RRA Varieties 2076









Grapa Company

In 1882, the Karniel family started their first vineyard. Through the generations, they advanced their grape industry to international levels of quality and technology.

In the late 80's, Shachar Karniel, 4th generation of the founders of the Karniel Farms, established a breeding program. The breeding program's world renown variety GRAPAES, known by its trademark EARLY SWEET, is successfully commercialized by the GRAPA Company.

During the last years, Mr. Karniel continued to develop supreme grape varieties at the grape breeding center of ARD LLC, subsidiary of Giumarra Vineyards Corporation in Bakersfield, California.

Today, Shachar Karniel's sons are in charge of the company's activities. Rafi Karniel, Adv. is the Managing Director. He is responsible for the worldwide commercialization and marketing of the new ARD LLC varieties known as the "ARRA" varieties. His mission is to continue the tradition of his forefather's unique business method, which emphasizes the family's friendly and personal contact with each and every grower and wholesaler. Adi Karniel is GRAPA's Technical Manager. He accompanies GRAPA's clients with technical support, and the guarantee of table grape varieties that are held at the highest standards of quality, fertility, long shelf life, excellent presentation and exceptional taste.

Grapa

The Giumarra Vineyards Corporation story began in the early 1900's when Giuseppe Giumarra, aka Papa Joe, immigrated to the United States with a dream of growing, producing and marketing fruits and vegetables, of the finest quality, to the world.

In 1922, Papa Joe and his brothers opened the Giumarra Brothers Fruit Company in Los Angeles' wholesale produce terminal.

During 1939 the Giumarra Vineyards Corp. was founded in California.

Since the early 1940's Giumarra Vineyards has been the leader in the California grape industry; creating and implementing new growing, packing, cooling, and shipping techniques.

Through decades of hard work and unwavering commitment to quality, Giumarra Vineyard's "GRAPE KING" label became the most sought after brand of table grapes around the world.





ARD LLC (Agricoltural Research & Development)

The ARD LLC Breeding Project was founded in 1999. The visionaries behind the project were Mr. Shachar Karniel and Mr. Sal Giumarra, president of Giumarra Vineyards Corporation. Their vision was of a labor free, highly productive vineyard that would deliver attractive seedless grapes of delicious eating quality.

Since these market trends and needs became apparent, the breeding program team has been working diligently to transform the vision into reality.

After more than 10 years of research and hard work, ARD LLC is proud to present its exciting assortment of new varieties - the ARRA varieties.

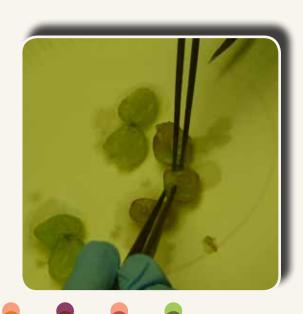
ARD Breeding Program

ARD's Breeding Program has widely diverse innovate projects.

A few of the projects include:

- Active gene bank.
- · Extensive breeding program.
- Embryo rescue program (seedless x seedless). Hand selected breeding parentals.
- Induced mutations.





Embryo Rescue















ARRA Harvest Calender

	January	February	March	April	May	June	July	August	September	October	November	December
ARRA 15												
ARRA 30												
ARRA 13												
ARRA 19												
ARRA 28												
ARRA 29												
ARRA 31												
ARRA 14												
ARRA 18 Clone 20												
ARRA 27												
ARRA 32												

Pipeline Harvest Calender

	January	February	March	April	May	June	July	August	September	October	November	December
26-19+2												
26-6+3												
36-39+3												
37-51+2												
40-70+1												
73-79+9												
8A-19+4												
9A-3+1												
26-13+4												
40-55+3												
35-11+2												
8A-35+1												

White Selection



White Selection



8A-19+4





Early

Comparison Varieties Early Sweet, Prime

Mid Early

Comparison Varieties SugraOne

Mid

Comparison Varieties Thompson Seedless, Princess, Regal

Mid Late

Comparison Varieties Princess, Regal

Late

Comparison Varieties
Autumn King

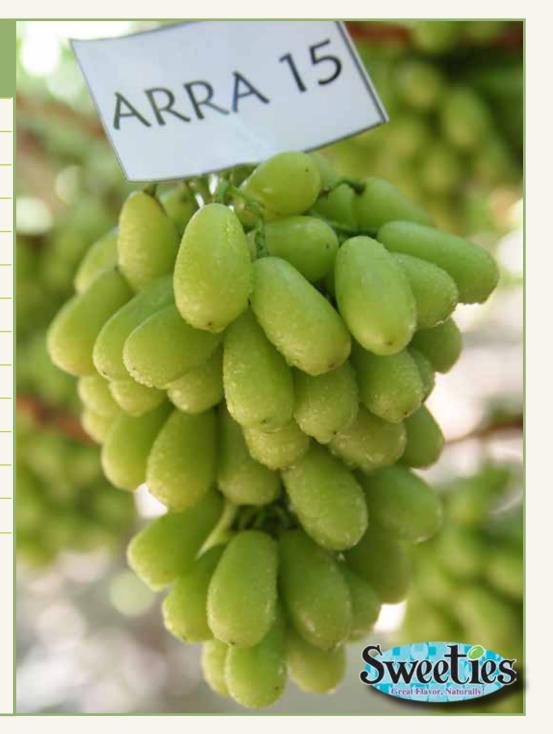






ARRAFIFTEEN

Harvest	Mid late, 3 weeks after Thompson
Optimal brix	20 brix
Flavor	Sweet
Berry size	22mm X 42mm
Texture	Very crisp, meaty and juicy
Skin	Medium
Berry Attachment	Very good
Rudiment	Sterile
Cap Stem \ Brush	Long \ Thick
Bunches \ Vine	40-42
Tons per hectare	35
Chilling	Low
Pruning	Spur
General	Excellent sugar-acid balance. Very
	fertile, medium-large bunch.
	Rain resistant with very good
	hanging and storage ability.
	Suitable also for desert and tropical
	climates.



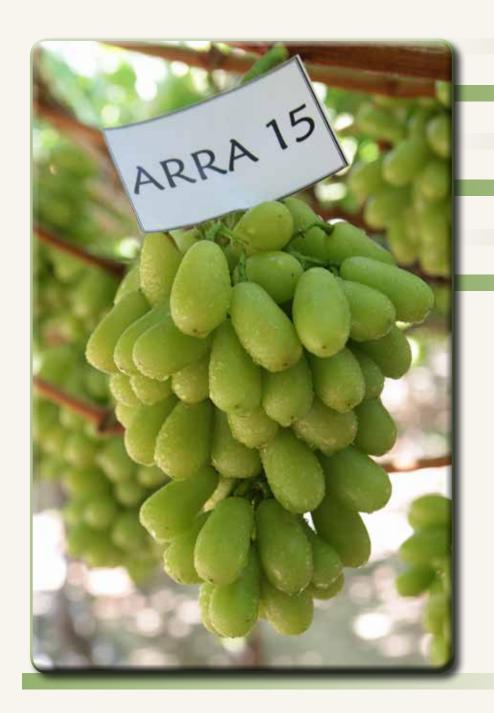






Bakersfield, California







The "Thompson Terminator"



Bakersfield,

California





In production





Harvest in Italy



Orchidea Farm





Italy





ARRA: le uve dal cuore biscegliese, conquistano i supermercari Dok e Famila

Promotion of ARRA 15 in Supermarkets

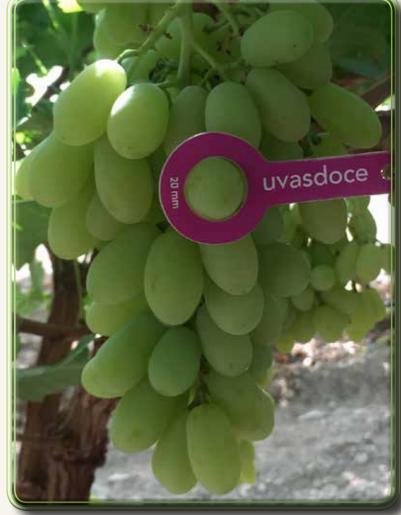




Spain



Uvasdoce



First Year Production

Moyca First Year Production





Namibia





First Year Production Andre Vermaak



First Year Production Cape Orchard Company

South Africa

TopFruit

Test Block









South Africa



Commercial Harvest



Cape Orchard Company





Ecuador



Pura Vida

Second Year Production







Peru SAGSA Farm

















Peru



Negociacion Agricola

Jayanca







Brazil



"Overhead"







Brazil



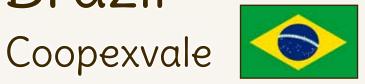
"V" trellising system







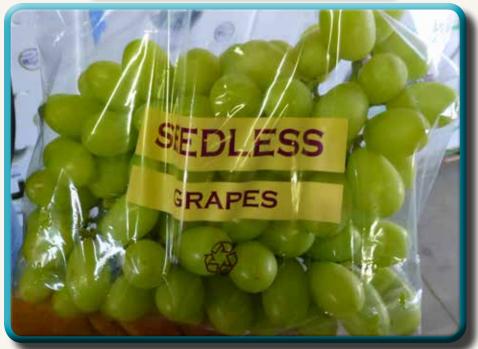
Brazil



At the Pack House











Brazil ARRA 15 Export

COANA

GVS

SunValley













Chile *



Atacama













ARRATHIRTY

Harvest	Early, 5 days before SugraOne
Optimal brix	18 brix
Flavor	Naturally sweet
Berry size	22mm x 35mm
Texture	Crunchy
Skin	Thin
Berry Attachment	Very good
Rudiment	Soft and small
Cap Stem \ Brush	Long \ Thin
Bunches \ Vine	32-36
Tons per hectare	24-26
Chilling	Medium
Pruning	Spur
General	Excellent hanging ability.
	Perfect for mass production.
	Excellent replacement for a very early
	white variety.





Bakersfield, California









Bakersfield,

California







Egypt



Technogreen Farms

First Year Production







Egypt



Technogreen Farms

First Year Production







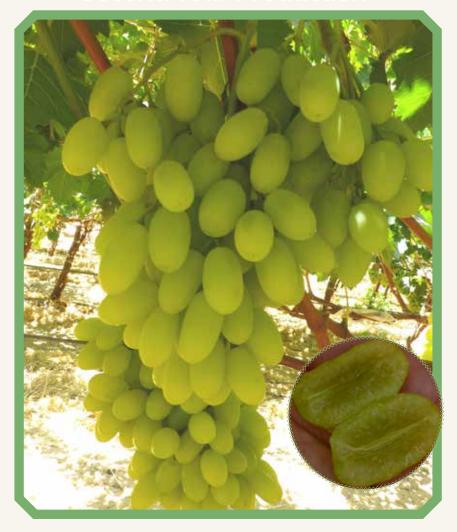


Egypt



Technogreen Farms

Second Year Production







Egypt



Technogreen Farms









Brazil



Agrivale Farm

Two weeks after harvest time



First Year Production







Agrivale Farm

Second Year Production







36-39+3

D	0	100
	De C	blas

Harvest	Late, first week of October
Optimal brix	18 brix
Flavor	Naturally sweet
Berry size	24mm
Texture	Meaty and juicy
Skin	Medium
Berry Attachment	Very good
Rudiment	Sterile
Cap Stem \ Brush	Long \ thin
Bunches \ Vine	42
Tons per hectare	37
Chilling	Medium - high
Pruning	Spur
General	Very productive.
	Good berry size and bunch.
	Very nice creamy color.
	Rain resistant with long shelf life.
	Excellent late season variety.



Bakersfield,









Bakersfield,









ス	7_	51	1_2
	/ -		TL

37-51+2	Pipeline
Harvest	Late, 2 weeks before Autumn King
Optimal brix	18 brix
Flavor	Natural
Berry size	22mm - 24mm
Texture	Meaty and Crunchy
Skin	Medium
Berry Attachment	Very Good
Rudiment	Sterile
Cap Stem \ Brush	Medium \ Long
Bunches \ Vine	36
Tons per hectare	35
Chilling	Medium
Pruning	Spur
General	Very large berry with meaty and juicy flesh. Good canopy that keeps its fresh green color. Suitable for the European market because of its yellow color (increased by leafing).



Bakersfield,

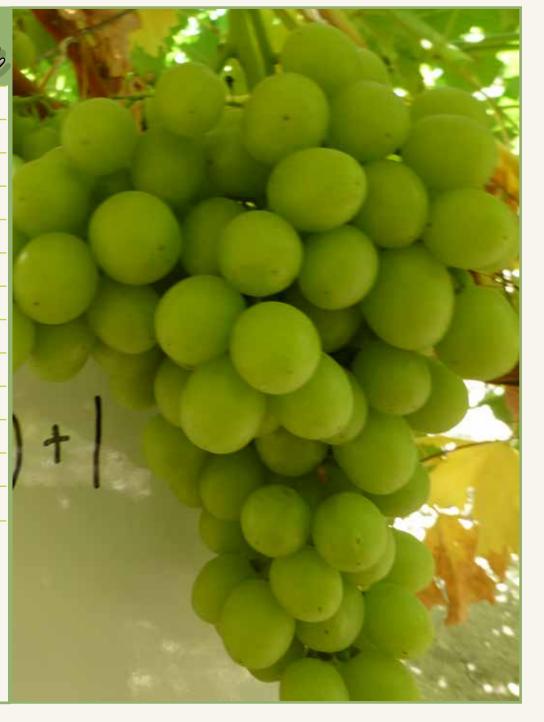








40-70+	1 Pipeline
Harvest	Mid Early season
Optimal brix	22 brix
Flavor	Sweet Muscat
Berry size	18mm - 20mm
Texture	Meaty
Skin	Thin
Berry Attachment	Good
Rudiment	Sterile - Small Green
Cap Stem \ Brush	Short / Medium
Bunches \ Vine	32
Tons per hectare	22 -24
Chilling	Medium
Pruning	Spur
General	Its fine Muscat flavor, combined with its sweetness makes this variety exceptional, very easy to grow, certainly an eye catcher with a milky cream color. This variety did not have discoloration after 40 days in cold storage.



Bakersfield,







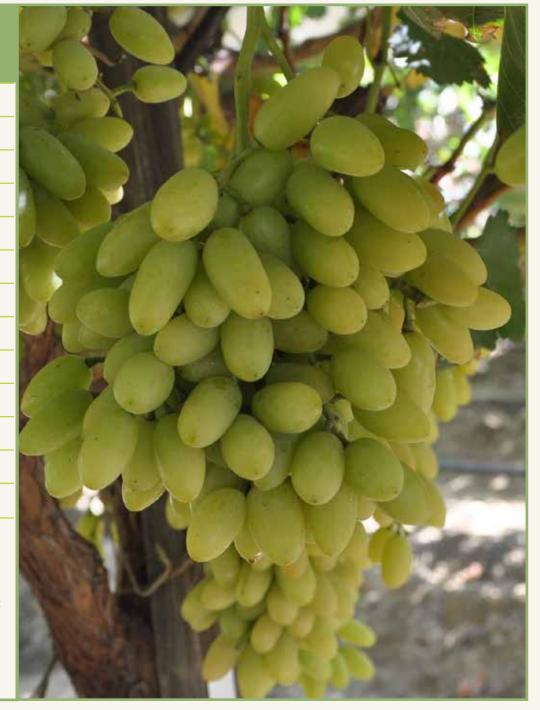




8A-19+4



	The state of the s
Harvest	Mid season, with Thompson
Optimal brix	18 - 20 brix
Flavor	Natural
Berry size	24 X 32 mm
Texture	Meaty
Skin	Thin
Berry Attachment	Good
Rudiment	Sterile
Cap Stem \ Brush	Thick \ Long or Short \ Thick
Bunches \ Vine	36
Tons per hectare	35 - 40
Chilling	Low - Medium
Pruning	Spur
General	Very fertile, with big uniform berries. Rain resistant variety with a sweet taste and exceptional storage capabilities. There are some similarities to ARRA 15, however it ripens a month earlier.



Bakersfield,





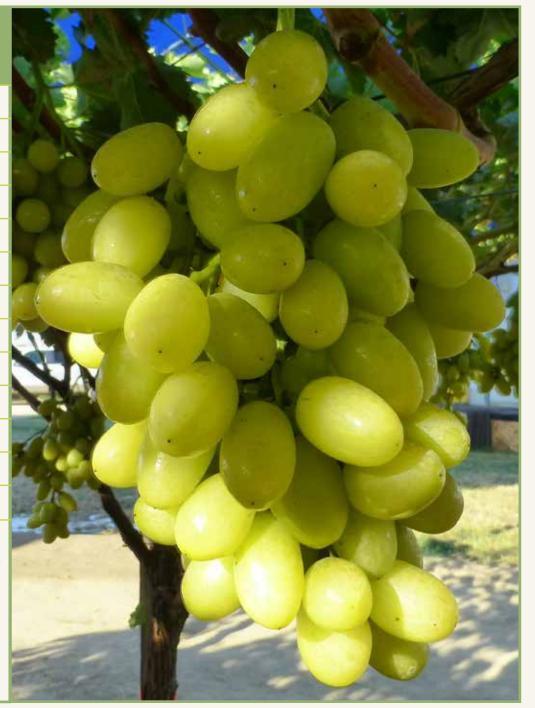




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A	59

Harvest	Very Early, One week before Sugraone
Optimal brix	18 brix
Flavor	Neutral & Light Muscat flavor
Berry size	22 - 24mm
Texture	Crisp
Skin	Thin
Berry Attachment	Very good
Rudiment	Sterile to very small green
Cap Stem \ Brush	Thin - Medium
Bunches \ Vine	32
Tons per hectare	25
Chilling	Low
Pruning	Spur
General	Ripens with ARRA 30, very crunchy and sweet with a thin skin. An excellent replacement for Sugraone. This variety is still under evaluation.



Bakersfield, California









Red Selection



Red Selection



ARRA 28

ARRA 31

Early

Comparison Varieties Flame

Mid Early

Comparison Varieties Flame

Mid

Comparison Varieties Sweet Scarlet, Sunred

Mid Late

Comparison Varieties Crimson, Scarlet Royal

Late

Comparison Varieties
Crimson

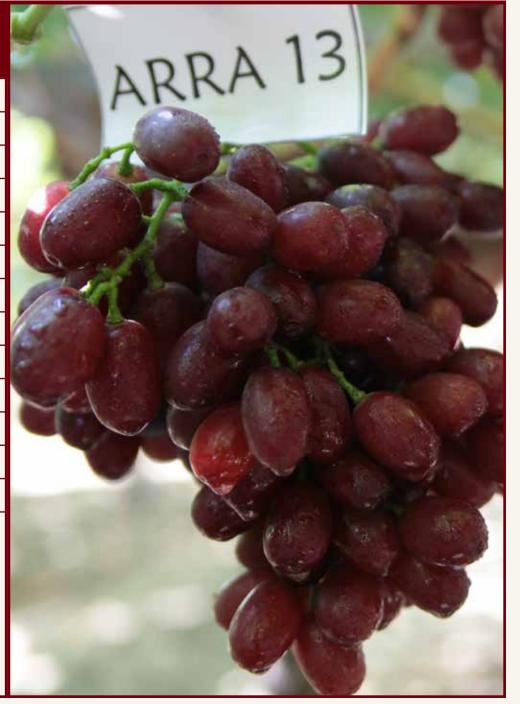






ARRATHIRTEEN

Harvest	Mid Early, with Flame
Optimal brix	17 brix
Flavor	Sweet (Crimson flavor)
Berry size	22mm - 24mm
Texture	Meaty and juicy
Skin	Thin
Berry Attachment	Very good
Rudiment	Sterile - Small, soft seed trace
Cap Stem \ Brush	Long \ thin
Bunches \ Vine	36
Tons per hectare	27
Chilling	Low
Pruning	Spur
General	Very fertile.
	Colors well without Etherel.
	Good eating quality.
	Excellent hanging and storage capacity.



Bakersfield,







Bakersfield,









Namibia



First Grapes Namib

Aussenkehr





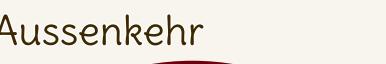
Namibia



Peru



ORVI







SAGSA

Chiclayo



ARRA NINETEEN

Harvest	Mid Late season
Optimal brix	19 brix
Flavor	Naturally sweet
Berry size	22mm
Texture	Crisp and meaty
Skin	Thin
Berry Attachment	Very good
Rudiment	Sterile to very small
Cap Stem \ Brush	Long \ thin
Bunches \ Vine	32-36
Tons per hectare	27
Chilling	High - very high
Pruning	Spur
General	Colors well without Etherel.
	Incredible hanging ability.
	Rain resistant.



Bakersfield,











Agrivale Farm



Brazil



Agrivale Farm





Brazil



Agrivale Farm export to ALDI







ARRA TWENTYEIGHT

Harvest	Late, 30 days after Crimson
Optimal brix	18 brix
Flavor	Apple flavor
Berry size	26mm - 28mm
Texture	Firm and meaty
Skin	Medium - thin
Berry Attachment	Very good
Rudiment	Sterile
Cap Stem \ Brush	Long \ thin
Bunches \ Vine	38-42
Tons per hectare	35
Chilling	Medium
Pruning	Spur
General	Develops a cherry color late in the
	season with no Etherel.
	Extremely good eating quality.
	Rain durable.





Commercial Harvest Bakersfield,









Commercial Harvest Bakersfield,







SUNLIGHT International farm



Bakersfield,









Agrivale Farm

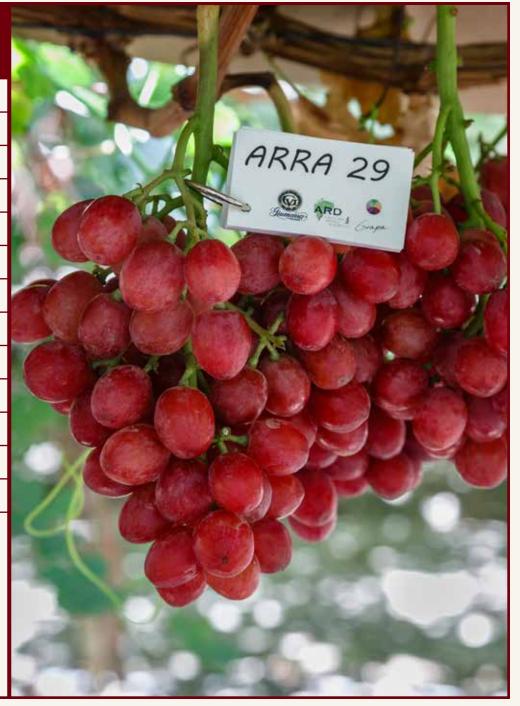






ARRA TWENTYNINE

Harvest	Early season, with Flame
Optimal brix	18 brix
Flavor	Sweet apple flavor
Berry size	24mm - 26mm
Texture	Crunchy
Skin	Natural
Berry Attachment	Excellent
Rudiment	Sterile
Cap Stem \ Brush	Thick \ long
Bunches \ Vine	32-36
Tons per hectare	30
Chilling	Medium
Pruning	Short spur pruning
General	Very large, early, crisp variety.
	Excellent color without Etherel.
	Exceptional eating quality.





Bakersfield, California





Bakersfield,







Egypt



Technogreen Farms







ARRATHIRTYONE

Harvest	Mid Late, 2 weeks before Crimson
Optimal brix	22 brix
Flavor	Naturally sweet
Berry size	19mm - 22mm
Texture	Meaty
Skin	Medium - thick
Berry Attachment	Very good
Rudiment	Small and soft
Cap Stem \ Brush	Short \ thick
Bunches \ Vine	36
Tons per hectare	35
Chilling	Medium
Pruning	Spur
General	Crimson appearance, good color
	development. Very good eating
	quality. Exceptionally resistant to
	rain.











Brazil Agrivale Farm







Brazil Agrivale Farm









Peru SAGSA Farm







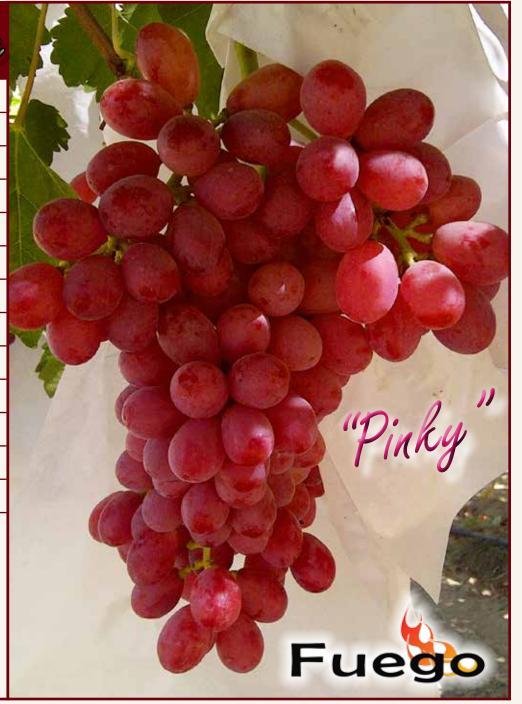


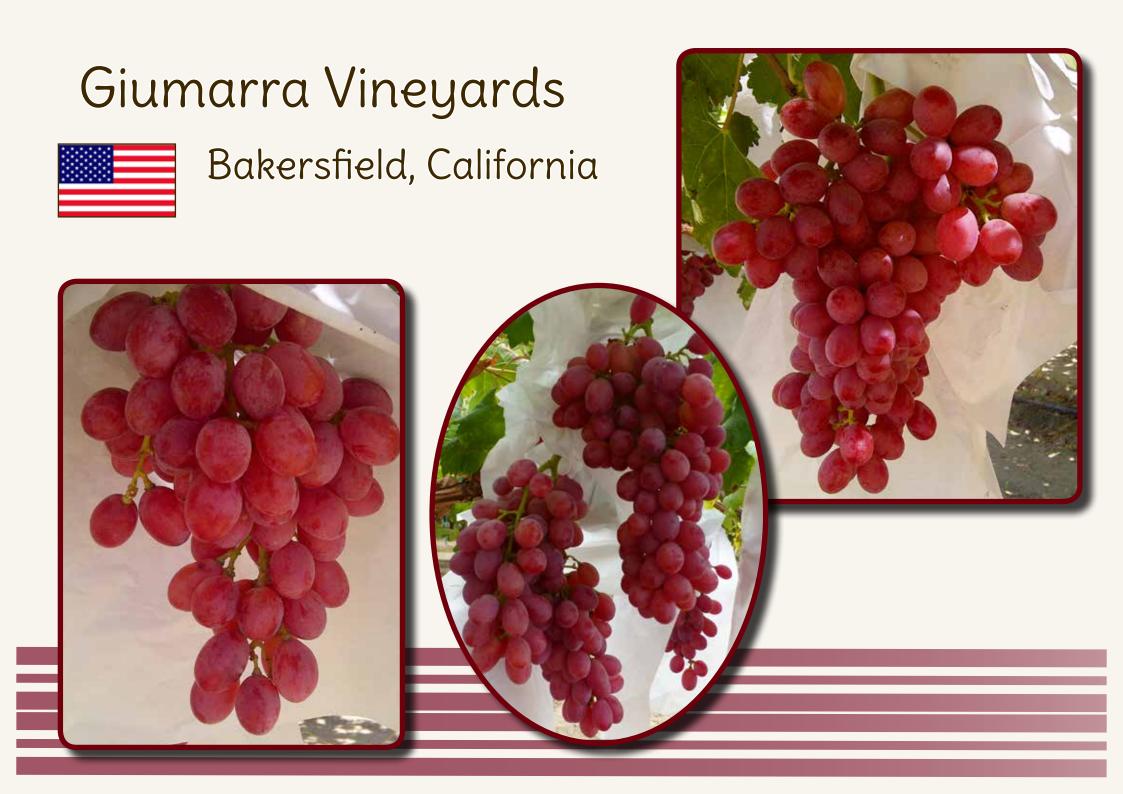


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Pipeline	
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Harvest	Mid Late season, with Scarlet Royal
Optimal brix	20 brix
Flavor	Naturally sweet
Berry size	20mm - 25mm
Texture	Meaty & juicy
Skin	Thin
Berry Attachment	Good
Rudiment	Sterile
Cap Stem \ Brush	Medium \ thin
Bunches \ Vine	42
Tons per hectare	30-35
Chilling	Medium
Pruning	Spur
General	Excellent fire attractive color,
	elongated berry, excellent eating
	quality with good shelf life.
	Outstanding replacement for Crimson
	and Scarlet Royal.









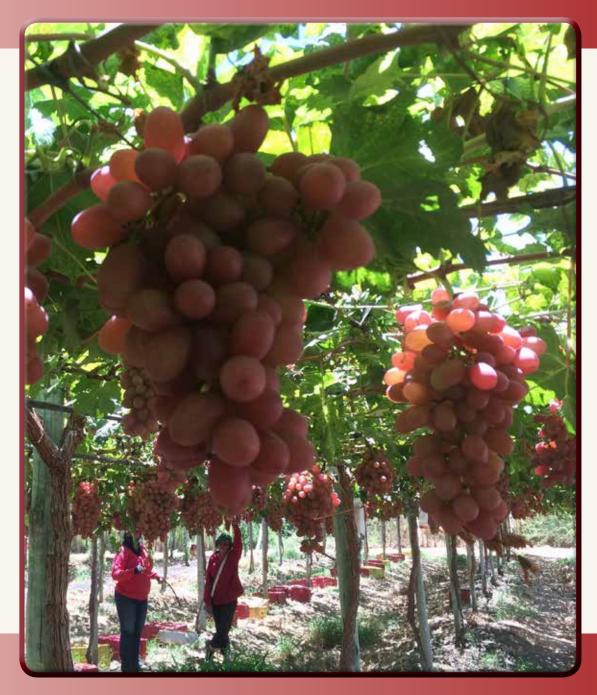




Brazil

Agrivale Farm

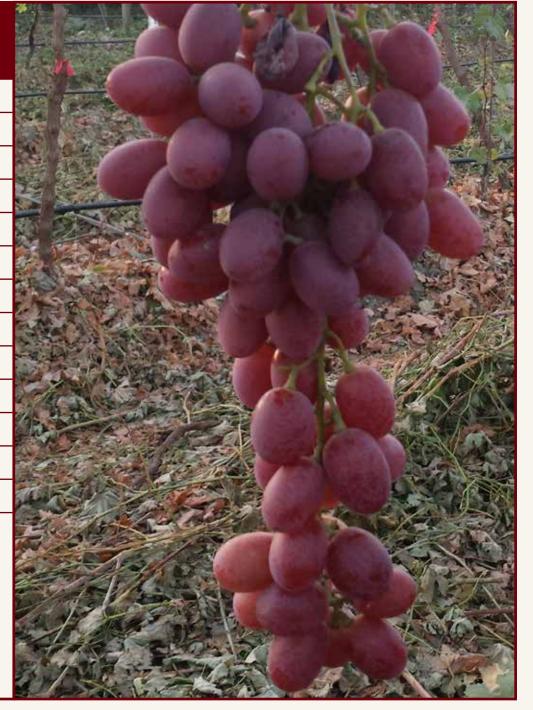




17A-14+1

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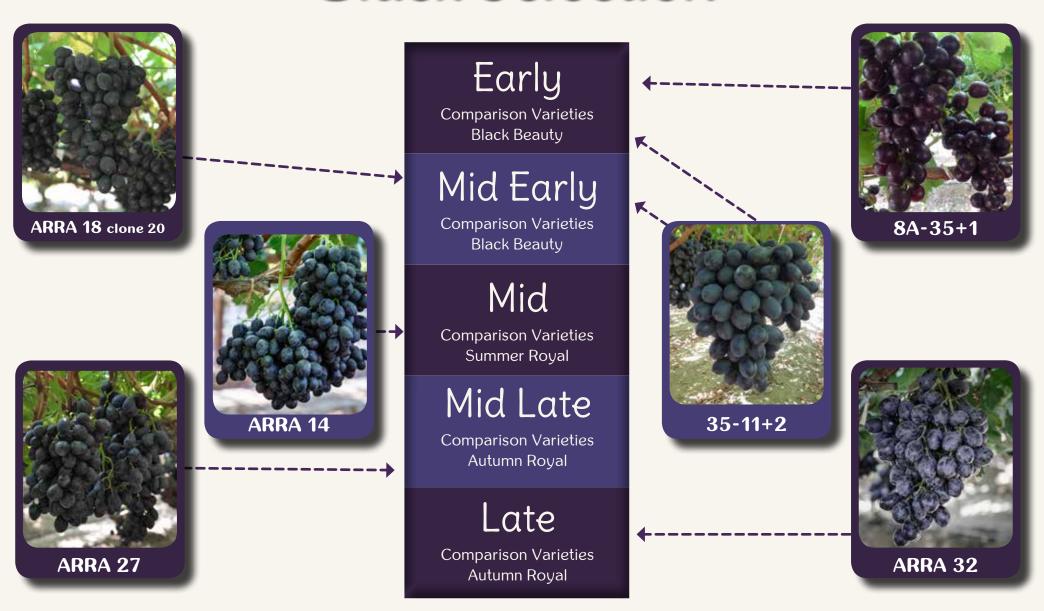
Harvest	Late season	
Optimal brix	18 - 20 brix	
Flavor	Natural	
Berry size	22 - 24mm	
Texture	Crisp	
Skin	Thin	
Berry Attachment	Good	
Rudiment	Sterile	
Cap Stem \ Brush	Medium \ Long	
Bunches \ Vine	32	
Tons per hectare	27 - 30	
Chilling	Medium	
Pruning	To be evaluated	
General	This impressive cherry red variety ripens in mid-late season and is similar	
	in appearance to ARRA 15. It has a loose bunch and large crunchy berries with a sweet taste.	



Black Selection



Black Selection



ARRA FOURTEEN

Harvest	Mid Season	
Optimal brix	20 brix	
Flavor Naturally Sweet		
Berry size	20mm - 22mm	
Texture	Meaty	
Skin	Thin	
Berry Attachment	Good	
Rudiment	Very small green	
Cap Stem \ Brush	Medium / Long	
Bunches \ Vine	36	
Tons per hectare	35	
Chilling	Medium - Low	
Pruning	Spur	
General	Very good eating quality, fertile and	
	easy to grow.	
	Very suitable for the Southern	
	Hemisphere as it fully colors there	
	without Etharel.	









South Africa

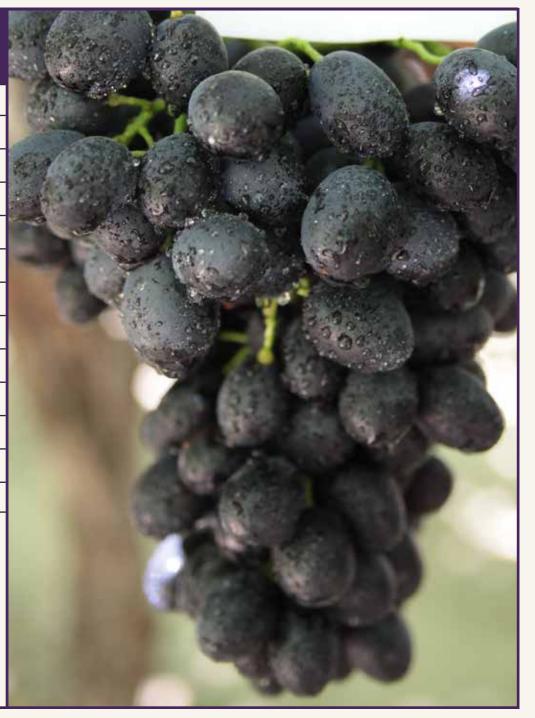






AKKA	't- (¬ t-†)	$I + I + I \setminus I$	clone TWENTY
/ \ \ \ \ \			CIONETWENT

Harvest	Mid Early season, with Summer Royal
Optimal brix	18 brix
Flavor	Naturally sweet
Berry size	22mm - 24mm
Texture	Meaty and juicy
Skin	Thin
Berry Attachment	Medium
Rudiment	Small and soft
Cap Stem \ Brush	Short \ thin
Bunches \ Vine	32-36
Tons per hectare	27
Chilling	Medium
Pruning	Spur
General	Mid early variety with fantastic eating
	quality.
	Full black color without Etherel.
	Medium bunch.
	Excellent shipping & storage ability.











Brazil



Agrivale Farm







ARRATWENTYSEVEN

Harvest	Mid Late season		
Optimal brix	20 brix		
Flavor	Naturally Sweet		
Berry size	24mm - 26mm		
Texture	Crisp, meaty and juicy		
Skin	Medium		
Berry Attachment	Good		
Rudiment	Small		
Cap Stem \ Brush	Long \ Medium		
Bunches \ Vine	38		
Tons per hectare	36 - 42		
Chilling	Low - Medium		
Pruning	Spur		
General	Colors well without Etherel.		
	Very fertile.		
	Large berry size.		
	Good eating quality.		

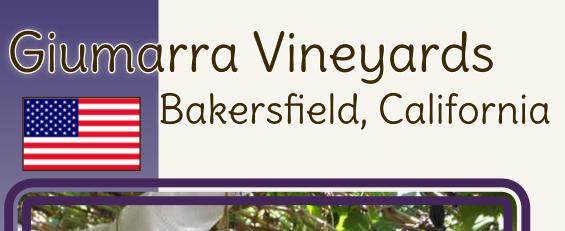
















ARRATHIRTYTWO

, ,, ,, ,,		
Harvest	Late, 15 days after Autumn Royal	
Optimal brix	18	
Flavor	Naturally Sweet	
Berry size	24mm - 26mm	
Texture	Meaty and juicy	
Skin	Thin	
Berry Attachment	Good	
Rudiment	Sterile	
Cap Stem \ Brush	Long \ thin	
Bunches \ Vine	40 - 42	
Tons per hectare	40	
Chilling	Medium	
Pruning	Spur	
General	Beautiful and very fertile variety.	
	Large bunches and big berries.	
	Excellent "hanging on the vine" ability and good eating quality.	























Brazil

Agrivale Farm





Brazil

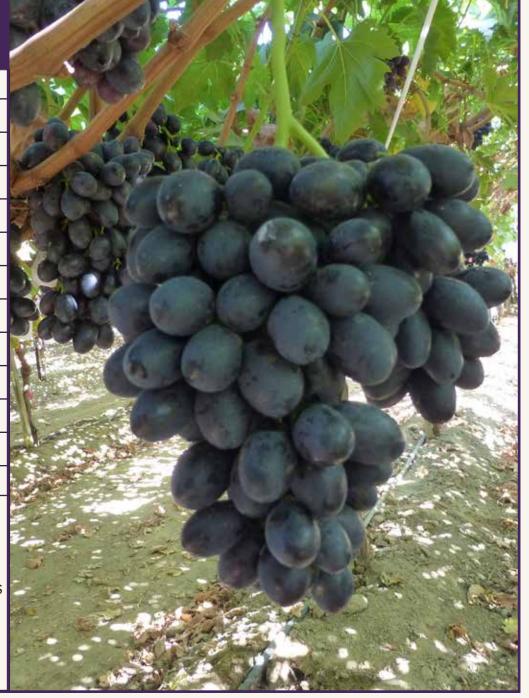
Agrivale

Farm





35-11+2	Pipeline
Harvest	Mid Early season 🗸
Optimal brix	20 brix
Flavor	Natural
Berry size	20mm - 22mm
Texture	Meaty and juicy
Skin	Thin
Berry Attachment	Good
Rudiment	Very small green
Cap Stem \ Brush	Medium \ long
Bunches \ Vine	42
Tons per hectare	28
Chilling	Meduim
Pruning	Spur
General	Very fertile black variety with an
	elongated berry shape.
	Very pleasant to eat and accumulates
	sugar very fast.











8A-35+1

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·	
Harvest	Very Early season
Optimal brix	20 brix
Flavor	Fruity Flavor, combination of Muscat and Nectar flavor
Berry size	20 - 22mm
Texture	Meaty
Skin	Thin
Berry Attachment	Very Good
Rudiment	Very Small
Cap Stem \ Brush	Short \ Thick
Bunches \setminus Vine	36
Tons per hectare	27
Chilling	Medium - High
Pruning	Spur
General	Very early dark cherry colored and
	shaped variety, with very special eating
	quality. Has a fruity sweet taste and crisp
	texture, heavy yield and medium sized
	bunches.



