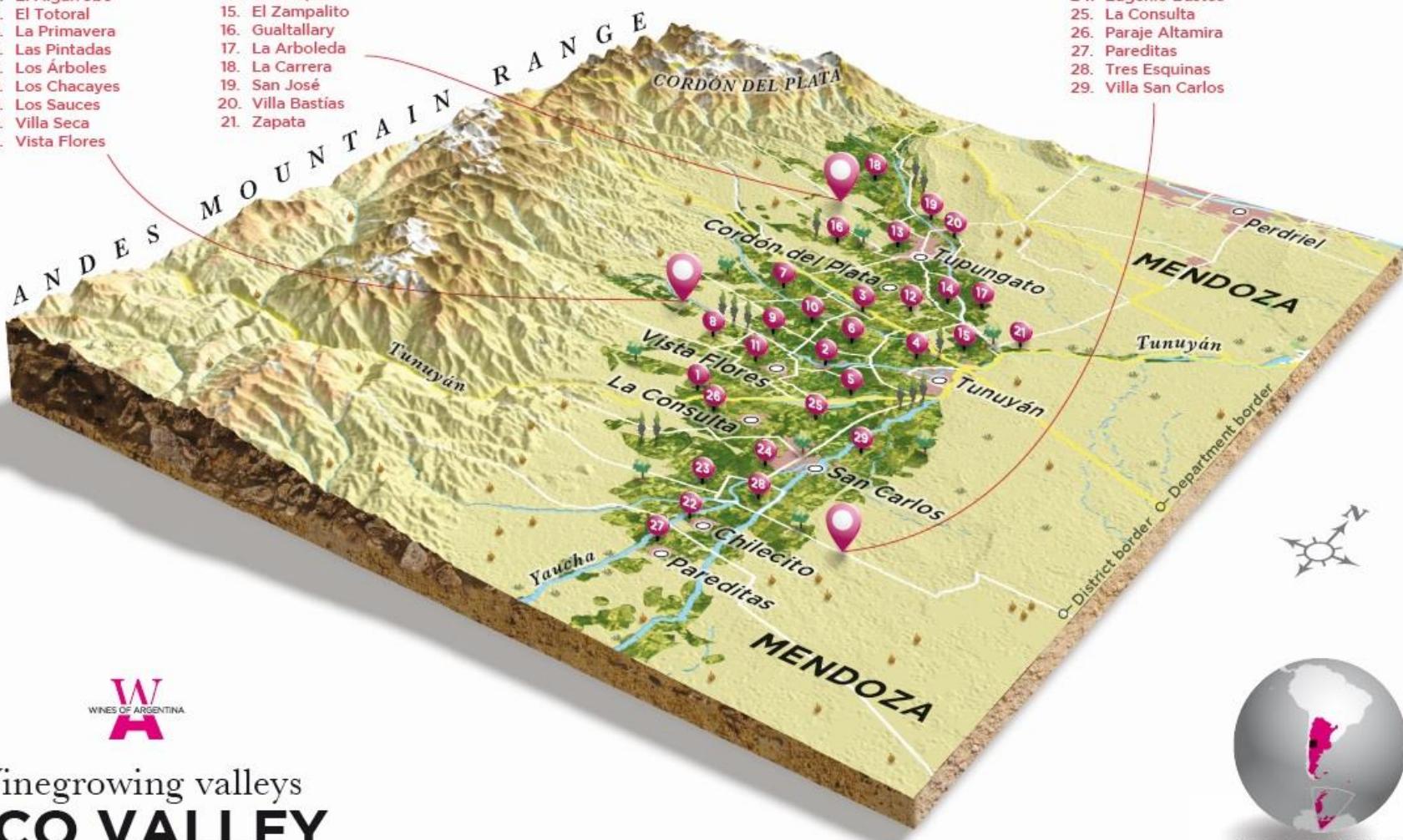
1. Campo de los Andes
2. Colonia Las Rosas
3. El Algarrobo
4. El Totoral
5. La Primavera
6. Las Pintadas
7. Los Árboles
8. Los Chacayes
9. Los Sauces
10. Villa Seca
11. Vista Flores

Tupungato
860 - 1610 m
2,800 - 5,282 ft

12. Cordón del Plata
13. El Peral
14. El Zampal
15. El Zampalito
16. Gualtallary
17. La Arboleda
18. La Carrera
19. San José
20. Villa Bastías
21. Zapata

San Carlos
910 - 1250 m
3,000 - 4,100 ft

22. Chilecito
23. El Cepillo
24. Eugenio Bustos
25. La Consulta
26. Paraje Altamira
27. Pareditas
28. Tres Esquinas
29. Villa San Carlos

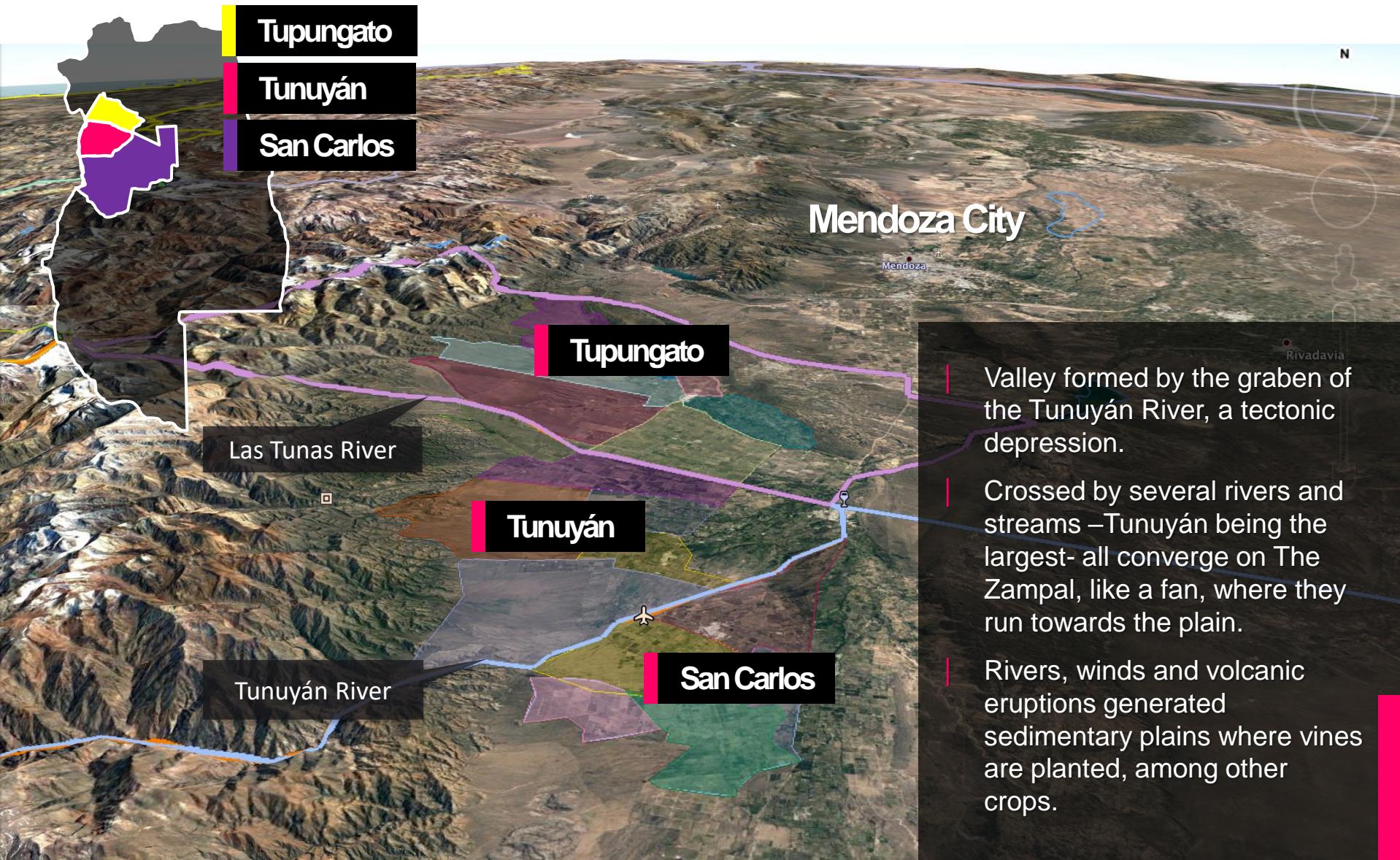


Vinegrowing valleys
UCO VALLEY



UCO VALLEY

Location



UCO VALLEY

Today's figures



CULTIVATED SURFACE

for vinification (INV - 2019)*

Ha: **28.624,6**

Ac: **70.734,25**

| 87,6% Red varieties



14,4% of the country

19,2% of the province

| 61% Malbec

| New plantations raised the need to characterise the terroir of the Uco Valley.

MALBEC (Uco Valley)

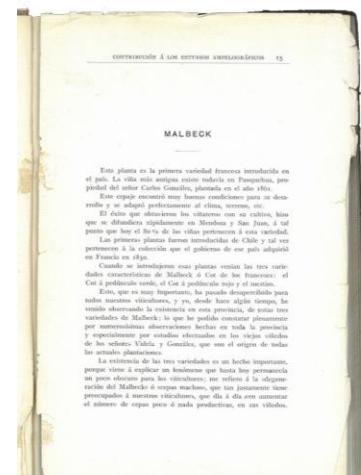
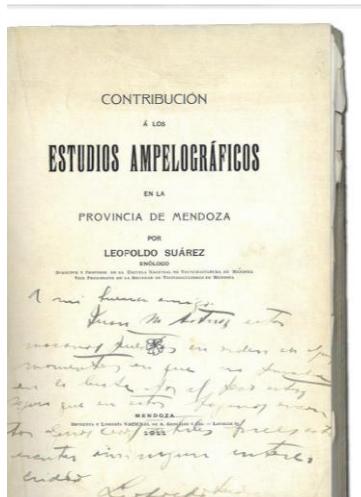
| **40,5%** of the province

UCO VALLEY

Brief History

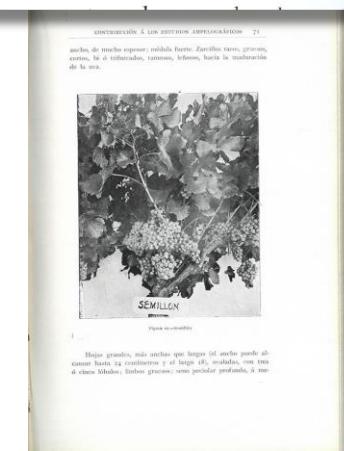
The logo for Wines of Argentina, featuring a stylized lowercase 'w' above the words 'WINES OF ARGENTINA' and a large, bold uppercase 'A' below it.

- | 16th Century, Jesuits missionaries were the first colonizers that planted vines.
 - | During the twentieth century Uco Valley specialized in the cultivation of fruit and vegetables, with some key places for vines: La Consulta, Eugenio Bustos, Vista Flores
 - | A book of 1922, written by oenologist Leopoldo Suárez, reported 16 wineries in San Carlos Department.
 - | Also a book of the same author, reported in 1911 the potential of calcareous soils for Semillon and other grapes, like Malbec.



70 CONTRIBUCIÓN Á LOS ESTUDIOS AMPELOGRÁFICOS

ideal es la mixta), su producción es constante, se adapta muy bien á los terrenos pedregosos, especialmente calcáreos, donde su mosto adquiere excelentes cualidades.



Planted in 1900. For the very first part of 20th Century it was considered a qualitative place.

As it was never a political district, it was a renowned place without clear boundaries.

Therefore, the name of Altamira was commonly used to point out an imprecise place in San Carlos.

Its name derives from the panoramic view it offers from the highest point.



UCO VALLEY | SAN CARLOS

PARAJE ALTAMIRA GI



Located in San Carlos, on the alluvial cone of the Tunuyán River. It is not a political district.

Since 2000, it has experienced a marked growth in cultivated area.

The red grapes are renowned for their colour and acidity.

TERROIR

Paraje Altamira GI



SAN CARLOS > LA CONSULTA

PARAJE ALTAMIRA

WINKLER ZONE



ALTITUDE

GRADIENT

1%

West - Southeast



CLIMATE

ARID



1200
to 1000
m

RAINFALL
280 mm



STATUS

Approved

TOTAL SURFACE

9300 ha

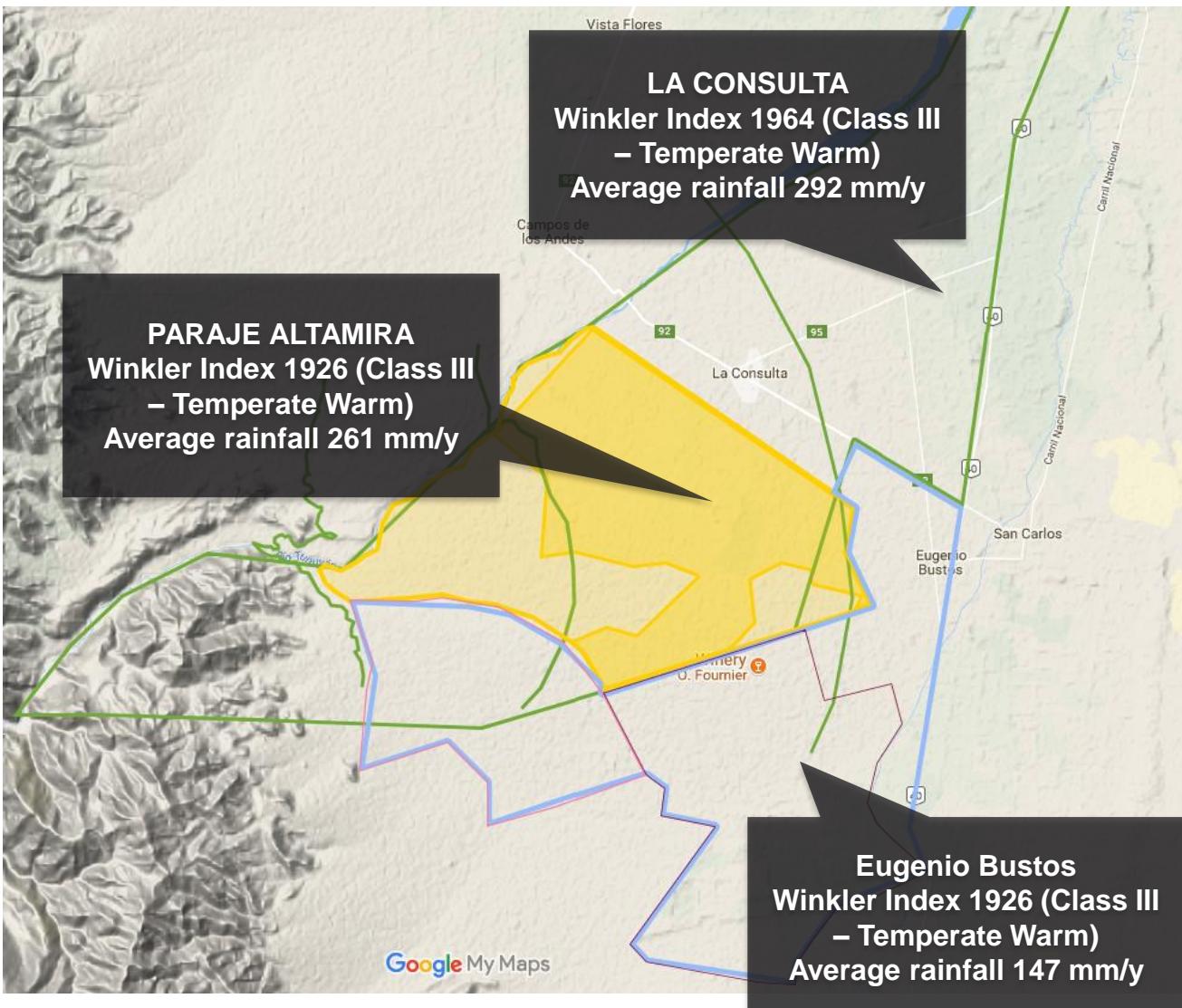
PLANTED SURFACE

2785 ha



CLIMATE

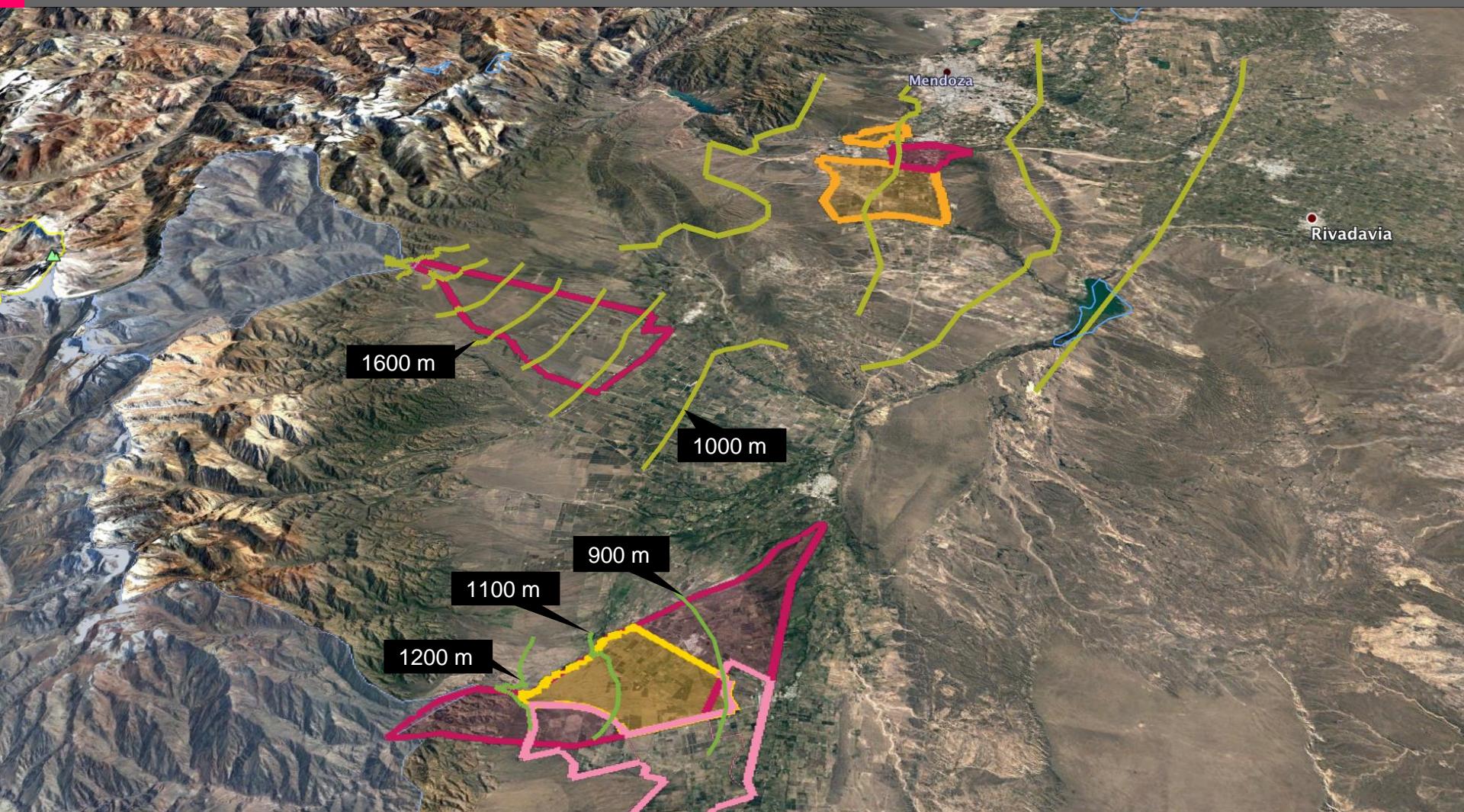
Paraje Altamira GI



- Climatic Zone
 - ★ Paraje Altamira Winkler III
- Tunuyan river's basin
- Contours
 - 1000 m
 - 1100 m
 - 1200 m
- La Consulta
 - ★ La Consulta GI
- Paraje Altamira GI
 - ★ Paraje Altamira GI
- Eugenio Bustos GI
 - ★ Eugenio Bustos
 - Los Indios
 - El Cepillo

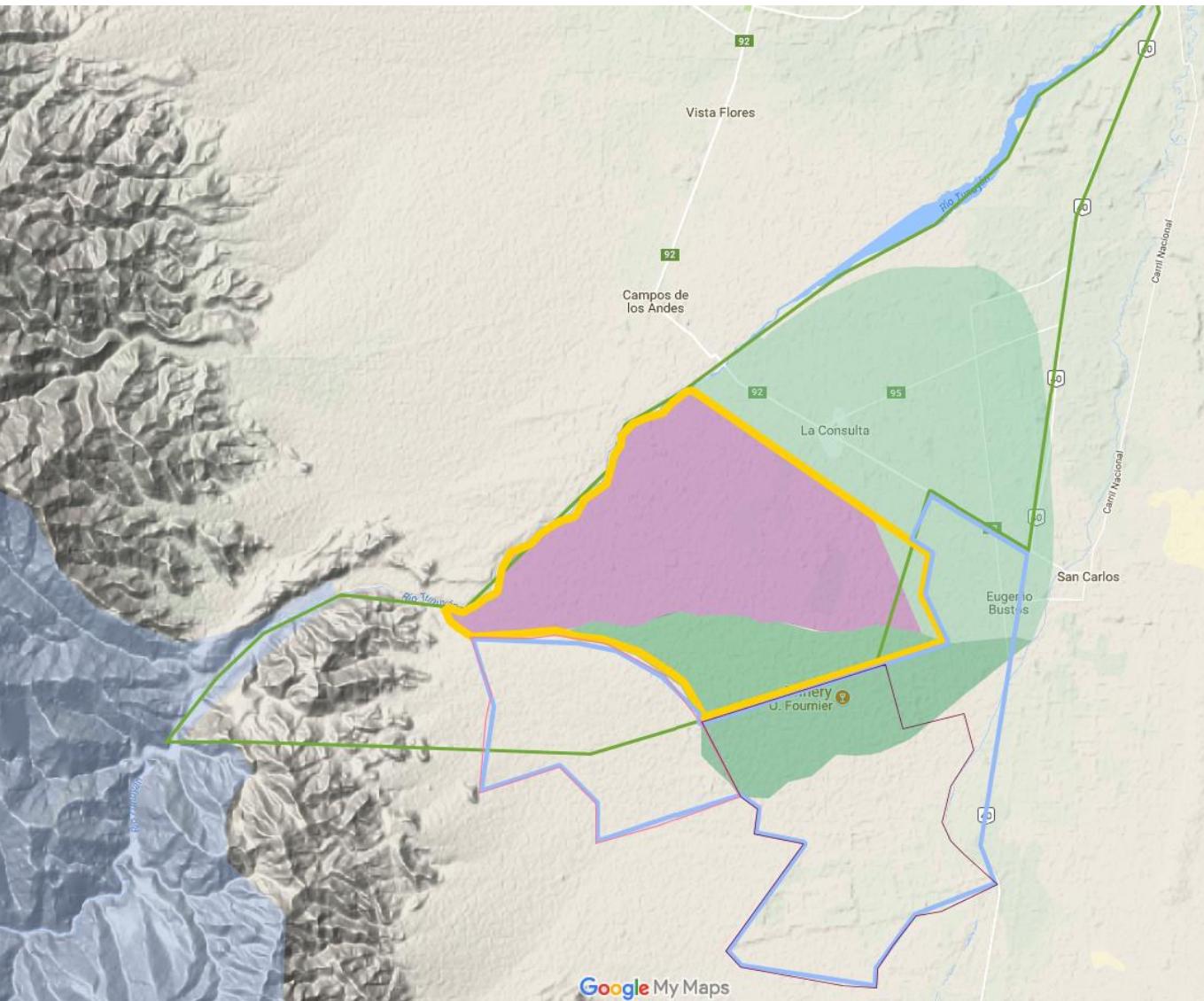
ALTITUDE & TEMPERATURE

Paraje Altamira GI



SOILS

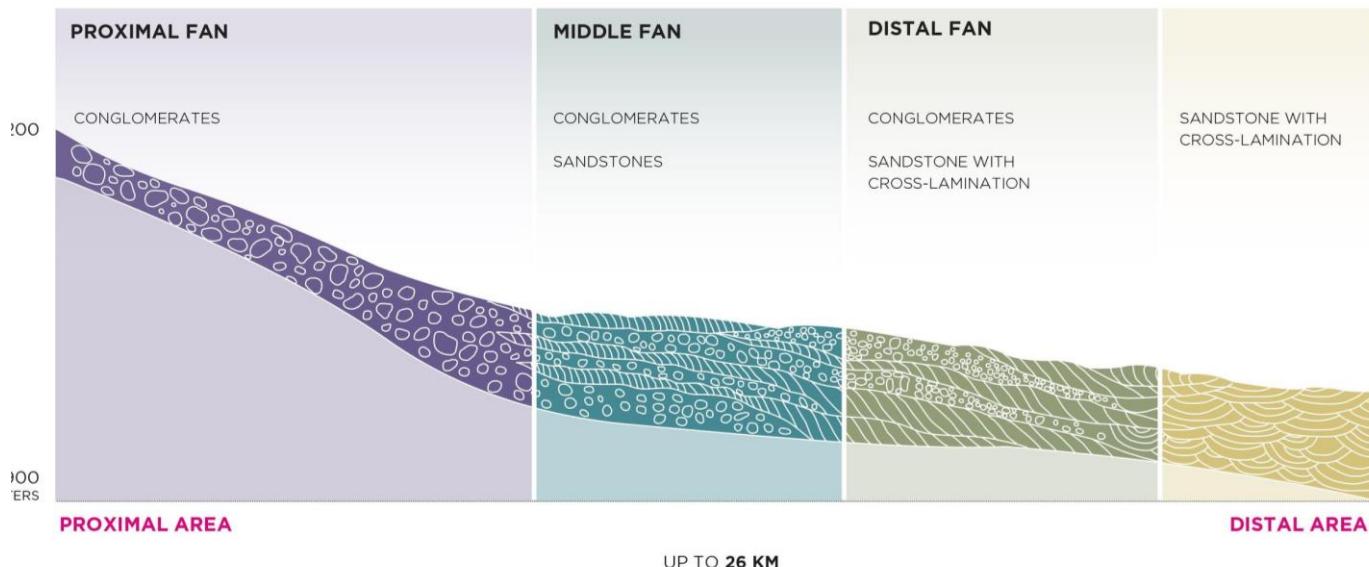
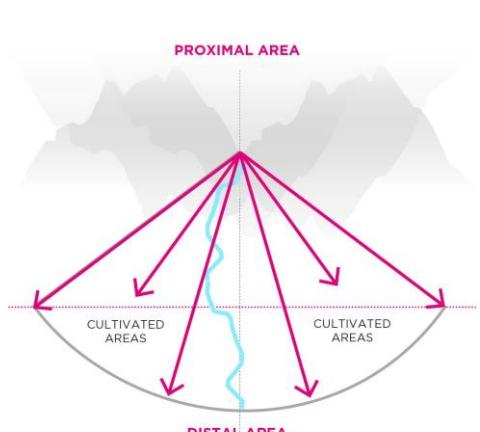
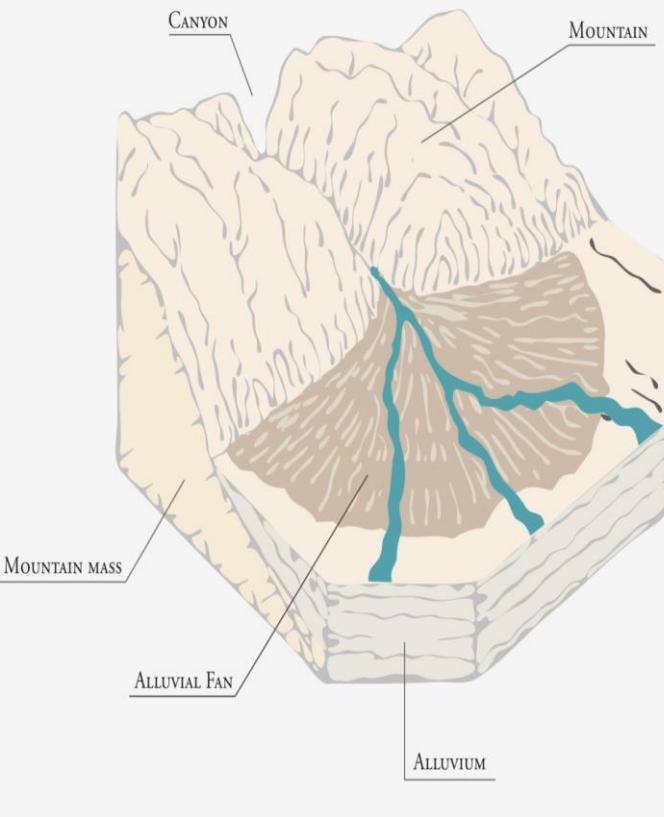
Paraje Altamira GI



SOILS

Paraje Altamira GI

- | **2009:** The need to separate it from La Consulta by soil type.
- | The **alluvial cone** of Tunuyán River was the physical factor for the delimitation.
- | **Paraje Altamira GI** was approved in 2013, then expanded in 2016.



SOILS

Paraje Altamira GI



SAN CARLOS > LA CONSULTA

PARAJE ALTAMIRA

LANDSCAPE MORPHOLOGY
Alluvial cone of the River Tunuyán

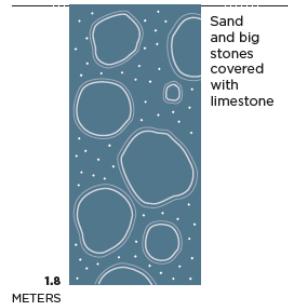
SOIL TYPE

Alluvial and heterogeneous: sandy with big stones (up to 2m) to sandy with smaller rounded stones, rich in limestone deposits; variable depth.

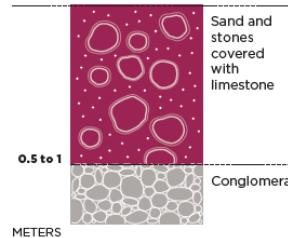
VARIETIES

Malbec
Cabernet Franc
Cabernet Sauvignon
Chardonnay

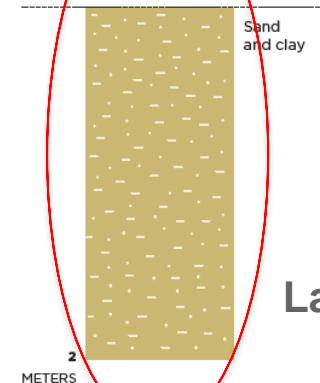
ALLUVIAL SOIL



ALLUVIAL SOIL

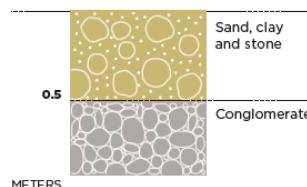


ALLUVIAL SOIL

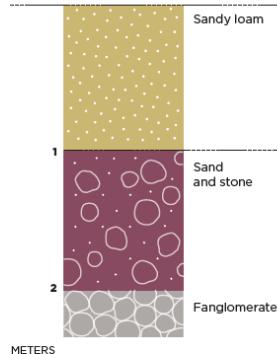


La Consulta

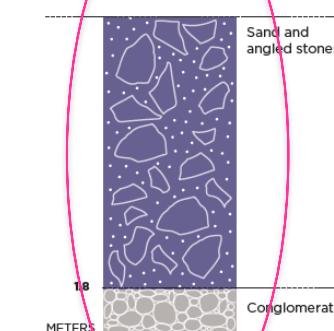
ALLUVIAL SOIL



ALLUVIAL SOIL

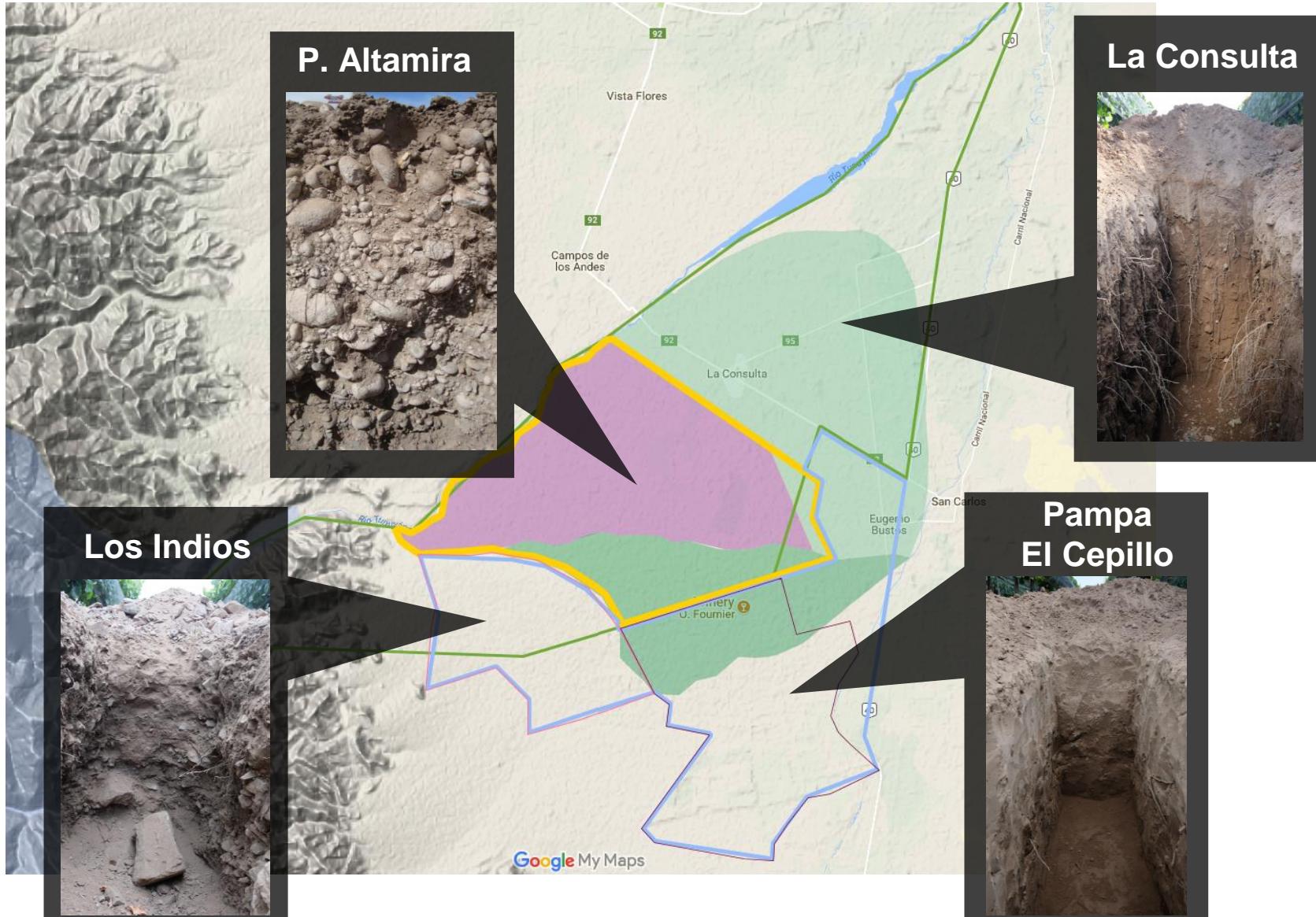


COLLUVIAL

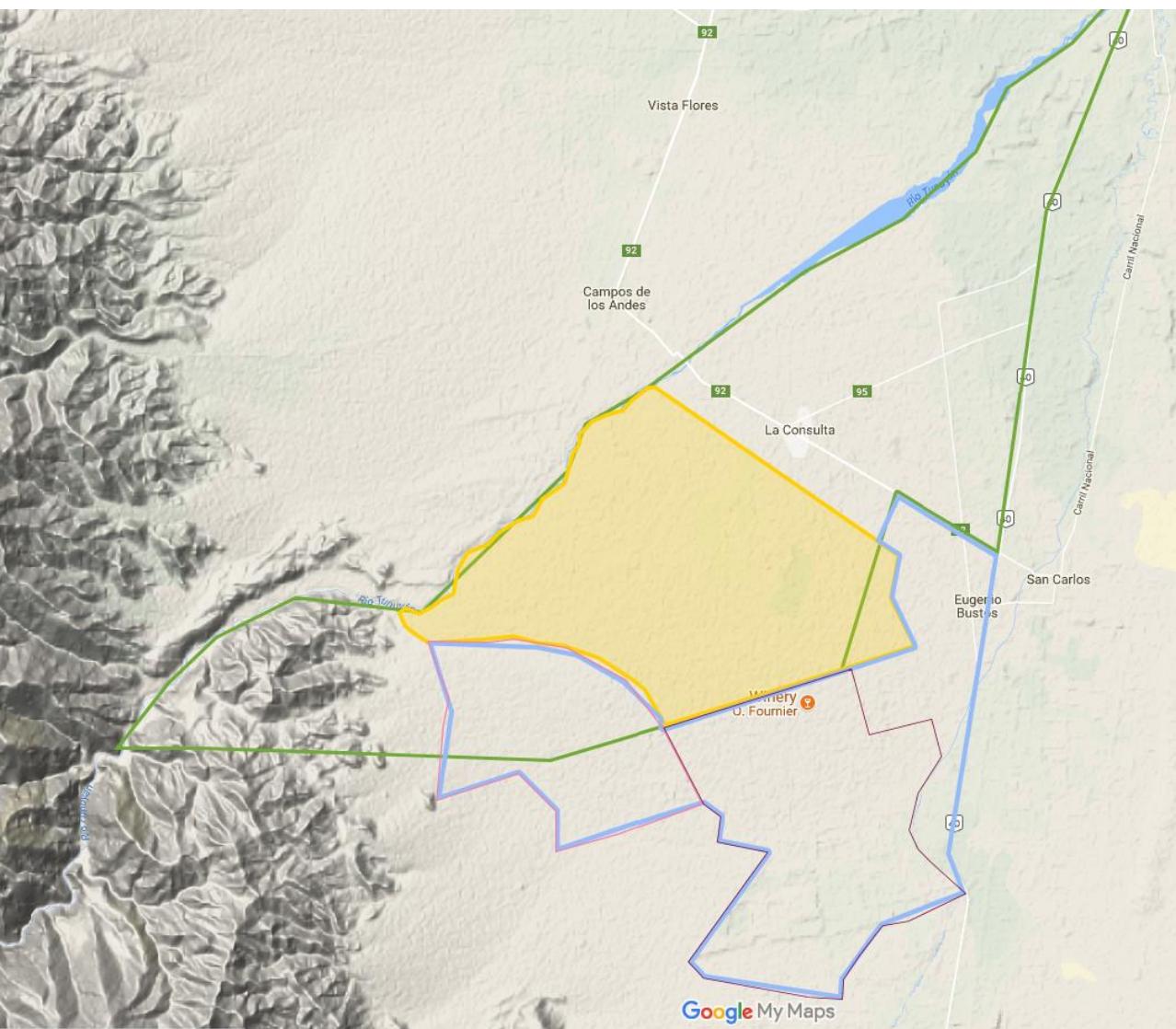


Los Indios

SOIL PROFILE Comparison



PARAJE ALTAMIRA GI



- Soils - Alluvial Fan Río Tunuyán
- Climatic Zone
- Tunuyan river's basin
- Contours
- La Consulta
 - La Consulta GI
- Paraje Altamira GI
 - Paraje Altamira GI
- Eugenio Bustos GI
 - Eugenio Bustos
 - Los Indios
 - El Cepillo

SOILS

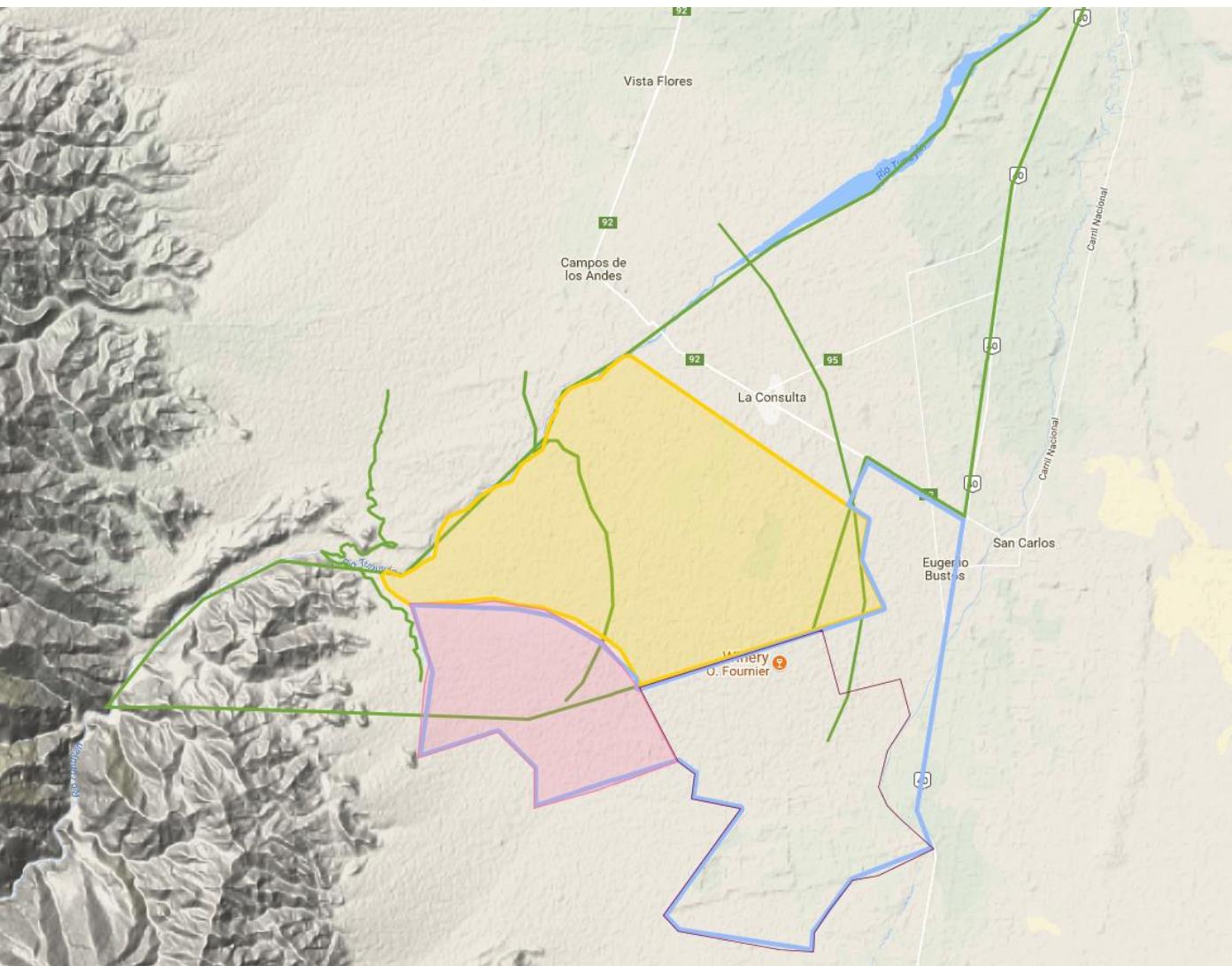
Paraje Altamira GI

W
WINES OF ARGENTINA
H



SAN CARLOS | LOS INDIOS

Eugenio Bustos GI



Contours

- 1000 m
- 1100 m
- 1200 m

La Consulta

- La Consulta GI

Paraje Altamira GI

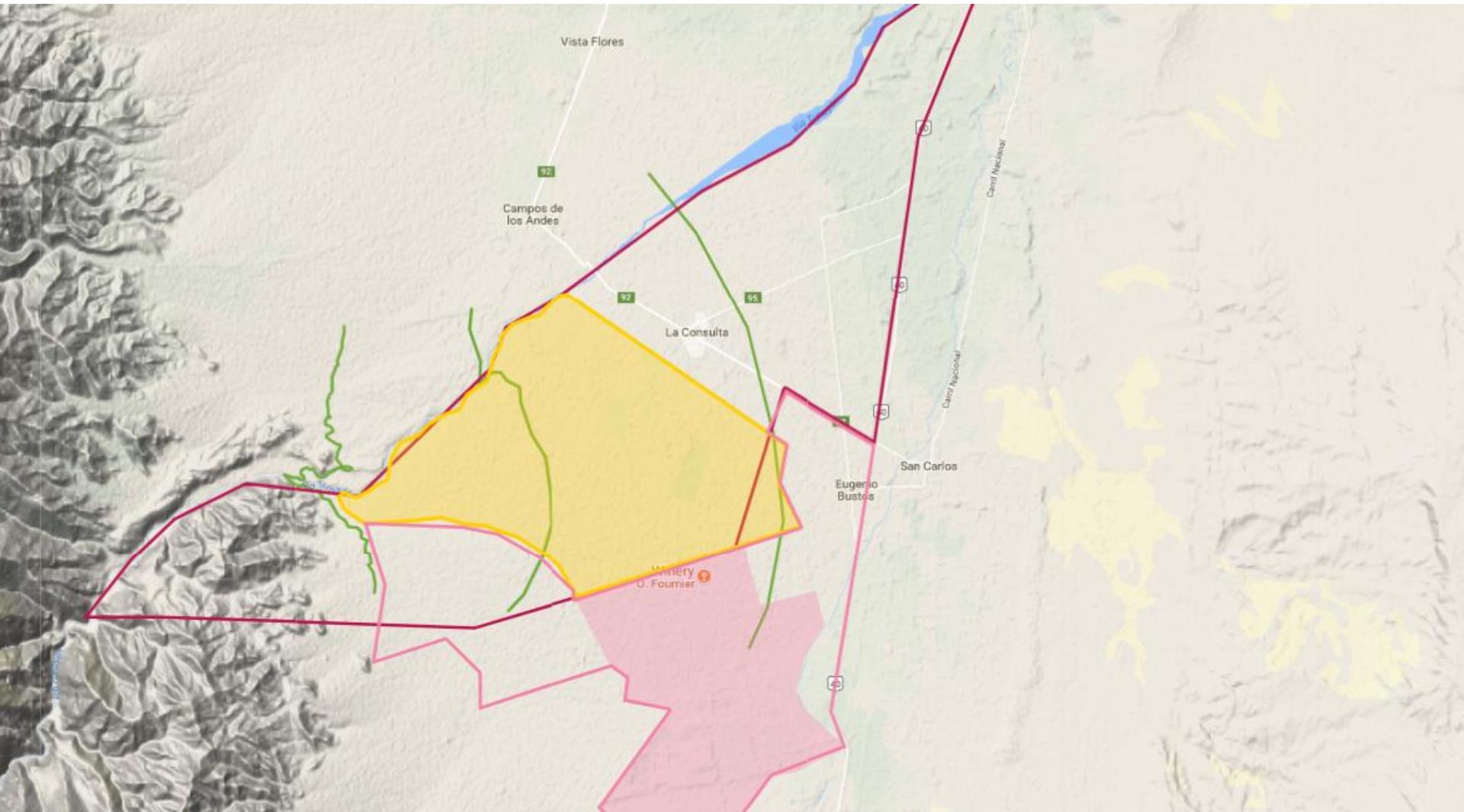
- Paraje Altamira GI

Eugenio Bustos GI

- Eugenio Bustos
- Los Indios
- El Cepillo

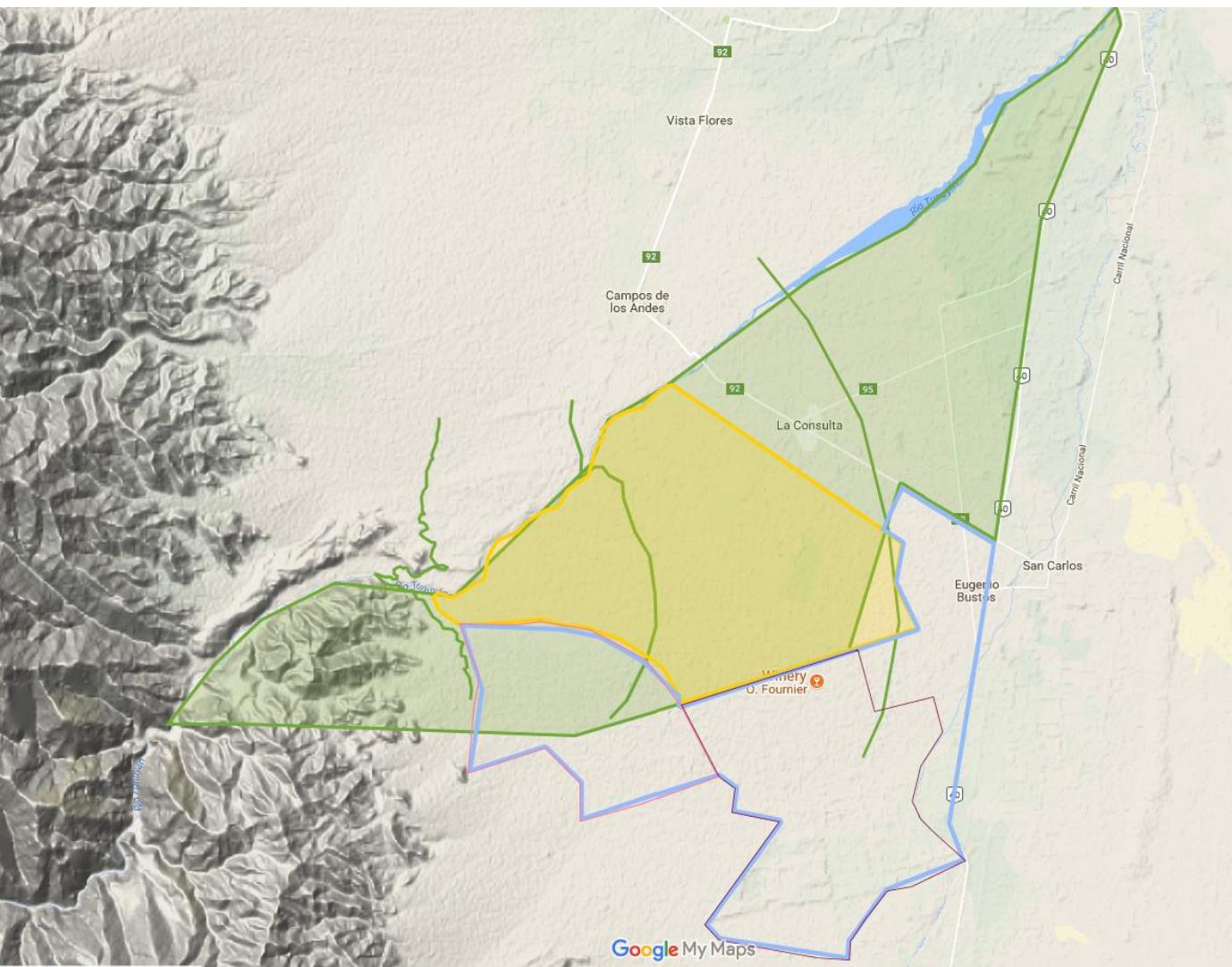
SAN CARLOS | PAMPA EL CEPILLO

Eugenio Bustos GI



SAN CARLOS

La Consulta GI



Contours

1000 m

1100 m

1200 m



La Consulta

La Consulta GI



Paraje Altamira GI

Paraje Altamira GI

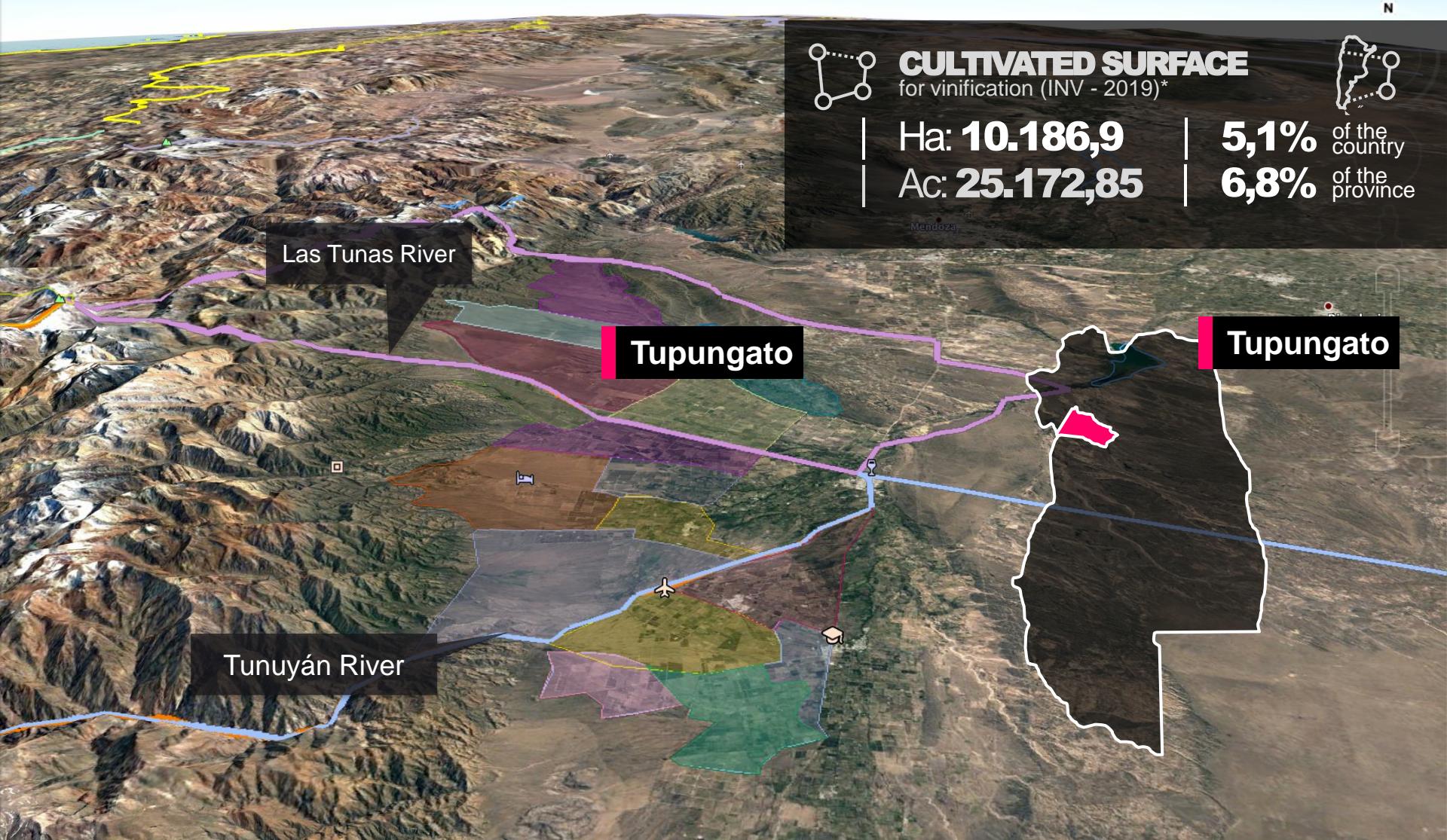


Eugenio Bustos GI

Eugenio Bustos

Los Indios

El Cepillo



TUPUNGATO

Brief History



- | It's been part of a Jesuit *encomienda* since 17th Century.
- | The valley has been farmed with orchards, vineyards and horticultural crops since the beginning of 20th Century.
- | Flood irrigation was common until mid 90's. Since then, drip irrigation has become more popular mainly on slopes and difficult topographies.
- | The personality and uniqueness of the wines has attracted the attention of wine critics and consumers worldwide.
- | **Tupungato is the only approved GI.** Gualtallary is a GI in process of approval.
- | Main grape variety: Malbec. Chardonnay, Cabernet Sauvignon, Pinot Noir & Cabernet Franc are also very important grapes in the GI based on the quality of the wines made out of these varietals



UCO VALLEY | TUPUNGATO
GUALTALLARY
Location



| Gualtallary boundaries:

- **West:** The Andes range, the border with Chile;
- **East:** Route 89
- **North:** El Peral district
- **South:** Las Tunas River



- | Gualtallary has already been requested as a GI by grape growers & a winery consortium.
- | There are over 20,000 ha of agricultural land. Only 2,200 ha are planted to date.
- | There is limited access to water trough wells or surface water rights from Las Tunas dam.
- | Gualtallary is one of the most exciting wine regions of South America due to the combination of its most diverse climates and soils.

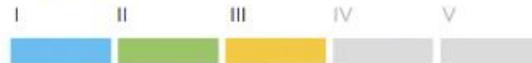


TERROIR

Gualtallary



ZONA WINKLER



ALTURA

2100
a 1080
msnm

PENDIENTE

3,1%

Oeste - Este



CLIMA
DESÉRTICO



PRECIPITACIONES
280-480 mm



STATUS

... En aprobación

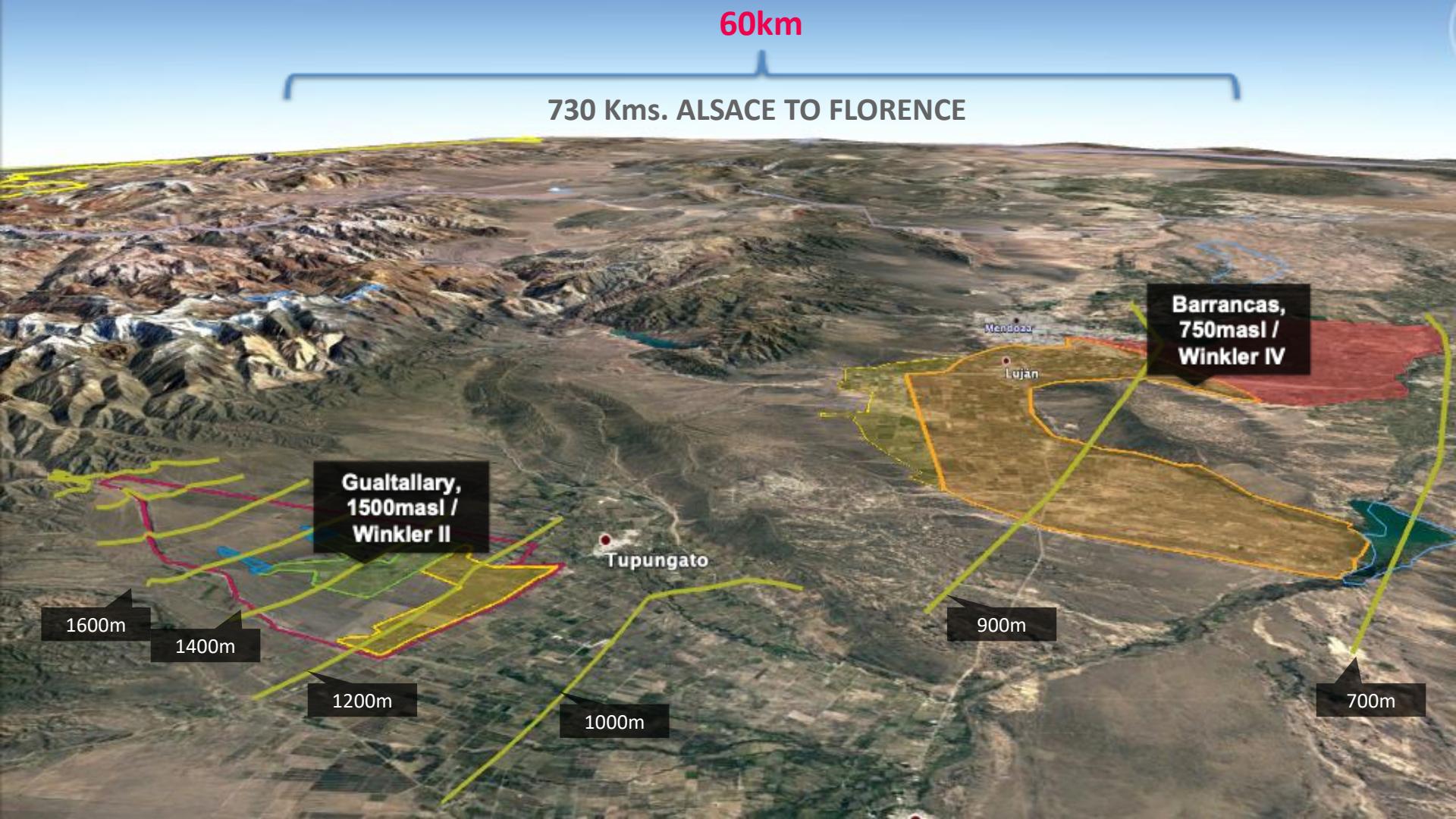
SUPERFICIE TOTAL
21000 ha

SUPERFICIE PLANTADA
2249 ha



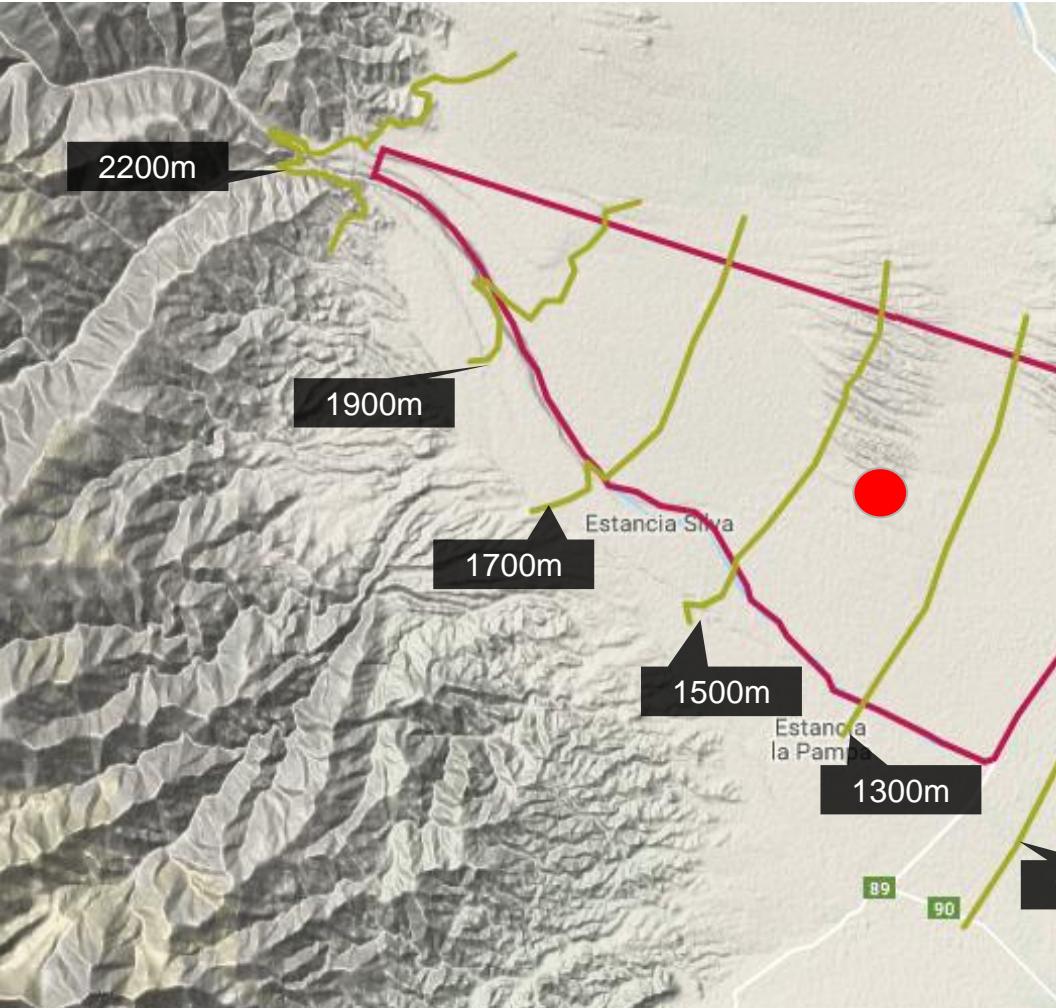
ALTITUDE & CLIMATE

Gualtallary

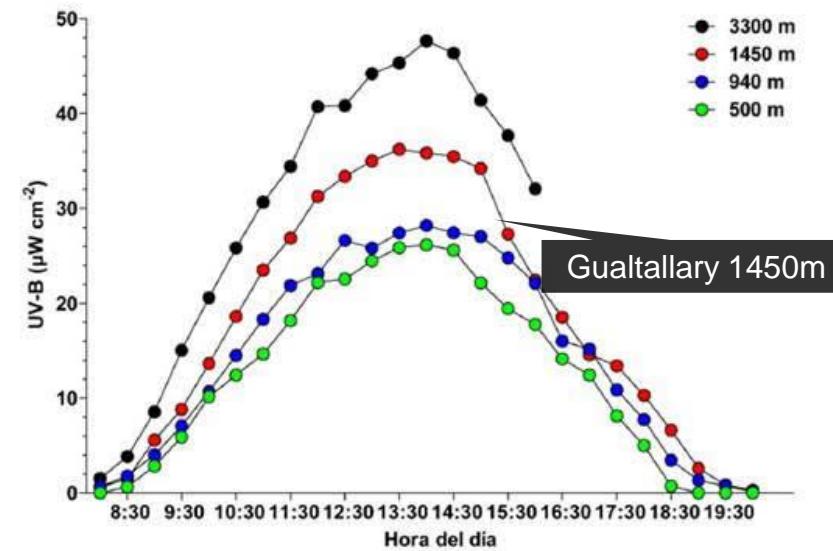


TERROIR

Gualtallary



UV RADIATION ACCORDING TO ALTITUDE



ALTITUDE & CLIMATE

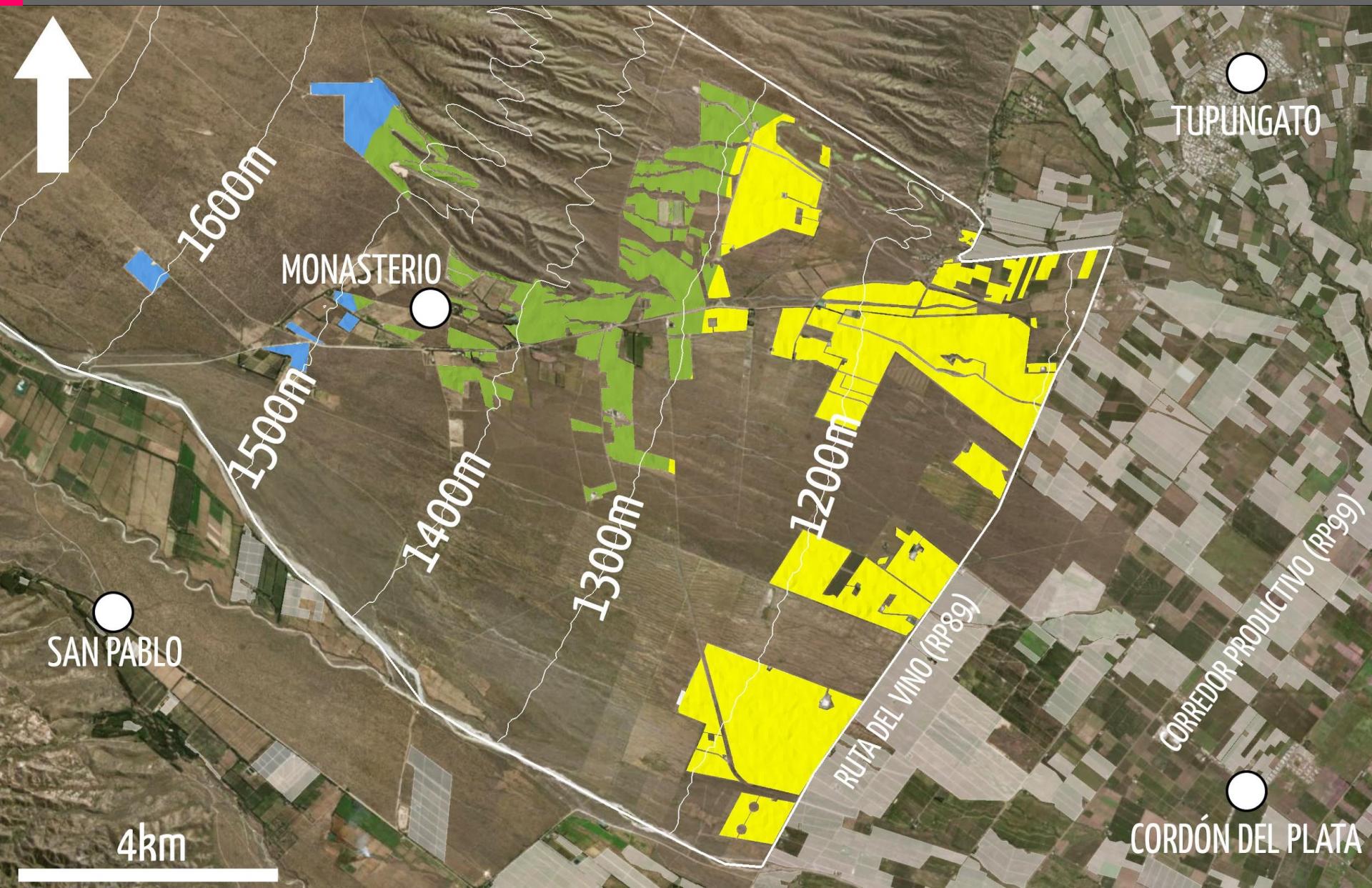
Gualtallary



- | The GI goes from 1.080 mts (3.500 ft) to 2.200 mts (7.200 ft) east-west.
- | There is a difference of 6°C from the base to the top of the GI, as the average temperature drops 1°C every 150 meters.
- | Applying Winkler (degree-days or heat summation from budbreak until harvest), the result is:
 - **Winkler I** from (+/-) 1500 meters (5000 feet) onwards.
 - **Winkler II** in a range that goes (+/-) 1300(4200 feet) to 1500 meters (5000 feet)
 - **Winkler III** in a range that goes (+/-) 1080 (3500 feet) to 1300 meters (4200 feet)

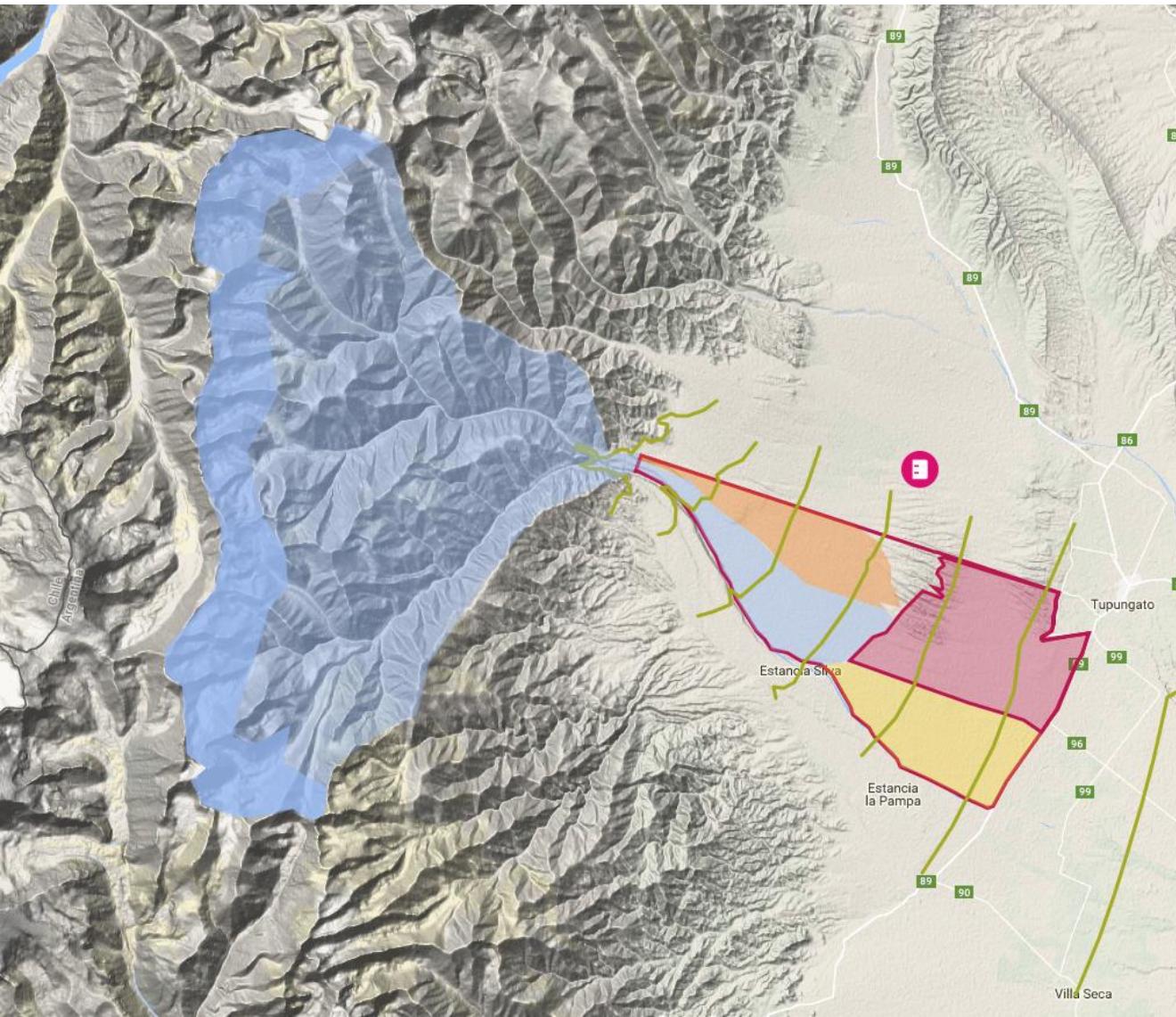
TERROIR

Gualtallary



SOILS

Gualtallary



- Gualtallary GI**
 - Superficie Total Gualtallary
 - Gualtallary IG Technical data
- Climatic Zone**
- Different soil types**
 - 1st Alluvial Terrace from Las Tunas River
 - 2nd Alluvial Terrace from Las Tunas River
 - 3rd Alluvial Terrace from Las Tunas River
 - Huayquerias
- Wineries**
- Contours**
 - All items
- Tuna's river basin**
 - La Tunas River Basin
 - Glacier area
 - Glacier area

| ALLUVIAL DEPOSITS FROM LAS TUNAS RIVER

The alluvial cone of the river delimits **three terraces**; 2 and 3 are plantation areas. They have similar compositions, pebbles, sand (75/80%), silt (15/20%) and clay (2/5%).

| COLLUVIAL DEPOSITS FROM THE FRONTAL MOUNTAIN RANGE

They occupy small areas around the mountain range. They are not relevant nowadays from the point of view of new plantings...

| WIND BLOWN DEPOSITS

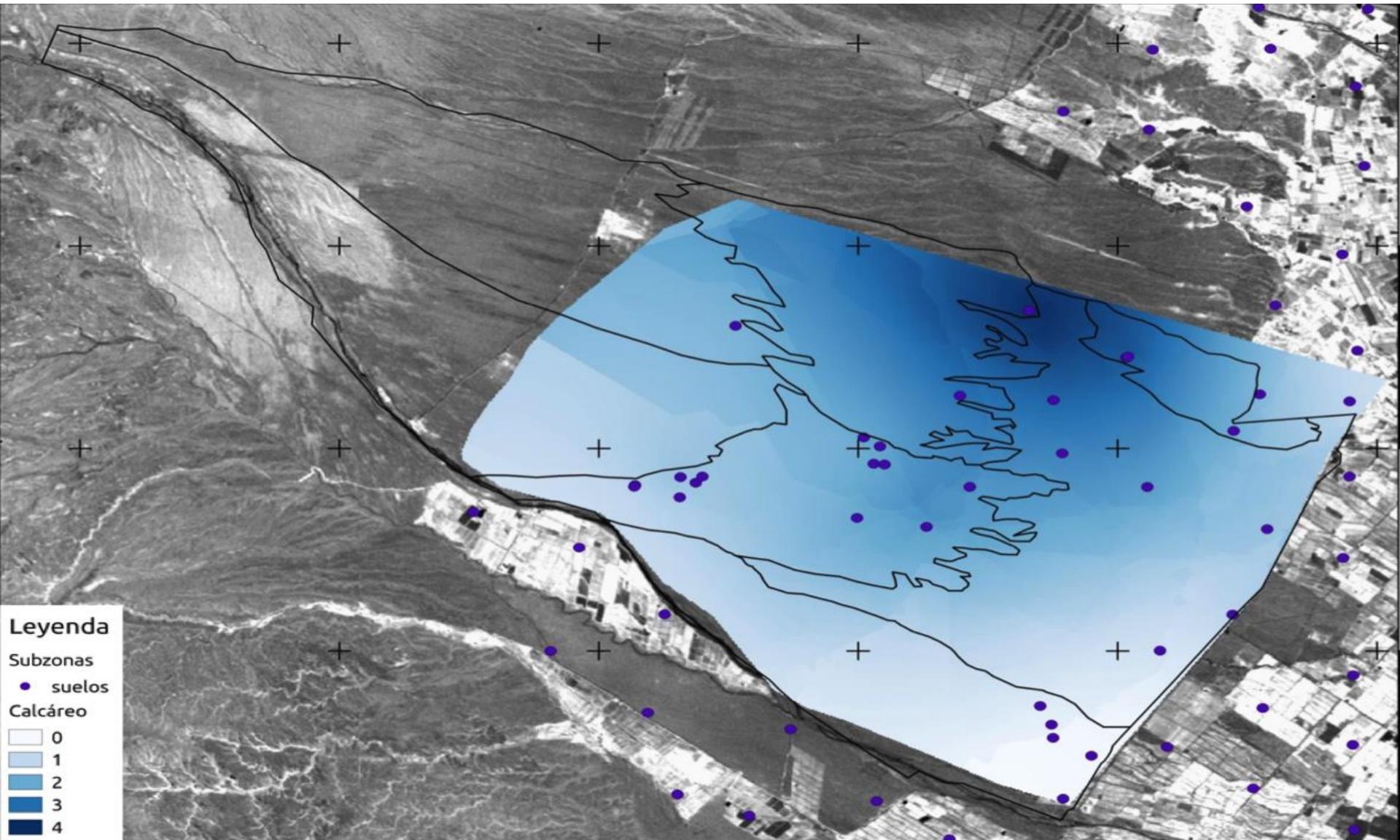
They form an extensive area in the heart of the GI, between Las Huayquerías and Las Tunas stream. Formed by loess with variable depth.

| SUPERFICIAL BEDROCK

Extremely rare plantings over calcium carbonate coated stones & stone encrusted calcareous mother rock.

SOILS | The CO₃Ca Index

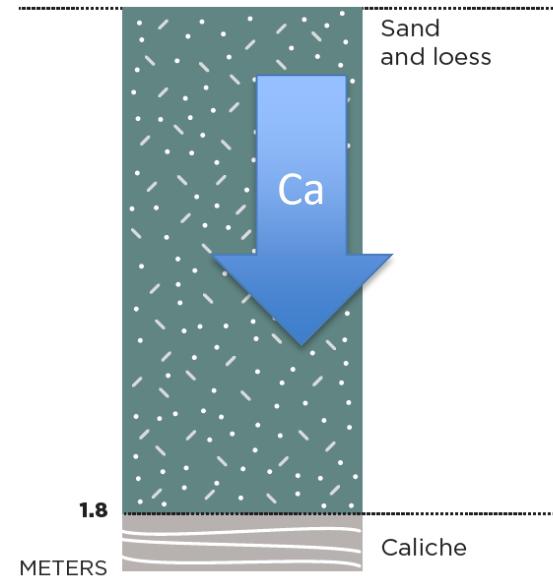
Gualtallary



CALCAREOUS SOILS

- | These are desert soils with the typical small bush vegetation in which the leaching of the calcium carbonates by the alluviums takes place, moving the mineral to deeper horizons.
- | There, the calcium builds up and solidifies forming a hard coarse rock called caliche as well as coating the stones with a white patina of chalk..
- | This type of soil is the most frequent in Gualtallary.

WIND-DEPOSITED SOIL



SOILS

Gualtallary



SOILS

Gualtallary

W
WINES OF ARGENTINA
A



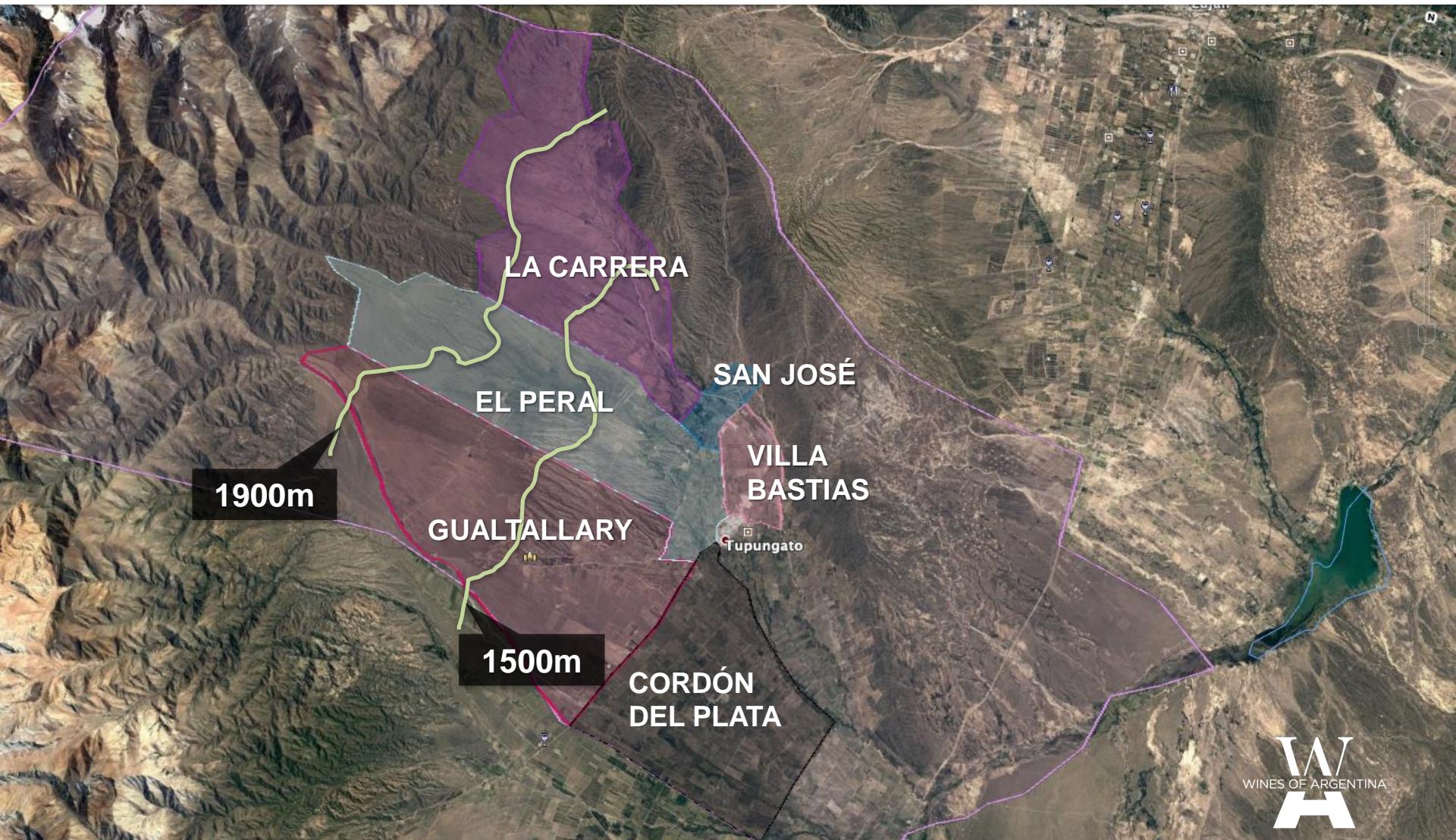
SOILS

Gualtallary



TUPUNGATO

Other relevant districts (NON-GI)



TUPUNGATO
LA CARRERA
Terroir characteristics



- | La Carrera is located in the extreme north of the Uco Valley, it is the last wine-growing frontier in this region.
- | The extreme climate, the great diversity of soils and a greater amount of rainfall make this area different from any other wine region making it perfect for the production of short-cycle varieties.



LOCATION
Viticultural area

33° 15'
SOUTH LATITUDE

69° 15'
WEST LONGITUDE



TEMP.
Annual Average

13° C
55.2° F



RAINFALL
Annual Average

500 - 700 mm/year
19 - 27 in/year



CULTIVATED SURFACE
for vinification*

Ha: 4 | **0.0020%**
Ac: 9.88 | **0.0026%**



of the country
of the region



ALTITUDE
of the vineyards

1.650 – 1.900 masl
5.413 – 6.233 fasl



MAIN GRAPE VARIETIES

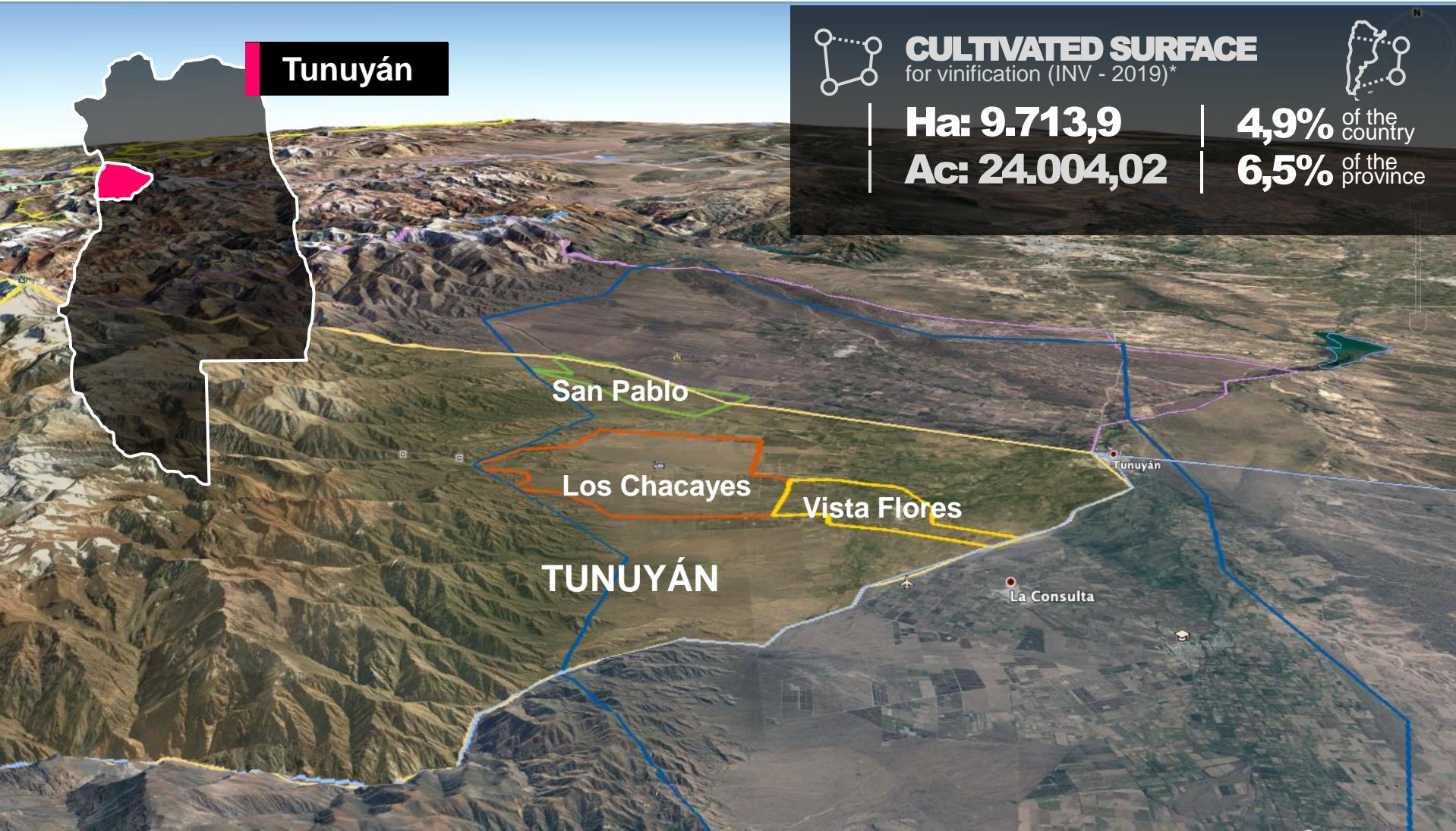
Sauvignon Blanc
Chardonnay
Riesling
Pinot Noir

LA CARRERA & EL PERAL

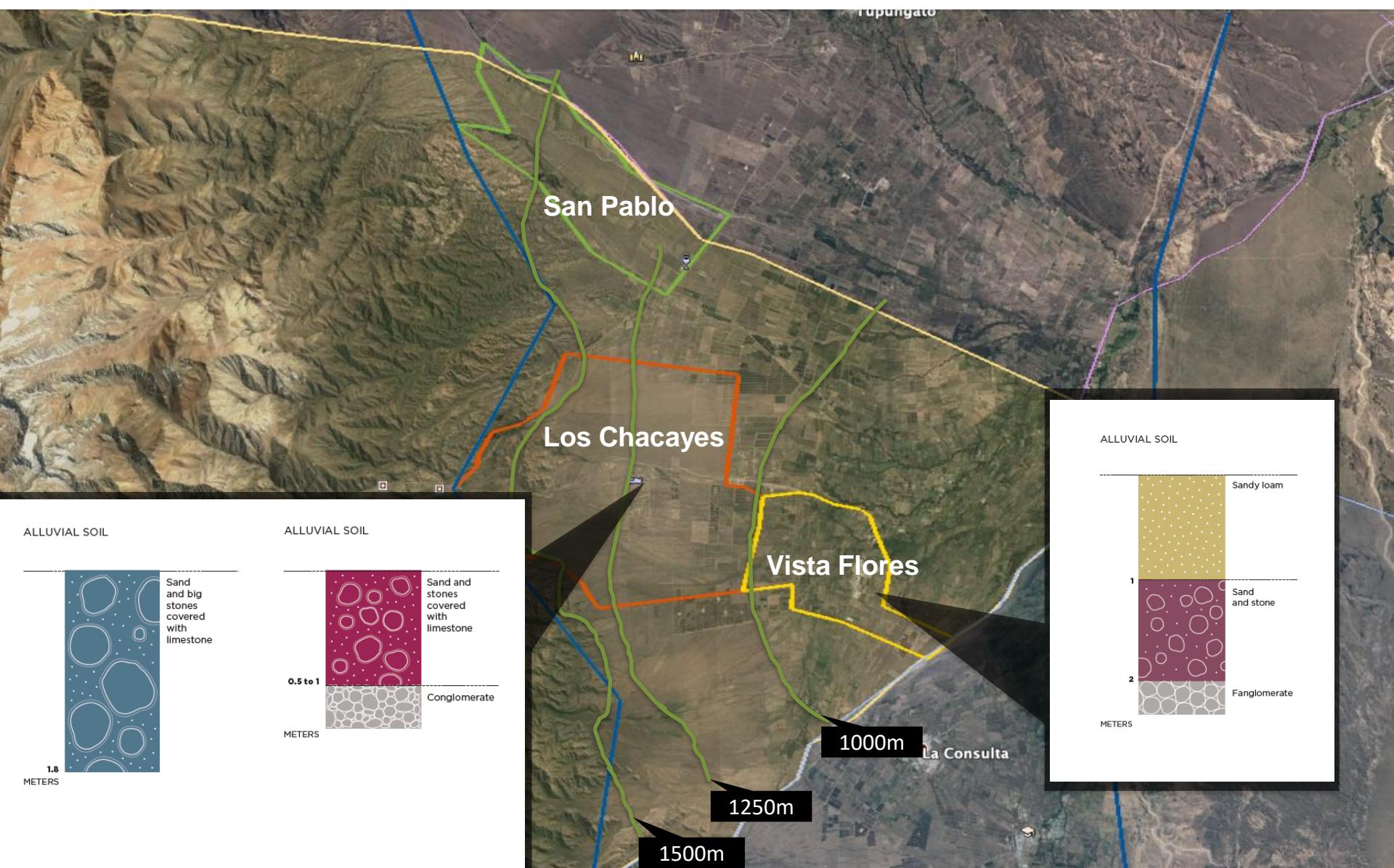
- | La Carrera: highest area under new plantings in the Valley.
- | Altitude ranges from 1600m (5400 ft) to 1900m (6200 ft). Winkler II and I.
- | There are small and scattered vineyards in the area.
- | Alluvial soil.
- | There are four rivers flooding the plain: La Carrera and Santa Clara are the most important, linked by Anchayuyo River.
- | Wind blown and calcareous deposits. Rich organic matter in the topsoils.
- | They form an extensive area in the heart of the GI, between Las Huayquerías and Santa Clara creek.

SAN JOSÉ & VILLA BASTÍAS

- | Old vineyards developed in the early 20th Century.
- | Altitude ranges from 1.050 m (3500 feet) to 1.200 m (4000 ft).
- | This area is mostly planted with cherry, walnuts and vineyards.
- | Predominantly small grapegrowers.
- | Chardonnay is widely planted.
- | Alluvial and colluvial soils.
- | Both banks in the Anchayuyo River are planted over alluvial soils.
- | The eastern bank is colluvial with wind blown topsoils.



UCO VALLEY
TUNUYÁN GI



- | **17th Century:** First settlers arrived in Tunuyán. Before that, it was a land of Huarpes, whose Cacique (chief) was called 'Cuco'.
- | During the last 200 years the lower land was used for grazing, fodder and fruit trees (apples and pears).
- | Since 1995 new, high-lands were developed for vines at the foot of the Andes, where pressurized irrigation has allowed new plantations.
- | New investors quickly arrived and increased vineyard areas. All new areas were planted **above 1.000 meters** (3.300ft).
- | Since 2010, when these vineyards matured, it was clear that **high altitude vines in Tunuyán create a different wine style.**
- | The need for better understanding of terroir pushed for new GI developments.
- | Approved GIs so far:
 - Tunuyán, Los Chacayes, Vista Flores and San Pablo.
 - San Pablo is a well studied and supported GI as it's not fixed on political boundaries.



TERROIR

San Pablo GI



WINKLER ZONE



ALTITUDE

GRADIENT

4%

Northwest - Southeast



CLIMATE ARID



1175
to 1720
m

RAINFALL

500 mm



STATUS

Pending approval

TOTAL SURFACE

5335 ha

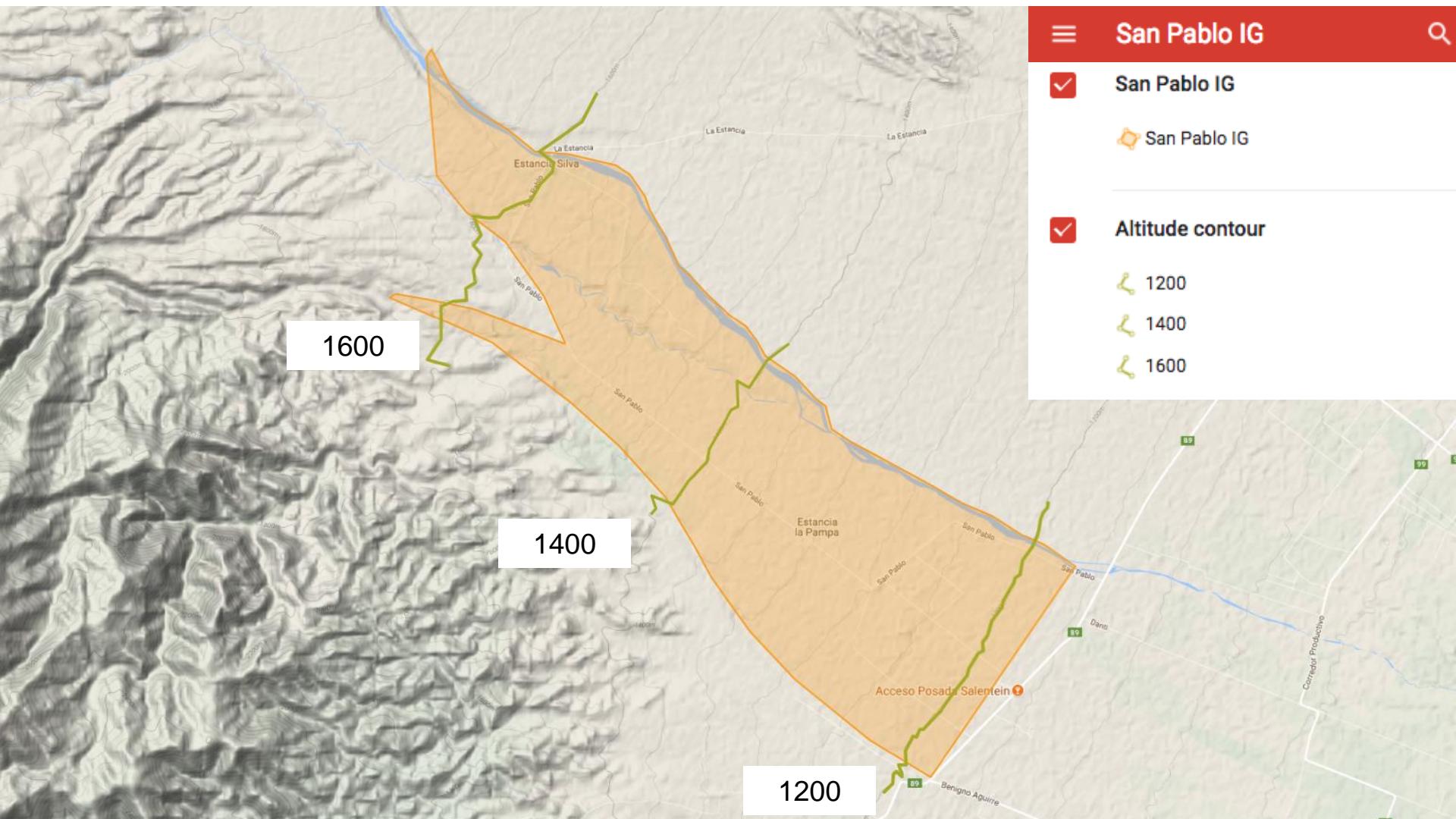
PLANTED SURFACE

475 ha



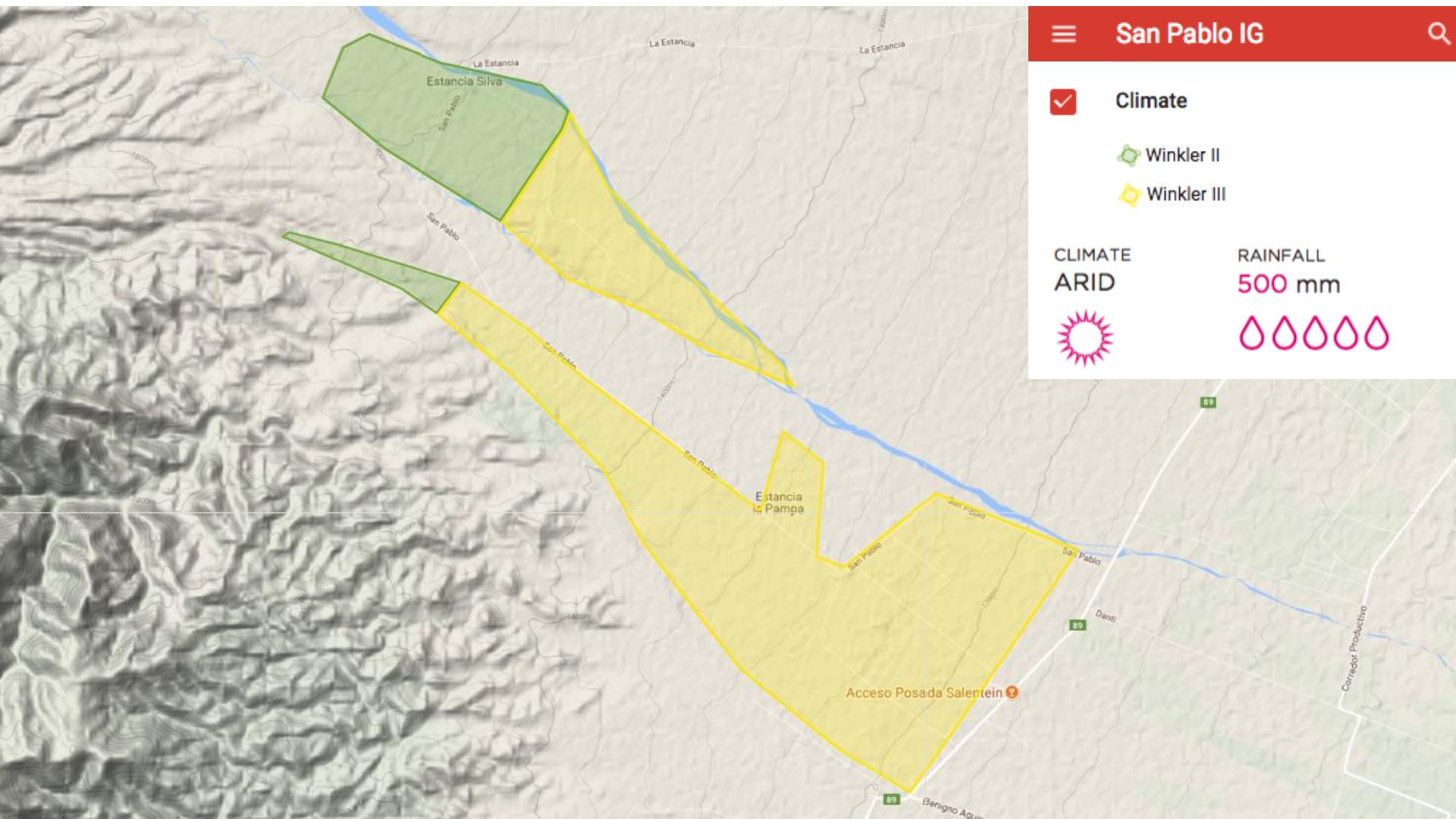
ALTITUDE

San Pablo GI



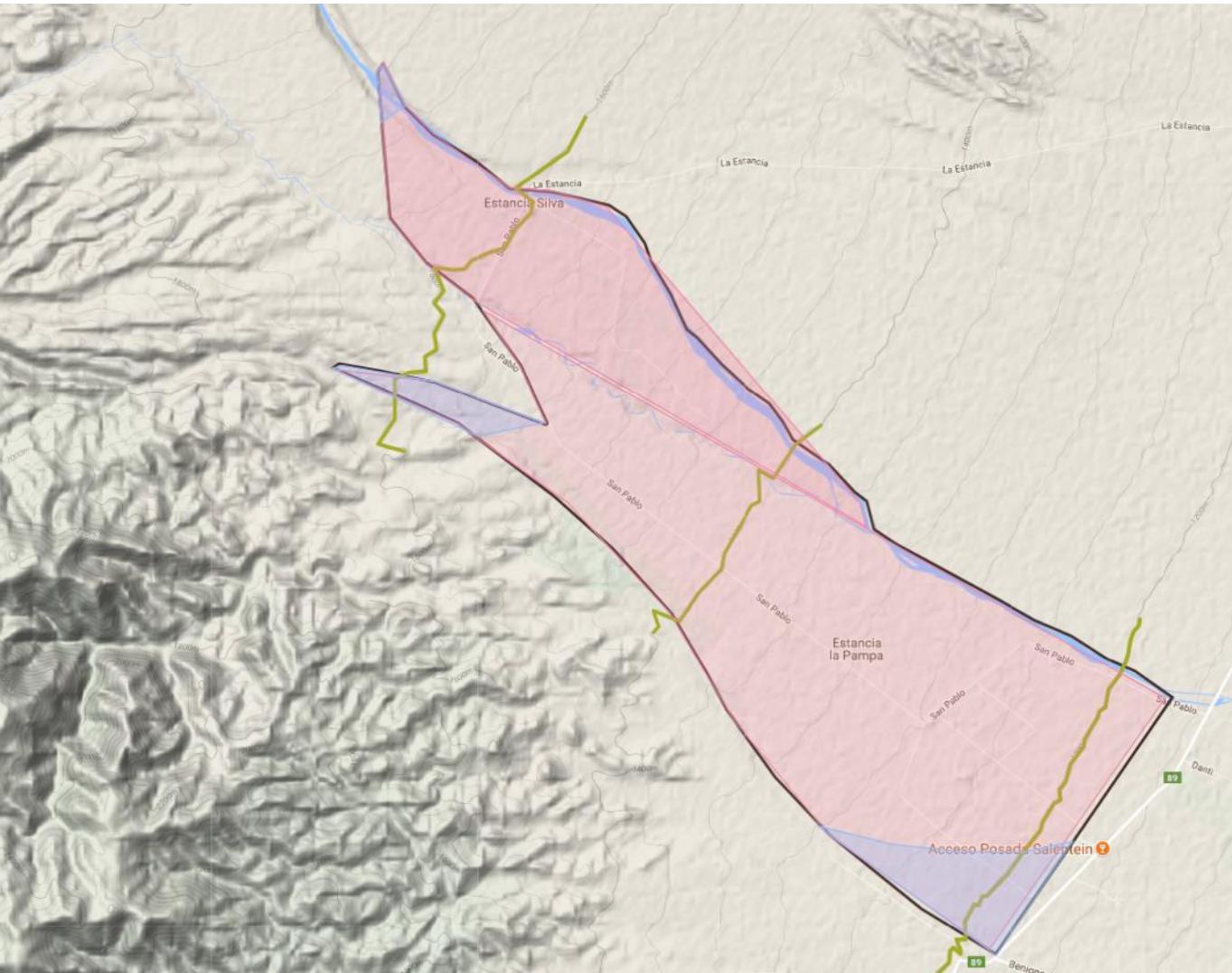
CLIMATE

San Pablo GI



SOILS

San Pablo GI



Las Tunas River Terraces

- Las Tunas River Terrace
- Las Tunas & Villegas Rivers Terrace
- Calcareous Soils

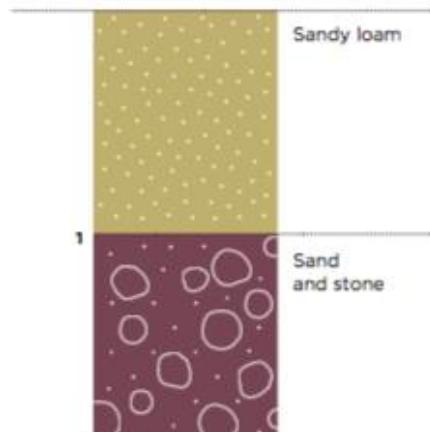
LANDSCAPE MORPHOLOGY

Alluvial cone of River Las Tunas and Arroyo Villegas

SOIL TYPE

Young soils of deep alluvial origin, sandy loam (very coarse & medium coarse sand) with low calcareous content. Medium-sized stones

ALLUVIAL SOIL



SOILS

San Pablo GI



Calcareous deposits
of microbial origin



LOS CHACAYES

Other relevant Gls

TUNUYÁN > LOS CHACAYES

LOS CHACAYES



UCO VALLEY | TUNUYÁN

VISTA FLORES

Other relevant Gls



TUNUYÁN > VISTA FLORES

VISTA FLORES



MENDOZA

PRECORDILLERA

Other interesting wine zones



MENDOZA
USPALLATA
Terroir characteristics



Estancia Uspallata is located in the Quebrada del Minero at the southern tip of the Uspallata Valley. This valley extends 150 km to the north through Mendoza into the province of San Juan, passing through the towns of Barreal and Calingasta.



LOCATION
Viticultural area

32° 40'
SOUTH LATITUDE
69° 21'
WEST LONGITUDE



TEMP.
Annual Average

14° C
57.2° F



RAINFALL
Annual Average

120 mm/year
4,7 in/year



CULTIVATED SURFACE
for vinification*

Ha: **4**
Ac: **9.88**

0.0020%
0.0026%

of the country
of the region



ALTITUDE
of the vineyards

2.000 masl
6.562 fasl



MAIN GRAPE VARIETIES

Malbec
Pinot Noir
Cabernet Franc

MENDOZA
USPALLATA



2.000 masl
**ESTANCIA
USPALLATA**





W
WINES OF ARGENTINA

PATAGONIA
& ATLANTIC

Patagonia & Atlantic



LOCATION

Latitude & longitude

36° 37' | 45° 36'

SOUTH LATITUDE

57° 39' | 71° 31'

WEST LONGITUDE



CULTIVATED SURFACE

for vinification*

Ha: 3.783,6

Ac: 9.349,65



1.91%
of the country



ALTITUDE

of the vineyards

4 - 670 masl

13 - 2.198 fasl

PROVINCES

La Pampa
Neuquén
Río Negro
Chubut
Buenos Aires



KEY FACTORS

- | The southernmost vineyards in the world are located in Chubut, beyond 45° south latitude.
- | Chapadmalal GI is the most eastern wine region in Argentina, (Atlantic viticulture).

PATAGONIA & ATLANTIC REGION



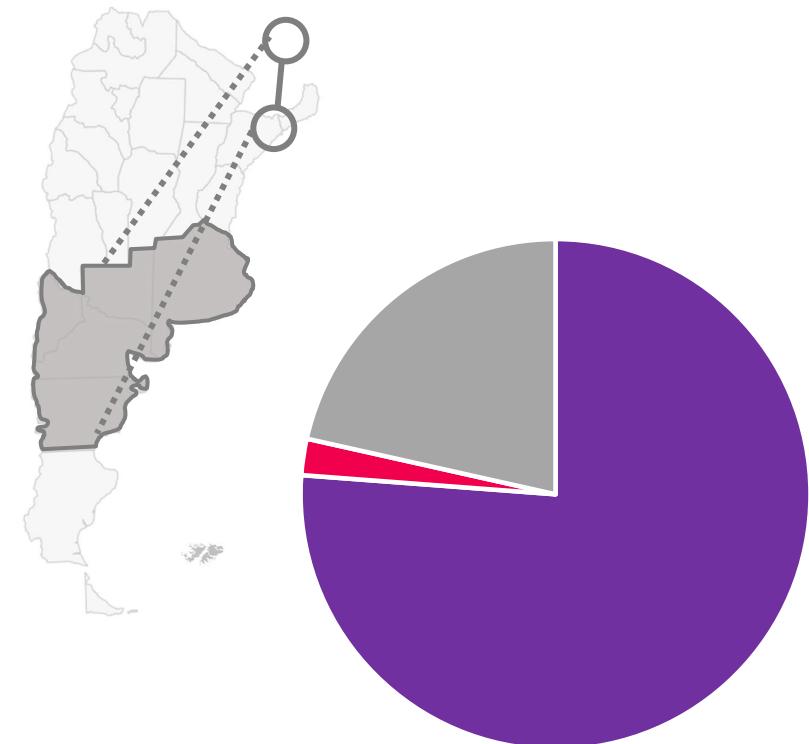
MAIN GRAPE VARIETIES

Distribution by colour*

	Hectares	Acres	%
RED VARIETIES	2.886,7	7.133,32	% Red
Malbec	1.177,2	2.908,98	40,78%
Merlot	542,1	1.339,58	18,78%
Pinot Noir	418,7	1.034,65	14,50%
Cabernet Sauvignon	411,1	1.015,94	14,24%
Syrah	108,3	267,69	3,75%
Cabernet Franc	70,3	173,72	2,44%
Petit Verdot	22,0	54,34	0,76%
Bonarda	19,0	46,95	0,66%
Tannat	13,8	34,10	0,48%
Tempranillo	13,5	33,38	0,47%
Other red varieties	90,6	223,99	3,14%
WHITE VARIETIES	809,4	2.000,11	% White
Chardonnay	221,6	547,64	27,38%
Sauvignon Blanc	155,8	385,00	19,25%
Torrontés Riojano	94,2	232,78	11,64%
Torrontés Mendocino	77,9	192,50	9,62%
Semillón	56,9	140,55	7,03%
Torrontés Sanjuanino	51,1	126,27	6,31%
Viognier	10,2	25,30	1,27%
Riesling	8,3	20,51	1,03%
Chenin	5,0	12,36	0,62%
Other white varieties	128,4	317,20	15,86%
PINK VARIETIES	87,5	216,22	% Pink
Criolla Chica	1,3	3,21	1,49%

- Red grapes
- White grapes
- Pink grapes

76,3%
21,4%
2,3%



PATAGONIA & ATLANTIC REGION

Location



- | It is a very extensive region cultivated from parallel 36° to 45° .
- | The search for new terroirs has led Argentine producers to extend the limits of growing vines to the south (beyond parallel 45°) and to the east, over the edge of the Atlantic ocean.

PATAGONIA & ATLANTIC REGION

Brief History



- | During 18th & 19th Century numerous colonies settled in Patagonia, with strong European influence.
- | The Negro River was then known as the South American Nile.
- | In **1883** began the construction of the first irrigation canal. In successive stages it stretched to form a string of agricultural colonies: General Roca, Cinco Saltos, Fernández Oro, among others (all in the province of Río Negro).
- | In **1909**, the first winery was established in Alto Valle del Río Negro (Northern Patagonia, General Roca).
- | The **20th Century** was an important productive period for wines until the crisis of 1980 ended the expansive cycle.

PATAGONIA & ATLANTIC REGION

Brief History



- | In the **1990s** vine plantation in Argentina was deregulated.
- | **1999** a new viticultural hub was born in Neuquén looking to diversify its production with wines in San Patricio del Chañar.
- | The **2000's** saw other areas flourish further north, such as Colonia 25 de Mayo, or further south, such as Hoyo de Epuyén and Sarmiento.
- | GI Patagonia has been approved since 2002. The cultivated surface is separated mainly into two GIs: Neuquén and Río Negro.

PATAGONIA

Key factors of terroir



- | Constant westerly winds = health + thickening of skins.
- | Abundance of sunlight hours (*latitude effect*).
- | Location of the vineyards with respect to the valleys: proximity to the riverbeds or the river banks.





Vinegrowing valleys
**CENTRAL
PATAGONIA**





LA PAMPA

W
WINES OF ARGENTINA
A

LA PAMPA

Terroir characteristics



LOCATION

Viticultural area

27° 46'

SOUTH LATITUDE

67° 43'

WEST LONGITUDE



TEMP.

Annual Average

14/16° C

57/61° F



RAINFALL

Annual Average

200 mm/year

7,9 in/year



CULTIVATED SURFACE

Ha: **278,2**

Ac: **687,46**



of the country

of the region



ALTITUDE

of the vineyards

305 – 370 masl

1.001 – 1.214 fasl



HIGHLIGHTS

Patagonia has extended its vineyard boundaries northward over the Colorado River basin, in the town of 25 de Mayo (La Pampa).

LA PAMPA

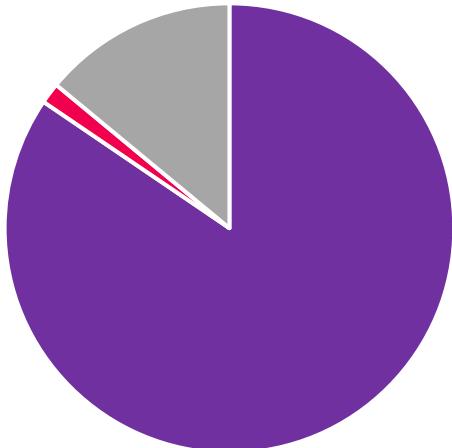
Varieties



DISTRIBUTION by colour*



Red grapes
White grapes
Pink grapes



84,7%
13,9%
1,4%



MAIN GRAPE VARIETIES

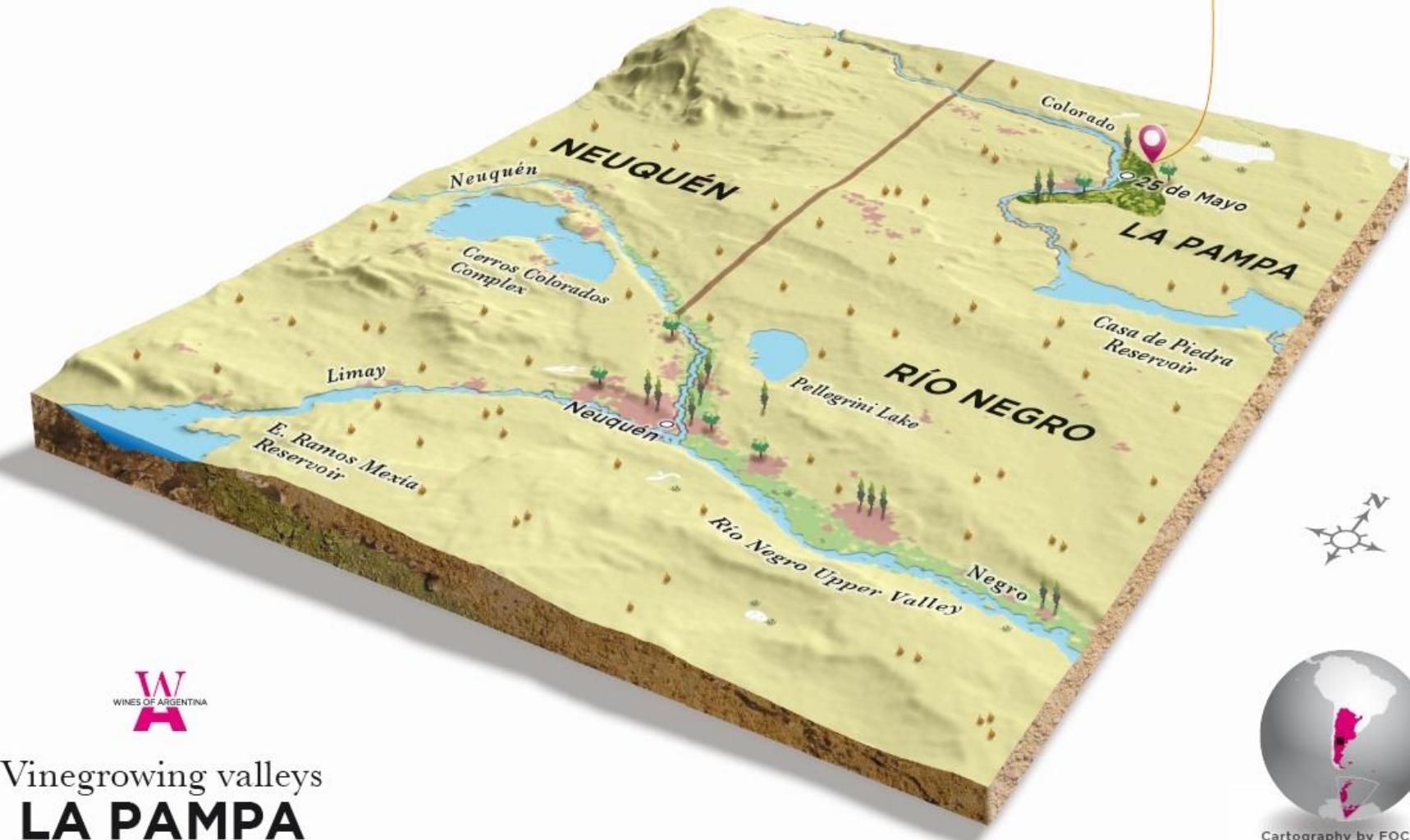
Most planted*

Malbec
Cabernet Sauvignon
Merlot
Cabernet Franc
Chardonnay

	Hectares	Acres	%
LA PAMPA	278,2	687,46	
Red varieties	235,7	582,44	% Red
Malbec	131,8	325,69	55,92%
Cabernet Sauvignon	38,0	93,90	16,12%
Merlot	28,1	69,44	11,92%
Cabernet Franc	14,9	36,82	6,32%
Pinot Noir	11,3	27,92	4,79%
Syrah	8,1	20,02	3,44%
Petit Verdot	0,3	0,74	0,13%
Bonarda	0,2	0,49	0,08%
Tannat	0,2	0,49	0,07%
Other red varieties	2,8	6,92	1,19%
White varieties	38,6	95,38	% White
Chardonnay	11,4	28,22	29,58%
Sauvignon Blanc	6,4	15,82	16,58%
Semillón	2,9	7,17	7,51%
Torrontés Riojano	2,7	6,67	6,99%
Viognier	0,9	2,22	2,33%
Other white varieties	14,3	35,29	37,00%
Pink varieties	3,9	9,64	% Pink

Rio Colorado
Upper Valley
305 - 370 m

1,001 - 1,214 ft



Vinegrowing valleys
LA PAMPA



NEUQUÉN



NEUQUÉN

Terroir characteristics



LOCATION

Viticultural area

38° 37' | 38° 57'

SOUTH LATITUDE

68° 18' | 68° 14'

WEST LONGITUDE



TEMP.

Annual Average

12/15° C

54/59° F



RAINFALL

Annual Average

150 mm/year

5,9 in/year



CULTIVATED SURFACE

for vinification*

Ha: 1.761,7

Ac: 4.353,34



of the country

of the region



ALTITUDE

of the vineyards

270 – 415 masl

886 – 1.362 fasl



HIGHLIGHTS

- The cultivated area is located at low altitude, but temperatures decrease as a result of latitude, which has a compensatory effect

NEUQUÉN

Varieties

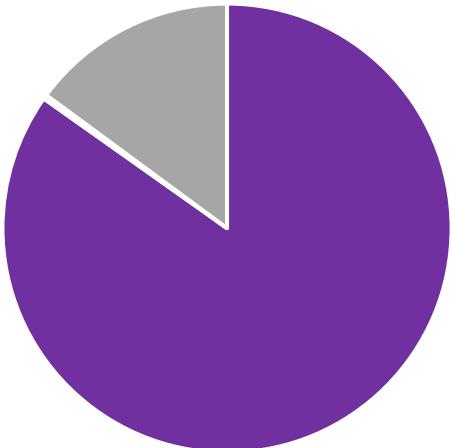


DISTRIBUTION

by colour*



Red grapes | **84,9%**
White grapes | **14,8%**
Pink grapes | **0,3%**



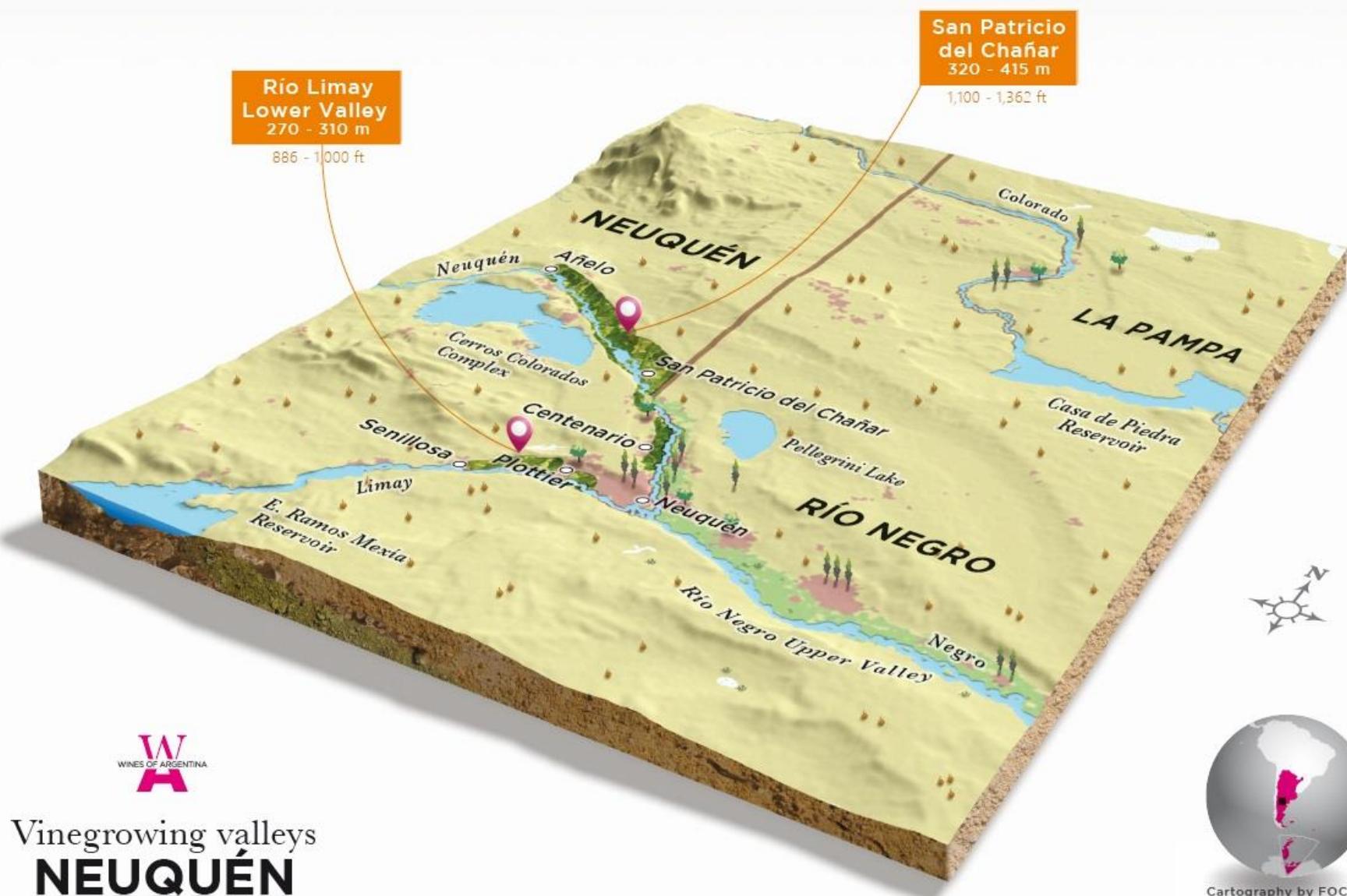
MAIN GRAPE VARIETIES

Most planted*

Malbec
 Cabernet Sauvignon
 Merlot
 Pinot Noir
 Chardonnay

	Hectares	Acres	%
NEUQUÉN	1.761,7	4.353,34	
Red varieties	1.495,3	3.695,04	% Red
Malbec	660,2	1.631,42	44,15%
Cabernet Sauvignon	266,7	659,04	17,84%
Merlot	239,8	592,57	16,04%
Pinot Noir	238,2	588,62	15,93%
Syrah	35,8	88,47	2,39%
Cabernet Franc	28,9	71,41	1,93%
Petit Verdot	9,4	23,23	0,63%
Tannat	5,3	13,10	0,35%
Bonarda	3,0	7,41	0,20%
Tempranillo	1,9	4,70	0,13%
Other red varieties	6,1	15,07	0,41%
White varieties	260,8	644,46	% White
Chardonnay	137,3	339,28	52,65%
Sauvignon Blanc	81,1	200,41	31,10%
Semillón	17,7	43,74	6,79%
Torrontés Riojano	12,6	31,14	4,83%
Viognier	8,1	20,02	3,11%
Torrontés Mendocino	1,4	3,46	0,54%
Chenin	0,3	0,74	0,12%
Riesling	0,1	0,25	0,04%
Other white varieties	2,2	5,44	0,84%
Pink varieties	5,6	13,84	

*Source: National Viticulture Institute – Annual Surface Report (12/31/2019 database).

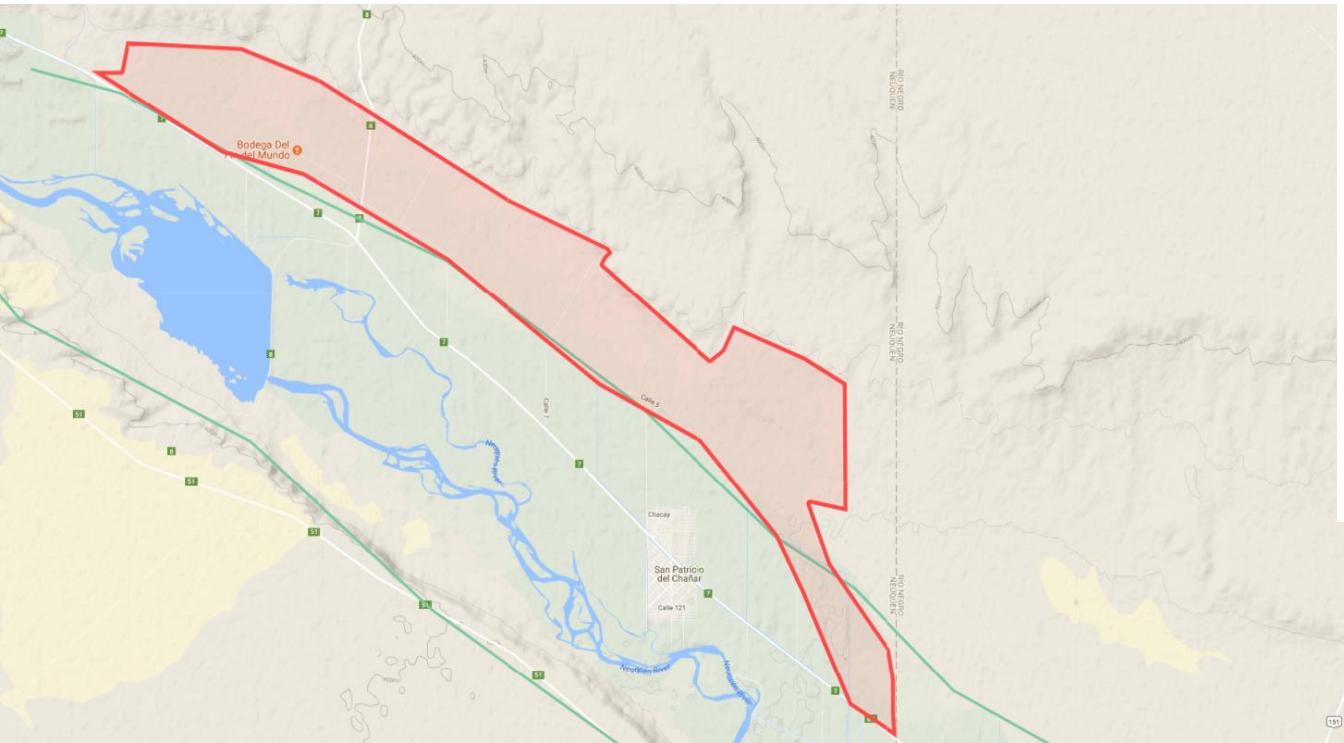


Vinegrowing valleys
NEUQUÉN

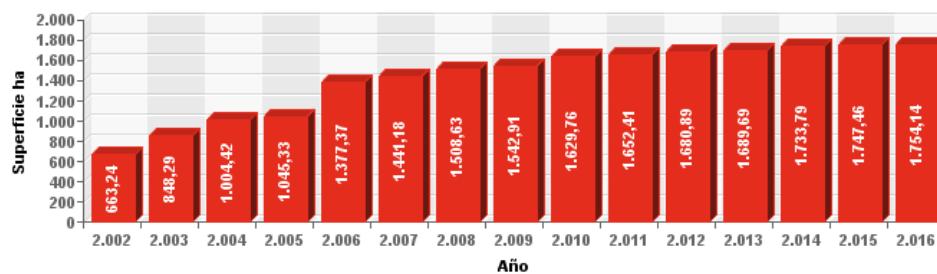


NEUQUÉN

Terroir characteristics



VINEYARD SURFACE / YEAR



NEUQUÉN

Terroir characteristics



WINKLER ZONE



ALTITUDE

GRADIENT

1,5%

Northeast - Southwest



CLIMATE
ARID



RAINFALL
150 mm



340
to 300
m

STATUS

✓ Approved

TOTAL SURFACE

3800 ha

PLANTED SURFACE

2923 ha



NEUQUÉN

Soils



CONFLUENCIA > CONFLUENCIA

NEUQUÉN

LANDSCAPE MORPHOLOGY

Pleistocene terraces, fluvial terraces, alluvial and colluvial cones.

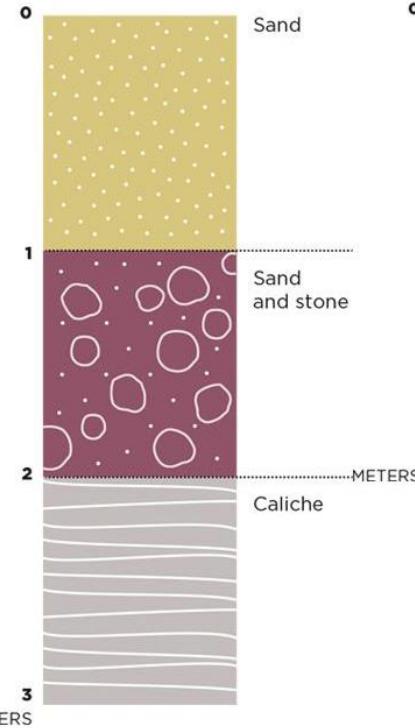
SOIL TYPE

Variable according to the position:
Petrogypsic Calcium on the
pleistocene terrace; loam, sandy,
clayey in the cones, a presence of
stones; loam, silty clay inadequately
drained in the fluvial terrace.

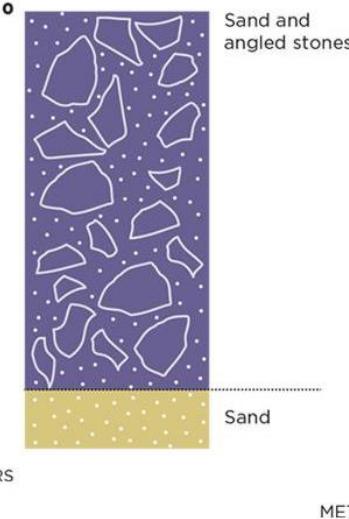
VARIETIES

Malbec
Cabernet Sauvignon
Chardonnay
Pinot Noir
Merlot
Sauvignon Blanc

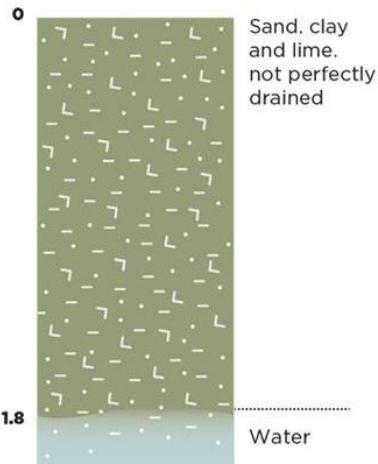
ALLUVIAL



COLLUVIAL



ALLUVIAL



NEUQUÉN | San Patricio del Chañar

Terroir characteristics



- Located 37 miles to the northwest of the province's capital (in Añelo Department), it has been chosen by the largest winegrowing establishments.
- In the last few years, the vineyards of this valley have grown rapidly in extension and importance.



LOCATION

Viticultural area

38°37'
SOUTH LATITUDE

68°18'
WEST LONGITUDE



TEMP.

Annual Average

9/13° C
48,5/55° F



RAINFALL

Annual Average

80 / 120 mm/year
3,2 / 4,7 in/year



SOIL

Profile

Aluvional soils. Sandy-clay-loam and calcareous soils in the highest parts of the valley.



CULTIVATED SURFACE

for vinification (Añelo Department)*

Ha: 1.592,2
Ac: 3.934,49

90.4%
of the cultivated surface in the province



ALTITUDE

of the vineyards

320 - 415 masl
1.100 - 1.362 fasl



MAIN GRAPE VARIETIES

Most planted*

Malbec
Cabernet Sauvignon
Merlot
Pinot Noir
Chardonnay



RÍO NEGRO

W
WINES OF ARGENTINA
A

RÍO NEGRO

Terroir characteristics



LOCATION

Viticultural area

37° 52' | 40° 45'

SOUTH LATITUDE

63° 16' | 67° 47'

WEST LONGITUDE



TEMP.

Annual Average

12/16° C

54/61° F



RAINFALL

Annual Average

190 mm/year

7,9 in/year



CULTIVATED SURFACE

Ha: **1.520,4**

Ac: **3.757,06**

0.77%

41.8%



of the country

of the region



ALTITUDE

of the vineyards

4 – 370 masl

13 – 1.214 fasl



HIGHLIGHTS

- | Series of valleys located in the basin of the Colorado and Negro rivers, which cross the province from west to east.
- | The lower valley of Río Negro receives the influence of the Atlantic ocean.

RÍO NEGRO

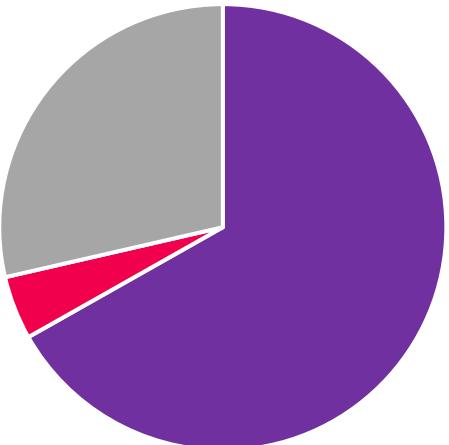
Varieties



DISTRIBUTION by colour*



Red grapes | **66,8%**
White grapes | **28,6%**
Pink grapes | **4,6%**



MAIN GRAPE VARIETIES

Most planted*

Malbec
 Merlot
 Torrontés
 Pinot Noir
 Cabernet Sauvignon

	Hectares	Acres	%
RÍO NEGRO	1.520,4	3.757,06	
Red varieties	1.016,4	2.511,63	% Red
Malbec	369,9	914,06	36,39%
Merlot	252,8	624,69	24,87%
Pinot Noir	127,4	314,82	12,53%
Cabernet Sauvignon	94,1	232,53	9,26%
Syrah	62,2	153,70	6,12%
Cabernet Franc	20,0	49,42	1,97%
Bonarda	12,4	30,64	1,22%
Petit Verdot	12,0	29,65	1,18%
Tempranillo	10,9	26,93	1,07%
Tannat	0,2	0,49	0,02%
Other red varieties	54,5	134,67	5,36%
White varieties	433,9	1.072,21	% White
Torrontés Riojano	76,7	189,53	17,68%
Torrontés Mendocino	76,5	189,04	17,63%
Torrontés Sanjuanino	51,1	126,27	11,78%
Sauvignon Blanc	44,3	109,47	10,21%
Semillón	35,8	88,47	8,25%
Chardonnay	31,2	77,10	7,19%
Chenin	4,5	11,12	1,04%
Riesling	3,4	8,40	0,78%
Viognier	1,2	2,97	0,28%
Other white varieties	109,2	269,84	25,17%
Pink varieties	70,1	173,22	% Pink
Criolla Chica	1,3	3,21	1,85%

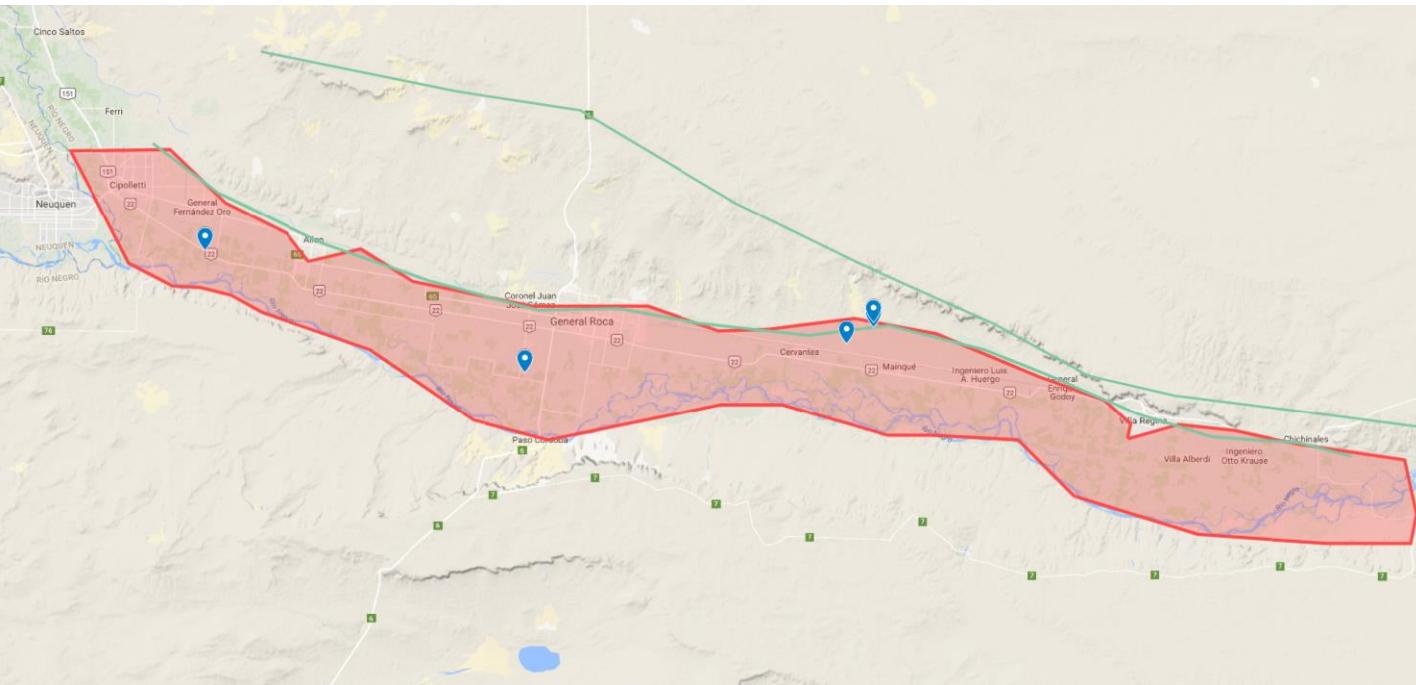
*Source: National Viticulture Institute – Annual Surface Report (12/31/2019 database).



Vinegrowing valleys
RÍO NEGRO

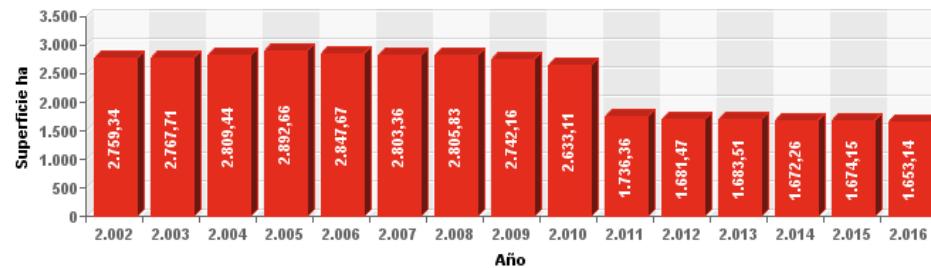
RÍO NEGRO

Terroir characteristics



- Neuquén
- Rio Negro
 - Alto Valle del Río Negro
 - Valle Medio
 - Valle Inferior
- 300
- 220
- La Pampa
- Chubut
- Wineries

VINEYARD SURFACE / YEAR



RÍO NEGRO

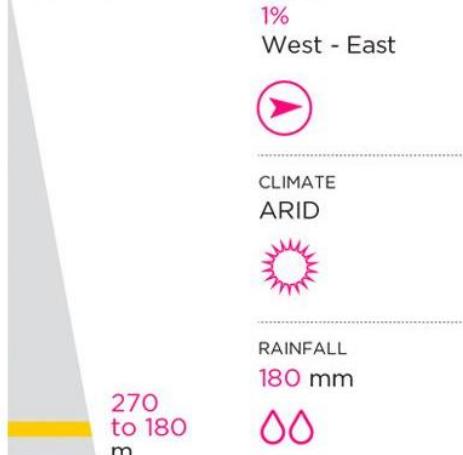
Terroir characteristics



WINKLER ZONE



ALTITUDE



GRADIENT

1%
West - East



CLIMATE

ARID



RAINFALL

180 mm



STATUS

✓ Approved

TOTAL SURFACE

70000 ha

PLANTED SURFACE

1500 ha



RÍO NEGRO

Terroir characteristics



GENERAL ROCA > GENERAL ROCA

RÍO NEGRO

LANDSCAPE MORPHOLOGY

Pleistocene terraces, fluvial terraces, alluvial and colluvial cones.

SOIL TYPE

Variable according to the position:
Petrogypsic Calcium on the
pleistocene terrace; loam, sandy,
clayey in the cones, a presence of
stones; loam, silty clay inadequately
drained in the fluvial terrace.

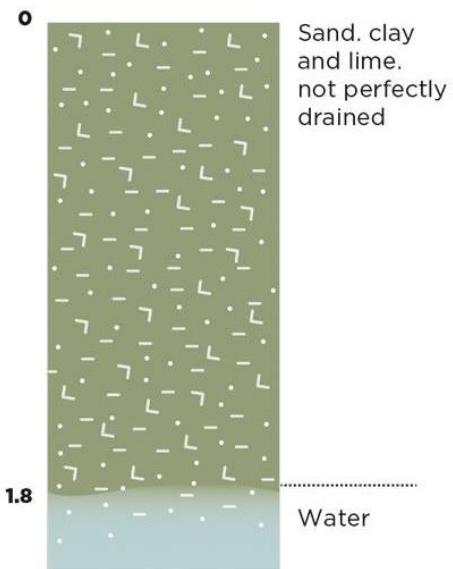
VARIETIES

Malbec
Cabernet Sauvignon
Merlot
Pinot Noir
Sauvignon Blanc

ALLUVIAL



ALLUVIAL



RÍO NEGRO | Upper Valley

Terroir characteristics



- | It is a 100 mile-long (160km), 6 mile-wide (10 km) oasis standing in the Patagonian plateau. It develops mostly on the north margin of the upper course of the Negro River.
- | It includes General Roca, Cipolletti, Villa Regina, Allen, among other smaller cities.



LOCATION

Viticultural area

38° 30' | 39° 05'

SOUTH LATITUDE

66° 45' | 68° 30'

WEST LONGITUDE



TEMP.

Annual Average

15,5° C

59,9° F



RAINFALL

Annual Average

197,7 mm/year

7,78 in/year



SOIL

Profile

- | Soils of fluvial origin, poor in organic matter. Stony subsoil, gravel type, with granulometries that can go from 3 to 10 cm in diameter. Mixed clay and sandy loam soils with different percentages of gravel in surface, which range from 5% to 30%.



CULTIVATED SURFACE

for vinification (General Roca Department)*

Ha: 1.108,5

Ac: 2.739,21



73%

of the cultivated surface of the province



ALTITUDE

of the vineyards

180 - 265 masl

590 - 870 fasl



MAIN GRAPE VARIETIES

Most planted (General Roca Dept.)*

Malbec

Merlot

Pinot Noir

Torrontés

Cabernet Sauvignon

RÍO NEGRO | Lower Valley

Terroir characteristics



It is located to the east of the province of Río Negro (Adolfo Alsina Department). It extends over 100 km from west to east following the southern margin of the Negro River. The area receives the influence of the Atlantic ocean.



LOCATION
Viticultural area

40°41' | **63°64'**
SOUTH LATITUDE WEST LONGITUDE



TEMP.
Annual Average

14,1° C
57,4° F



RAINFALL
Annual Average

408 mm/year
16,06 in/year



MAIN GRAPE VARIETIES

Most planted (Adolfo Alsina Dept.)*

Malbec
Cabernet Sauvignon
Merlot
Pinot Noir
Sauvignon Blanc



CULTIVATED SURFACE

for vinification (Adolfo Alsina Department)*

Ha: 98,1
Ac: 241,41

6.5%
of the cultivated surface of the province



ALTITUDE
of the vineyards

4 - 16 masl
13 - 53 fasl



*Source: National Viticulture Institute – Annual Surface Report (12/31/2019 database).



CHUBUT

W
WINES OF ARGENTINA
A

CHUBUT

Terroir characteristics



LOCATION

Viticultural area

42° 03' | 45° 36'

SOUTH LATITUDE

65° 06' | 71° 31'

WEST LONGITUDE



TEMP.

Annual Average

13,4° C

56,1° F



RAINFALL

Annual Average

184 mm/year

7,2 in/year



CULTIVATED SURFACE

for vinification*

Ha: 74,7

Ac: 184,59



of the country
of the region

0.04%
2%



ALTITUDE

of the vineyards

10 – 670 masl

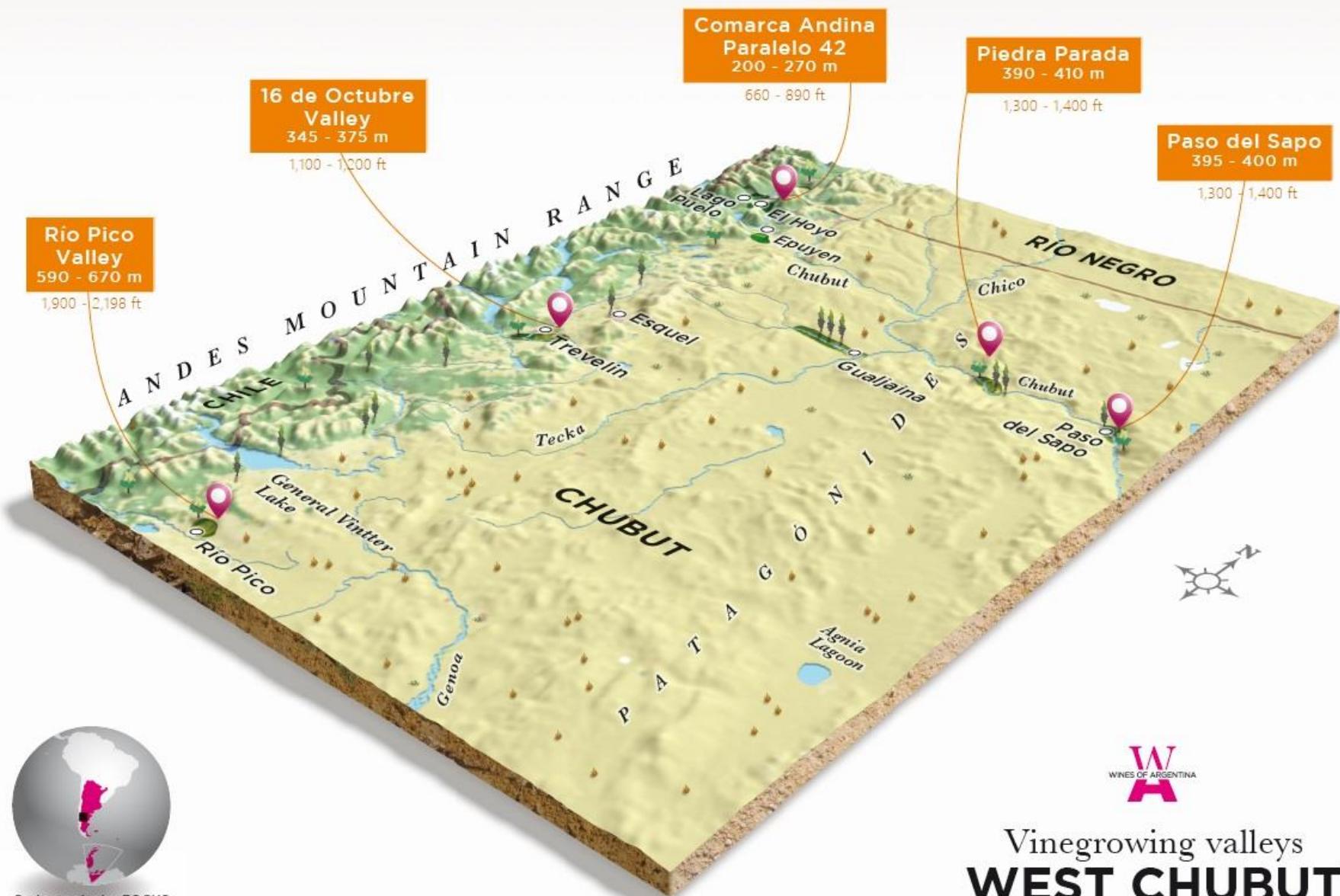
33 – 2.198 fasl



HIGHLIGHTS

Chubut boasts the southernmost vineyard in the world, which sits beyond the 45th parallel south (Sarmiento).





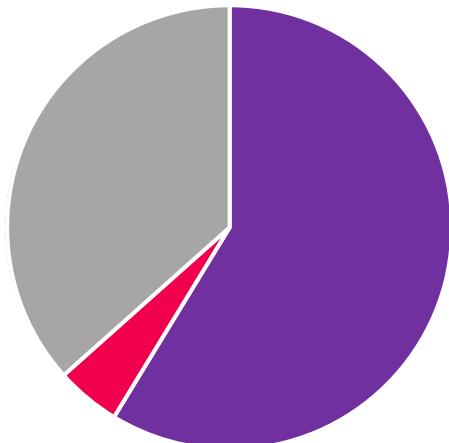


DISTRIBUTION

by colour*



Red grapes
White grapes
Pink grapes



58,8%
36,4%
4,8%

	Hectares	Acres	%
CHUBUT	74,7	184,59	
Red varieties	43,9	108,48	% Red
Pinot Noir	32,40	80,06	73,80%
Merlot	9,00	22,24	20,50%
Malbec	2,00	4,94	4,56%
Cabernet Franc	0,40	0,99	0,91%
Cabernet Sauvignon	0,03	0,07	0,07%
Syrah	0,03	0,07	0,07%
Other red varieties	0,04	0,10	0,09%
White varieties	27,2	67,21	% White
Chardonnay	21,9	54,12	80,51%
Riesling	1,6	3,95	5,88%
Sauvignon Blanc	1,5	3,71	5,51%
Semillón	0,3	0,74	1,10%
Torrontés Riojano	1,9	4,70	6,99%
Pink varieties	3,6	8,90	% Pink



MAIN GRAPE VARIETIES

Most planted*

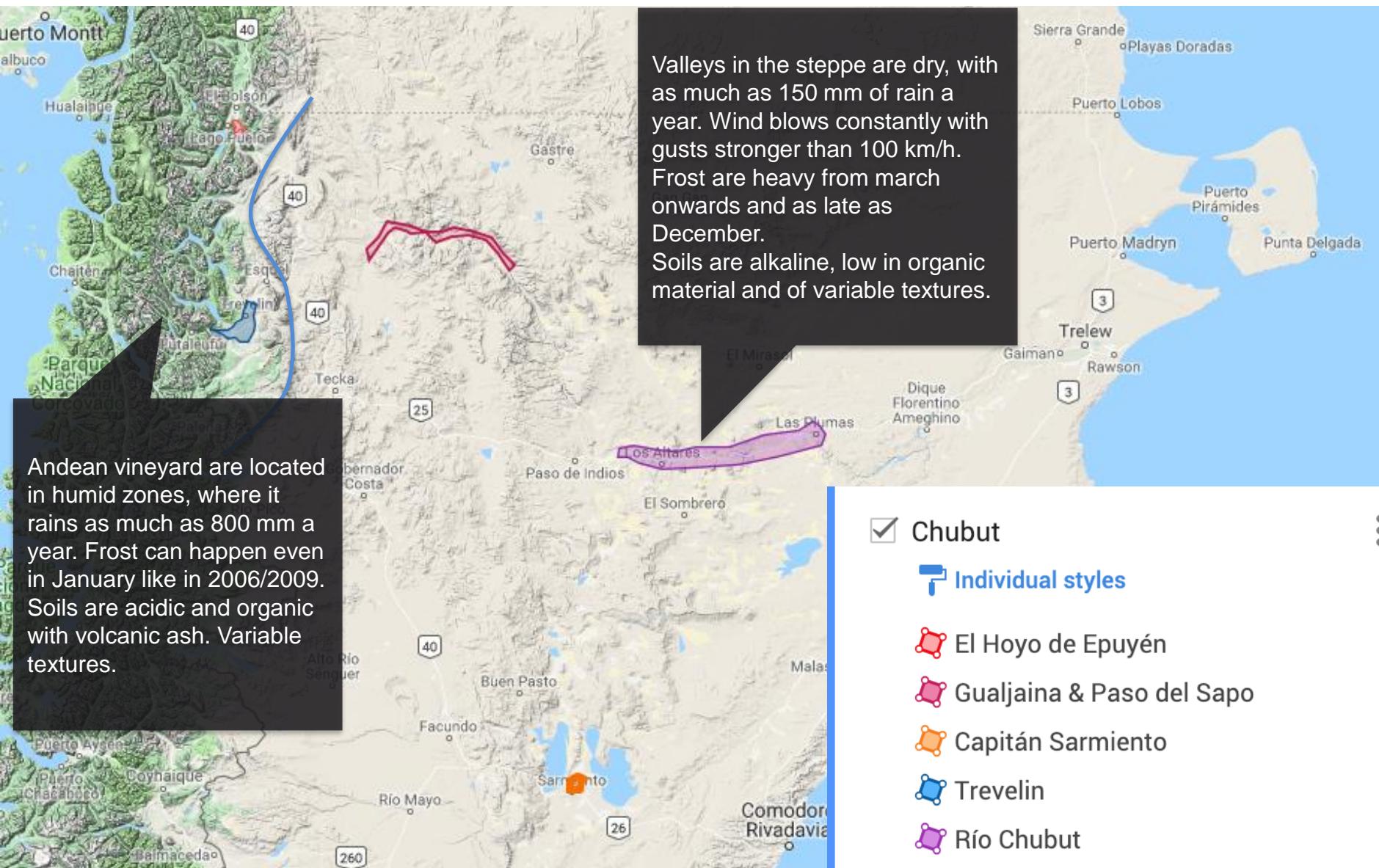
Pinot Noir
 Chardonnay
 Merlot
 Malbec
 Torrontés



- | The most southern wine province in Argentina, starts at 42º parallel, but is not yet a GI.
- | A compilation of small oases attached to big rivers.
- | There are only 74 ha of scattered vines and 17 producers.
- | New oases like Trevelin, Paso del Sapo and Sarmiento are developing fast.
- | Pioneer producers cultivate Chardonnay, Pinot Noir and Sauvignon Blanc, due to its short summer.
- | Strong winds and early and late frosts are the main threat in the area.

CHUBUT

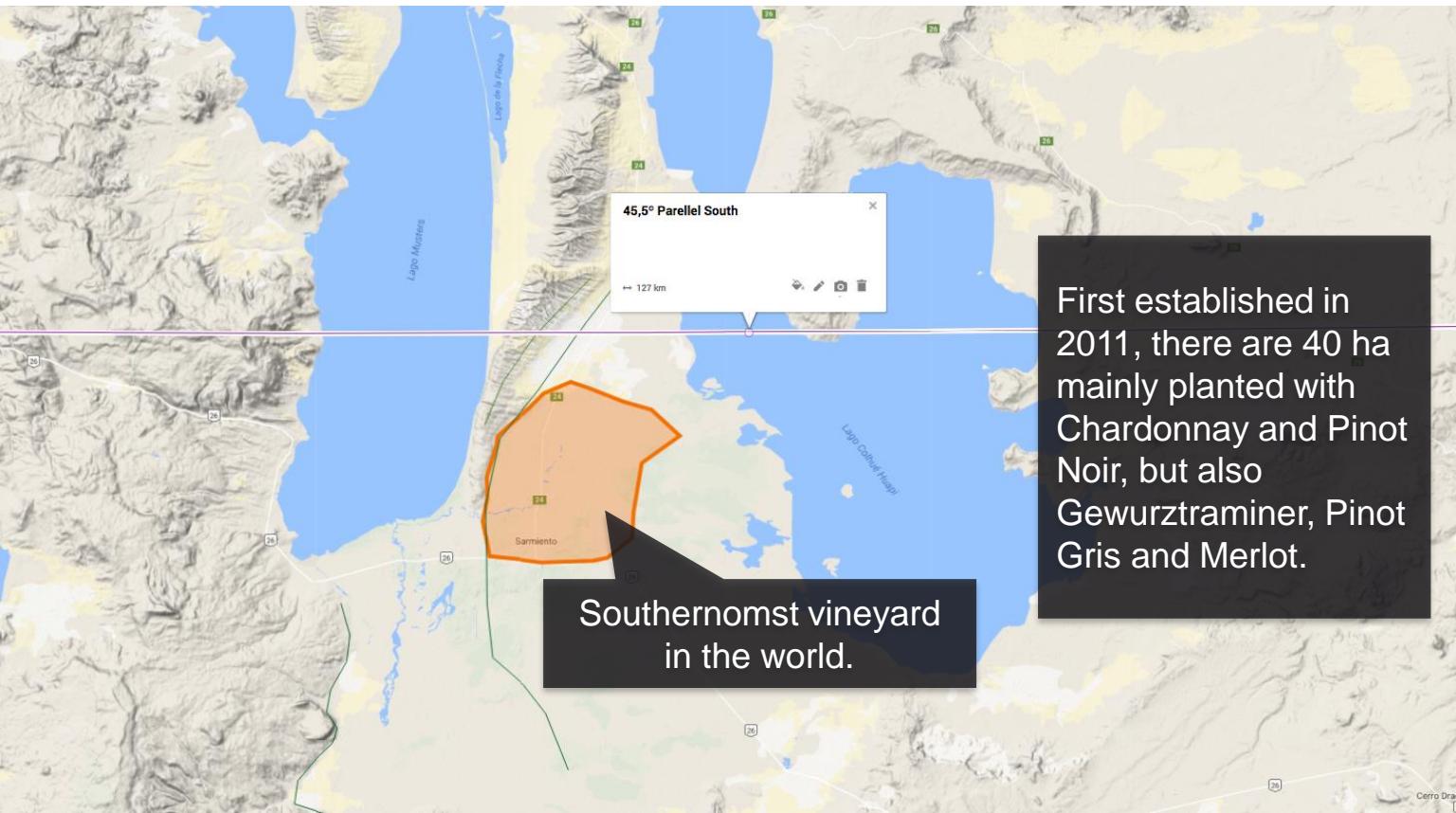
Terroir characteristics



CHUBUT

Terroir characteristics

Sarmiento's latitude is the same as Lyon, France, and almost the same as Central Otago in New Zealand



- Neuquén
- Río Negro
- La Pampa
- Chubut
 - El Hoyo de Epuyén
 - Río Chubut
 - Capitán Sarmiento
 - 400 m
 - 400 m
 - 300 m
 - 45,5° Parallel South

- | Group of villages, towns and cities located close to each other, in the northwest of the province of Chubut and southwest of Río Negro.
- | It includes El Bolsón (Río Negro), El Hoyo, Lago Puelo, Epuyén, among other cities within the Cushamen Department (Chubut). The most important production is found in El Hoyo.
- | Temperate-cold climate, with great thermal amplitude.



LOCATION

Viticultural area

42°03' | **71°19'**
SOUTH LATITUDE WEST LONGITUDE



TEMP.

Annual Average

10,6° C
52° F



RAINFALL

Annual Average

800 / 1.000 mm/year
31,5 / 39 in/year



CULTIVATED SURFACE

for vinification (Cushamen Department)*

Ha: 22,9
Ac: 56,59



30.6%
of the cultivated surface in the province



ALTITUDE

of the vineyards

200 - 270 masl
660 - 890 fasl



MAIN GRAPE VARIETIES

Most planted
(Cushamen Dept.)*

Pinot Noir
Merlot
Chardonnay
Riesling
Sauvignon Blanc



SOIL

Profile

Soils of
volcanic
origin.

CHUBUT | 16 de Octubre

Valleys



- | 16 de Octubre Valley was the name given by the Welsh settlers to Trevelin and its surroundings. It is located 150km to the south of Comarca Andina Paralelo 42, with similar soil and climatic conditions.
- | An ideal area to make sparkling wines with low alcohol content.



LOCATION

Viticultural area

43°05' | **71°28'**
SOUTH LATITUDE WEST LONGITUDE



TEMP.

Annual Average

9,7° C
49,4° F



RAINFALL

Annual Average

963 mm/year
37,9 in/year



CULTIVATED SURFACE

for vinification (Futaleufu Department)*

Ha: 8,5
Ac: 21,00



11.4%
of the cultivated surface in the province



ALTITUDE

of the vineyards

345 - 375 masl
1.100 - 1.200 fasl



MAIN GRAPE VARIETIES

Most planted (Futaleufu Dept.)*

Pinot Noir
Chardonnay
Sauvignon Blanc
Riesling

CHUBUT | Paso del Sapo

Valleys



| It is located at the northwest of Chubut, on the banks of the Chubut River.



LOCATION

Viticultural area

42°44'
SOUTH LATITUDE

69°36'
WEST LONGITUDE



TEMP.
Annual Average

11,2° C
52° F



RAINFALL
Annual Average

300 mm/year
11,8 in/year



| Alluvial soils located between cliffs of 100 meters-high, next to the Chubut River coast.



CULTIVATED SURFACE

for vinification (Languïñeo Department)*

Ha: 0,1
Ac: 0,25



0.13%
of the cultivated surface in the province



ALTITUDE
of the vineyards

395 - 400 masl
1.300 - 1.310 fasl



MAIN GRAPE VARIETIES

Most planted (Languïñeo Dept.)*

Chardonnay
Pinot Noir
Merlot

| Full-bodied wines, with less acidity.
| White wines: quite fleshy and can be aged in oak.

CHUBUT | Sarmiento

Valleys



| It is the most important valley in Chubut, where the southernmost vineyards in the world are located (beyond 45° south latitude).



CULTIVATED SURFACE

for vinification (Sarmiento Department)*

Ha: **40**

Ac: **98,84**



LOCATION

Viticultural area

45°36' | **69°05'**
SOUTH LATITUDE WEST LONGITUDE



TEMP.

Annual Average

10,8° C
51,4° F



RAINFALL

Annual Average

200/250 mm/year
7,8 / 9,8 in/year



ALTITUDE

of the vineyards

265 - 300 masl
870 - 980 fasl



MAIN GRAPE VARIETIES

Most planted (Sarmiento Dept.)*

Pinot Noir
Chardonnay
Merlot
Torrontés

White wines: aromatic, apt for oak ageing.
Red wines: medium-bodied, promising wines.

CHUBUT | Río Chubut Lower Valley

Valleys



- | It is a fertile zone located in the northeast of Chubut, crossed by the Chubut River.
- | It includes part of the departments of Gaiman and Rawson.



LOCATION

Viticultural area

43°18'
SOUTH
LATITUDE

65°06'
WEST
LONGITUDE



CULTIVATED SURFACE

for vinification (Gaiman and Rawson Depts.)*

Ha: 0,7
Ac: 1,73



0.9%
of the cultivated surface in the province



ALTITUDE

of the vineyards

10 - 50 masl
33 - 160 fasl



TEMP.

Annual Average

13,5° C
56,3° F



RAINFALL

Annual Average

200/300 mm/year
7,8/11,8 in/year



MAIN GRAPE VARIETIES

Most planted (Gaiman and Rawson Dept.)*

Malbec
Pinot Noir
Chardonnay/Merlot/Syrah/Cabernet Sauvignon



SOIL

Profile

Soils with alkaline PH.

ATLANTIC REGION

The influence of the ocean



CULTIVATED SURFACE

for vinification (INV - 2019)

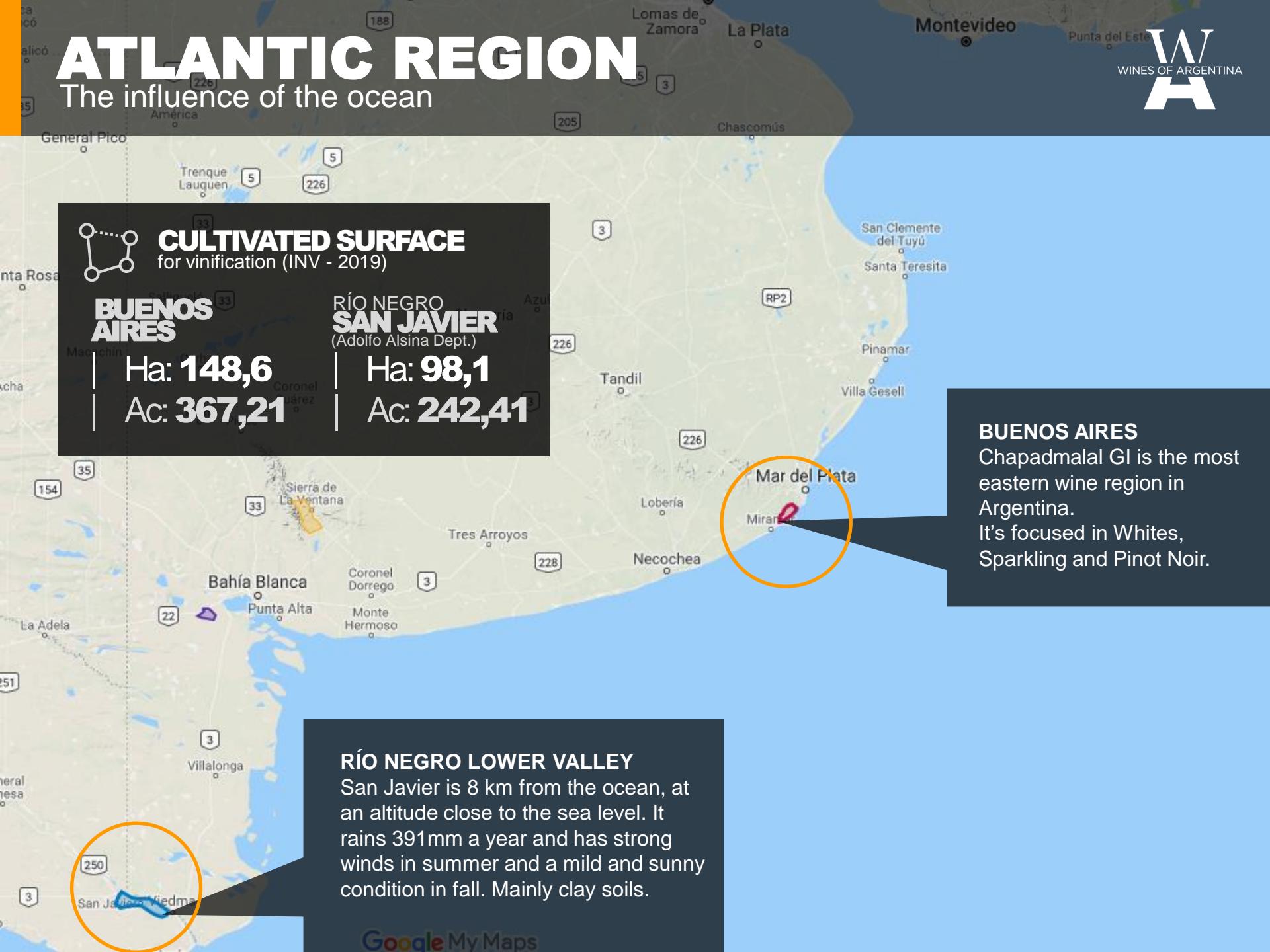
BUENOS AIRES

Ha: **148,6**
Ac: **367,21**

RÍO NEGRO SAN JAVIER

(Adolfo Alsina Dept.)

Ha: **98,1**
Ac: **242,41**



BUENOS AIRES

Chapadmalal GI is the most eastern wine region in Argentina. It's focused in Whites, Sparkling and Pinot Noir.

RÍO NEGRO LOWER VALLEY

San Javier is 8 km from the ocean, at an altitude close to the sea level. It rains 391mm a year and has strong winds in summer and a mild and sunny condition in fall. Mainly clay soils.

ATLANTIC REGION

Location



ATLANTIC REGION

The influence of the ocean



- | In the **1990s** vine plantation in Argentina was deregulated.
- | Some **ventures** emerged in the Atlantic region.
- | The idea of developing **oceanic wines gained new strength in 2007** with the development of new vineyards in Chapadmalal.
- | GI Chapadmalal was approved in **2014**, the only one in the area.
- | There are also vineyards of relative importance in Médanos and Sierra de la Ventana.

BUENOS AIRES

Varieties

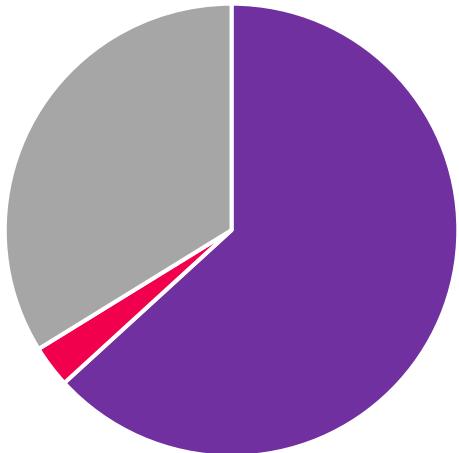


DISTRIBUTION

by colour*



Red grapes | **64,2%**
White grapes | **32,9%**
Rosé Grapes | **2,9%**



MAIN GRAPE VARIETIES

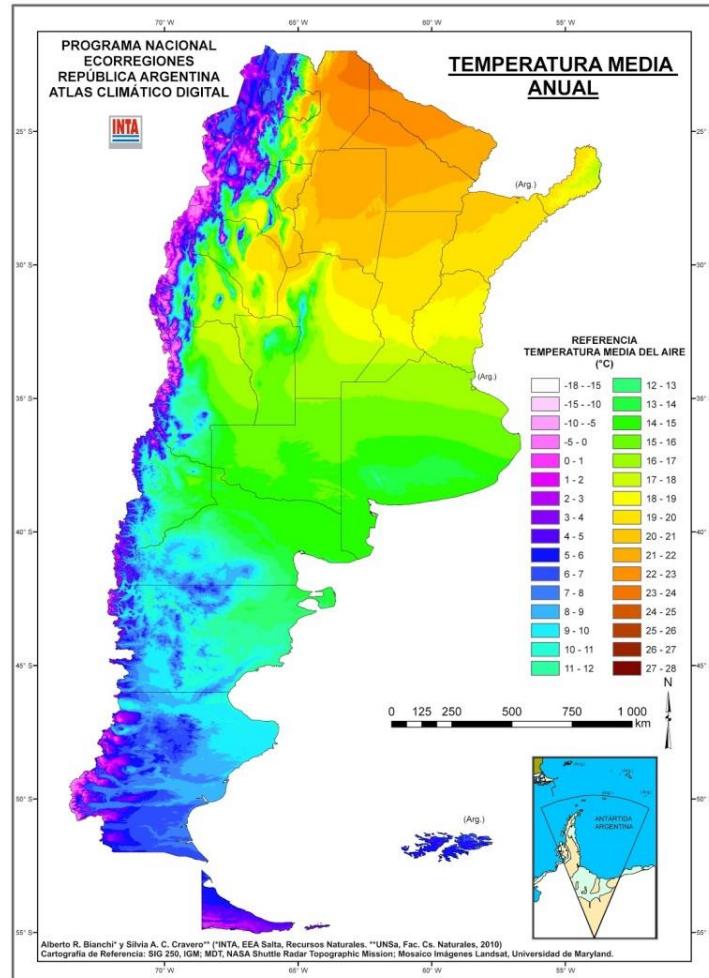
Most planted*

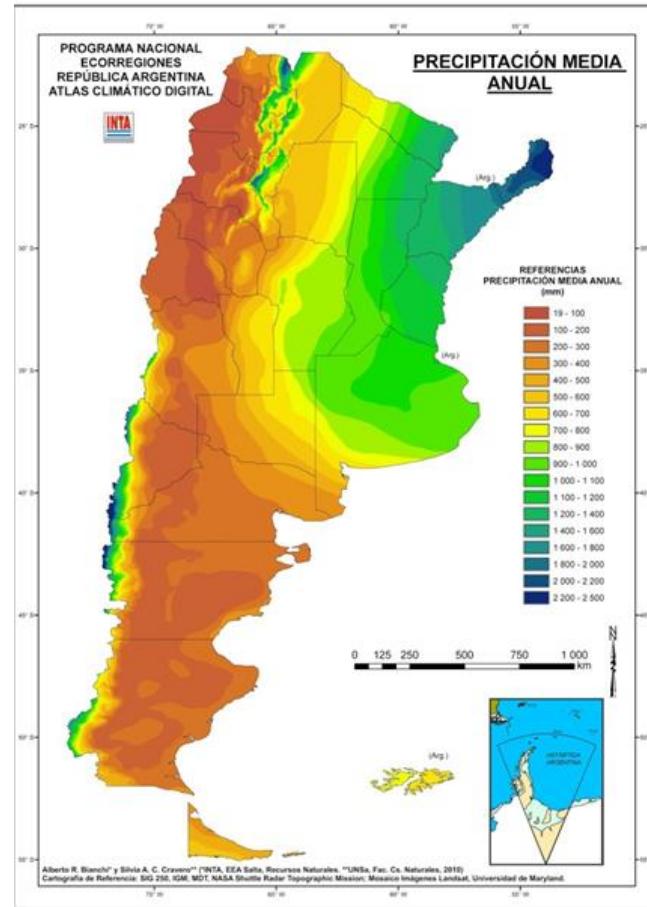
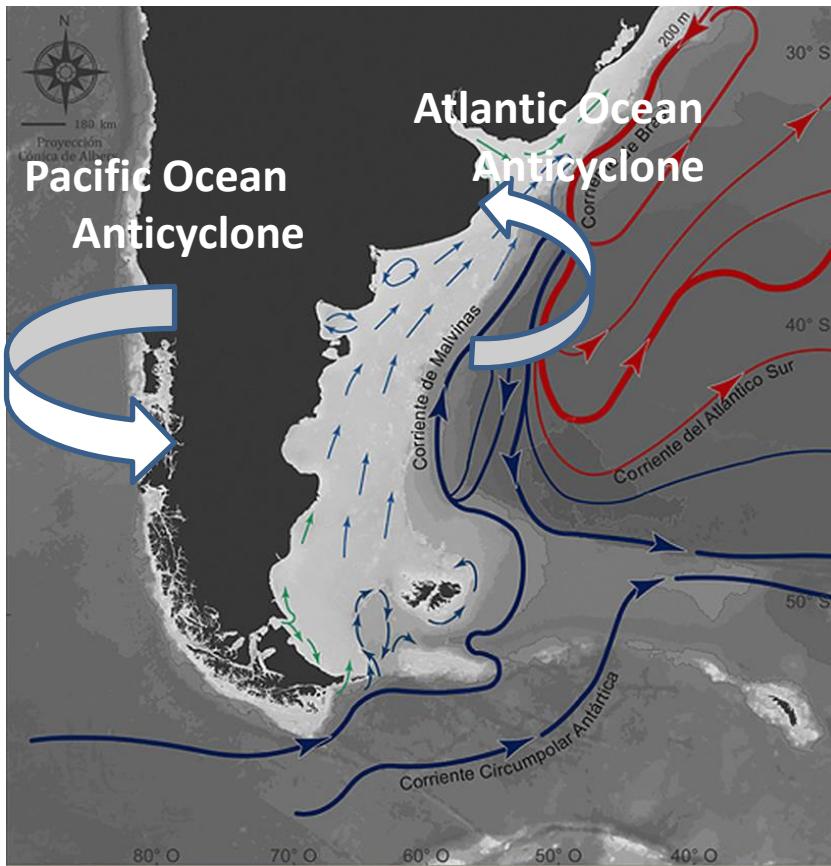
Sauvignon Blanc
 Chardonnay
 Malbec
 Merlot
 Cabernet Sauvignon

	Hectares	Acres	%
BUENOS AIRES	148,6	367,21	
Red varieties	95,4	235,74	% Red
Malbec	13,3	32,87	13,94%
Merlot	12,4	30,64	13,00%
Cabernet Sauvignon	12,3	30,39	12,89%
Pinot Noir	9,4	23,23	9,85%
Tannat	8,1	20,02	8,49%
Cabernet Franc	6,1	15,07	6,39%
Bonarda	3,4	8,40	3,56%
Syrah	2,2	5,44	2,31%
Tempranillo	0,7	1,75	0,74%
Petit Verdot	0,3	0,72	0,30%
Other red varieties	27,2	67,22	28,51%
White varieties	48,9	120,84	% White
Sauvignon Blanc	22,5	55,60	46,01%
Chardonnay	19,8	48,93	40,49%
Riesling	3,2	7,91	6,54%
Torrontés Riojano	0,3	0,74	0,61%
Chenin	0,2	0,49	0,41%
Semillón	0,2	0,44	0,37%
Viognier	0,04	0,10	0,08%
Other white varieties	2,7	6,63	5,48%
Pink varieties	4,3	10,63	% Pink

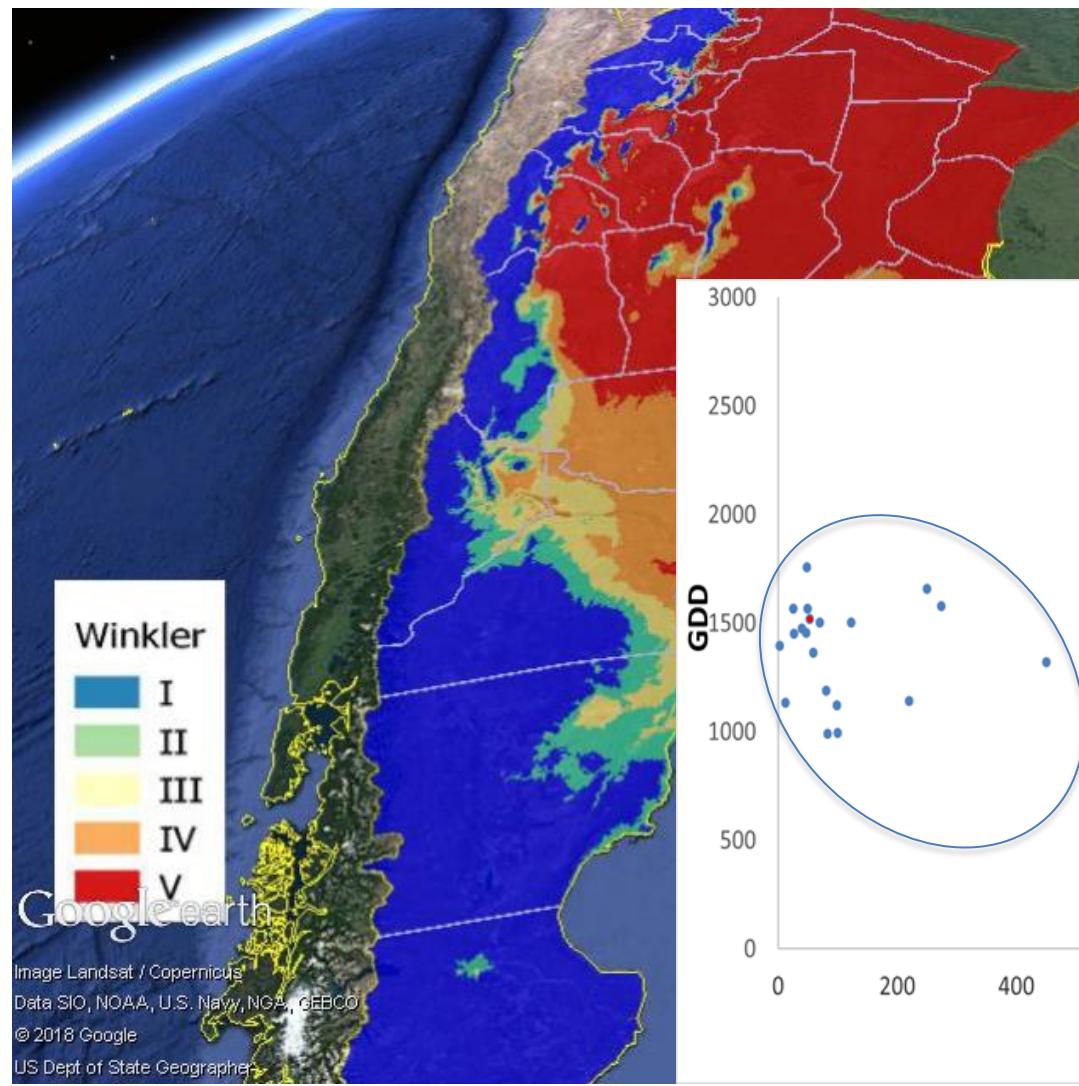


Vinegrowing valleys
ATLANTIC

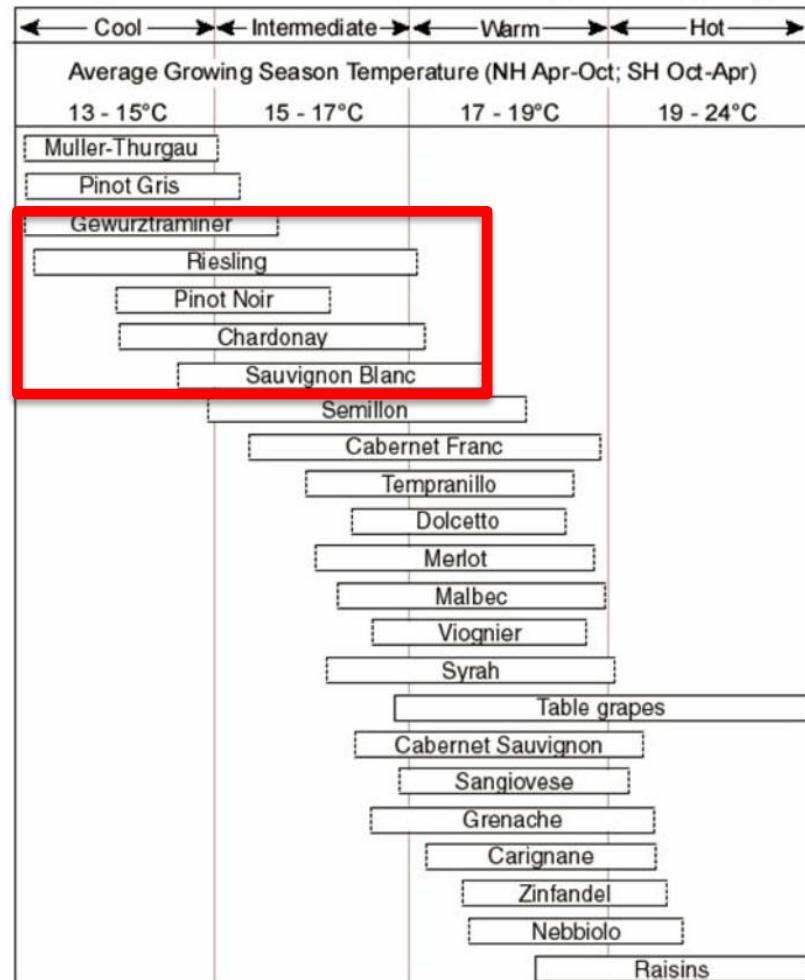


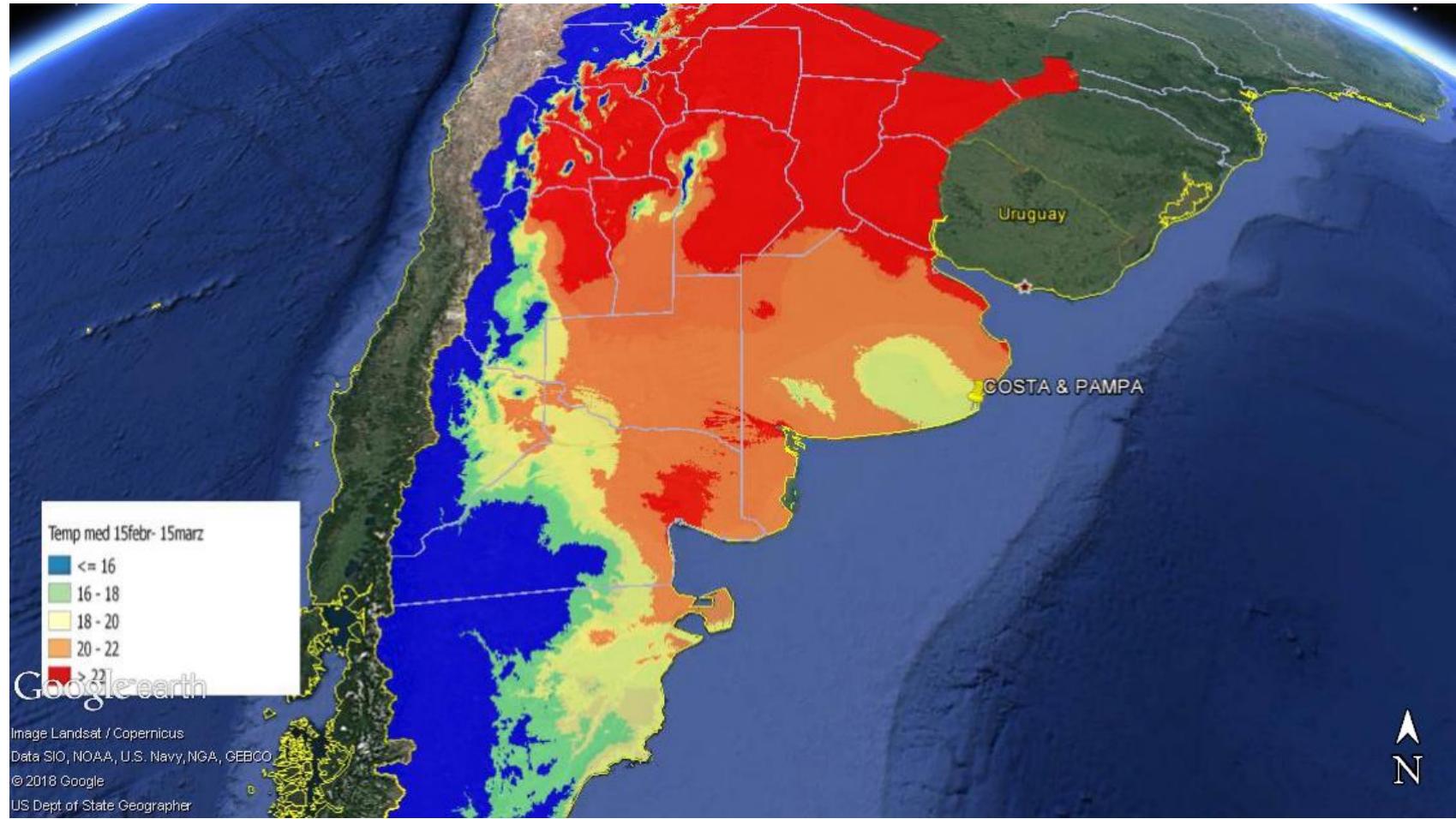


ATLANTIC VITICULTURE
GROWING
Degree days

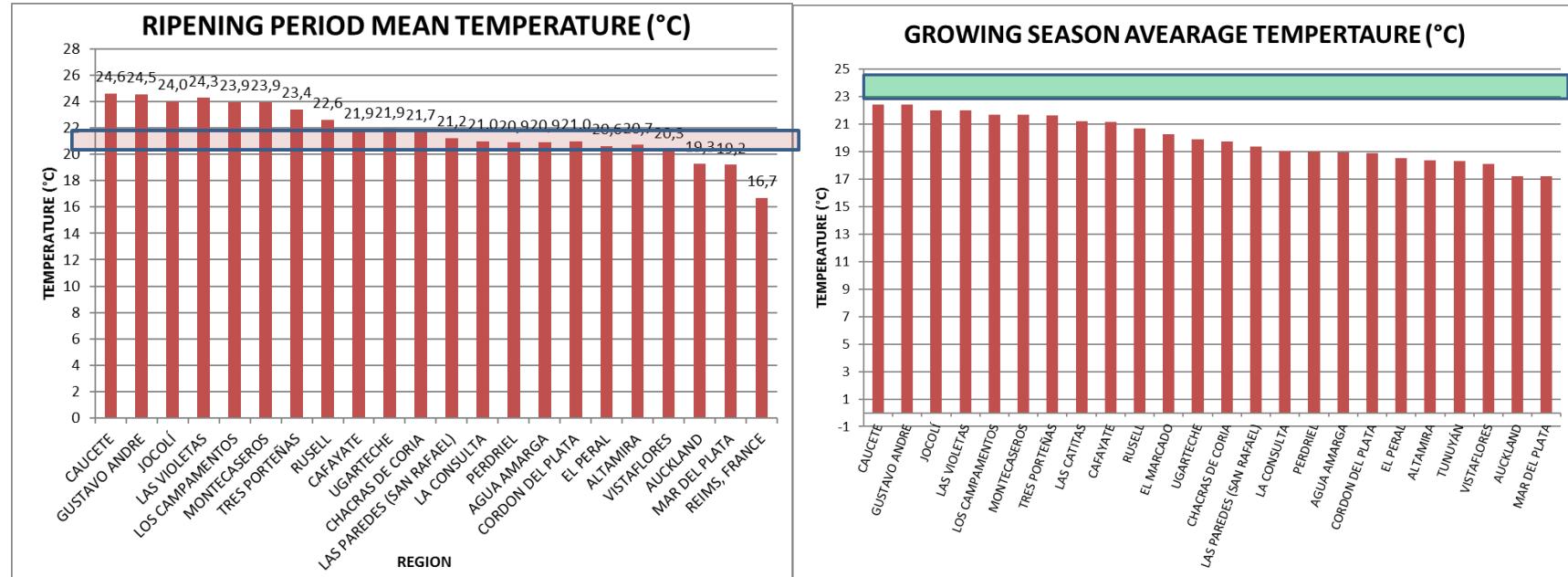


Grapevine Climate/Maturity Groupings





ATLANTIC VITICULTURE
CLIMATE
 Impact of temperature



ATLANTIC REGION

Terroir characteristics



ATLÁNTICA > BUENOS AIRES

GENERAL PUEYRREDÓN > CHAPADMALAL

CHAPADMALAL

ZONA WINKLER



ALTURA

PENDIENTE
0,4%
Noroeste - Sureste



CLIMA
PAMPEANO



PRECIPITACIONES
900 mm



46-6
msnm

STATUS

Aprobada

SUPERFICIE TOTAL

1480 ha

SUPERFICIE PLANTADA

25 ha

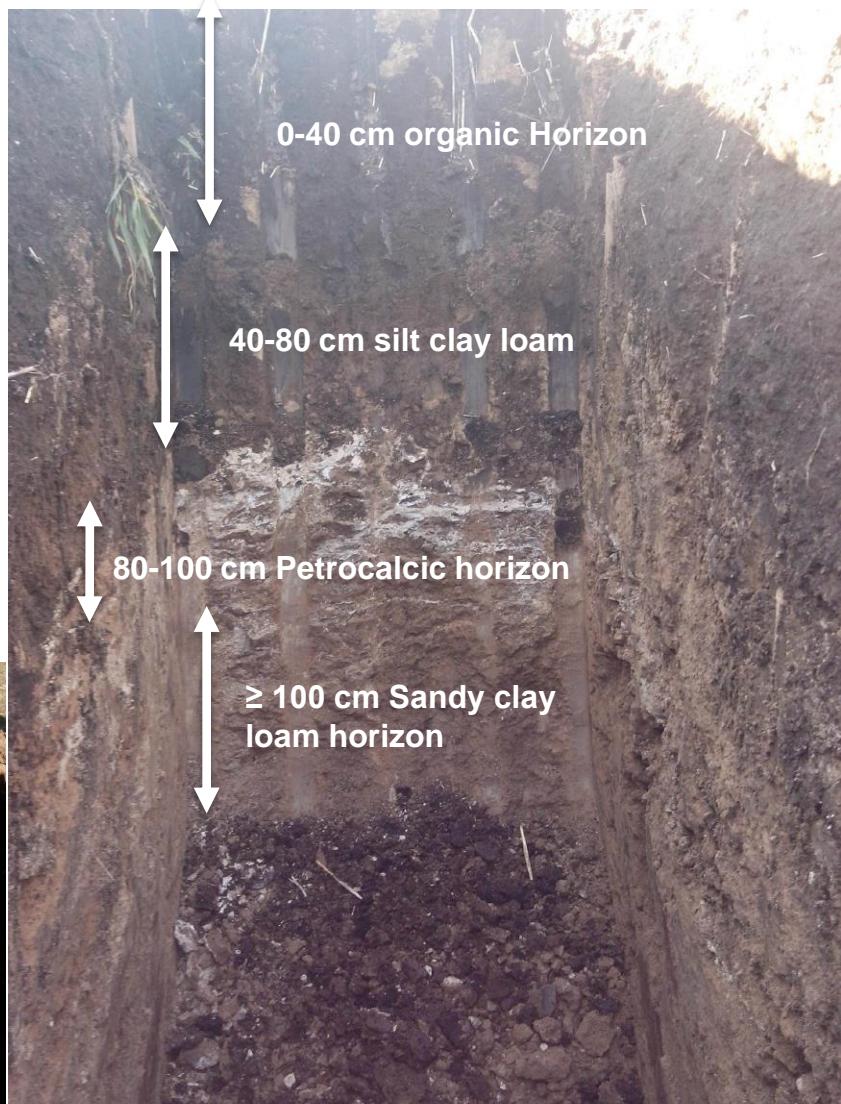


ATLANTIC REGION

Soils



- | Rolling hilly landscape
- | Loessic soils: Eolic deposit from volcanic origin (Los Andes) during the quaternary period.
- | Silty clay loam texture with a petrocalcic horizon (Argiudoll)
- | Vineyards planted at the top of the hills



ATLANTIC REGION

Climate



	Temperatura Mínima	11,26°C
	Temperatura Máxima	23,24°C
	Temperatura Media	16,99°C
	Amplitud térmica Marzo	10,65°C
	Índice de Frescor Nocturno Noches Frías	13,53°C
	Precipitaciones	511,04mm
	Índice de Winkler Región 2	1478,55
	Periodo Libre de Heladas	181 Días
	Carga Térmica	116,3 Hs 57 °C
	Índice de Continentalidad Semihiperocéánico	13,21



ATLANTIC REGION

Climate: Winds





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