

Results of the study Condotta da Juan Vilar Consultores per Agromillora.

OLIVE ORCHARDS IN HEDGEROWS

TRANSFORMATION FOR THE WORLD OLIVE SECTOR 1994 - 2022

FIGURES



450,000
Tons
OF EXTRA
VIRGIN OIL



15% OF ALL OLIVES
PRODUCED
WORLDWIDE



14% OF OLIVE
OIL PRODUCED
IN THE WORLD



36% OF EVOO
IN THE WORLD COMES
FROM HEDGEROWS



960,000
Acres
PLANTED



3.3% OF THE WORLD'S
OLIVE GROVES
ARE IN HEDGEROWS

SUSTAINABILITY & EFFICIENCY



0.7-1.5M
Tons
OF CO₂ PER SEASON



250%
More Efficient
THE INDUSTRY OF
OLIVE ORCHARDS
IN HEDGEROWS

THE QUALITY OF OUR OLIVE TREES

We are continually innovating to ensure large-scale production of the highest genetic and sanitary quality for our customers.

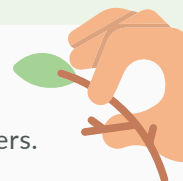


Genetic Quality

We have the best genetic materials adapted to the hedge olive grove system.

Quality Control

We carefully select plants for our customers.



Characteristics

Agromillora's olive plants come from semi-herbaceous staking and are rooted under nebulization.

Mother Plant Fields

We offer a distinguished product based on material exclusively from our mother plant fields, which are controlled at both the genetic and sanitary levels.




LECCIANA
USPP# 30,208

Sikitita™
USPP# 19,511


CORIANA™
USPP# 35,366

Todolivo I-15™
USPP# 32,302

Protected and Exclusive Varieties

We have selected clones and varieties as well as new materials from the most advanced Genetic Improvement Programs in the world: Universities of Cordoba, Bari, Florence, and Todolivo.



BREEDER UNIVERSITÀ
DEGLI STUDI DI BARI

USPP# 30,208



LECCIANA™

'Arbosana' x 'Leccino'™ cross

A type of oil that is highly valued for its organoleptic properties, has a very constant quality throughout the season. **High polyphenol index** (can be twice that of Arbequina), also high in oleic acid. Above all, tasters like it for its complex oil, which may have spicy, bitter, and fruity notes. This polyphenolic content gives the EVOO good stability.

Vigor: with abundant irrigation and good soil conditions, it is capable of displaying the same or more vigor than Arbequina. However, in fields that are rainfed, have support irrigation systems, or practice organic farming and in cold areas, its vigor is controlled, producing constant harvests.

Branching: in this regard, its arbosana parentage shows, having a good leaf/wood ratio.

Productivity: similar to Arbequina. Its powerful root system gives it significant hardiness, so it is recommended for rainfed/support irrigation systems or organic farming. The fruit retains its turgidity despite the lack of water in summer. Oil yield equal to or higher than Arbequina.

Cold Tolerance: good, better than the rest of the varieties adapted to hedgerows thus far.

Harvest time: very early; it is one of the first to reach veraison and can be harvested a week earlier than the ideal time for the Arbequina variety.

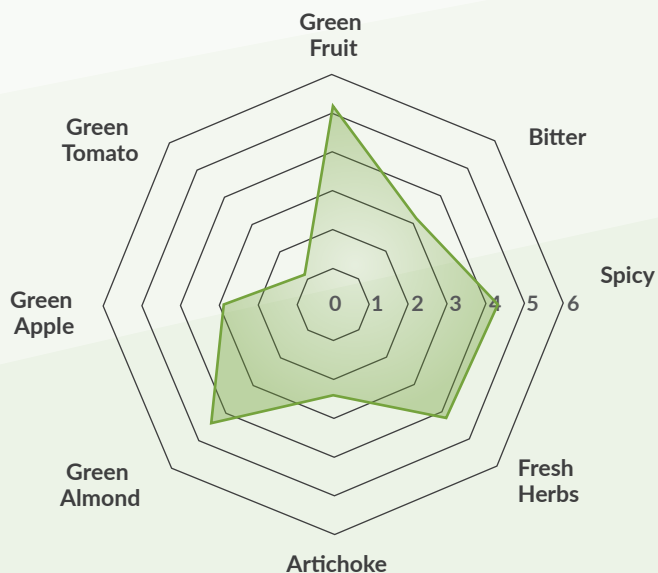
Who is this variety for?

It is suitable for difficult soil and climatic conditions (organic farming, cold areas, dry land, or support irrigation), where its production is barely reduced compared to other varieties, due to its rusticity.

Highly recommended for anyone who wishes to obtain a balanced, premium EVOO (fruity, spicy, and bitter) and who calls for the EFSA requirement on polyphenols (>250ppm) be met to regard them as a healthy EVOO.

Global Oil Profile

This green variety of Extra Virgin Olive Oil has a strong character and good olfactory-gustatory harmony, with complexity, an intense aroma, and pronounced fruity, spicy, and bitter notes.



Main Characteristics

TREE

Bearing	ERECT
Vigor	AVERAGE

FRUIT

Olive weight (g)	3.3
Pulp/weight ratio	9.42
Oil yield (%sms)	52.80

Virgin Oil

Ratio of mono/polyunsaturated	10.7
Total polyphenols	362mg/kg
Bitterness (K232)	1.829
Stability (hours at 120°C)	15.79

FATTY ACIDS (%)

Palmitic (C16:0)	15.51
Palmitoleic (C16:1)	1.22
Stearic (C18:0)	2.21
Oleic (C18:1)	71.05
Linoleic (C18:2)	8.11
Linolenic (C18:3)	0.74



You can find more information about Lecciana on our website



CORIANA™

'Arbosana' x 'Koroneiki' cross

A type of oil characterized by its bitterness and spiciness, which is due to its high polyphenol content. Improves on the Arbequina in terms of Oleic acid. Very interesting both as a single varietal and as an improver of EVOOs that may have gone flat.

Vigor: medium-low, similar to 'Arbosana.' It is bushy, not erect, and sends out many fruiting branches.

High productivity, oil yield equal to or higher than Arbequina. This variety does best in irrigated conditions. Very precocious, it is immature for only the first two "springs".

Tolerance to cold, behaves similarly to the Arbequina in olive-growing areas, in cold areas still under observation to see its potential.

Fruit: similar to arbosana but ends in a point, reaches veraison with violet tones. Fruits in clusters.

Ideal harvest time: it generally reaches its maximum oil yield 1 week after Arbequina with oil that may have turned from green to tomato notes, but when harvested at the

same time as arbequina (with a similar oil yield), it offers an exceptional oil with high polyphenol content and spicy, fruity and bitter characteristics.

Who is this variety for?

Highly suitable for fields with sufficient water available, where it will provide high yields of EVOO with a high organoleptic quality (spicy and bitter), and exceeding the EFSA requirement on healthy oils.



You can find more information about Coriana on our website



Virgin Oil

Polyphenols 388 mg/kg 11.92

Stability (hours at 120°C) 14.5

Fatty Acids (%)

Myristic (C14:0) 0.02

Palmitic (C16:0) 14.80

Palmitoleic (C16:1) 1.37

Heptadecanoic (C17:0) 0.04

Heptadecanoic (C17:1) 0.08

Stearic (C18:0) 2.15

Oleic (C18:1) 73.18

Linoleic (C18:2) 6.54

Arachidic (C20:0) 0.44

Linolenic (C18:3) 0.81

Eicosenoic (C20:1) 0.33

Behenic (C22:0) 0.16

Erucic (C22:1) ND

Lignoceric (C24:0) 0.08

Coriana™ EVOO tasting notes

Green Fruit 5.8

Bitter 3.3

Spicy 4.8

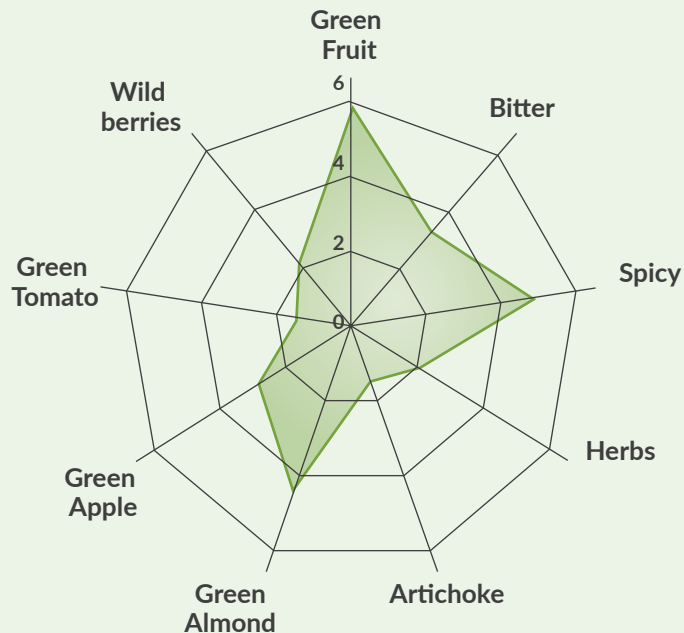
Fresh Herbs 2

Artichoke 1.4

Green Almond 4

Green Apple 2

Tomato 2.5



USPP# 19,511

SIKITITA™

'Picual™' x 'Arbequina' Cross

Breeder's data*

A type of oil with good organoleptic characteristics, high in polyphenol and oleic acid content - far superior to Arbequina. Offers very fruity oils with high acceptance among consumers and commercially. Notes of green leaf, almond, dried fruits and nuts, and artichoke.

Vigor: Low, always lower than Arbequina; depending on the area, equal to Arbosana

Branching: Weeping bearing.

Productivity: High and constant. Due to its higher fat yield, oil production is similar to Arbequina, Arbosana, and Sikitita™. Good extractability in the oil mill.

Tolerance to the cold: Good tolerance.

Time of harvest: Very early, it is currently the earliest variety in the system of growing olive groves in hedgerows.

Who this variety is for: Recommended for any type of soil. Ideal for the production of EVOO that is highly apprecia-



You can find more information about Sikitita on our website

Global Oil Profile

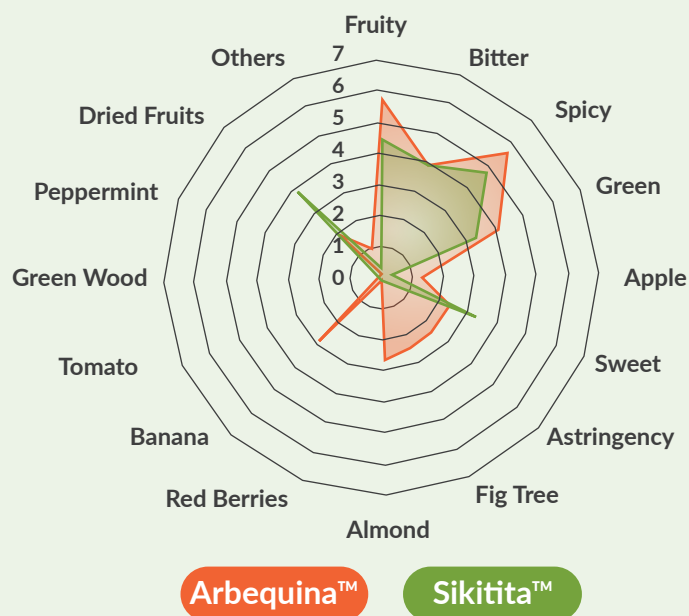
Highly fruity EVOO, with hints of dried fruits and nuts as well as notes of green leaf and artichoke.

Main Characteristics

TREE

Bearing	WEeping
Vigor	LOW

FRUIT	2.5
Olive weight (g)	9.6
Pulp/weight ratio Oil yield (%sms)	50.0



Virgin Oil

Mono/polyunsaturated ratio	--
Total Polyphenols	437 mg/kg
Bitterness (K232)	--

FATTY ACIDS (%)

Palmitic (C16:0)	15.0
Palmitoleic (C16:1)	2.0
Stearic (C18:0)	2.1
Oleic (C18:1)	73.9
Linoleic (C18:2)	5.1
Linolenic (C18:3)	0.7



Todolivo I-15^P

'Arbosana' x 'Koroneiki' cross

Breeder's data*

An intensely fruity type of oil with scents of home-grown fruits, as well as green notes of fresh herbs and young olives. Very balanced, smooth and fresh on the palate, marked bitterness, and a spicy aftertaste. The organoleptic characteristics of its parents, the Arbosana and Koroneiki, come together perfectly in this extra virgin olive oil.

Vigor: Its vigor is medium/low. It requires little pruning and displays a rapid productive response to pruning, making its agronomic management quite simple and economical.

Branching: It is structurally very similar to its parent, Arbosana I-43, which makes it ideal for cultivation in hedgerows. Its internodes are short and have abundant branching with a high amount of olives in its mass of foliage. It branches really well with very simple pruning.

Productivity: Its production is early, very high, and constant. Oil yields are high in both early and late maturation, with early maturing producing the greatest differences in production compared to the rest of the varieties in both rainfed and irrigated conditions. In the tests carried out

to date, it has surpassed its parents in kg of EVOO/ha,, as well as an international collection of 33 traditional varieties; among these, it is compared to the irrigated 'La Mata' and 'Las Hazuelas' and rainfed 'Calderito Alto' farms.

Time of harvest: Todolivo I-15^P has the advantage of offering a lot of oil early on, making it possible to harvest earlier in order to obtain excellent EEVOs and get prices at the beginning of the season for oil without making the harvest more expensive, as the fruit is harvested green, when it releases easily.

Who this variety is for: Variety of great hardiness and adaptability for different types of soils and climates. Constant high productivity both in rainfed and irrigated conditions. Suitable for all farmers with irrigated and rainfed systems who wish to produce an EVOO of extraordinary organoleptic quality and increase the profitability of their farm, regularly producing more kilos of oil/ha than the other traditional varieties with simple, economical management.

Global Oil Profile

Highly fruity EVOO, with hints of dried fruits and nuts as well as notes of green leaf and artichoke.

Main Characteristics

TREE

Stature OPEN

Vigor MEDIUM/LOW

FRUIT

Olive weight (g) MEDIUM

Oil yield (%sms) 49.95

Virgin Oil

Total Polyphenols 343mg/kg

Bitterness (K232) 1.84

Stability (hours at 120°C, Arbequina= 45) 13.70

FATTY ACIDS (%)

Palmitic (%) 12.75

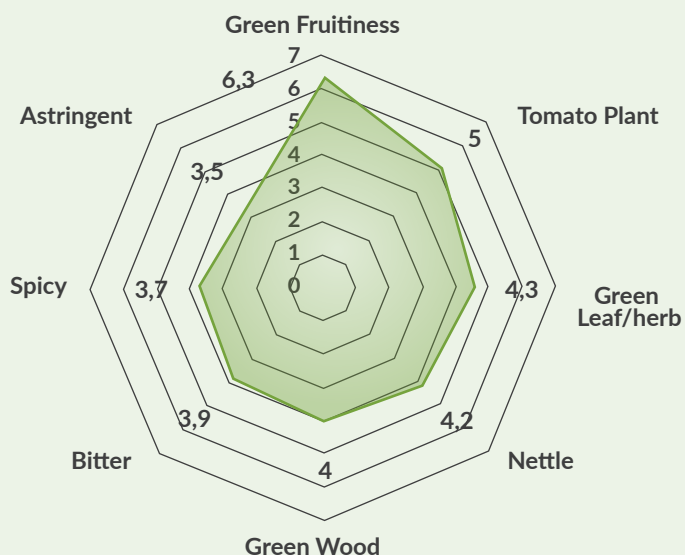
Palmitoleic (%) 0.80

Stearic (%) 2.63

Oleic (%) 72.09

Linoleic (%) 9.73

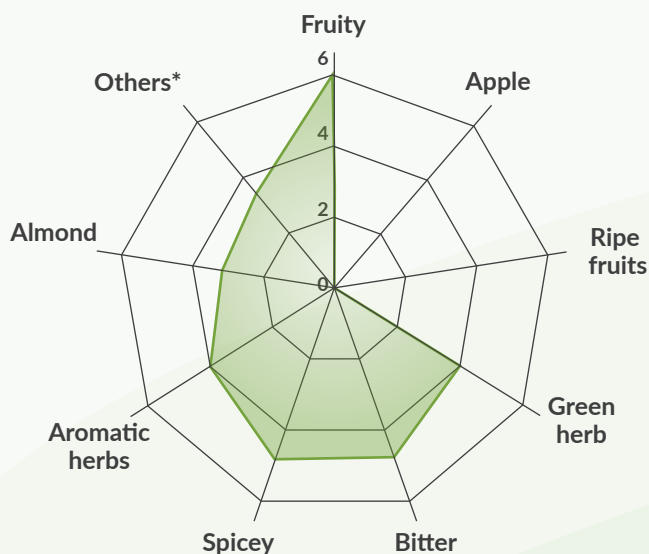
Linolenic (%) 0.66



You can find more information about **Todolivo I-15^P** on our website

Arbosana

Corresponds to a green type of virgin oil with a strong personality, good harmony at the aromatic level and high levels of bitterness, spiciness and astringency. Persistent.



Main Characteristics

TREE

Stature	OPEN
Vigor	LOW

FRUIT

Olive weight (g)	1.43
Pulp/weight ratio	4.65
Fat yield (% dry matter)	51.80

- A variety well suited for the SHD system.
- Medium vigour: the final size will depend on soil and climatic conditions and agronomic management. Consistent, high yield.
- Early entry into production.
- Ripening in the northern hemisphere: Starts in October in the earliest areas. Ends in December in the latest areas.
- Relatively tolerant to cold.

Virgin Oil

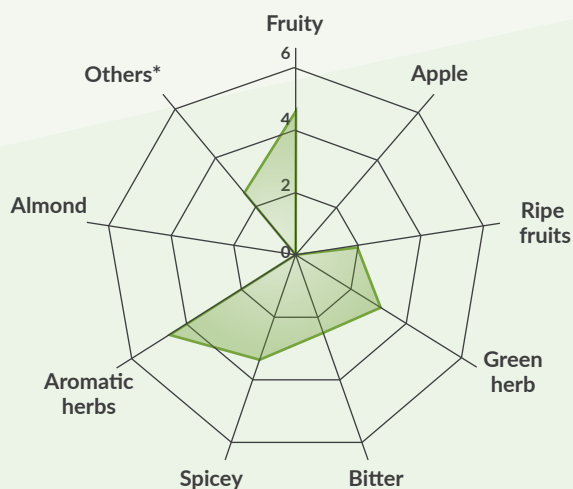
Mono/polyunsaturated ratio	10.23
Polyphenols (ppm of caffeic acid)	680
Bitterness (K225)	0.289
Stability (hours at 120 °C)	15.79

FATTY ACIDS (%)

Palmythic (C16:0)	13.40
Palmitoleic (C16:1)	1.44
Stearic (C18:0)	2.14
Oleic (C18: 1)	74.28
Linoleic (C18:2)	6.88
Linolenic (C18:3)	0.58

Arbequina

Corresponds to a sweet type of virgin oil. Delicate and fragrant. Medium fruitiness with low levels of bitterness and spiciness. Harmonious, enabling it to be marketed as mono-varietal or in combination with oils high in polyphenols in order to enhance its stability.



Main Characteristics

TREE

Stature **UPRIGHT**

Vigor **MEDIUM**

FRUIT

Olive weight (g) **1.71**

Pulp/weight ratio **4.20**

Fat yield (% dry matter) **48.8**

- A reference variety of SHD olive plant.
- Medium vigour: the final size will depend on soil and climatic conditions and agronomic management. Consistent, high yield.
- Early entry into production. Ripening in the northern hemisphere: Starts in October in the earliest areas. Ends in December in the latest areas.
- Relatively tolerant to cold.

Virgin Oil

Mono/polyunsaturated ratio **7.57**

Polyphenols (ppm of caffeic acid) **270**

Bitterness (K225) **0.124**

Stability (hours at 120 °C) **7.89**

FATTY ACIDS (%)

Palmythic (C16:0) **13.97**

Palmitoleic (C16:1) **1.53**

Stearic (C18:0) **1.83**

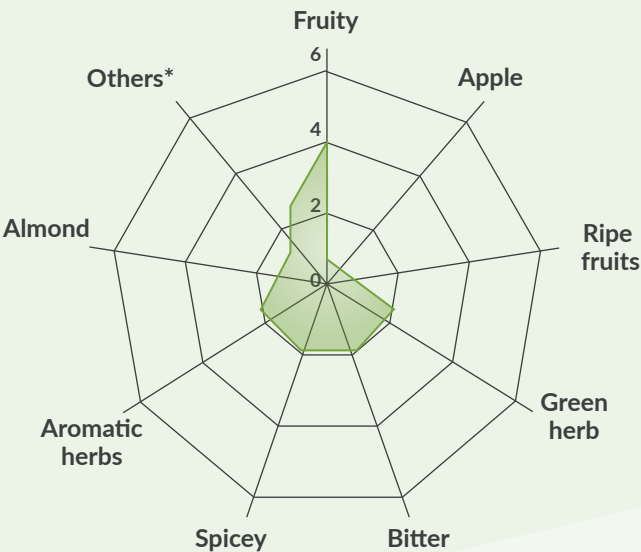
Oleic (C18: 1) **71.78**

Linoleic (C18:2) **9.28**

Linolenic (C18:3) **0.47**

Koroneiki

Corresponds to a green type of virgin oil, very complex and highly stable. Persistent, with high astringency. Characteristic dark green colour.



Main Characteristics

TREE

Structure	UPRIGHT-OPEN
Vigor	MEDIUM-HIGH

FRUIT

Olive weight (g)	1.07
Pulp/weight ratio	2.70
Fat yield (% dry matter)	51.10

- A variety well suited for SHD olive grove.
- Medium to high vigour and upright-open structure which makes it difficult to manage in fertile irrigated soils and mild climates.
- Very productive and early. Very high oil yield.
- Ripens 2 weeks earlier than Arbosana.
- Low resistance to cold.
- Oil highly valued in the market.

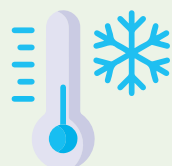
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Linolenic (C18:3)	0.58

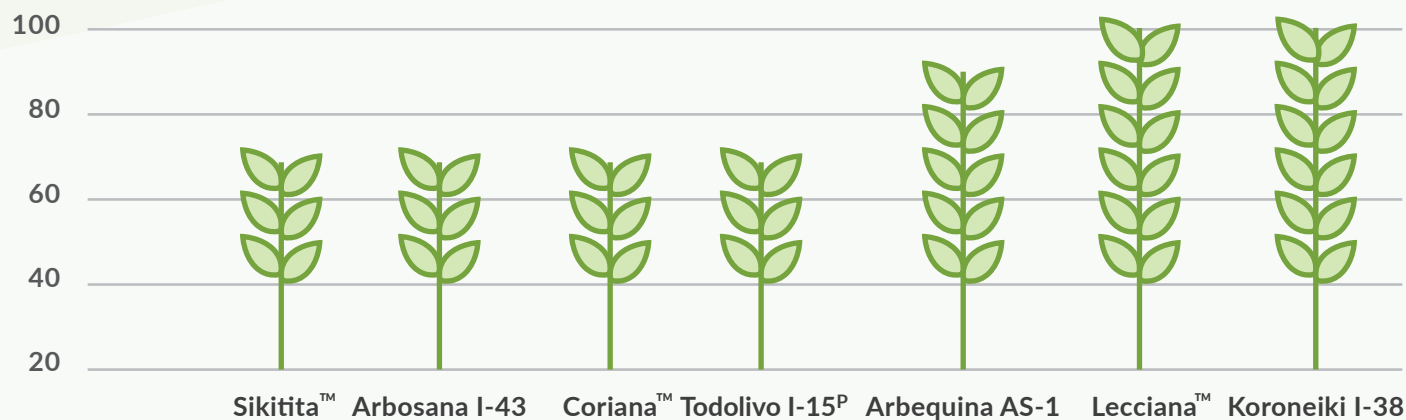
COMPARISON OF VARIETIES



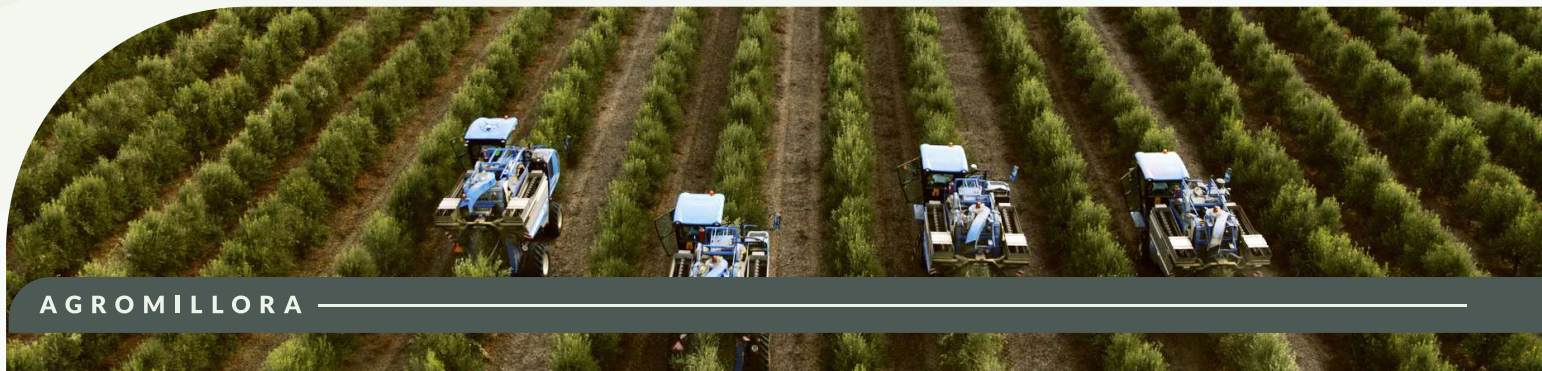
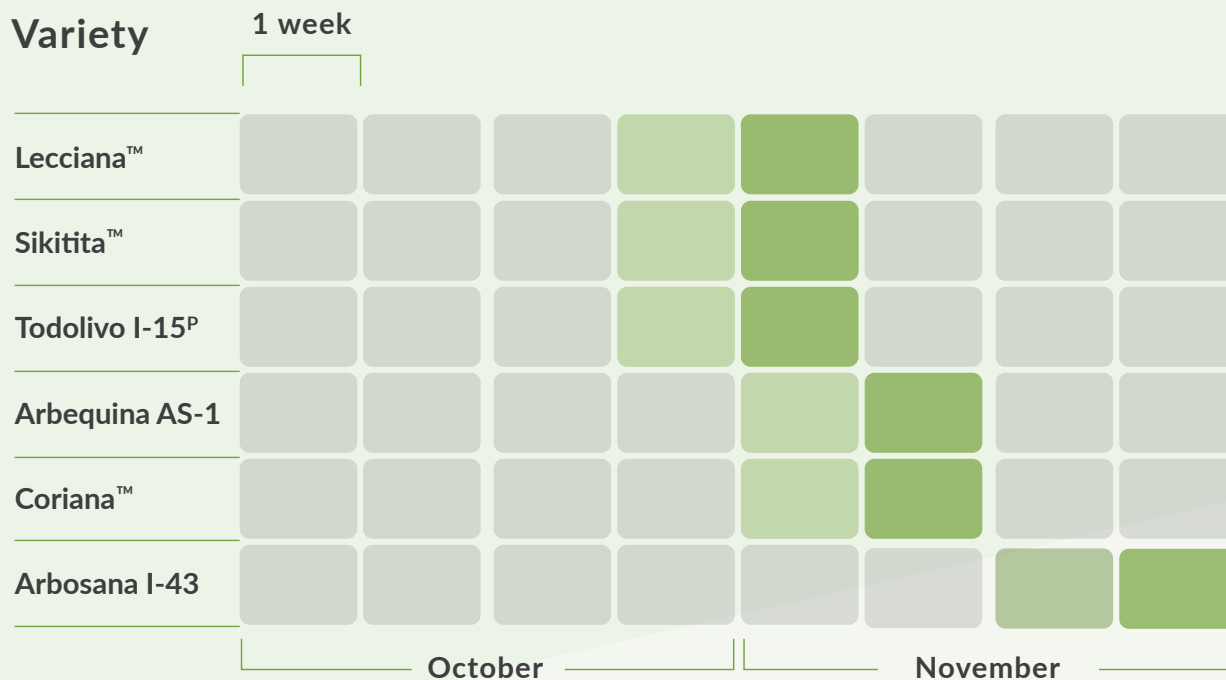
RESISTANCE TO COLD¹



SCALE OF VIGOR

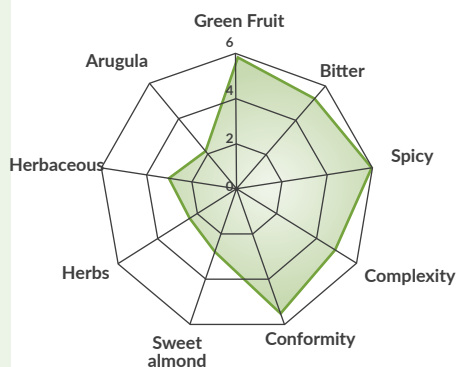


MATURATION PERIOD

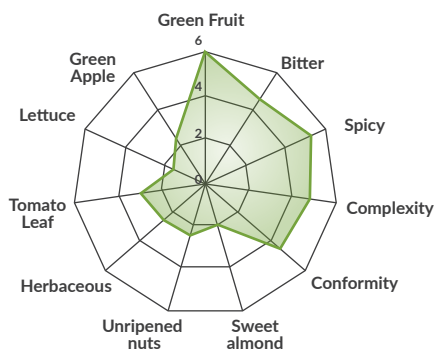


WHAT'S UP NEXT...

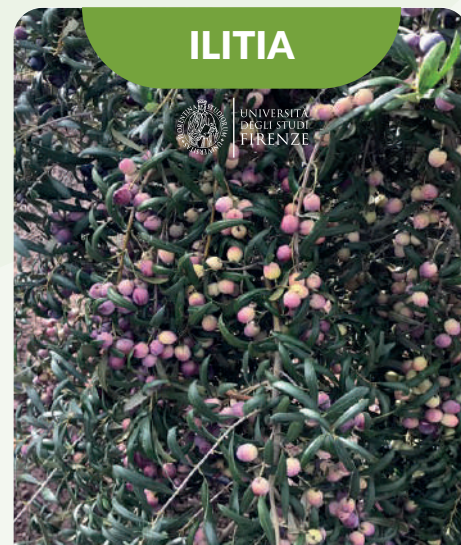
FLORENTIA



BRUNELLA



ILITIA



Genetic Improvement Program

I-20P

I-30P

I-42P

I-40P

I-47P

I-51P

I-99P

I-100P

NOTES



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