

Uva de Mesa- Análisis y selección de nuevas variedades

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www.prokambium.cl



Programa

- Introducción
- Situación Varietal Actual
 - Producción Comercial Chile , USA , Sud África
 - Que buscan los Genetistas y los Agricultores.
 - Licencias en Chile.
 - Propiedad Intelectual y Protección.
 - Aproximación a la evaluación Técnico-Comercial
- Mutaciones Espontaneas y su importancia
- Gira California -Variedades.
- Programas Genéticos y Variedades
- Consideraciones Finales



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Consultorías & Investigación



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Oscar Salgado



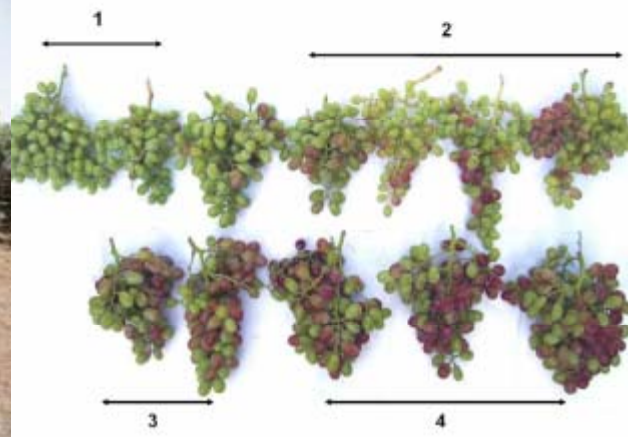
Andres Mediano



proKambium

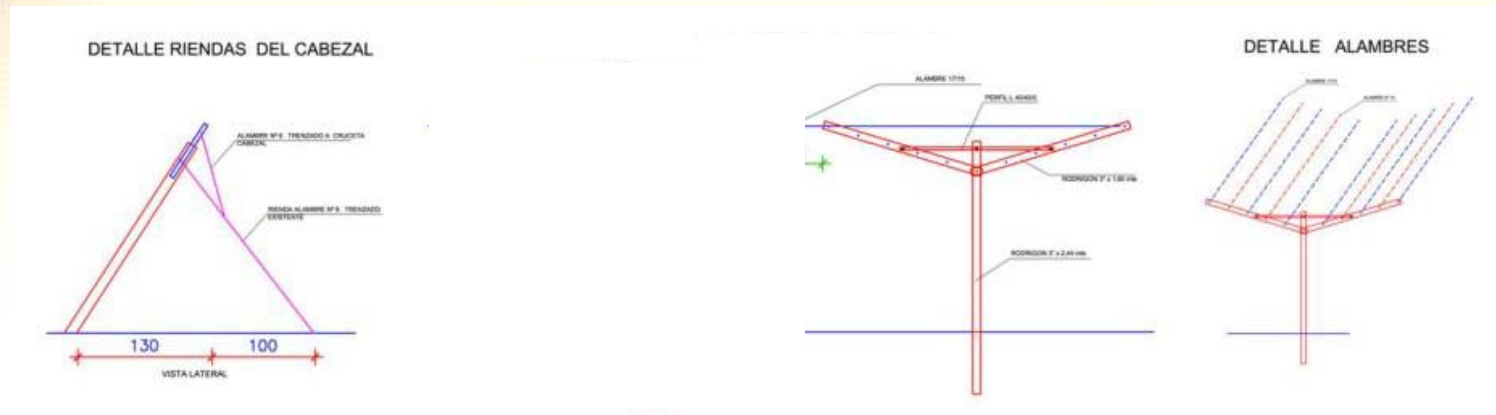
Consultorías & Investigación

- Nuevas variedades
- Desarrollo de prácticas culturales
- Reguladores de crecimiento
- Post Cosecha
- Evaluación de Agroquímicos , Fertilizantes y Moléculas Orgánicas
- Tecnología electrostática



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Desarrollo de Sistemas de Conducción



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Consultorías & Investigación

Giras Técnicas

- Productores Egipcios.....Chile , Sud África
- Productores Chilenos..... México, Perú, Brasil ,California, South África, China , España
- Productores Californianos.....Chile , Egipto
- Productores Brasileños.....California , Chile
- Productores Mexicanos..... Chile , España
- Productores Sud-Africanos..... Chile



Programa

- Situación Varietal Actual
 - Producción Comercial Chile , USA , Sud África



Nuevas Variedades

- Durante los 80' y 90' y hasta el inicio del 2000 solo aparecieron 5 “comerciales” nuevas variedades (Red Globe, Crimson Seedless, Autumn Royal, Princess, Fantasy), algunas fueron exitosas.
- Desde esa fecha hasta el día de hoy la lista sobrepasa las 80' variedades.



Nuevas variedades.....La nueva respuesta..... ??????

- 4TH Table Grape Symposium de La Serena, Chile no hubo ninguna presentación de variedades (2000)
- 5th Table Grape Symposium, Cape Town, South África(2007) tuvimos una presentación
- 6th Table Grape Symposium, Davis CA, (2010) tuvimos 5 presentaciones de nuevas variedades





Cual fue el cambio ?



Rescate embrionario

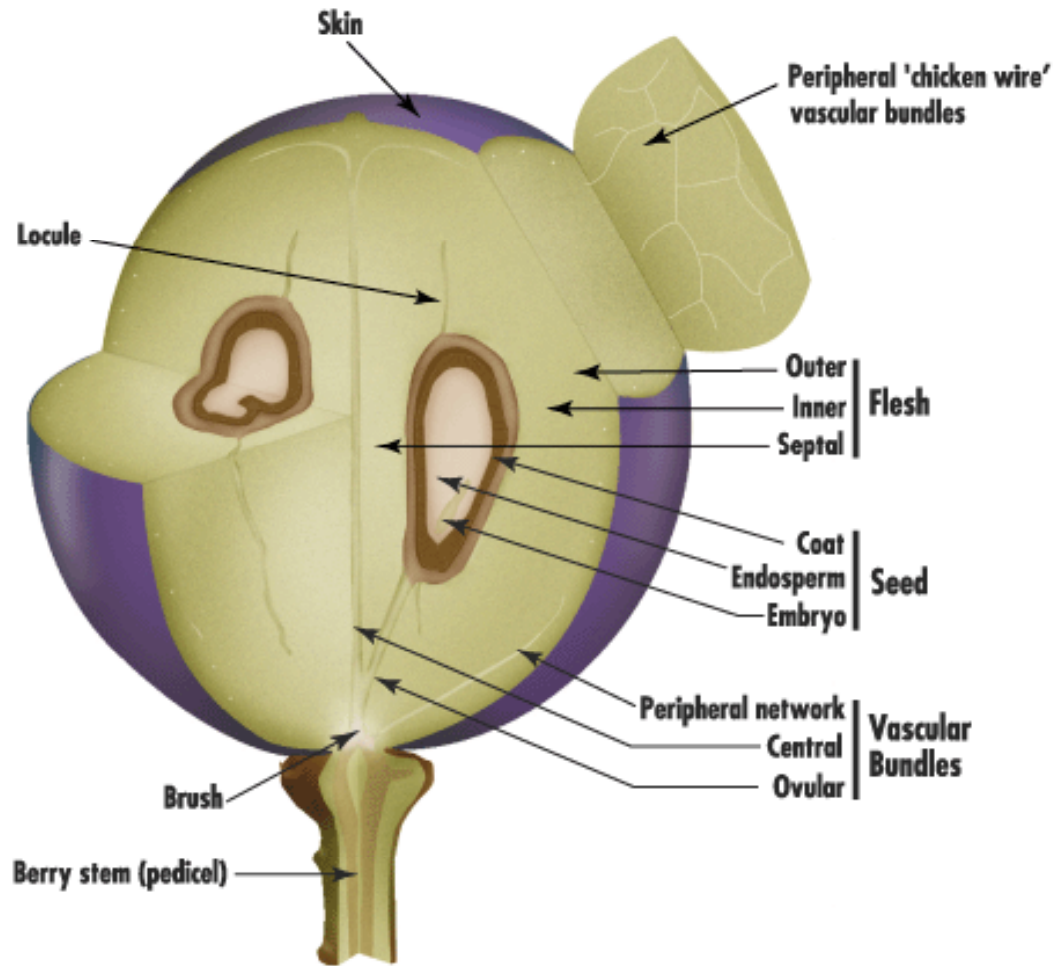
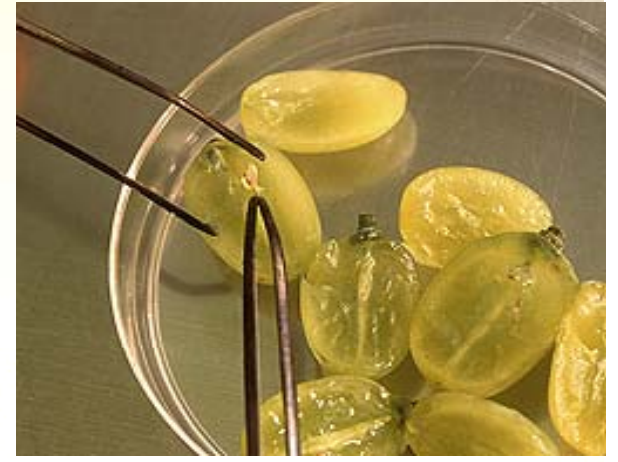


Figure 1: Structure of a ripe grape berry partially sectioned on the long and central axis to show internal parts. Illustration by Jordan Koutroumanidis, Winetitles.



Rescate embrionario





USDA

Sun World

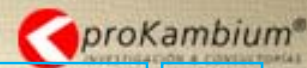
A. Caratan

M. Caratan

Sheehan Genetics

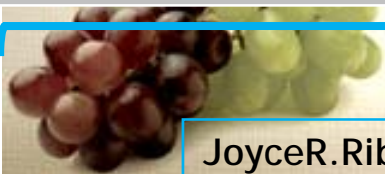
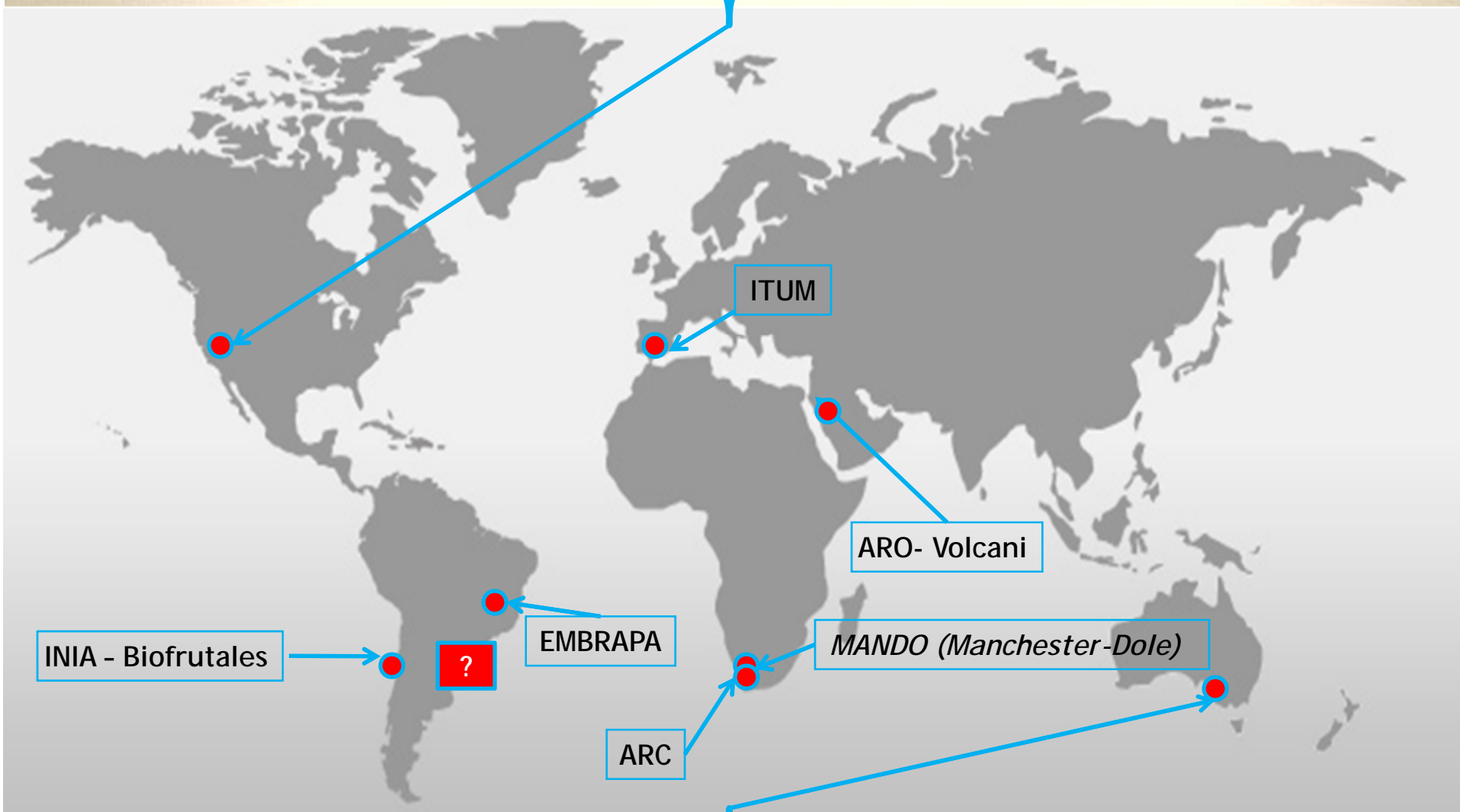
Sunview

Gerawan



Guimarra

IFG



Andriske Table grapes

CSIRO

DPI

Malcolm D. Cleggett

Ralli & Sons

JoyceR.Ribarits

Peter M. Burne and Robert G. Trezise

Volumen de Variedades Protegidas Chile 2010-2011

| VARIEDAD | VOLUMEN cajas 8,2 Kg | % |
|--|-------------------------|--------------|
| MIDNIGHT BEAUTY | 113.517 | 0,104 |
| MISTERY | 6.600 | 0,006 |
| PRIME | 146.182 | 0,134 |
| RALLI SEEDLESS | 295.314 | 0,271 |
| SUGRATHIRTEEN (Midnight Beauty) | 155.274 | 0,142 |
| SUNSET SEEDLESS | 305.760 | 0,280 |
| SUPERIOR | 307.203 | 0,282 |
| SUPERIOR SEEDLESS M.R. | 3.807 | 0,003 |
| Total Variedades con Royaltie o Protegida | 1.333.657 | 1,223 |
| Total cajas Exportadas | 109.075.500 | 100 |



Fuente: Recopilación A, Hoffman 2011

Chile: ASOEX, 2011

South Africa: SATI, 2011

California: CTGC Distribution Reports

Volumen de Variedades Protegidas California 2010

| VARIEDAD | VOLUMEN cajas 19 lb. | % |
|--------------------------------------|-------------------------|----------------|
| Scarlet Royal | 4.417.375 | 4,484 |
| Autumn King | 2.506.694 | 2,544 |
| Sweet Scarlet | < 992.997 (**) | 0,000 |
| Blanc Seedless -Pristine | 2122930 | 2,155 |
| Summer Royal | 1.700.565 | 1,726 |
| Vintage Red | 1.143.161 | 1,160 |
| Sugranineteen | 998.240 | 1,013 |
| 903618*** (Holiday) | 992.997 | 1,008 |
| Total Variedades con Royaltie | 13.881.962 | 13,630 |
| Total cajas Producidas | 98.515.643 | 100,000 |



Fuente: Recopilación A, Hoffman 2011--California: CTGC Distribution Reports

Volumen de Variedades Protegidas SudAfrica 2010-2011

| Variedad | VOLUME caja 4,5 Kg | % |
|------------------------------|-----------------------|------|
| AFRICAN DELIGHT | 47.520 | 0,11 |
| ALPHA RED | 33.920 | 0,08 |
| CERISE | 9.280 | 0,02 |
| DESERT SEEDLESS | 52.000 | 0,12 |
| GALAXY | 480 | 0,00 |
| GR | 1.050.983 | 2,35 |
| GRAPAES | 141.800 | 0,32 |
| ICE | 3.200 | 0,01 |
| KRISSY(SHEEGENE3) | 1.440 | 0,00 |
| LA ROCHELLE | 1.336.656 | 2,98 |
| MAJESTIC | 25.940 | 0,06 |
| MIDNIGHT BEAUTY(R) | 22.560 | 0,05 |
| MOONBALLS | 101.120 | 0,23 |
| MOONBALLS/ALPHONSE LAVALLEE | 6.880 | 0,02 |
| MOONBALLS/DAN BEN HANNAH | 1.920 | 0,00 |
| MYSTERY | 2.190 | 0,00 |
| PRIME | 4.396.614 | 9,82 |
| PRIME/RALLI SEEDLESS | 6.880 | 0,02 |
| PRIME/RALLI SEEDLESS/SUGRA13 | 6.080 | 0,01 |
| PRIME/STARLIGHT | 30.660 | 0,07 |
| PRIME/SUGRATHIRTEEN | 160 | 0,00 |



Volumen de Variedades Protegidas SudAfrica 2010-2011

| Variedad | VOLUME caja 4,5 Kg | % |
|--------------------------------------|-----------------------|---------------|
| PRIME/RALLI SEEDLESS | 6.880 | 0,02 |
| PRIME/RALLI SEEDLESS/SUGRA13 | 6.080 | 0,01 |
| PRIME/STARLIGHT | 30.660 | 0,07 |
| PRIME/SUGRATHIRTEEN | 160 | 0,00 |
| RALLI SEEDLESS | 476.580 | 1,06 |
| RALLI/SUGRATHIRTEEN | 6.720 | 0,02 |
| REGAL SEEDLESS | 1.570.142 | 3,51 |
| REGAL SEEDLESS/RALLI SEEDLESS | 960 | 0,00 |
| REGAL SEEDLESS/SUGRATHIRTEEN | 6.880 | 0,02 |
| REGAL SEEDLESS/SUNRED SEEDLESS | 15.233 | 0,03 |
| STARLIGHT | 54.494 | 0,12 |
| SUGATHIRTEEN/SUNRED/REGAL | 6.560 | 0,01 |
| SUGRANINETEEN | 78.790 | 0,18 |
| SUGRAONE(SUPERIOR SEEDLESS(R)) | 5.280.000 | 11,79 |
| SUGRASEVENTEEN | 8.000 | 0,02 |
| SUGRASIXTEEN | 242.787 | 0,54 |
| SUGRASIXTEEN/RALLI | 3.200 | 0,01 |
| SUGRATHIRTEEN | 789.337 | 1,76 |
| SUGRATWELVE/COACHELLA SEEDLESS | 6.400 | 0,01 |
| SUNDANCE SDLS/SUGRATHIRTEEN | 10.400 | 0,02 |
| SUNRED SEEDLESS | 1.143.669 | 2,55 |
| TROPICAL DELIGHT | 38.600 | 0,09 |
| Total Variedades con Royaltie | 17.017.035 | 38,00 |
| Total cajas Exportadas | 44.780.928 | 100,00 |
| Otras | 27.763.893 | |



Fuente: Recopilación A, Hoffman 2011--South Africa: SATI, 2011
Andrew Teubes VG Nursery

% Variedades con Royaltie Chile, California , Sud Africa

| Pais | % |
|--------------|-------|
| Chile | 1,22 |
| South Africa | 38 |
| California | 13,63 |



Programa

- Que buscan los Genetistas y los Agricultores.



Que están buscando los breeders?

- Seedless
- Rojas , Verdes , Negras , Diferentes Tonos de azul, rosado ,variegado
- Reemplazo de Thompson Seedless , Crimson (color) y Flame (partidura)
- Continuidad durante toda la temporada
- Growers friendly o baja intensidad mano de obra (raleo manual poda ,feminelas)
- Alta fertilidad de yemas.....podas cortas
- Toma de color fácil sin uso de Reguladores
- No desgrane.
- Nuevos sabores(Muscat) y aromas.
- Texturas Crocantes
- Colores atractivos
- Tamaños de baya grande y nuevas formas
- Buena vida de post cosecha y escobajos verdes.
- Bio resistencia a enfermedades : Oidio ,Mildiu ,Botrytis.



Criterios de Selección de variedades

- Alta fertilidad de yemas (Poda Corta)
- Giberelico de Raleo (0 o 1 ppm)
- Giberelico de crecimiento(solo 10-20 ppm)
- Raleo Manual (0 tijera , no labor de mano)
- Calibre (> 22 mm)
- Características Organolépticas
- Cosecha (Bajo costo de mano de obra)
- Post Cosecha (larga vida)

Grapasa



Key Attributes for Growers...

- High fertility
- Loose bunch
- Large natural berry size
- Spur or half cane pruning
- Red and black varieties that colour naturally
- Low labour inputs
- Rain and disease resistance
- Good shipping qualities



Objetivos y metas — Uvas

- Todos los colores y estaciones
- Sin semilla
- Sabores moscatel, labrusca y vinífera
- Textura crocante y firme
- Tamaño grande de grano
- Alta productividad
- Tolerante al medio ambiente y enfermedades
- Colores intensos
- Racimos sueltos de tamaño mediano
- Reducción de costos de producción
- Racimos fuertes y con poco desgrane de uvas
- Buena capacidad de almacenamiento y viaje





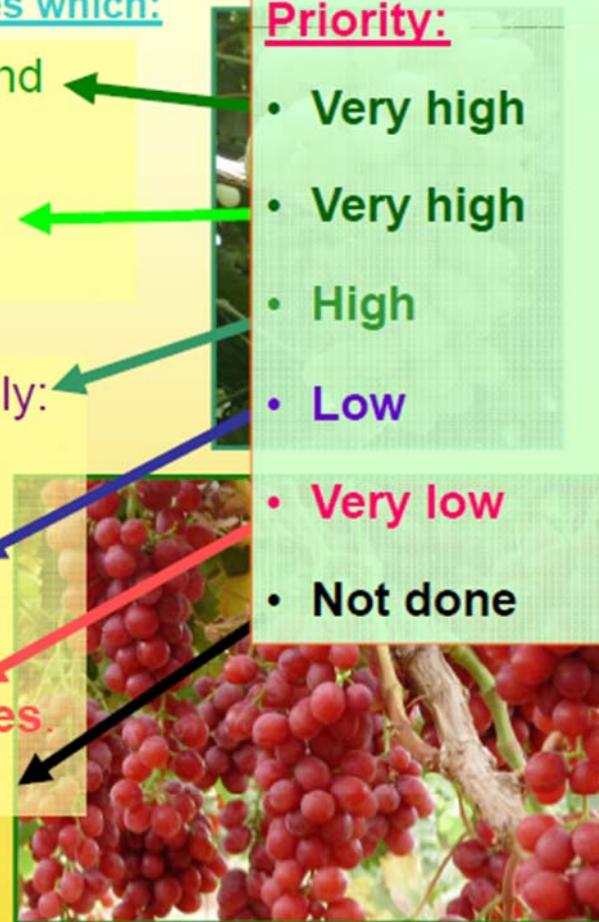
Breeding Program aim:

Focus on seedless table grapes which:

- Extend the season – **Very early** and **very late**.
- Increase quality for the consumer: **visually, eating** and **storage**.
- Make varieties more grower-friendly: **Productive, low cluster & berry attention**.
- Incorporate unique qualifications: **color, taste, shape**
- Incorporate **resistance to maladies**.
- Develop new products for food industry

Priority:

- **Very high**
- **Very high**
- **High**
- **Low**
- **Very low**
- **Not done**

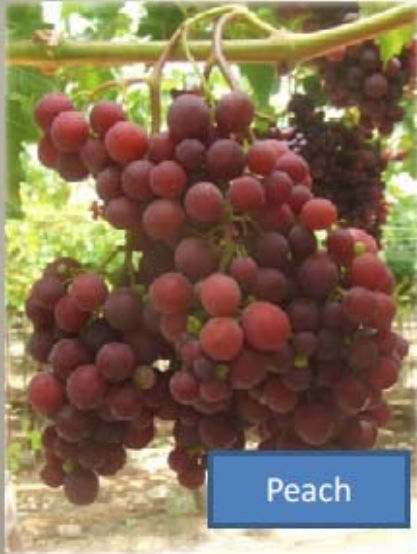


Petite champagne cultivars



Fuente: A. Perl Volcani 2010





Peach



Mango



Blueberry

Niche varieties with exceptional flavour



Strawberry



Que buscan los técnicos y los productores?

Bajos costos de producción
< Intensidad MO

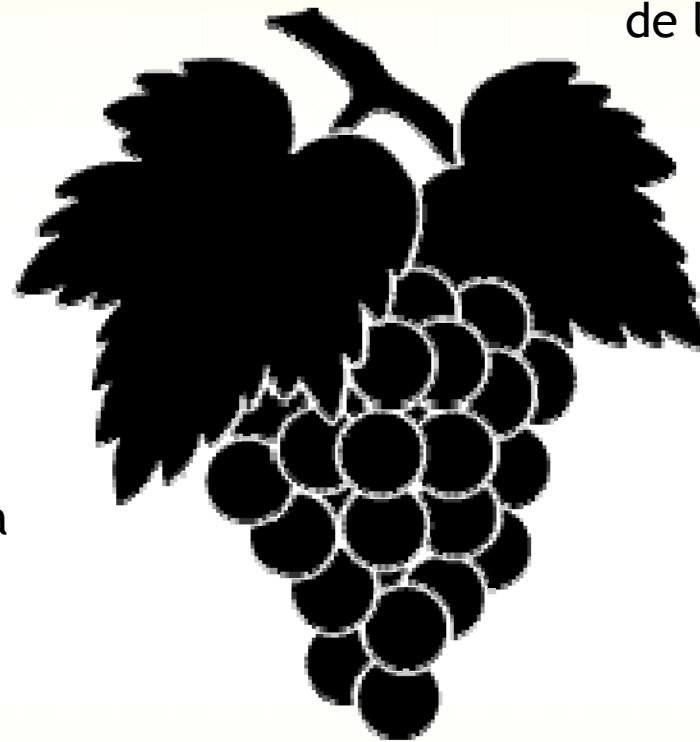
Abastecer todos las necesidades
de los mercados ...Ganar dinero

Resistente a Pestes
y Enfermedades

Adaptación a todos los
ecosistemas donde
producimos

Cubrir toda la temporada
en todas las categorías.

Fruta de buena calidad y
CONDICION



Alta Productividad

Facil acceso y atractivo modelo
de negocio

“La variedad perfecta”

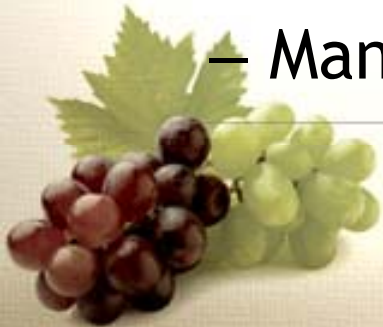
Programa

- - Licencias en Chile.
 - Propiedad Intelectual y Protección

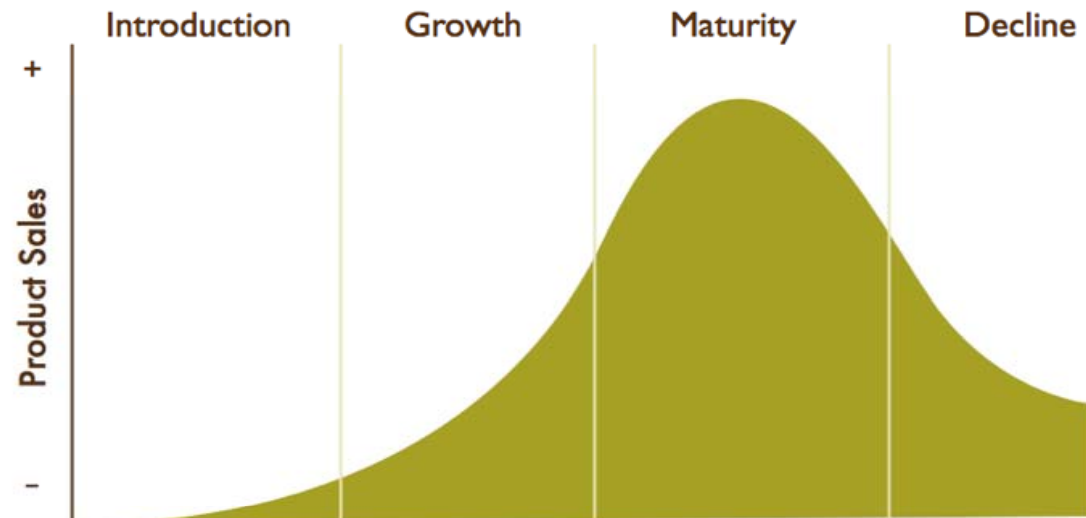


Licencias en Chile.

- Plant Material Managers
 - PPM son los responsables de mantener el valor en la cadena , cuidando los intereses del obtentor , clientes y vendedores.
 - Exportadores y/o Importadores -Integración Vertical
 - Extender el Ciclo de Vida de las Variedades
 - Control de la oferta (aumentando o manteniendo los márgenes)
 - Mantener los estándares de calidad y condición
-



Life Cycle: Four Basic Stages



| | Introduction | Growth | Maturity | Decline |
|----------------|----------------|--------------|--------------------|-------------|
| Audience | Early Adopters | Mainstream | Late Adopters | Laggards |
| Market | Small | Growing | Large | Contracting |
| Sales | Low | High | Flattening | Moderate |
| Competition | Low | Moderate | High | Moderate |
| Business Focus | Awareness | Market Share | Customer Retention | Transition |
| Design Focus | Tuning | Scaling | Support | Transition |

Re-drawn from the book "Universal Principles of Design" © 2003 Rockport Publishers

idea-sandbox.com



Términos comerciales en Chile

- Clubs Cerrados
 - Se Fijara una superficie máxima a plantar
 - La exportación se restringe a través de los compañías socias
 - Royalties
 - por planta
 - caja exportada , superficie o % del FOB
 - % creciente del FOB
 - Obligación de usar recibidores específicos en algunos mercado y en otros será libre
 - Clausula de exportación a mercados específicos por un tiempo determinado.



- Parcialmente abiertas
 - Superficie limitada o fija
 - Obligación de usar recibidores específicos en algunos mercados y en otros será libre
 - Royalties
 - por planta
 - caja exportada , superficie o % del FOB

- Abiertas
 - Superficie ilimitada
 - Royalties por planta



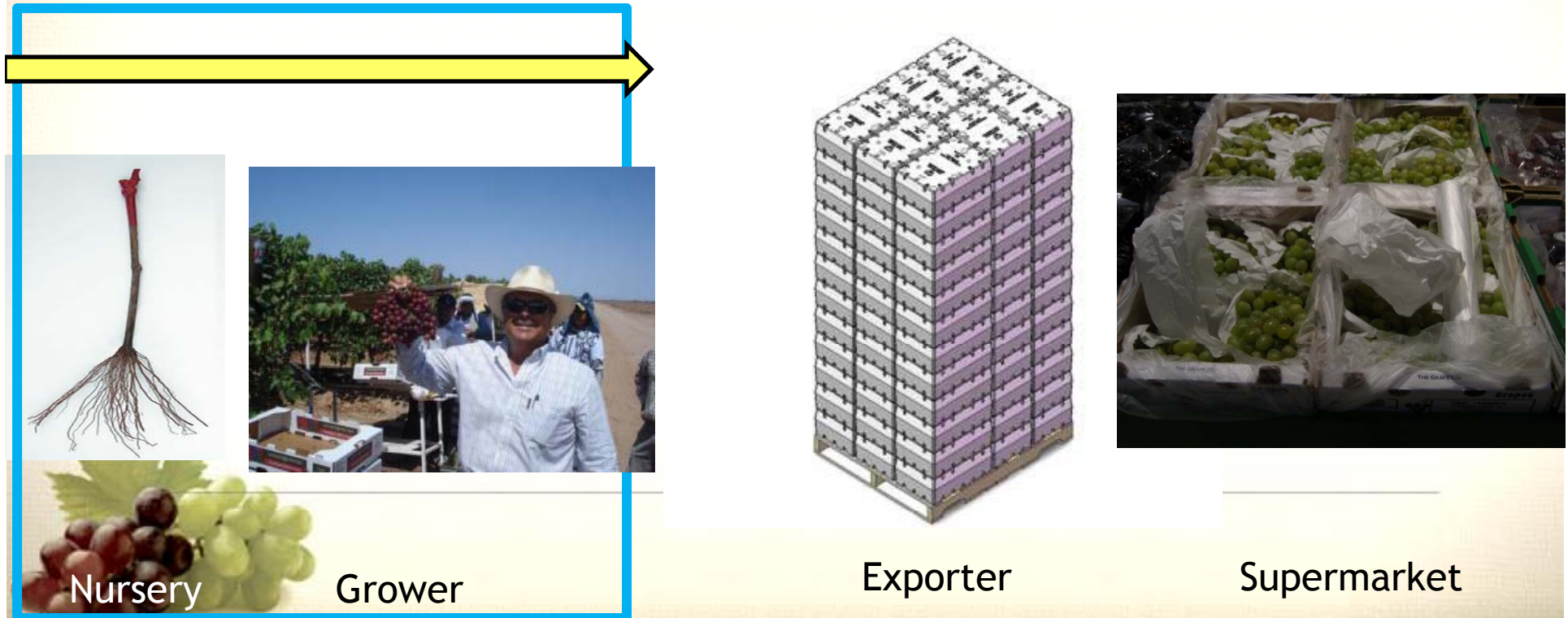
Derechos de propiedad intelectual en las frutas

- Variedades Patentadas
 - Los derechos y los beneficios del Material Genético (variedades y portainjertos) es propiedad del breeder y esta garantizado por la ley (locales e internacional) por un determinado periodo de tiempo.
- Marca / Trade Name ®™
 - El nombre de una variedad es de exclusividad del que lo registro y es protegido por ley en forma permanente
 - Superior Seedless® / Sugraone cv.
 - Early Sweet ®

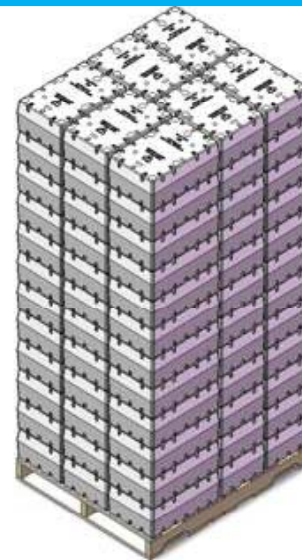


Propiedad Intelectual -frutas y plantas

- Variedades Protegidas
 - Chile es miembro de la Unión Internacional para la Protección de las Obtenciones Vegetales UPOV (http://www.upov.int/index_es.html)
 - Ley 19.342 - Acuerdo UPOV 1978
 - La protección cubre el material vegetal “asexual” reproducido



- Variedades Protegidas
 - En 1991 se realizo un up date del acuerdo UPOV
 - La protección cubre todo el material vegeta incluido el “sexual” (Fruta / cadena de valor)



Nursery

Grower

Exporter

Supermarket

Otras Protecciones

- Acuerdos Internacionales (TLC´s)
- Acuerdos Comerciales / entre productores , exportadores ,recibidores y el retail
- Industria Madura
- Organismos de Control



Announcement

Hereby **Grapa Co.** of Cyprus, the owner of the table grape variety

GRAPAES

known by its own trade mark name

Early sweet™

having European IP protection number 19647
and Temporary Egyptian IP protection number 001,

is announcing and stating that the list of growers below are the sole
exclusive licensees in Egypt to grow and market the

GRAPAES / Early sweet™

variety.

In order to avoid any intellectual property infringement subject of the said
variety, and to avoid any legal liabilities, please adhere to this statement.

Grapa Co. Egyptian Licensees are:



Belco

DOFAD DOFAD



MAFA



Consukorra



Pico



Australia

DNA technology solves illegal table grape planting



The continuing fight against illegal table grape growers by ANFIC has resulted in a significant settlement in the Carnarvon district of Western Australia.

Through the use of DNA technology in the market place, detection of the illegal growing of Prime Seedless table grapes (Plant Breeders Rights A 2009/078) (Prime Seedless) has led to an arrangement where the grower responsible has incurred significant penalty fees and tight restrictions on future sales of Prime Seedless table grapes.



Programa

- Aproximación a la evaluación Técnico-Comercial



Evaluación de Variedades

- Ventajas Técnicas que impactan en la rentabilidad al disminuir los costos y favorecen su calidad y condición.
- Ventajas Comerciales que aumentan los márgenes.



Ventaja Técnica Royalties (5% FOB)

| Item | valor racimo Ch\$ | racimos / ha | costo total total Ch\$ | costo total US\$ 1 US\$ = Ch \$ 500 |
|--------------------|-------------------|--------------|------------------------|--|
| Arreglo de racimos | 20 | 45.000 | 900.000 | 1.800 |

| Item | labor | Valor total US\$ |
|-----------------|---------------------------|------------------|
| alta fertilidad | poda corta | < \$\$\$ |
| | < desbrotes | < \$\$\$ |
| | > rendimientos y estables | > \$\$\$ |

| Variedad | Regulador | Objetivo | dosis gr /ha | Volumen GA3/CPPU | costo total gr I.A. | costo total US\$ 3 US\$ = Ch \$ 500 |
|----------|--------------|-------------------------|--------------|------------------|---------------------|--|
| Thompson | CPPU | 1 estimulación de brote | 2 | 2 | 28,0 | 56 |
| | | 1 crecimiento | 2 | 2 | 28,0 | 56 |
| | AG3 | 1 elongación | 15 | | 0,6 | 0 |
| | | 4 raleos | 10 | 160 | 0,6 | 96 |
| | | 3 crecimientos | 100 | 300 | 0,6 | 180 |
| | Total | | | | | |

CUADRO: COSTOS DE PRODUCCIÓN
VARIEDAD: THOMPSON
PRODUCCION: 2.800 cjs/ha

| ITEMS | US\$ |
|-----------------------------------|---------------|
| Administración | 1.930 |
| Mano de Obra directa | 8.453 |
| Mano de Obra indirecta | 760 |
| Packing | 3.212 |
| Pesticidas y Fertilizantes | 4.118 |
| Mantenion de maquinaria y equipos | 447 |
| Energía electrica | 1.786 |
| Otros | 1.769 |
| TOTAL | 22.475 |



| Regulador | Objetivo | dosis lt /ha | costo total lt | costo total US\$ |
|----------------|----------|-----------------|-------------------|---------------------|
| ethephon | color | 1 | 30,0 | 30 |
| acido absicico | color | 4 | 235 | 940 |

| Item | labor | Valor total US\$ |
|-----------------|-------------------------------|------------------------|
| alta fertilidad | poda corta | < \$\$\$ |
| | < desbrotes | < \$\$\$ |
| | > rendimientos y estables | > \$\$\$ |
| > color | > rendimientos por < desechos | > \$\$\$ |

CUADRO: COSTOS DE PRODUCCIÓN

VARIEDAD: CRIMSON

PRODUCCION: 3.800 cjs/ha

| ITEMS | US\$ |
|-----------------------------------|---------------|
| Administración | 1.930 |
| Mano de Obra directa | 7.692 |
| Mano de Obra indirecta | 760 |
| Packing | 4.359 |
| Pesticidas y Fertilizantes | 4.118 |
| Mantenion de maquinaria y equipos | 447 |
| Energía electrica | 1.786 |
| Otros | 1.769 |
| TOTAL | 22.861 |



- Situación varietal del productor
 - Clima
 - Terreno virgen o replante
- Realidad local y Global:
 - Competidores :Autumn de California vs Chile y Peru
 - Peru vs Chile
 - Mismas variedades en HS y HN

– NOS FALTA INFORMACION

- Ejemplo Flame y Crimson
- Test block zonales



Ventajas Comerciales

- La variedad "XX" es demandada por el consumidor y este esta dispuesto a pagar precios mas altos que el Mercado , para conseguir la fruta. Por lo tanto tengo mas Utilidades por :
 - Sabor y crocancia
 - Larga vida de post cosecha y buena vida de anaquel.
 - Resistente a Pestes y enfermedades< uso de plaguicidas
 - Apariencia externa
 - Escobajo verde y turgente
 - Bayas de color uniforme y atrayente
 - 0 desgrane
 - SS/acidez perfecta
 - Sin manchas



Ventajas Comerciales

- La variedad “YY” es una variedad de reemplazo por una antigua (Ej Flame) . Va al mercado como una variedad de color rojo y el consumidor esta dispuesto a pagar precios del open Market fijados por Oferta y Demanda. Por lo tanto tengo mas Utilidades por :
 - > rendimiento
 - Vida de post cosecha normal y mediana vida de anaquel.
 - > fertilidad
 - Apariencia externa
 - Colores de distinta tonalidad
 - Bayas uniforme
 - Desgrane normal



Ventaja Económica

- La rentabilidad con el Royalties (5% FOB) incluido tiene que ser mayor o igual a la variedad reemplazada.
 - Rentabilidad mayor.....IMPECABLE
 - Rentabilidad igual se acepta si los costos de producción menos el royalties subieron .



Programa

- Mutaciones Espontaneas y su importancia
- Gira California -Variedades.



Valle del Bekaa Libano

1st Agosto 2010

البقاع



Source: Fady 2010

Mutation Argentina San Juan





Chimenti Globe cv.

Chimenti Globe cv., es una mutacion espontanea de Red Globe encontrada en la Region Metropolitana de Chile en un huerto del Sr. Alfredo Chimenti Agri



Chimenti Globe
Malloco 29 de marzo 2011



Red Globe
Malloco 29 de marzo 2011







Gira Variedades California

Oct. 2011



Lluvia en California

5 de Octubre 2011

| Location | Inches | mm |
|-------------|--------|-------|
| Fresno | 0,95 | 24,13 |
| Madera | 0,65 | 16,51 |
| Parlier | 0,84 | 21,35 |
| Hanford | 0,33 | 8,38 |
| Arvin | 0,75 | 19,05 |
| Bakersfield | 0,62 | 15,75 |
| Delano | 0,21 | 5,33 |
| McFarland | 0,55 | 13,97 |
| Famoso | 0,63 | 16,00 |
| Lindcove | 0,73 | 18,54 |
| Porterville | 0,52 | 13,21 |
| Visalia | 0,30 | 7,62 |



Cosecha Noviembre -Diciembre 2010

Valle del Cauca - Colombia





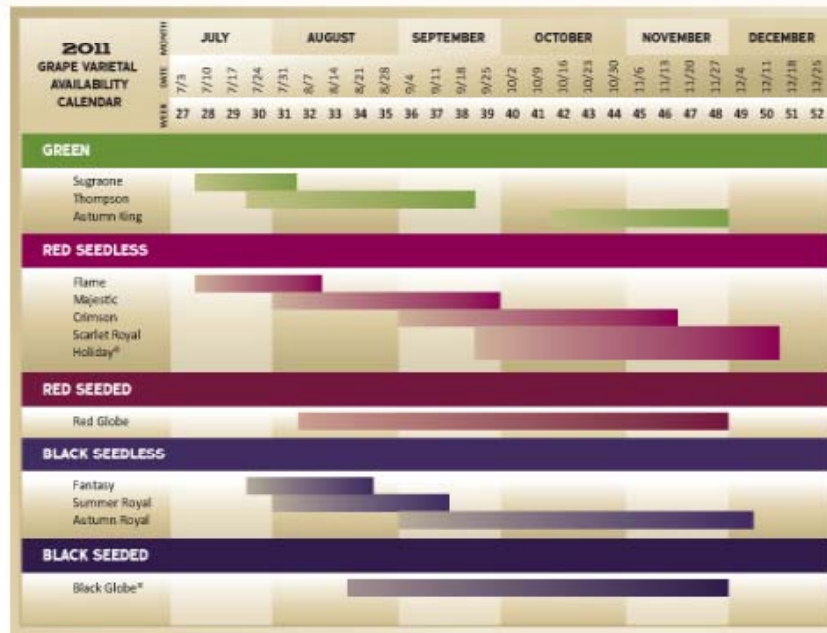


Plásticos



Shipping Variety Calendar

2011 Grape Varieties – Click here for pdf



IN THIS SECTION

Holiday Seedless®

Black Globe®

All Grape Varieties

Shipping Variety Calendar

Annual Vineyard Cycle

MEET OUR EXCLUSIVE GRAPES



<http://www.columbinevineyards.com/our-grapes/shipping-variety-calendar/>

IFG



<http://www.thepacker.com/commodity-fruits/grapes/New-grape-variety-offers-taste-of-county-fair-131457303.html>

Jack's Salute- IFG variety



<http://www.thepacker.com/fruit-vegetable-news/Jacks-Salute-grape-honors-the-late-Jack-Pandol-130361563.html>



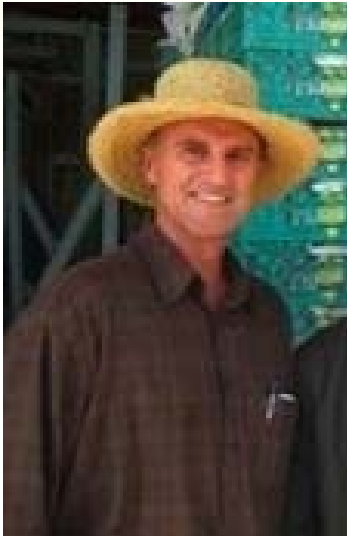
Timco-Sheean



Guiamarra



Anton Caratan - Pristine™



Autumn King- USDA variety



Programa

- Programas Genéticos y Variedades
- Consideraciones Finales



Mejoramiento Genético de Uva de Mesa INIA 1986-2011

Dra. Carolina Uquillas H.
56-2-7575156
Email: cuquillas@inia.cl



-En Chile, Instituto de Investigaciones Agropecuarias (INIA) ha abordado el mejoramiento genético de la uva de mesa y la creación de nuevas variedades desde el año 1986, siendo pionero en este tipo de investigación en el país, liberando el año 2006 las primeras 3 variedades.

- A partir del año 2006, un conjunto de entidades tecnológicas, actores relevantes de la industria viverística y organizaciones gremiales de productores chilenos, concurren a la formación del Consorcio Biofrutales S.A.

- El Programa de Mejoramiento Genético de Uva (PMGU) de INIA se basa en el mejoramiento convencional mediante cruzamientos dirigidos, apoyado por herramientas de biología molecular, como uso de marcadores moleculares para selección asistida.



- Actualmente existen 4 has. de selecciones establecidas para evaluaciones en dependencias de INIA y alrededor de 4 has establecidas como *Test block* en huertos privados para evaluaciones semicomerciales de las mejores selecciones avanzadas del programa.
- 2011 se registró la primera variedad desarrollada bajo el Consorcio INIA-Biofrutales, denominada *Inia grape-one* (mencionada anteriormente como 5.56). Se espera tener el desarrollo comercial para la temporada 2011-2012
- Hay 2 selecciones avanzadas promisorias: INIA N° 5 e INIA N° 10NN
- Las variedades registrada (*Inia grape-one*) como las selecciones avanzadas destacan por una buena vida de postcosecha y productividad.



Inia grape-one



- Media estación (19-21 ° Brix) 15 Feb V Región
- Color negro azulado (completo cubrimiento)
- Racimo cónico de tamaño medio-grande 580-830 g
- Buen calibre de bayas
- Buena respuesta a GA₃ (elongación, raleo y crecimiento)
- Fructificación en yemas basales
- Semejante a “Midnight Beauty” y “Black Seedless” en tipo de fruta y época de cosecha
- Distribución calibres Extra (≥20 mm) y Súper extra (≥22 mm)



Fuente : Carolina Uquillas

- Firmeza de baya cumple estándares comerciales de fruta firme (> 240 gr/mm)
- Pudriciones bajo límite comercial (5%)
- Desgrane bajo límite comercial (5%)
- Buena apariencia del escobajo
- Buena condición en almacenaje hacen factible el acceso a mercado asiático, ventajas respecto a otras variedades negras.
- Buen sabor, alta acidez y piel firme
- Formación de pepita rudimentaria (restos de semillas algunas temporadas)
- Sin GA₃ 16-17,5 mm 16-18 mm 4-4,2 g
Con GA₃ 18,5-22 mm 23-25 mm 7-9 g



Selección INIA N° 5



- Media estación (16,5° Brix) 15 Feb V Región
- Color verde crema
- seedless
- Racimo cónico de tamaño grande 600-900 g
- Buen calibre de bayas
- Sin GA₃ 15,5-17 mm 19-22 mm 3,5-4 g
- Con GA₃ 18,5-21 mm 25-28 mm 6-8 g
- No requiere GA₃ para raleo
- Fructificación en yemas basales
- Semejante a “Thompson Seedless” en tipo de fruta y época de cosecha
- Doble propósito, fruta fresca y pasas



Fuente: Carolina Uquillas

- Distribución calibres Extra (≥ 19 mm) y Súper extra (≥ 21 mm)
- Firmeza de baya cumple estándares comerciales de fruta firme (> 240 gr/mm)
- Pudriciones bajo límite comercial (5%)
- Desgrane bajo límite comercial (5%)
- Buena apariencia del escobajo
- Buena condición en almacenaje hacen factible exportación a mercados lejanos.
- *Vitis vinifera* subespecie *vinifera*
- Mejoramiento convencional, confirmado por marcadores moleculares
- Año de Selección 1999/00



Selección INIA N° 10NN



- Media estación (20° Brix) 10 Feb V Región
- Color rosado a rojo
- Con semilla
- Sabor neutro, textura firme
- Racimo cónico de tamaño medio y suelto 800 g
- Buen calibre de bayas
 - Sin GA₃ 26 mm 8,8 g
- Semejante a “Red Globe” en tipo de fruta pero se cosecha más temprano y color más claro
- Firmeza (≥ 300 gr/mm) sin problemas de pudrición o desgrane



Foto: Carolina Uquillas INIA (sin arreglo de racimo)

Sun World

(www.sunworld.com)



EXPORTADORAS LICENCIADA : UNIFRUTTI, SUBSOLE, SANTA MARÍA, DOLE
VIVEROS LICENCIADOS: A.BROWN, EL TAMBO, UNIVIVEROS®



Johan Jooste
Vice President of International Licensing
E-mail: jjooste@sun-world.com



Terry Bacon
Director of Product Development

Breeding better fruit is Terry's mission. He directs fruit breeding and commercial testing operations at Sun World's Variety Development Center, ensuring that the best characteristics are always maximized in delicious new varieties.

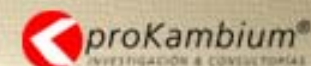


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Variety Development Calendar



Grapes

7-day intervals (Thompson=0), and week number in different hemispheres
(Harvest start timing is standardized for optimal commercial quality at the same location)

| | JUNE | | JULY | | | | | AUGUST | | | | | SEPTEMBER | | | | | OCTOBER | | | | |
|-------------------|------|-----|------|-----|----|----|----|--------|----|----|----|----|-----------|----|----|----|----|---------|----|----|--|--|
| Days +/- Thompson | -35 | -28 | -21 | -14 | -7 | 0 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 | 77 | 84 | 91 | 98 | | |
| Week Number N.H. | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | | |
| Week Number S.H. | 51 | 52 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | | |
| Prime | W | | | | | | | | | | | | | | | | | | | | | |
| Sugrathirtysix | R | | | | | | | | | | | | | | | | | | | | | |
| Flame | R | | | | | | | | | | | | | | | | | | | | | |
| Summer Royal | B | | | | | | | | | | | | | | | | | | | | | |
| Sugraone | | W | | | | | | | | | | | | | | | | | | | | |
| Sugratwelve | | W | | | | | | | | | | | | | | | | | | | | |
| Sugrathirteen | | B | | | | | | | | | | | | | | | | | | | | |
| Sugrathirtytwo | | R | | | | | | | | | | | | | | | | | | | | |
| Sugrafourteen | | R | | | | | | | | | | | | | | | | | | | | |
| Thompson | | | | W | | | | | | | | | | | | | | | | | | |
| Sugrasixteen | | | | | B | | | | | | | | | | | | | | | | | |
| Sugraeighteen | | | | | | W | | | | | | | | | | | | | | | | |
| Scarlet Royal | | | | | | | R | | | | | | | | | | | | | | | |
| Autumn Royal | | | | | | | | B | | | | | | | | | | | | | | |
| Crimson | | | | | | | | | R | | | | | | | | | | | | | |
| Sugrathirtyfive | | | | | | | | | | W | | | | | | | | | | | | |
| Autumn King | | | | | | | | | | | W | | | | | | | | | | | |
| Sugranineteen | | | | | | | | | | | | R | | | | | | | | | | |
| Sugrathirtyfour | | | | | | | | | | | | | B | | | | | | | | | |
| | 19 | 26 | 3 | 10 | 17 | 24 | 31 | 7 | 14 | 21 | 28 | 4 | 11 | 18 | 25 | 2 | 9 | 16 | 23 | 30 | | |

Average harvest dates in Bakersfield, CA

Berry Color & harvest season



Notice: Propagating materials for Sun World's proprietary varieties are only available under license to qualified nursery and producer organizations. These privately owned and protected materials are not available for sale. Variety performance will vary depending on region and cultural practices.

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Variety names and trademarks

Variety name

Trademark

Sugraone

**SUPERIOR
SEEDLESS**[®]
A SENSATIONAL GREEN GRAPE
by Sun World

Sugratwelve

**COACHELLA
SEEDLESS**[™]
A PREMIUM GREEN GRAPE
by Sun World

Sugrathirteen

**MIDNIGHT
BEAUTY**[®]
A SPECIAL BLACK SEEDLESS GRAPE
by Sun World

Sugrasixteen

**SABLE
SEEDLESS**[™]
AN EXCEPTIONAL BLACK GRAPE
by Sun World

Sugraeighteen

**SOPHIA
SEEDLESS**[™]
A DELICIOUS MUSCAT GRAPE
by Sun World

Sugranineteen

**SCARLOTTA
SEEDLESS**[™]
A SENSATIONAL RED GRAPE
by Sun World

Su=Sun World gra=Grape eighteen=Sequential number



SUGRAFOURTEEN

ROJA SEEDLESS TEMPRANA (FECHA SUGRAONE)

PRODUCCIÓN CONSISTENTE

RACIMO GRANDE Y RESISTENTE

RAQUIS FIRME, BUEN INSERCIÓN PEDICELAR

BAYA GRANDE (22-24mm), CROCANTE, UNIFORME Y FIRME

ALGUNA DIFICULTAD DE TOMA DE COLOR EN CLIMAS CÁLIDOS

SABOR MEDIANAMENTE DULCE

BUENA POSTCOSECHA Y CAPACIDAD VIAJERA

PLANTA DE BUEN VIGOR, CONSISTENTE Y PRODUCTIVA.

PODA EN CARGADORES



SUGRATHIRTEEN cv. MIDNIGHT BEAUTY®

NEGRA SEEDLESS TEMPRANA (FECHA SUGRAONE)

PRODUCCIÓN CONSISTENTE

RACIMO GRANDE Y RESISTENTE

RAQUIS FIRME Y BUENA INSERCIÓN PEDICELAR

BAYA ELONGADA (22-25 mm), UNIFORME, FIRME Y CROCANTE

TRAZAS MENORES DE SEMILLA

SABOR NEUTRO

BUENA CAPACIDAD DE GUARDA Y VIAJE (+9 SEMANAS)

PLANTAS VIGOROSAS, CONSISTENTES Y PRODUCTIVAS

PODA EN CARGADOR







SUGRANINETEEN cv. SCARLOTTA®

ROJA SEEDLESS TARDÍA (FECHA CRIMSON)

PRODUCCIÓN ALTA Y CONSISTENTE

RACIMO GRANDE, RAQUIS FIRME, BUENA INSERCIÓN
PEDICELAR

BAYA NATURLAMENTE GRANDE (21-23mm), ROJO
OSCURO, CROCANTE

TRAZAS DE SEMILLA MENORES

SABOR DULCE

BUENA POSTCOSECHA, GUARDA Y CAPACIDAD
VIAJERA

PLANTAS VIGOROSAS

PODA EN PITONES





Bakersfield US California 19th September 2007



SUGRASIXTEEN cv. SABLE SEEDLESS®

NEGRA SEEDLESS MEDIA ESTACIÓN (THOMPSON S - 7)
PRODUCCIÓN CONSISTENTE
RACIMO DE TAMAÑO MEDIO
RAQUIS FIRME Y CON BUENA INSERCIÓN PEDICELAR
BAYA MEDIANA (18-19 mm), UNIFORME Y FIRME
TRAZAS DE SEMILLA MENORES
PIEL GRUESA
SABOR MUY DULCE CON UN AROMA ÚNICO Y ESPECIAL
EXCELENTE GUARDA Y CAPACIDAD VIAJERA
PLANTAS VIGOROSAS
PODA EN PITONES
DIFÍCIL DE RALEAR CON AG3





- ## Sugar 16 (Black Seedless)
- Black seedless grape at the end of Thompson
 - Patented through Sun World (USA)
 - Excellent taste, better than any other commercial variety
 - Perfect black colour
 - Same vigor as Sugraone
 - Very fruitful
 - GA for thinning, girdling for berry size (more research), problems to get size.
 - Excellent favor one of the BEST



Source: A. Teubes



Sugar 16

25 Enero 2007

Marchigue



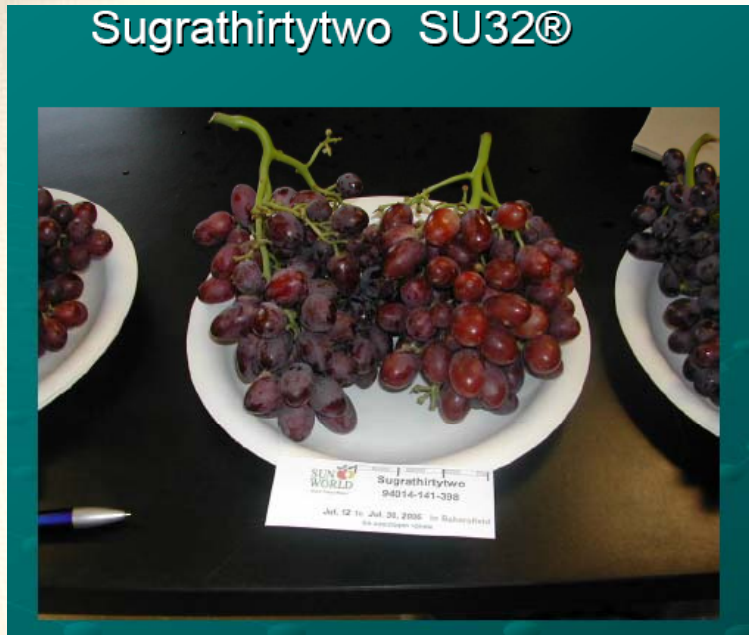
SUGRATHIRTYTWO

ROJA SEEDLESS, FLAME S. +10
BAYA ELÍPTICA Y CROCANTE (19-21mm)
RACIMO PROMEDIO 842 GR, COMPACTO
BUEN COLOR SIN TMT, RESPONDE BIEN AL
ANILLADO
SABOR AROMÁTICO
MENOS PARTIDURA QUE FLAME S
INSERCIÓN PEDICELAR DÉBIL
VIGOROSA - PODA APITONADA



Sugarthirty-two (32) or SU 32®

Sugrathirtytwo SU32®



Pink to Red Seedless
7 days after Flame Seedless and similar texture
Coloring up easily
Apparently sensitive to a post harvest shattering
Not split berries have being reported
Loose clusters well form



Source: A. Teubes

Ralli Seedless Emerald Leaf



EXPORTADORAS LICENCIADA : SUBSOLE
VIVEROS LICENCIADOS: ALTO ELQUI , NUEVA VID ,SAN VICENTE



RALLI SEEDLESS

ROJA SEEDLESS TEMPRANA

FECHA FLAME

MUTACIÓN DE SUPERIOR (AUSTRALIA-JOE RALLI)

RESISTENCIA A PARTIDURAS

BUENA VIDA POSTCOSECHA

BAYA CROCANTE (22-24 mm) DE COLOR ROJO ENCENDIDO

PRESENTA DIFICULTAD PARA TOMAR COLOR EN ZONAS CÁLIDAS



CARACTERÍSTICAS

COLOR ROJO 'CARDINAL'

EXCELENTE SABOR

BAYA 20 A 25 mm

RACIMO CÓNICO 500 a 700 gr

ALTO VIGOR

FERTILIDAD YEMAS MEDIA BAJA

PRODUCTIVIDAD 3000 CAJAS/HA



http://www.subsole.cl/_file/file_227_dia%20campo%20ralli%202011%28gm%20mja%29.pdf



USDA

Californian Table Grape Commission

- *Sweet Scarlet*
- *Scarlet Royal*
- *Autumn King*
- *Summer Royal*





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Pawnee, California
95711-5150

Phone: 559-447-8350
Fax: 559-447-3184
www.freshcaliforniagraper.com
email: info@freshcaliforniagraper.com

September 20, 2006

Address information

Re: Two new patented table grape varieties available soon only from California

Dear Retailer:

You probably already know the good news about the expansion of the California table grape industry's partnership with United States Department of Agriculture (USDA) but just in case, we wanted to notify you officially - and personally.

USDA and the industry, through the California Table Grape Commission, have been working together to develop new world-class table grape varieties since 1981. Past results of that partnership include Crimson Seedless, Princess, and Autumn Royal, to name a few. Recently, that partnership has expanded to include the patenting and licensing of all new, commercially promising table grape varieties.

The goal of the expanded program is simple: provide growers and consumers with new and improved grape choices and do so in a manner that ensures that those who paid the development costs of new varieties benefit first. Toward that end, patent protection is being acquired in the United States and in key grape producing countries around the world.

Under this new program, three new table grape varieties were patented and released by USDA within the past two years. You may have heard of them: Sweet Scarlet, Scarlet Royal and Autumn King.

Sweet Scarlet is in production and available from many growers. Sweet Scarlet is a mid-season red seedless grape, available approximately August through December. The medium to large berries are oval in shape and have a light muscat flavor.

Scarlet Royal is not yet in licensed production. Scarlet Royal is a mid-season red seedless grape, available approximately June through January. The large berries are oval in shape and have a neutral flavor.

Autumn King is also not yet in licensed production. Autumn King is a late-season green seedless grape, available approximately October through January. The very large berries are cylindrical to oval in shape and have a neutral flavor.

New patented varieties
Page 2 of 2
September 20, 2006

As noted, USDA is the U.S. patent holder of these varieties. The California Table Grape Commission, an instrumentality of the state of California, is the exclusive worldwide licensee.

We are pleased to tell you that multiple nurseries, all members of the state's Grapevine Certification & Registration Program, are licensed to propagate plant material and that growers from throughout the grape-growing areas of California have purchased plant material for all three of the new varieties.

Regarding Scarlet Royal and Autumn King, it is important to note that it will be a year before the first licensed fruit is available and even then there will be very little. By 2008, fruit should be available from multiple California sources.

We have long considered you a partner in providing the country's consumers with fresh, wholesome, beautiful, great-tasting fruit that can be incorporated into a healthy diet that provides energy and prevents disease. This expanded partnership between USDA and the commission is great news for the California table grape industry so we wanted to share it with you.

We are posting additional information about the program as well as pictures of the new varieties and the official USDA descriptions in the retail section of the commission's website at www.freshcaliforniagraper.com. If you have any questions about the new program or the new varieties, please don't hesitate to call or send me an email.

Best regards,



Kathleen Nave
President

Phone: 559.447.8350
Email: kathleen@freshcaliforniagraper.com



SWEET SCARLET:

VARIEDAD ROJO ENCENDIDO, BAYA DE TAMAÑO GRANDE, FORMA OVALADA, FIRME.

MADURACIÓN: POCO DESPUÉS DE THOMPSON.

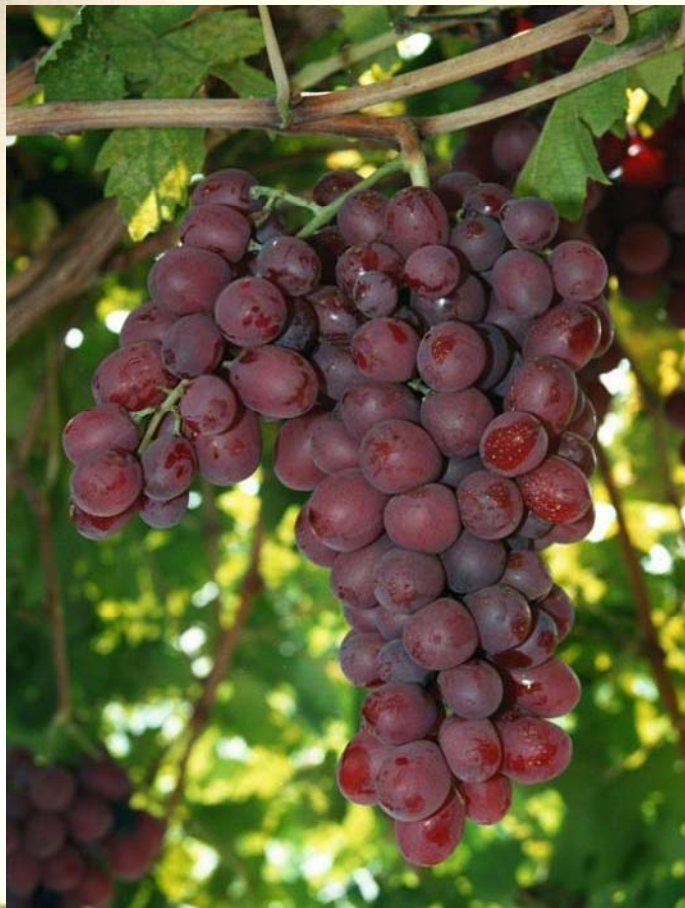
SEEDLESS

SABOR MOSCATEL

ESCOBAJO: “LARGA VIDA”







SCARLET ROYAL:

BAYA COLOR ROJO OSCURO

MADURACIÓN: ENTRE FLAME Y
CRIMSON.

SEMILLAS: 3-4 SEMILLAS ABORTADAS NO
DETECTABLES AL COMER.

BAYAS OVALES SIMILARES A CS, BUEN
DESARROLLO CON GA.

PIEL MEDIA A DELGADA

**RACIMO 800 GR, 3000-3600
CAJAS/HA..?**

PODA EN PITONES

PIEL ASTRINGENTE

Scarlet Royal is a mid-season red seedless grape, which ripens between Flame Seedless and Crimson seedless. Its fruit had reached 16.7 % soluble solids and a 22:1 sugar/acid ratio by July 20, 2004 with the application of 1 pint per acre Ethrel and pulling leaves. **Scarlet Royal** continues to mature on the vine and by August 15 had reached 22.0 % soluble solids and 0.55 mg acid / 100 ml juice without Ethrel. The clusters are large in size (0.8 Kg or 1.8 pounds) and length. They are conical in shape and are medium to well-filled. The natural berry is oval in shape and averages 5.8 grams. Berries from girdled vines treated with 2.5 ppm gibberellic acid (GA) at bloom and 20 ppm GA at berry set averaged 8.3 grams, 22 mm in diameter, and 33 mm in length. The flavor is sweet and neutral. The skin of **Scarlet Royal** is medium to thick and adheres to the flesh. The flesh texture is firm and meaty. The berries contain 3 to 4 aborted seeds, which are small and not noticeable when eaten. The fruit retained its firmness during two months of cold storage. The berry attachment to the pedicel is very good and very little postharvest shatter occurs. The rachis is tough with a woody peduncle.

Scarlet Royal blooms about 3 to 4 days after Ruby Seedless and is medium in vigor. Production has averaged 27 Kg (60 pounds) per vine when trained to quadrilateral cordons, pruned to 2 bud spurs and grown on a “Y” trellis. The 20 ppm GA size spray applied in 2003 reduced cluster counts in 2004 by 10 to 38%, leaving 48 to 64 clusters, which is still commercially acceptable.



USDA/CTGC



AUTUMN KING:

BLANCA TARDÍA, 8 SEM. DP. DE THOMPSON).

SEMILLAS: CONTIENE 2-3 SEMILLAS ABORTADAS, NO DETECTABLES AL COMER.

BAYA. CILINDRICA A OVOIDE, BUEN DESARROLLO CON GA Y ANILLADO

COLOR VERDE

PIEL MEDIA A DELGADA

RACIMOS MEDIOS: 0,5 KG

PRODUCTIVA



27/10/2011



Autumn King is a late-season white seedless grape, which ripens about eight weeks after Thompson Seedless, about the third week of October in Fresno. By this time it has reached 18.6 % soluble solids and 0.31 mg acid / 100 ml juice. The clusters are medium in size (0.5 Kg or 1.1 pounds) and length. They are conical to cylindrical and are medium to well-filled. The natural berry is cylindrical to ovoid in shape and averages 9.8 grams. Berries from girdled vines treated with 2.5 to 5 ppm gibberellic acid at bloom (GA) averaged 11.5 grams, 25 mm in diameter, and 35 mm in length. **Autumn King** is sensitive to GA applied at berry set which has reduced fruitfulness the following year making production below commercial levels. Therefore GA application during berry set is not recommended. The flavor is sweet and neutral. The skin of **Autumn King** is medium in thickness and adheres to the flesh. The berries contain 2 to 3 aborted seeds, which are small and not noticeable when eaten. The flesh is meaty in texture and medium in firmness.

Autumn King blooms about 7 days after Thompson Seedless and is medium in vigor. Production has averaged 17 Kg (38 pounds) per vine when head trained and pruned to 5-6 canes and grown on a “Y” trellis. In cold storage trials the firmness remained good even after 2 months. No surface or internal browning was noticed throughout the cold storage period. Postharvest berry attachment was good and much less shatter occurred than in Thompson Seedless.







SUMMER ROYAL:

VARIEDAD NEGRA, BAYA DE
TAMAÑO MEDIO 4.3 - 5.3 GR.,
FORMA OVALADA, FIRME.

TERCERA SEMANA AGOSTO EN
FRESNO (VI REGIÓN A FINES DE
ENERO).

SEEDLESS

PODA EN CARGADOR



Summer Royal

Sonora - Hermosillo Mexico
Fin de Mayo



Sumer Royal / Sugraone / Flame

Sonora - Hermosillo Mexico

Fin de Mayo



Sheehan Programs SFNL



LICENCIA EN CHILEUNIVIVEROS®



S.N.F.L
GROUP

- SNFL LTD
- SNFL MEDITERRANEO SA
- SOURCE CITRUS GENESIS SA
- VITIS INTERNATIONAL LTD
- SHEEHAN GENETICS LLC

For more information contact...
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<http://www.snfl.eu>





COUNTRIES:

South Africa
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Chile
Italy
Mexico

Spain
Australia
Brazil
Peru
Morocco
Portugal



SHEEHAN GENETICS, LLC -

Porterville

- Tim Sheehan trabajo en programas de hibridación por mas de 30 años con Dr. Weinberger, Dr. Olmo en el USDA, estudio en UC Davis. En los últimos 18 años recorrió 8 países de los cuales obtuvo material para iniciar sus hibridaciones . Los frutos de ese trabajo se expresan hasta el día de hoy.



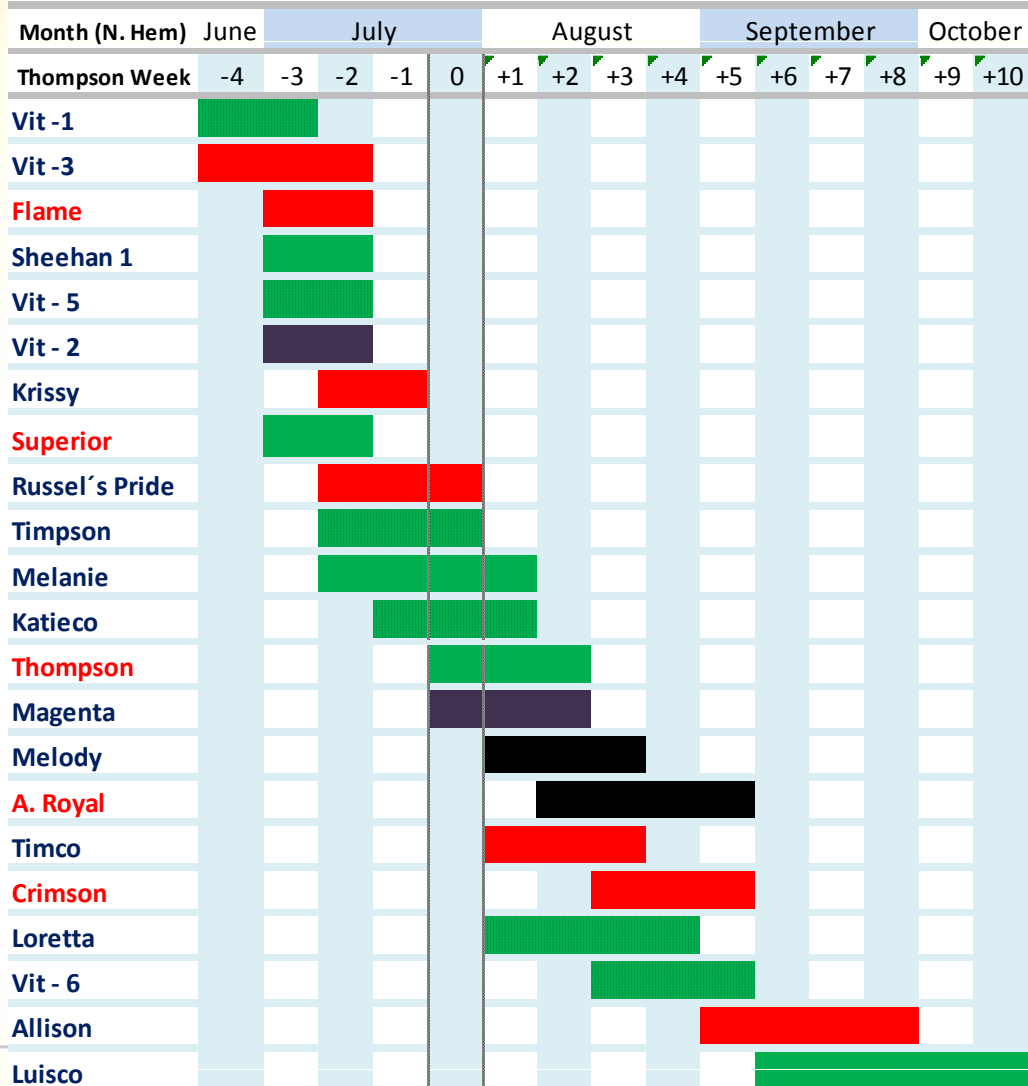
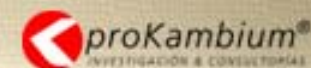
Gira Técnica California Oscar Salgado 2005







SNFL TABLE GRAPE CALENDAR



- Green Seedless
- Slight Muscat
- Red Seedless
- Pink Seedless
- Black Seedless



*Harvest weeks given as approximate maturity dates in our trial sites in Murcia (Spain) and compared with the Thompson maturity established as last week of July in the area.

Melanie



- Cosecha: 5 días después de superior
- Diámetro de baya : 22-24 mm .
- A diferencia de Superior no tiene uvilla y no se ralea con GA3
- Alta fertilidad y poda piton.
- Muy crocante
- Es la variedad para reemplazar superior



Magenta

- Cosecha entre Flame y Crimson
- Diámetro de baya : 22-24 mm .
- Muy crocante
- No necesita raleo con GA3
- Alta fertilidad y poda pitón.
- Buen escobajo , resistente y buena vida de postcosecha
- Toma color rojo en forma natural (no ethephon)
- Es la variedad que se planta en Sud África , España y USA.



Timco



- Cosecha similar a Crimson
- . Diámetro de baya : 22-24 mm .
- Muy crocante
- Una aplicación de raleo con GA3.
- Alta fertilidad y poda pitón.
- Buen escobajo y buena vida de postcosecha
- Sabor Cherry
- Toma color rojo en forma natural (no ethephon)



White Globe

- Diámetro de baya > 24 mm .
- Fecha de Cosecha es una semana antes que Thompson .
- Muy crocante y jugosa
- Necesita 1 aplicación de raleo con GA3
- Alta fertilidad y poda pitón.
- Buen escobajo
- Postcosecha en análisis



Melody

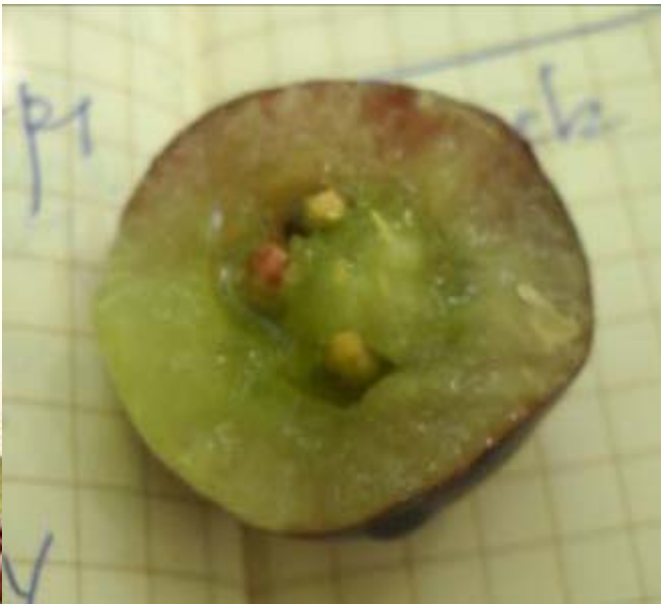
- Una semana antes que Autumn Royal
- No requiere raleo con AG3
- Buen raquis y firme la unión de la baya con pedicelo
- Bayas de 18-21 mm
- No ethephon para color
- Alta concentración de azúcares y sabor intenso.
- Excelente post cosecha.



Black Globe



- Fecha de Cosecha es 1 semana después de Thompson
- Diámetro de Baya :23-27 mm
- Muy crocante , muy buena pulpa (ver foto *)
- 1ppm AG3 para raleo
- Postcosecha en evaluación



(*)



ARC Infruitec-Nievoorbij South Africa

- G1-358
- Regal
- Sunred Seedless



G1-358

ROJA SIN SEMILLA

FECHA FLAME SEEDLESS

BAYA NATURAL: 23,6mm

PIEL: SEMI DURA

FIRME



LICENCIA EN CHILEUNIFRUTTI®

Regal Seedless

some peoples in
Chile Bond



Source: A. Teubes

Regal Seedless qualities

- White seedless grape 1 week before Thompson
- Patented through ARC in SA
- Very fruitful, natural large berry size 7 g
- No GA, no girdling - negative effect
- Low labour variety, very easy production
- Crop at 17-20 Brix
- Trace element deficiencies early spring common
- Problems with storage, surface browning
- Sell it soonest possible after harvesting



Sunred Seedless



Source: A. Teubes

Sunred Seedless qualities

- Red seedless grape close to Thompson
- Patented through ARC in SA
- Very fruitful, moderate vigor
- Natural large berry size 6 g
- Bunches compact, sweet neutral taste
- Sensitive to split after rain
- No GA treatment, no girdling (seed traces)
- Good shelf life
- High labor intensive variety for thinning



ARD (Agricultural Research Development) Guimarra Vineyards -S. Karniel program





Muchas Gracias por el
interés en nuestras
variedades

Giumarra Vineyards Co.
11220 Edison St.
Edison (Bakersfield) 93220
California
USA

Grapa Varieties
SHACHAR KARNIEL

REP. SUD AMERICA
GRAPASA LTDA.
Karl Conrads A.
email - kconrads@entelchile.net



ARD Field Day 11 de Octubre 2011



ARD Field Day 11 de Octubre 2011

ARA - 15



27/51+3
Fecha de Crimson
Color Rosado y baya muy crocante



ARA - 19



Early Sweet™

Belong to
Grapa Co Cyprus breeding
program



Early Sweet™ world production calender

| | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
|--------------|-----|------|------|--------|-----------|---------|----------|----------|
| MOROCCO | 🍇 | 🍇 | | | | | | |
| ISRAEL | 🍇 | 🍇 | 🍇 | | | | | |
| EGYPT | | 🍇 | 🍇 | | | | | |
| SPAIN | | | 🍇 | 🍇 | | | | |
| TUNIS | | | | 🍇 | | | | |
| ITALY | | | 🍇 | 🍇 | | | | |
| SOUTH AFRICA | | | | | | | 🍇 | 🍇 |
| AUSTRALIA | | | | | | | | 🍇 |



New Table Grape Variety - Early Sweet™



New Table Grape Variety - Early Sweet™

Domination Name - GRAPAES

Owner - GRAPA Company Limited, Cyprus

Characters:

Color - Creamy-Yellow

Ripening Time - Few days before Perlet/ 2-3 weeks before Superior seedless

Aroma - At his best Muscat aroma at 17-19°Brix

Presentation of seed traces - Small and soft.

Berry - Elongated. Large. ø22-24MM' X ø24-26MM'

Bunch size - 750gr' in general

Thickness of skin - Thin

Firmness of Flesh - Meaty and Juicy

Transportability and storage ability - up to 60 days in excellent shape







Israeli Prime from South Africa



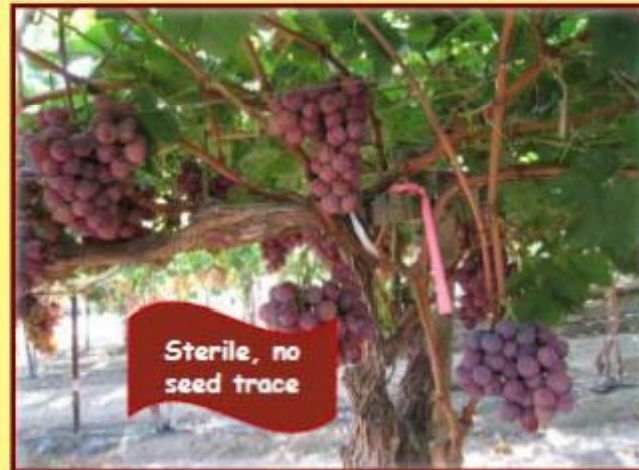
Season 2002/2003



Source: O. Salgado May 2010 Egypt /Early Sweet™



ARRATWO 33-11/86+6



Nick name
Red Globe
Seedless





Nick name
Red Globe
Seedless

ARRATWO 33-11/86+6

Cropping Recommendation 30/H

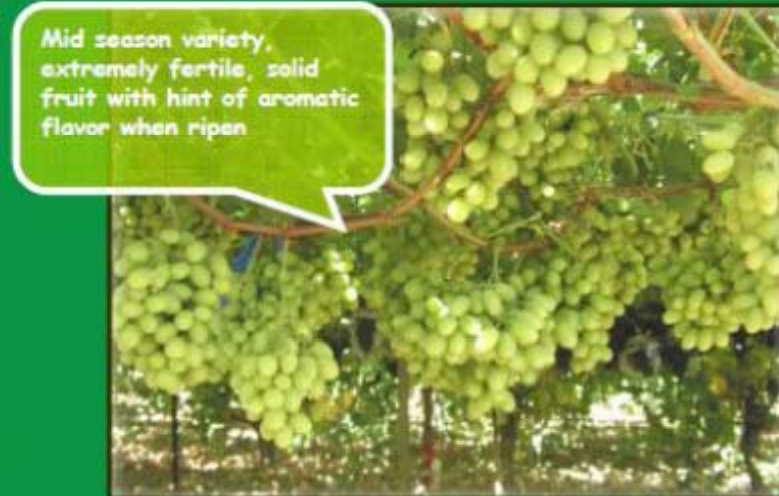
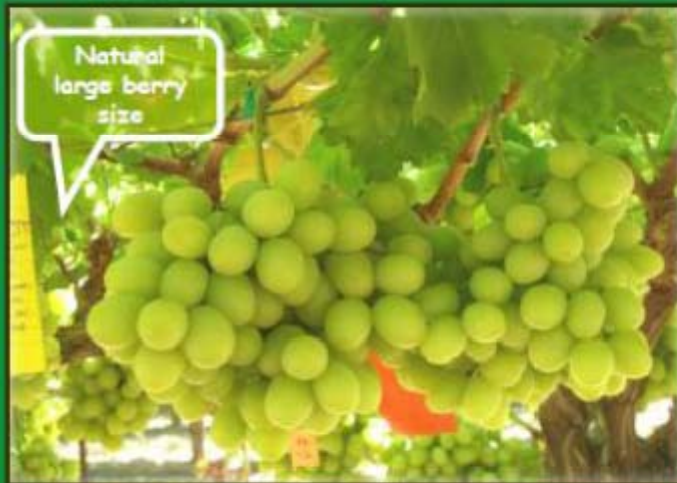


Row 18
11/2616
7/31 small
Rajo 1x1
chico med.
907 med.
607 low
7-4 NATURAL
ND
Zoppi





ARRAFOUR 33-1/17+16



Cropping Recommendation 45t/H





ARRAFOUR 33-1/17+16

Growing Protocol

RH 29 ROW 67
10-15

APPA-4

DATE 8/4 SUGAR 17

COLOR Verde SEED TRACE ~~EMAU~~

BERRY SHAPE Redonda Ø MM 1 x 1/2

BUNCH SHAPE Grande SKIN Med.

BUNCH UNIFORMITY 100% MEET YES

BUNCH LOOSE YES ACID Low

BUNCH LOCATION 4.5 FLAVOR 207-

BLOOM SPRAY 0.5 50% CRACKS YES
6.7 10-11

SIZE SPRAY 2.000 10/11 CRACKS Med.

BRUSH Med.

| | |
|--|-----------------------------------|
| Bloom spray | 04/22/04' 1 ppm' Gibb @ 40% bloom |
| Size Spray | 05/06/04' 10 ppm' @ 4-5 mm' |
| Protocol results and evaluation | |
| Total bunches | 37 Bunches |
| Ugly bunches | None |
| Tide bunches | 1 Bunches |
| Total 1 point | 36 Bunches |
| Size Ø | 15/16" |
| Brix at day | 16* Brix in 07/22/04' |

Harvest time
Thompson seedless
+ 5 Days

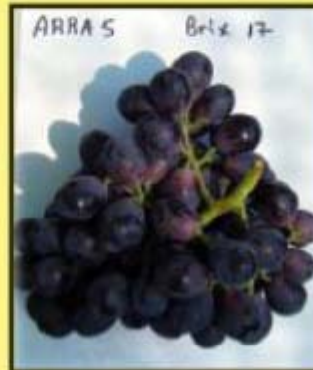




Arrafour



ARRAFIVE 29-68/1+6



Small
soft
seed
trace

Cropping Recommendation 30t/H





ARRAFIVE





ARRAFIFTEEN 33-6/22+21

The ultimate Thompson replacement.
Crunchy, light skin, superb eating, easy to grow,
fertile, excellent storage capacity.



Harvest time
Thompson seedless



Cropping Recommendation 30t'/H

ARRAEFIFTEEN Gibberelic protocol

Bloom spray - No bloom spray require, unless in certain years, but if needed, no more then 0.5ppm @ 85% bloom.

Size spray - 10ppm' @ 5-6 mm' since the variety nature is long berry, above 10ppm' produce too long berry.



R# 29 Row 67/21-23

ID: ARRA-15

DATE: 8/31 SUGAR °B 17

COLOR: Verde C SEED TRACE: small

BERRY SHAPE: long. Ø MM: 14/16 x 1"

BUNCH SHAPE: small SKIN: Med.

BUNCH UNIFORMITY: 90% MEET: yes

BUNCH LOOSE: yes ACID: low

BUNCH LOCATION: 4.5 FLAVOR: Natural

BLOOM SPRAY: NO CRANCY: yes

SIZE SPRAY: 6.7-8.9 9 vases 10 ppm CAPESTEAM: Med.

BRUSH: small

This year we put 1-0.5 stretch and 0.5 100% of flower.

2ppm ct 3-4 mm 10ppm 4-5 10ppm 6 8

and calcium to all.

This station was the best station.

Not so big not to small.







ARRAELEVEN 33-1/9+20

ARRAELEVEN

ARRAELEVEN harvest time is 5-7 days after Early sweet™ and few days before Sagraone.

ARRAELEVEN is unique in shape, flavor, crunchiness, eating quality and easy growing



Cropping Recommendation 30t/H





ARRAELEVEN 33-17-1+17







ARRAELEVEN

ARRAELEVEN a cross of Early sweet™ inherited the earliness and excellent eating quality of sweetness and lot of Muscat flavor.

ARRAELEVEN can reach 23*Brix, hold excellent on the vine for almost 3 weeks, cold storage capacity of 45 days and more make this variety very attractive.

From the farmer side, no bunch labor application require, no manicure, no shatt berries, no soft berries and no water berries.

R#29 Row 65/41-42

ID: ARRA-11

DATE: 8/31 SUGAR: 19

COLOR: verde BERRY SHAPE: NONE

BERRY SHAPE: 50% round 14/16

BUNCH SHAPE: Med. SKIN: Med.

BUNCH UNIFORMITY: 90% MEAT: YES

BUNCH LOOSE: 50% ACID: low

BUNCH LOCATION: 4-5 FLAVOR: 30% muscat

BLOOM SPRAY: 10ppm CHANICH: YES

SIZE SPRAY: 20ppm FRUIT SIZE: SMALL

NECESSITY: esbeen small

OS Bloom: 20ppm



Gibb Protocol application:

Bloom spray - 0.5ppm @ 85% bloom

Size spray - First application 10ppm @ 7-8 mm.

Second application of 10ppm 5 days later



ARRAFIFTEEN 33-6/22+21

The ultimate Thompson replacement.
Crunchy, light skin, superb eating, easy to grow,
fertile, excellent storage capacity.



Harvest time
Thompson seedless
+ 30 Days



Cropping Recommendation 30t/H





ARRAEFIFTEEN *Giberelic protocol*

Bloom spray - No bloom spray require, unless in certain years, but if needed, no more than 0.5ppm @ 85% bloom.

Size spray - 10ppm @ 5-6 mm since the variety nature is long berry, above 10ppm produce too long berry.



This year we put 1-0.5 stretch and 0.5 100% of flower.

2ppm ct 3-4 mm 10ppm 4-5 10ppm 6 8

and calcium to all.

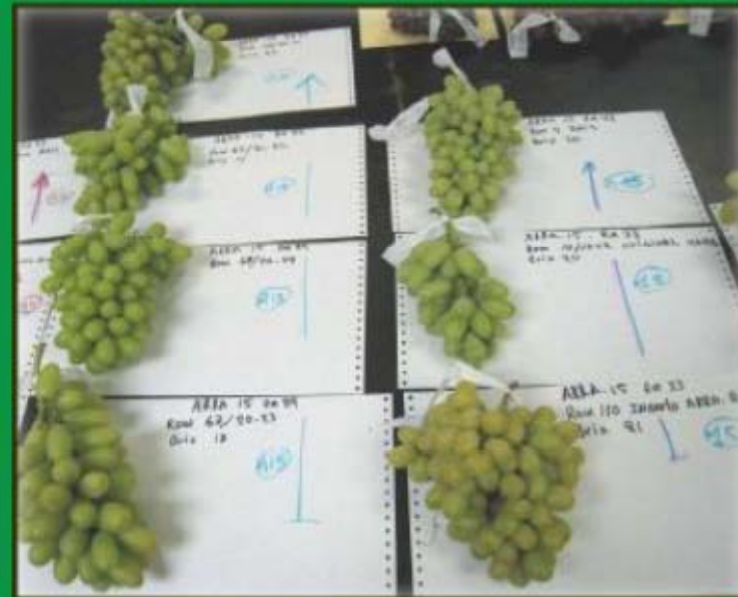
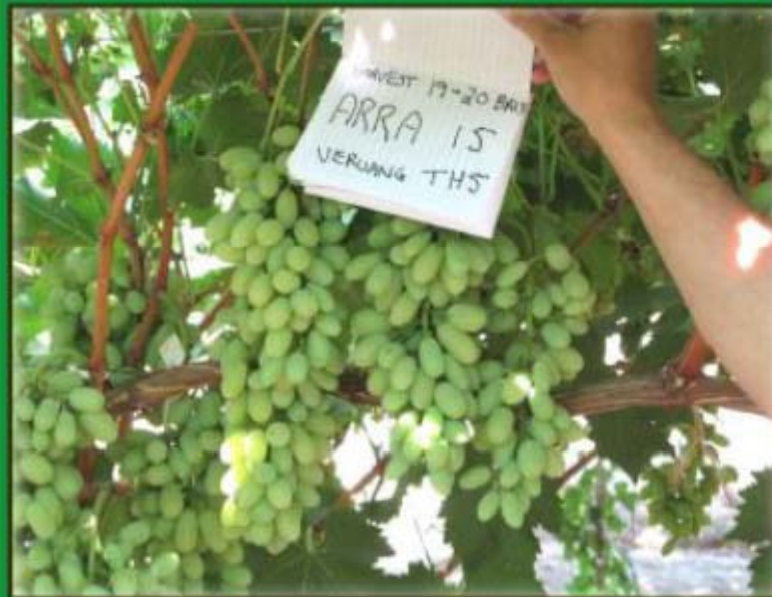
This station was the best station.

Not to big not to small.



ARRAEFIFTEEN Evaluation Data

| | |
|--------------------------|------------------|
| R# 29 | Row 67/21-23 |
| 0. ARRA-15 | |
| DATE 8/31 | SUGAR % 17 |
| COLOR verde | BEED TRACE small |
| BERRY SHAPE long. | Ø mm 14/16 x 1" |
| BUNCH SHAPE small | SKIN Med. |
| BUNCH UNIFORMITY 90% | MEET YES |
| BUNCH LOOSE yes | ACID low |
| BUNCH LOCATION 4.5 | FLAVOR Natural |
| BLOOM SPRAY NO | CRUNCHY YES |
| SIZE SPRAY 2 boxes 10ppm | GRAPESTEAM Med. |
| | BRUSH small |



IFG

International Fruit Genetics

Dr. David W. Cane



LICENCIA EN MANOS DE IFG – CHILE (UNIFRUTTI - DDC - RIO BLANCO)

LICENCIA PROPAGACIÓNUNIVIVEROS®:



Visita California IFG

10 de Octubre 2011



104-253

BLANCA SEEDLESS DE BAYA ALARGADA
MEDIA ESTACIÓN

CROCANTE

BAYA: 6 TO 7 GR (FORMA NATURAL)

REEMPLAZO PARA PRINCESS

POSTCOSECHA ACEPTABLE

RESPONDE A GA Y/O ANILLADO PARA RAQUIS

RESPONDE A GA Y/O ANILLADO PARA CALIBRE

NO SE RECOMIENDA RALEO CON GA



31-77

NEGRA SEEDLESS

TEMPRANA

COLOREA MUY BIEN

BAYA 23-25 mm

EXCELENTE SABOR

PULPA CROCANTE

ALTO VIGOR PUEDE AFECTAR PRODUCCIÓN

ALTO POTENCIAL PARA SER TEMPRANA



68-175

RED SEEDLESS

MEDIA ESTACIÓN

BAYA OVALADA

PULPA FIRME

BAYA 23-25 mm

PRESENCIA DE TRAZAS DE SEMILLA

EXCELENTE SABOR Y CALIDAD PALATABLE

COLOREA BIEN A LA SOMBRA

RESPONDE A GA Y/O ANILLADO PARA
CRECIMIENTO

MUY PRODUCTIVA





01073-093-242

NEGRA TARDÍA SEMILLADA

BUENA GUARDA

SE MANTIENE BIEN EN LA PARRA

EXCELENTE COLOR

PULPA CROCANTE A FIRME

MUY BUENA CALIDAD ORGANOLÉPTICA

TAMAÑO DE BAYA MUY GRANDE (26-28 mm)

RESPONDE A GA



Licenciados Mundialmente

- **Chile**

- Unifruiti Traders LTDA
- Exportador Rio Blanco
- David del Curto S.A.
- Univiveros

- **Turquía**

- GELECEĐYŃ MEYVESY
FYDAN VE TARIM
ÜRÜNLERY TYCARET
PAZARLAMA ANONYM
BYRKETY

- **USA**

- Grapery
- Vincent B. Zaninovich
& Sons Inc.
- Jasmine Vineyards Inc.
- Pandol Brothers

- **Sudáfrica**

- Colors Fruit
- Capespan Grapes
- Exsa
- P.E.R. – Reliance Group

- **Italia**

- DiDonna Trade
- Agricoper di Gianni Liturri

- **España**

- El Ciruelo
- S.A.T. MOYCA
- Anecoop S. Coop.

- **Australia**

- Yalumba Nursery
- Olea Nurseries



MANDO Table Grape Varieties

Combination de Manchester Farm y Dole



Variedades de Manchester Farm

Manejada por Dole en Sud Africa, Marruecos

- | | | |
|----------------------|--------------------|--------------|
| -Alpha Red..... | Roja con semilla | -3 semanas |
| -Desert Seedless.... | Negra sin semilla | -3 semanas |
| -Ice Seedless..... | Blanca sin semilla | -2.5 semanas |
| -Night Shade..... | Negra con semilla | -2 semanas |
| -Cerise Seedless.... | Roja sin semillas, | -3 semanas |
| -Moon Balls..... | Blanca con semilla | +2 semanas ? |
| -Galaxy..... | Roja con semilla | +2,5 semanas |



LICENCIA EN CHILE EN MANOS DE A.N.A.

MOON BALLS

BLANCA TEMPRANA SEMILLADA

FECHA RED GLOBE

BAYA GRANDE REDONDA (26-30 mm)

SABOR MOSCATEL Y CROCANTE



Fuente: ANA y Viveros El Tambo



Moon balls from South Africa season 2002





Moon Balls™ Egipto July 2010



Moon balls

- Whit Seeded ideal for Asian Market
- Dole have the right for Chile, South Africa and Morocco, available in Egypt.
- Pruning in sours.
- Need good shade so strong canopy should enhance.
- Berries can not be touch till the Veraison / Softening.
- Tipping the bunch targeting 60 berries 13 grams each with 30 mm
- Berry size not depending in the number of seeds as Red Globe.
- 44.000 clusters x Ha x 13 grams x berry x 60 berries 33 - 35ton/Há
- Tend to compact because lack of space for berry growth.



DESERT SEEDLESS

NEGRA SEEDLESS TEMPRANA

COSECHA FECHA FLAME S.

BAYA NATURALMENTE GRANDE

SABOR EXÓTICO

POCA EXIGENTE EN CUANTO A LABORES



Fuente ANA y Vivero El Tambo

ICE Seedless

- Breed to replace Sugraone, very irregular fertility almost not related to the chilling winter units.
- Friendly in term of shattering (almost not shot berries), good texture and flavor.
- Harvest as Sugraone 22-24 mm only with girdling.
- Managing the fruit load the harvest can move a bit early.





Source: A. Teubes



Alpha Red

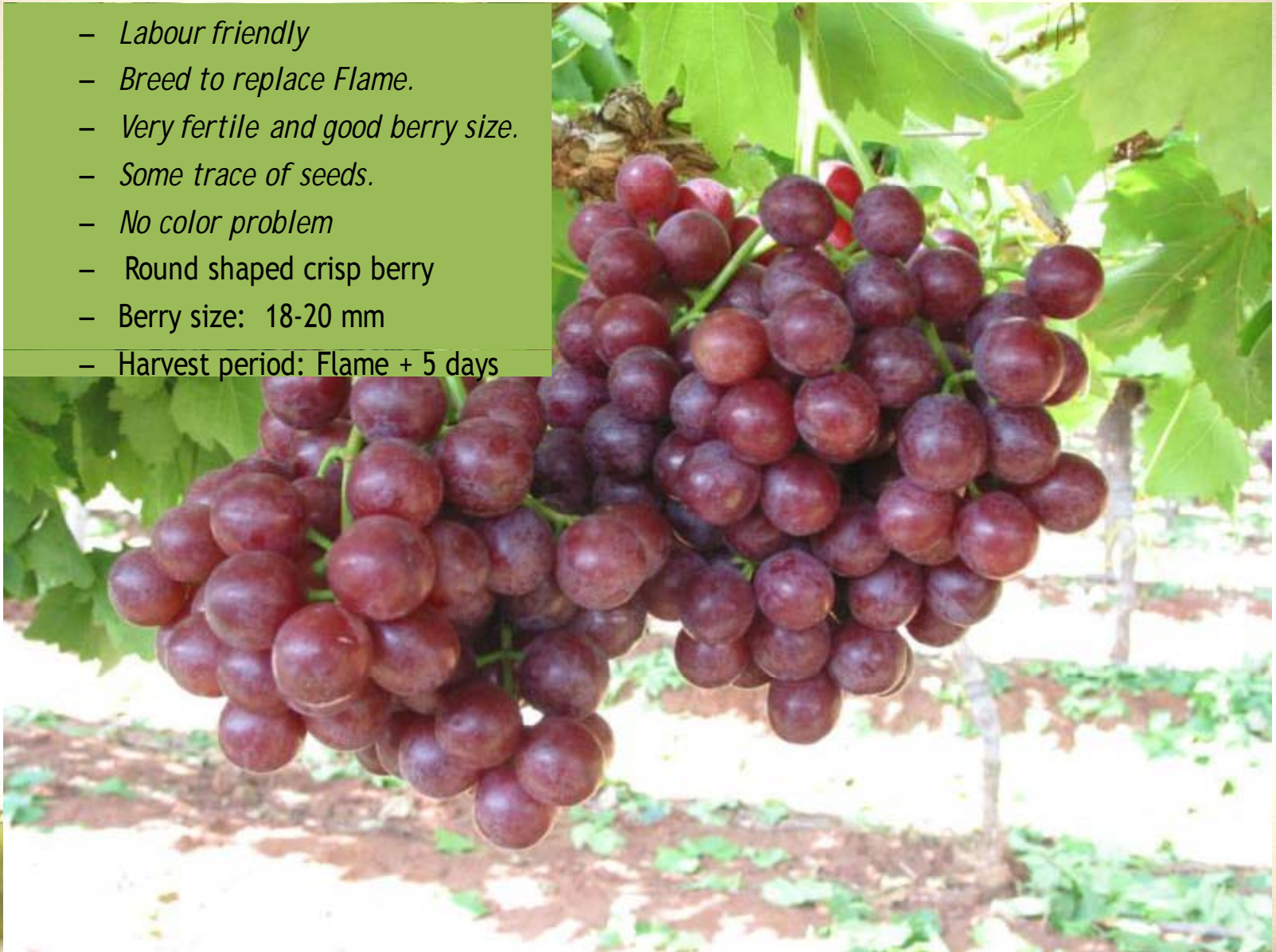
- Seeded early have not the same size as Red Globe
- Very good thinning, girdling may be good effect for size, as well as the GA3.
- Round shaped, crisp berry
- Berry size: ave. 20-24 mm
- Harvest period: Flame - 7 days
- Travaal in SA harvest 5th November.
- Post harvest life as good as to reach 72 days.



Source: A. Teubes

Cerise Seedless

- *Labour friendly*
- *Breed to replace Flame.*
- *Very fertile and good berry size.*
- *Some trace of seeds.*
- *No color problem*
- *Round shaped crisp berry*
- *Berry size: 18-20 mm*
- *Harvest period: Flame + 5 days*



Source: A. Teubes

Programa de Anton Caratan California

- BLANC SEEDLESS cv. PRISTINE®
- CARA SEEDLESS cv.
- MARA SEEDLES cv.
- ROUGE cv.



POLAR S.A TIENE LA LICENCIA Y ESTAN
PROTEGIDAS EN EL REGISTRO DE VARIEDADES
DEL SAG

BLANC SEEDLESS cv. PRISTINE®

VARIEDAD BLANCA SEEDLESS TARDÍA

BAYA GRANDE ELONGADA

MUY CROCANTE

SABOR NEUTRO

COLOR CREMA

RACIMO BIEN FORMADO







Plastic coverage: protection for the rain harvest 25th of
September 2008









Cara™

- .-Black seedless
- .-Tamaño 21 -23 mm
- .-Cosecha in California 20 September 2011
- .- Sabor a Ribier



Mara™

- .-Red Seedless
- .-Tamaño 24-26 mm
- .-Cosecha en California
1^{era} semana de Octubre (2011)
- .- Buen raleo
- .- Buena pulpa



EMBRAPA BraSil



■ BRS Clara

(Vitis vinifera)

- Peso médio de cachos: 500g
- Comprimento de bagas: 23 mm
- Diâmetro de bagas: 18 mm
- SST: 20° Brix
- Produtividade: 30-40 t/ha
- Sabor moscatel agradável
- Tolerante ao rachamento de bagas
- Duração do ciclo: 100 dias



■ **BRS Linda**
(*Vitis vinifera*)

- Peso médio de cachos: 600g
- Comprimento de bagas: 26 mm
- Diâmetro de bagas: 20 mm
- SST: 14° Brix
- Produtividade: 30-40 t/ha
- Sabor neutro
- Duração do ciclo: 100 dias



■ **BRS Morena**
(*Vitis vinifera*)

- Peso médio de cachos: 600g
- Comprimento de bagas: 23 mm
- Diâmetro de bagas: 20 mm
- SST: 19° Brix
- Produtividade: 20-25 t/ha
- Sabor neutro
- Duração do ciclo: 100 dias



<http://www.cnpuv.embrapa.br/publica/sprod/UvasSemSementes/>



■ Cultivares Benitaka e Brasil (*Vitis vinifera*)

- Mutações coloridas da cv. Italia
- Áreas de produção: Vale do São Francisco (PE e BA), MG, SP, PR
- Produtividade: 40 ton/ha/ano



Butia

- Variedad sin nombre que proviene de test block de Embrapa . Fue rechazada en un principio pero se esta usando en remplazo de Crimson (COLOR

Es roja con 16 ° Brix y negra con 20° Brix





VARIETADES EN INDIA



Sharad Seedless



NANASAHEB SEEDLESS



नानासाहेब सिडलेस



नानासाहेब सिडलेस



NANASAHEB SEEDLESS



सरिता सिडलेस



SARITA SEEDLESS





Black seedless harvest
December - January



Source: Azhar Tambuwala 2010

Zonaca packed 10th April 2010



Zonaca leave India





Zonaca at the local market April 2009 (Source O. Salgado)

PRIME™

Volcani Institute
Israel

Many licensee
around the world



Prime qualities

- Patented through Volcani Institute, Israel
- Earliest white seedless cultivar, 7 days before Flame Seedless
- Extremely fruitful, moderate vigour
- Thinning 1 ppm GA, dipping 20 ppm enlargement, girdling after set optional
- Can be sensitive to small berries as bad as Sugrane.
- Crop at 16 Brix, low acidity, slight Muscat flavour
- Very popular in SA, 1500 ha+
- High labor variety in term of bunch natural and hand thinning when young, but worthwhile due to the earliness,



Source: A. Teubes

Kyoho

- Kyoho grapes (巨峰葡萄 Kyohō budō , literally "giant mountain grapes") are a Concord-like cross (*Vitis vinifera* x *Vitis labrusca*) between Campbell and Centennial grape varieties. Like Concord, Kyoho is a slip-skin variety, meaning that the skin is easily separated from the fruit. Kyoho grapes are blackish-purple, or almost black, with large seeds. While the seeds are bitter and the skin is not traditionally eaten, the flesh is juicy with high sugar content and mild acidity.
- Kyoho grapes were first produced in 1942 in Shizuoka Prefecture, but were not so named until 1946. They are popular in Japan, China, and Korea for its huge size and very sweet flesh. They are traditionally served peeled as a dessert. Areas of production include Nagano Prefecture





Kyoho ready for picking Australia



Consideraciones Finales

- Nuevas areas sin lluvias cerca del Ecuador permiten cosechar (ventanas) para suplir las necesidades de los mercados.
- Las nuevas variedades (exitosas) van a impactar esas areas y los mercados.
- Va a tomar un tiempo el decantamiento de las variedades nuevas .Por lo tanto las variedades actuales seguirán cumpliendo un importante rol.



- Cada variedad tendrá un modelo de negocio asociado “*Se acabo el tiempo de las variedades libres*”
- No podemos aceptar o rechazar una variedad basado en una sola experiencia.
- Experiencia local propia , validación de acuerdo a cada zona productora.
- Enfocarse en la selección de variedades que llenen las necesidades técnico productivas y los mercados de destino.



- Evaluaciones de Postcosecha (fumigación), vida de anaquel y análisis de mercado serán una necesidad constante.
- El nuevo pool de variedades llegando a todos los países abren nuevas oportunidades y alternativas para reemplazar las var. existentes
- El análisis a realizar debe considerar : aspectos técnicos , comercial , legales .

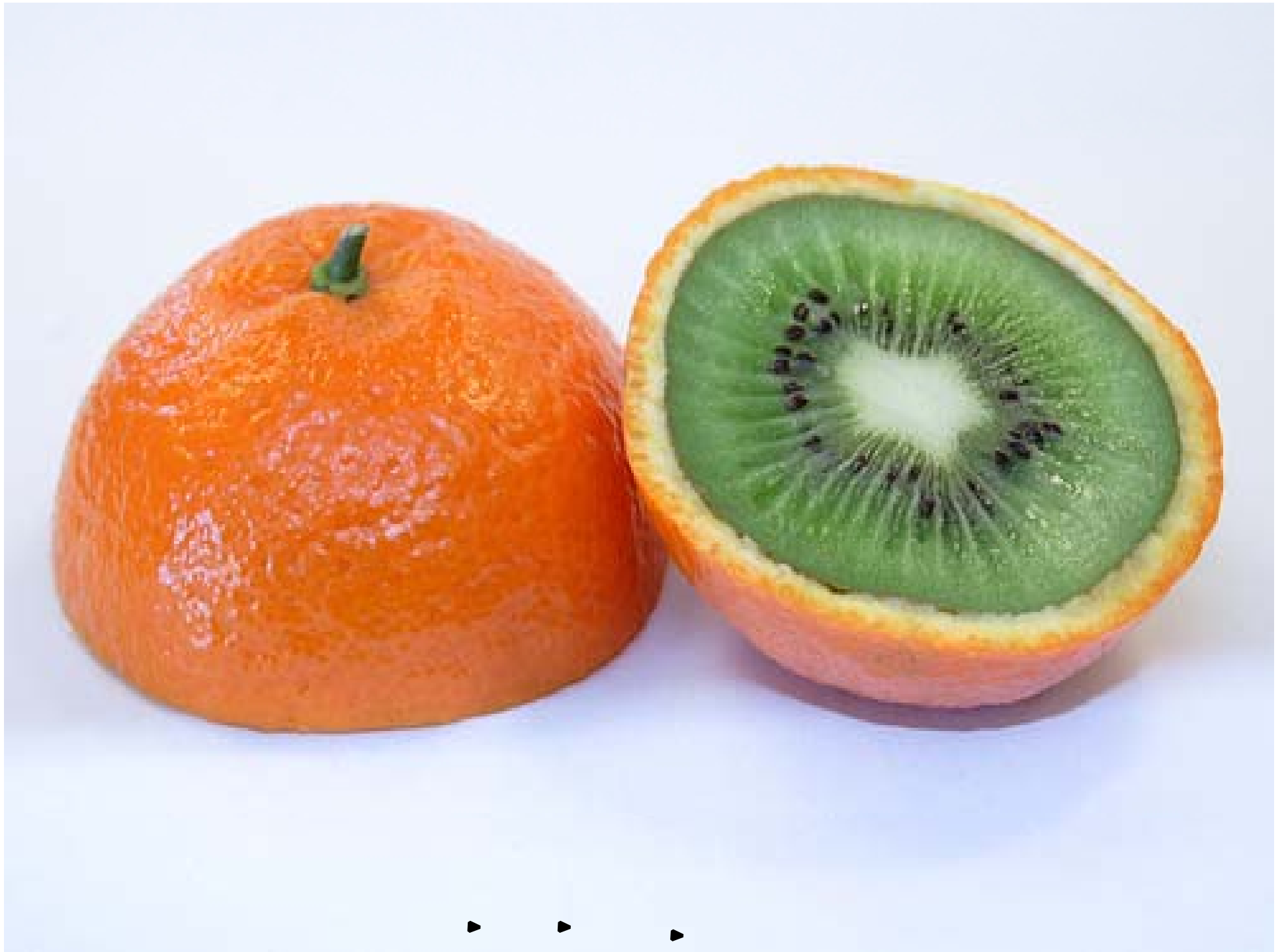
• FALTA INFORMACION....LA ESTAMOS GENERANDO.....?



Agradecimientos

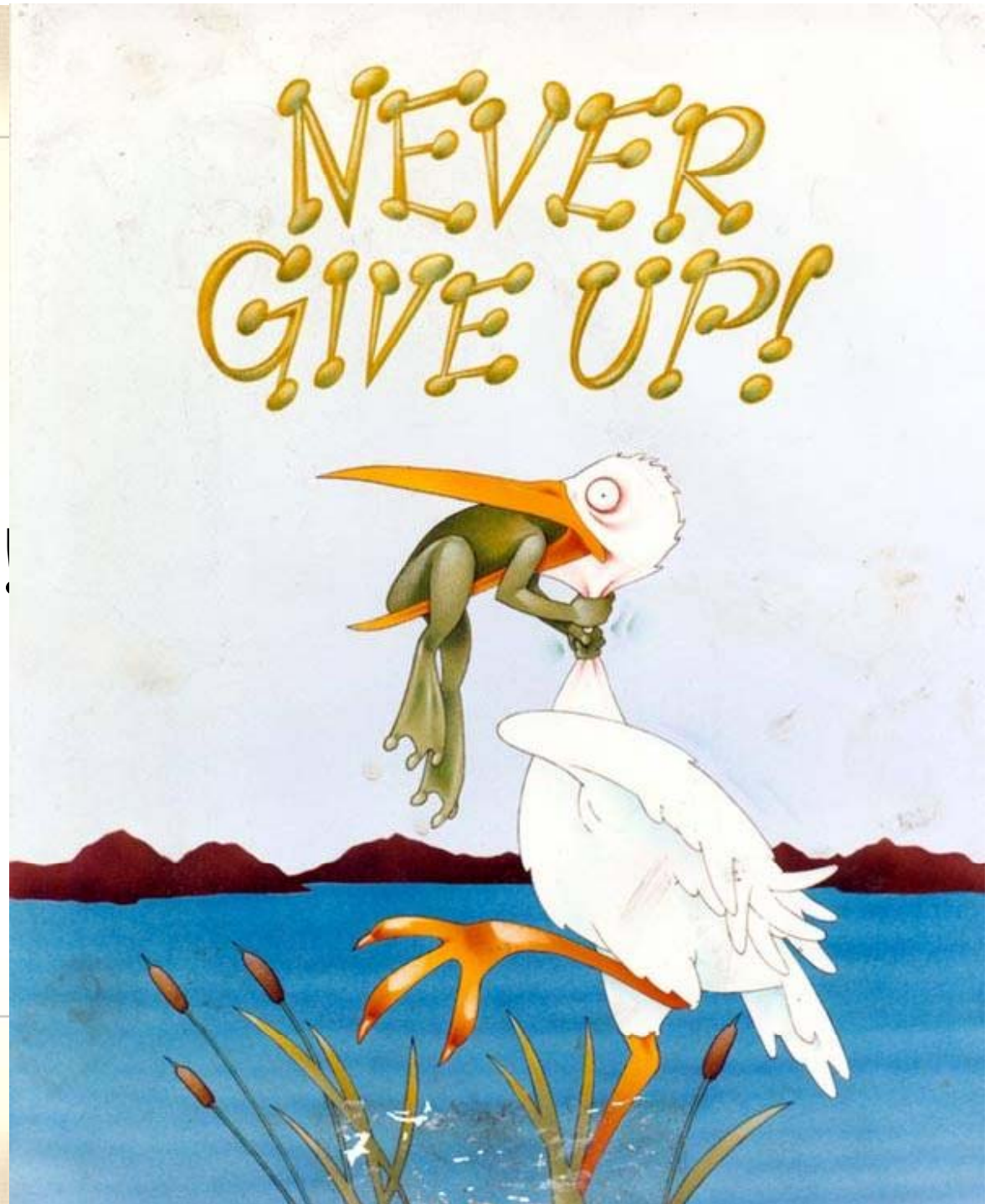
- Oscar Salgado y Andres Mediano
- Familia Prohens Soissa
- Luis Fernandez , Ignacio LetamendiUniviveros
- Rafael ParadaSun World
- Andrew Teubes.....Vg Nursery Sud Africa
- Josep Estiarte.....SNFL
- Karl Conrad y Shachar Karniel....ARD
- Rodrigo Cruzat
- Horacio Parra.....Agrícola El Guindal
- Eugenio Lira.....El Pedregal







Nunca te
rindas.....!!!!!!



Thanks !
GRACIAS

