

SATI Plantmateriaal projek en kernpunte uit 'n besoek aan NZ an Aus

1. INLEIDING

Die **prestasie** van Tafeldruif plantmateriaal bly onbevredigend vir baie produsente in SA.

SATI het 'n **strategiese inisiatief** geloods om die aangeleentheid te ondersoek om die nodige veranderinge en verbeterings te help fasiliteer.



SATI Plantmateriaal projek en kernpunte uit 'n besoek aan NZ an Aus

- 1. Gehalte Plantmateriaal - Oorsig**
- 2. Kernpunte uit besoek aan NZ en Australië**
- 3. Virusstatus van tafeldruifkultivars tans**



OORSIG: Gehalte Plantmateriaal

1.ID Korrek – voor die handliggend

2. GESOND / SKOON

2.1 Swaminfeksies - GTD (GrapeVineTrunkDisease)

versameling van komplekse swaminfeksies, wat as een of meer van die volgende siektes kan manifesteer:

Petri Disease, Black Foot, Eutypa Dieback en Botryospheraia.

2.2 Bakteriese siektes – Vlamsiekte

2.3. Virusse

- Rolblad (Leafroll)
- Netelblaar (Fanleaf)

Vektor
oordraagbaar

Geen Vektore

- GVA (Gleufstam) en GVB (Skurfbas)





- Effect on coloring
- Effect on Berry Development



- **LEAFROLL VIRUS**
- GLRaV1/3
- ***SPREAD:-Infected Plant Material***
- *Vector: Mealybug*

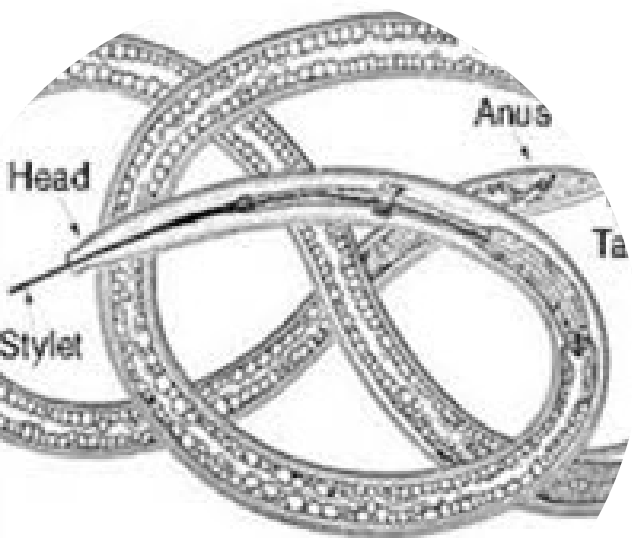




- **FANLEAF DEGENERATION DECLINE**

- VIRUS: GFLV

- ***SPREAD:*** -Infected Plant Material
- - *Vector: Xiphinema index*
(Dagger Nematode)



OORSIG:

Gehalte Plantmateriaal: Gesond / skoon en lewensvatbaar.

3. LEWENSVATBAAR: - fisiologies kompetierend – vermoë om te kan vermeerder
- genoegsame reserwes

4. FISIES - vry van wonde
- entlaste stewig vasgekallus

SATI delegasie besoek aan NZ an Aus Okt 2018



2. DOEL VAN BESOEK

Om **internasionale beste praktyke** vir produksie van geënte tafeldruifstokke te ondersoek om te bepaal hoe:

- a) addisionele waarde tot gehalte van tafeldruifstokke kan voeg en tekortkominge met nuwe elemente kan aanspreek,
- b) **ander moontlikhede**, praktyke en toetse buite die skema se raamwerk, tot by die aflewering van stokke, geimplimenteer kan word.



Hoogtepunte - Australië en Nieu-Seeland besoek:

1. Fisiese Standaarde
2. Entmetodes
3. Gradering en sortering van entmateriaal
4. Moederblokbestuur
 - Oplei van onderstokke
 - Virustoetse
5. Toets van Kwekerystokke (End of Process Testing)
6. Algemene Sanitasie
7. Verpakking van stokke



TABLE 1. SUMMARISED COMPARISON OF VINE CERTIFICATION ENVIRONMENT BETWEEN SA, NZ AND AUSTRALIA

	SA	New Zealand	Australia
Official Plant Improvement Legislation / Act	Yes. Plant Improvement Act. Provides minimum physical standards, Phytosanitary requirements = Visually free All sales (certified and uncertified) must comply to physical standards.	No	No
Vine Certification body	YES. VIA (Vine Improvement Association) Official designated authority of the vine certification scheme.	YES. NZW (New Zealand Winegrowers) In collaboration with VINA(NZ) by means of a MOU	NO Certification body, only Accreditation body, namely Vine Industry Nursery Accreditation Scheme (VINA-AUS)
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Nurseries	Nurseries wanting to sell certified vines must be registered at VIA. Visual inspections by VIA inspectors annually	Annual traceability audit by independent NZW (New Zealand Winegrowers) auditors. 'End of process testing' on samples of grapevine	Annual traceability audit by independent VINA (AUS) appointed auditor.

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Figure 2. Newly grafted vines being dipped in wax for graft wound protection.



WHAT IS THE GRAFTED GRAPEVINE STANDARD?

When you buy GGS Certified vines you know they comply with the requirements of the New Zealand Winegrowers Grafted Grapevine Standard. A vine that carries the GGS certification has met the requirements in the following areas:

- ✓ True to type by variety
- ✓ Testing for GLRaV-3
- ✓ Physical specifications
- ✓ Vine health
- ✓ Management systems

CERTIFIED - TRUE TO TYPE

Rootstock and scion materials have been proven to be true to type at a varietal level using either ampelography or DNA testing carried out by qualified and approved ampelographers and laboratories.

All vines have 100% traceability back to the original mother source.

CERTIFIED - PHYSICAL SPECIFICATIONS

All vines that are certified to the GGS meet the following physical specifications:

- Graft union** - able to withstand the stress/bend test with medium pressure in two directions.
- Stem length** - 250 mm min (base of rootstock to base of the first season's growth).
- Thickness** - rootstock 7 mm min immediately below graft, and 4mm min for shoot of the scion at the first clear internode.
- Curvature** - rootstock curvature not angled beyond 10 and 2 o'clock from the perpendicular, scion wood curvature not angled beyond 9 and 3 o'clock from the first bud of the previous season's growth.
- Roots** - 3 strong live roots (2 growing in opposite directions) with others evenly distributed. Root diameter 2 mm min at 10 mm from the base of the trunk, visually healthy, and if trimmed, at least 75 mm in length.
- Buds** -2 visible dormant buds above graft union.
- Flexibility** -rootstocks shall be able to withstand moderate bending in two directions.
- Disease and damage** - no breakages, cracks, or damage.

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Nurseries

Nurseries wanting to sell certified vines must be registered at VIA.
Visual inspections by VIA inspectors annually

Annual traceability audit by independent NZW (New Zealand Winegrowers) auditors.
'End of process testing' on samples of grapevine

Annual traceability audit by independent VINA (AUS) appointed auditor.

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Nurseries	Nurseries must be registered and vines must be registered. Visual inspection by PIO's annually for trueness to type and disease. Random physical inspections prior to sales – winter.	Annual traceability audit by independent NZW (New Zealand Winegrowers) auditors. 'End of process testing' on samples of grapevine batches involves virus testing in the nursery to comply to Acceptable Quality Levels (AQL).	Annual traceability audit by independent VINA (AUS) appointed auditor.

COST OF TESTING

V-Enting



V-Enting





1. ONDERSTOK MOEDERBLOKKE WORD OPGELEI

VERTIKAAL

HORISONTAAL



STRENG GRADERING VAN ENTHOUT

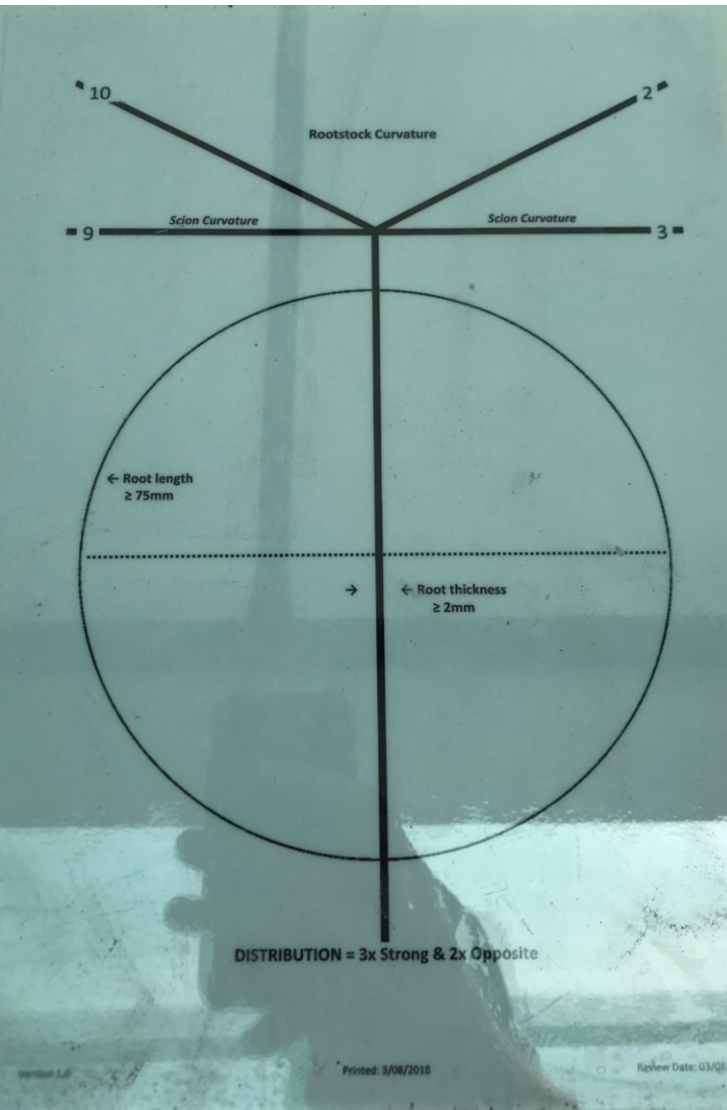






KWEKERY interne standaarde (SOP's):

- Baie hoë fisiese standaard
- Homogeen



VERSKILLENDE STOKGROOTTES

Standaard 300-350 mm 5.0 NZD

“Hi-Stem” 700-750 mm 7.50 NZD



Ormond Nurseries Ltd
MARLBOROUGH
Grapevine Propagation Specialists

HI-STEM® Vines

Ormond Nurseries Ltd. has been working on an innovative vine designed to save you time and money in your vineyard. The HI-STEM® vine gets to the wire faster (and cheaper) than a traditional vine and provides you with benefits both during establishment and at maturity. Not only does the HI-STEM® vine provide you with a nice straight trunk, but it also allows you to eliminate bud rubbing from your annual budget.

After many years of development work and refining of our production systems, these vines are now also available for purchase in commercial volumes.

Standard
(300-350mm)

HI-STEM®
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or smaller by specific request

What are the benefits of HI-STEM® vines?

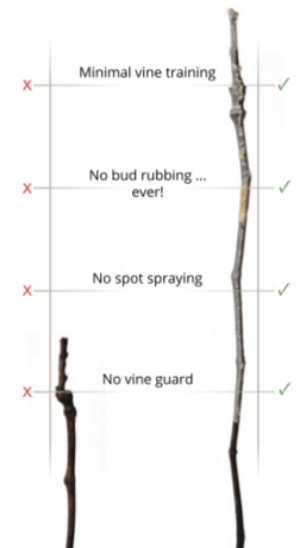
VINEYARD ESTABLISHMENT

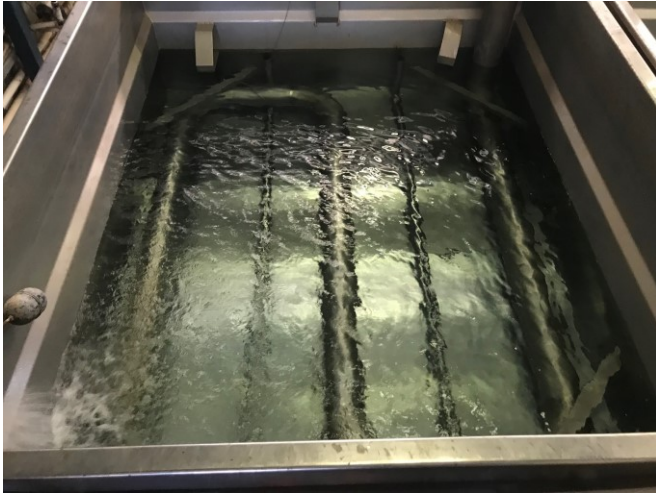
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- No vine guard required
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- No spot spraying of weeds required
- No awkward “in between” year of pruning when you need to choose between two budding, head-high pruning or laying buds on the wire

MATURE VINEYARD

- No bud rubbing... ever!
- No springtime weed spraying delays while you wait for your bud rubbing to be completed
- Straight trunks**

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AUSTRALIË



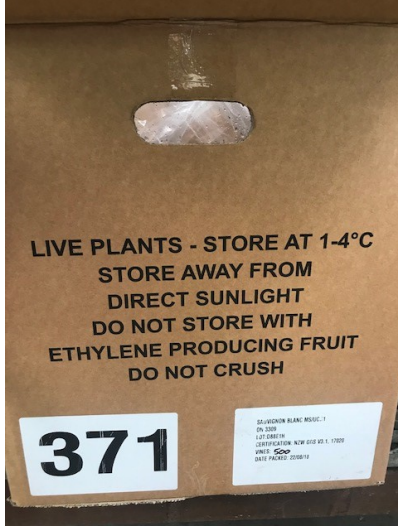
WWB
WARMWATERBEHANDELING
50°C 30 MIN



-FILTRASIE
-Voorkom kruis-kontaminasie



VERPAKKING



VERPAKKING

- Voorkom Uitdroging





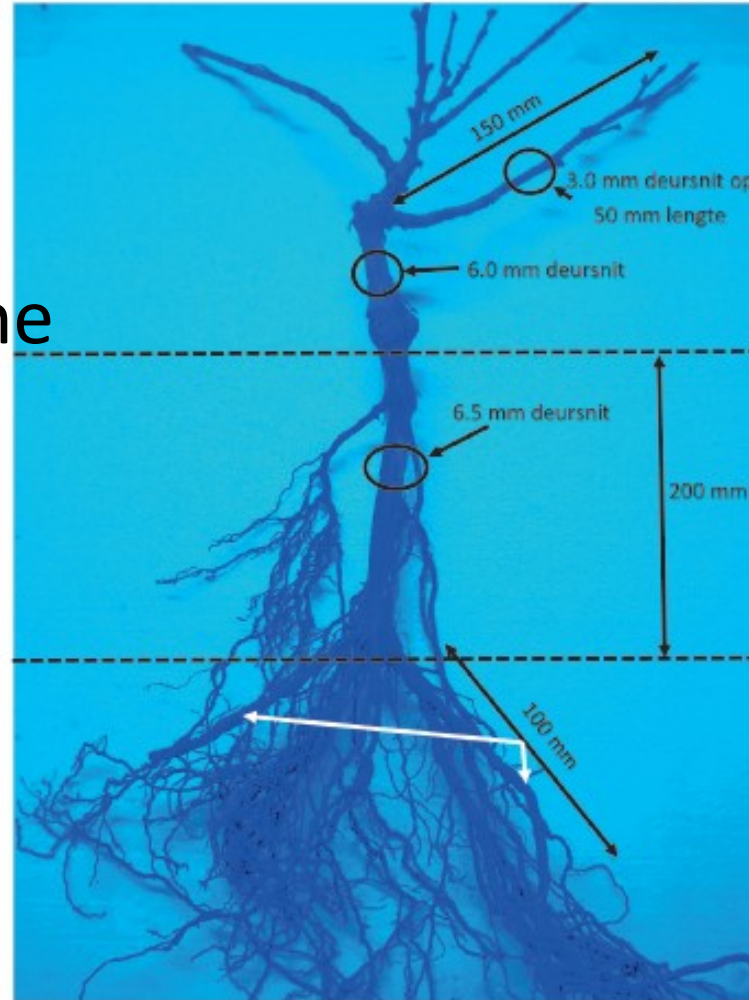
YALUMBA NURSERY
VINES FOR THE TIMES

ALGEMENE SANITASIE IN KWEKERY ENTSTORE



Physical characteristics e.g. fully ripened dormant cuttings
of >7mm in diameter,

Grafted Grapevine



Bostok
Een ryp loot
(150 mm lank)

Tweejarige bostok
gedeelte
Deursnit 6.0 mm

Entlas
Stewig reg rondom gekallus
Buig- en draaitoets

Onderstok
Deursnit 6.5 mm

Wortels
Twee goed ontwikkelde
wortels
Nie korter as 100 mm
teruggesny nie

- Deursnit van bostokloot = 3.0 mm op 50 mm lengte in geval van alle variëteite.
- Toelaatbare toleransie: 3% van stokke in besending.

FIGUUR 3. Fisiese vereistes vir geënte tafel- en wyndruifstokke.



Minimum fisiese vereistes : SA vs NZ



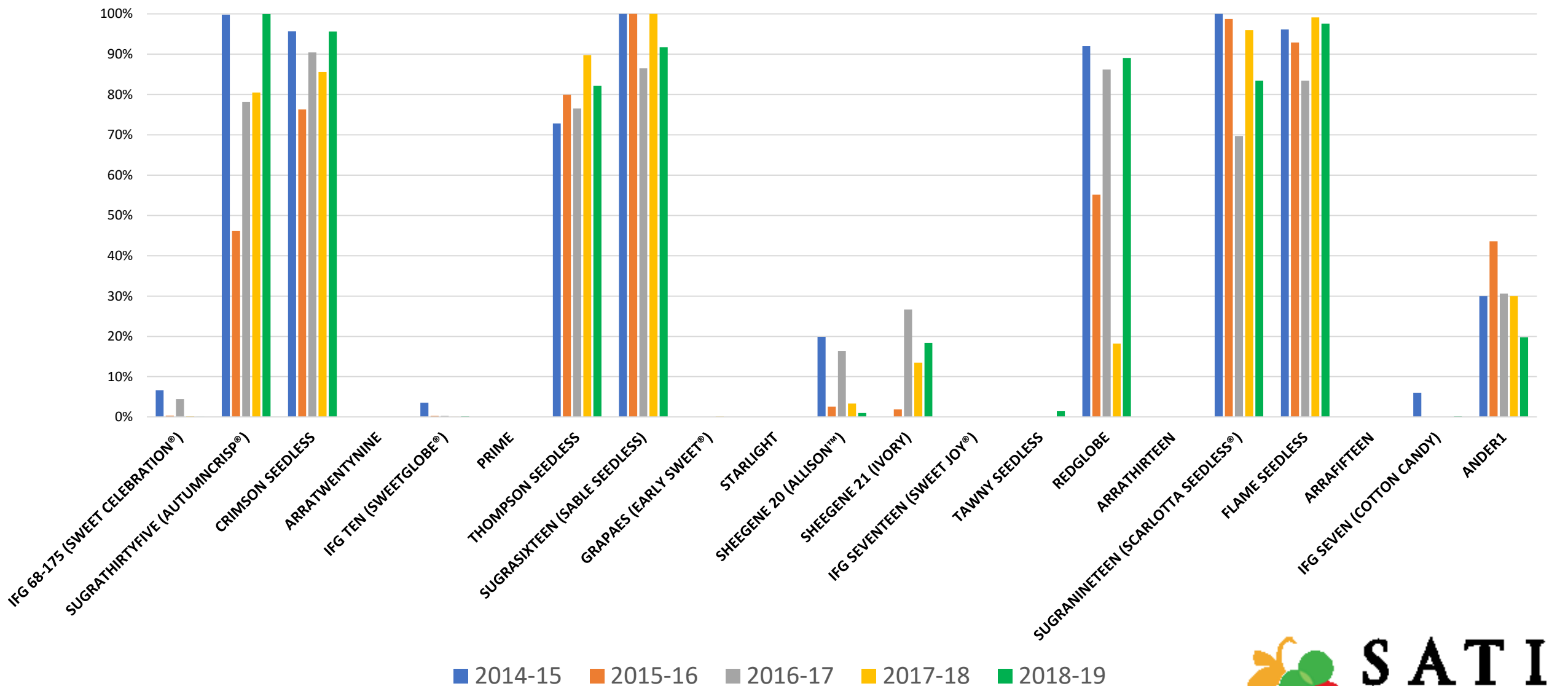
Physical Specifications	NZW Grafted Grapevine Standards	SA Vine Certification Scheme
Minimum Matured Shoots: amount	1	1
Shoot (other)	Minimum 2 buds above graft union	Minimum length: 100 mm
Shoot - minimum diameter	4 mm (measured at fist internode)	3 mm (measured 100 mm from base)
Rootstock of grafted vine	length 250 mm x diameter 7 mm	length 200 mm x diameter 7 mm
Roots (minimum of)	3	2
Roots - minimum diameter	2 mm (measured 10 mm from base of trunk)	—
Roots minimum length when trimmed	75 mm	100 mm

Hoogtepunte - Australië en Nieu-Seeland besoek:

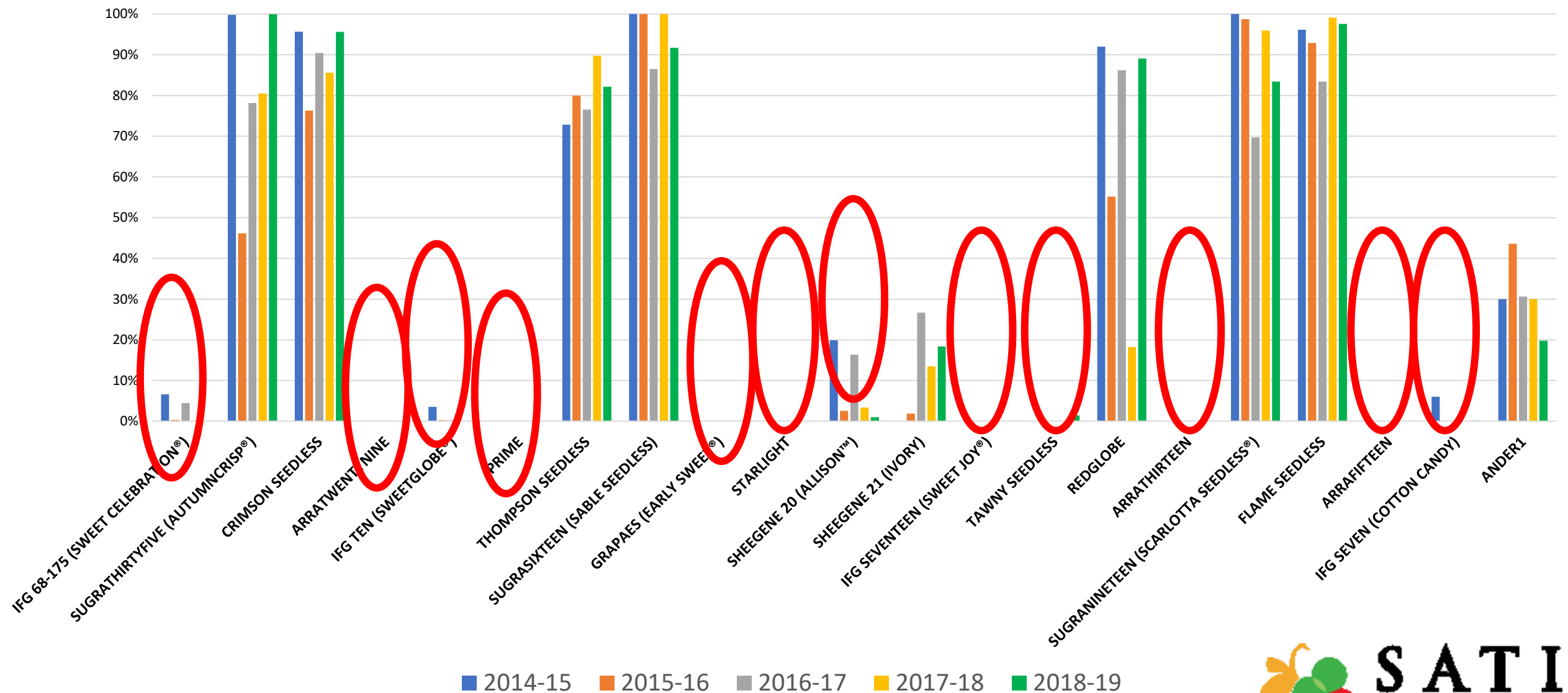
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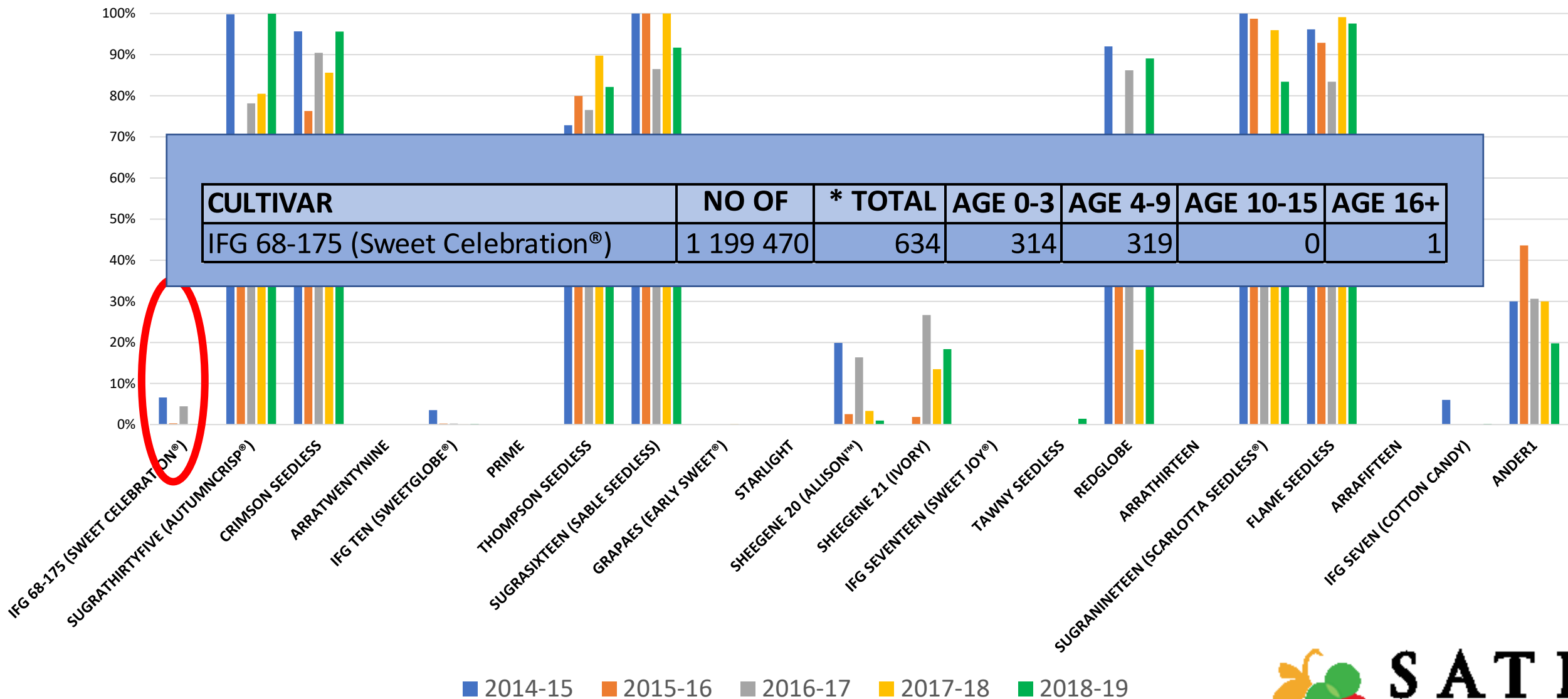
PERCENTAGE CERTIFIED SCIONS GRAFTED AND PLANTED IN NURESERIES TOP 20 CULTIVARS OVER LAST FIVE YEARS



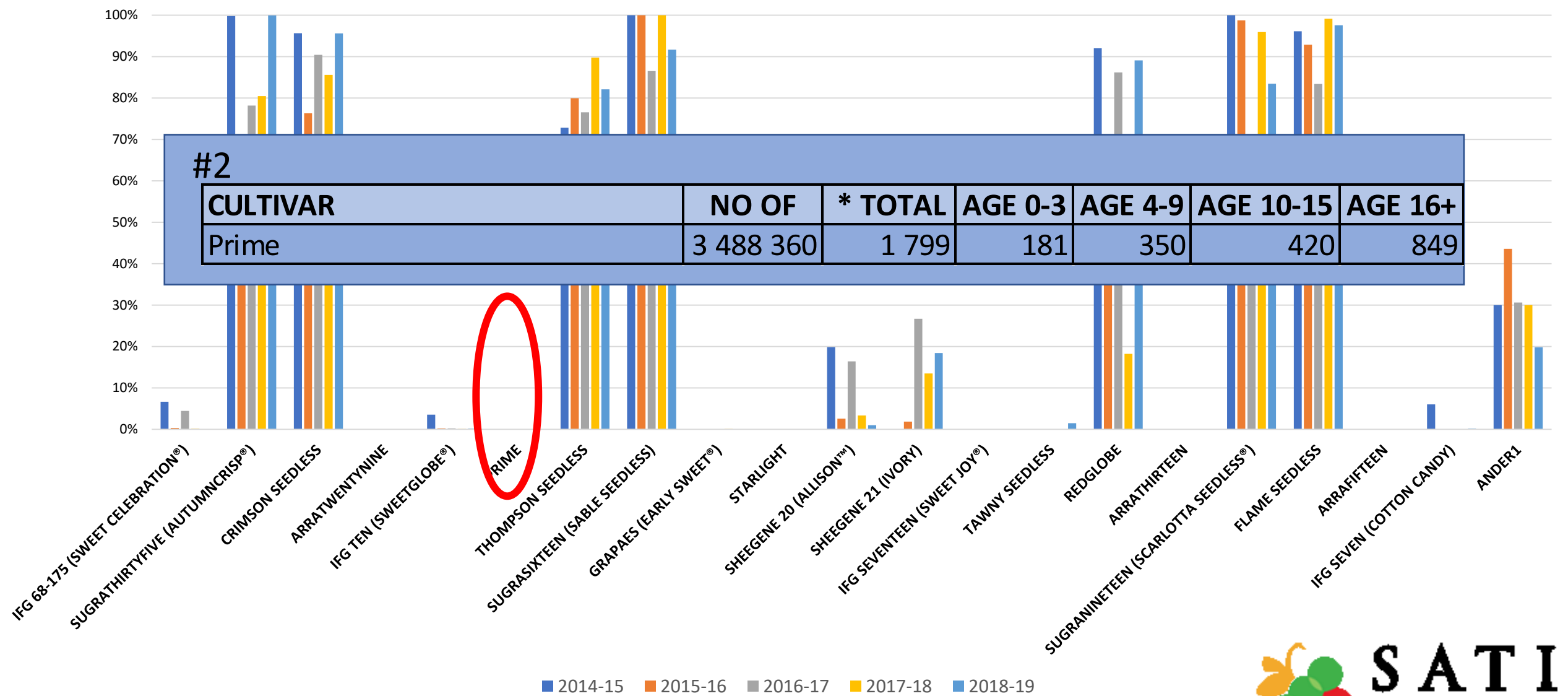
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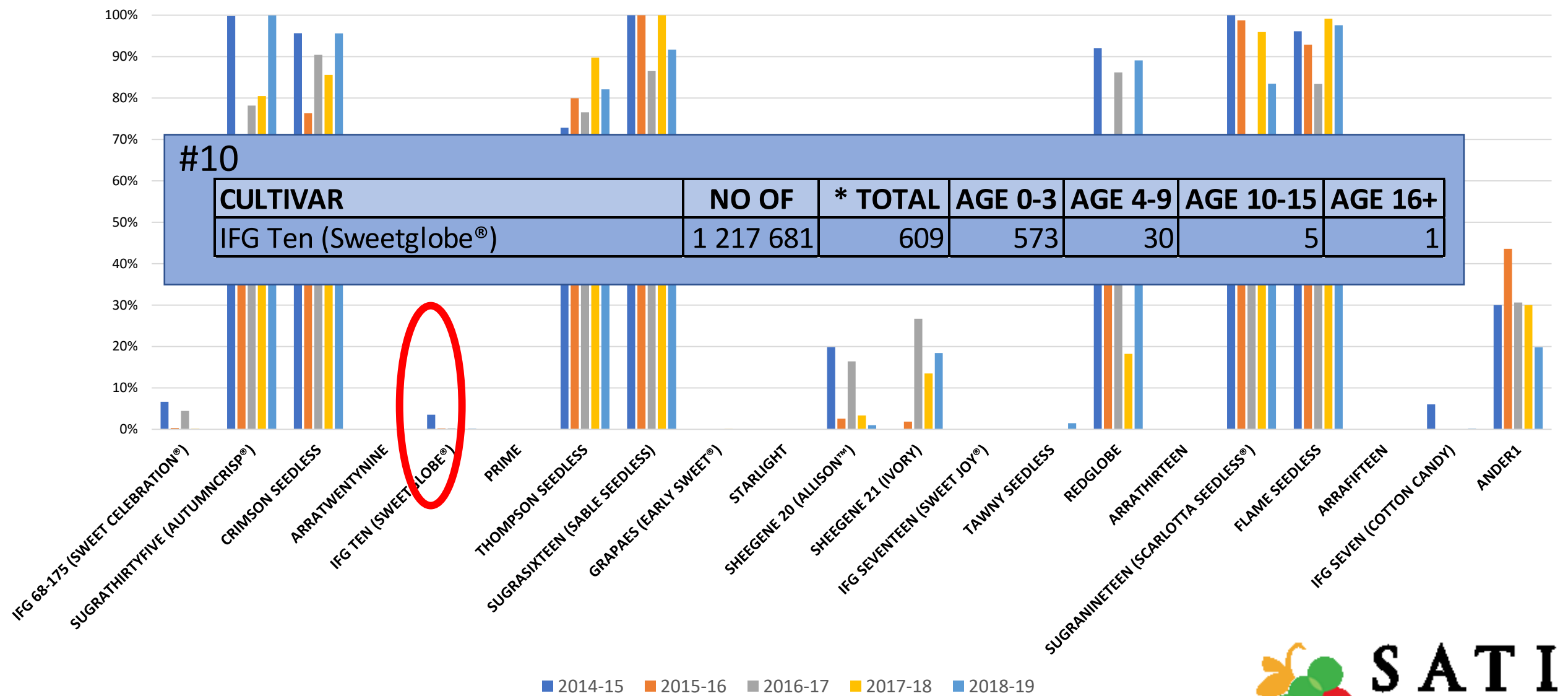
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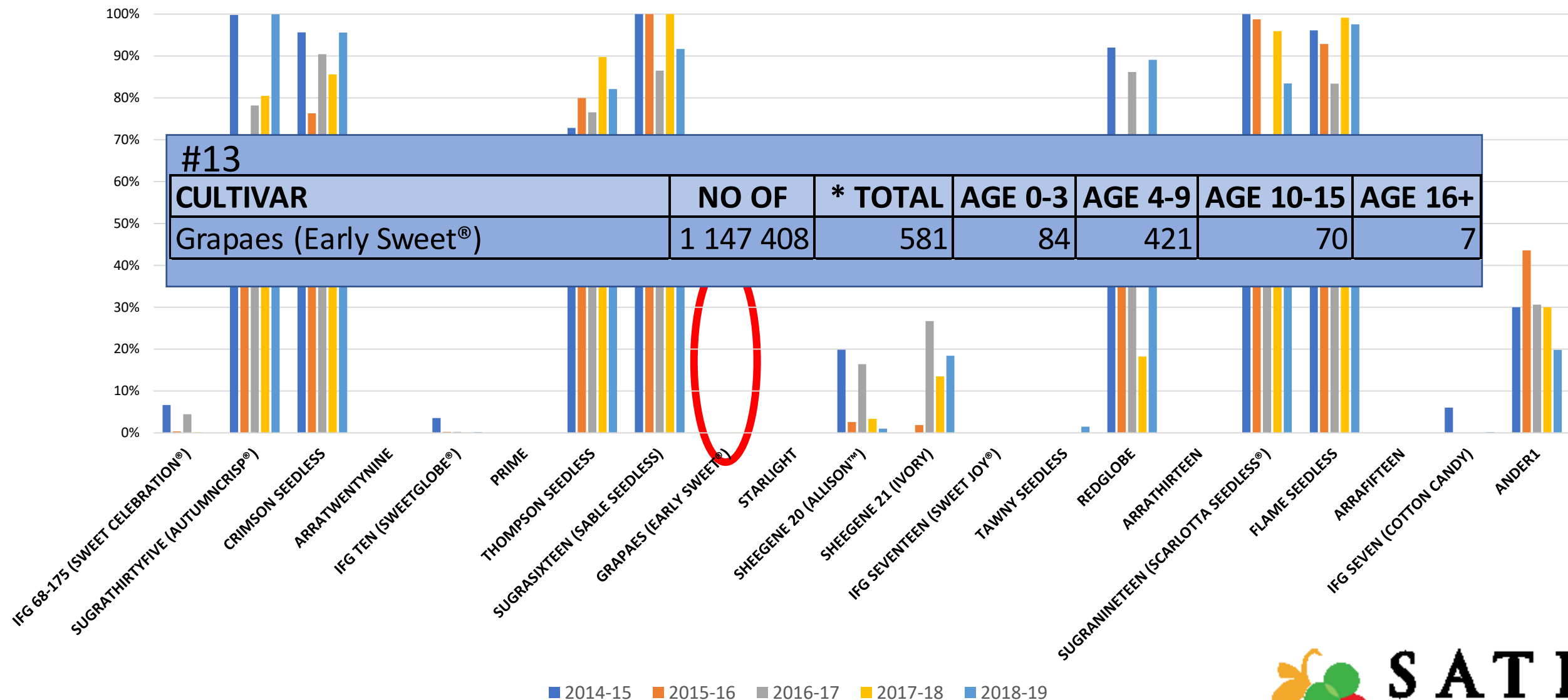
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10% BESMET MET ROLBLAD TIPE 3

[illegible]

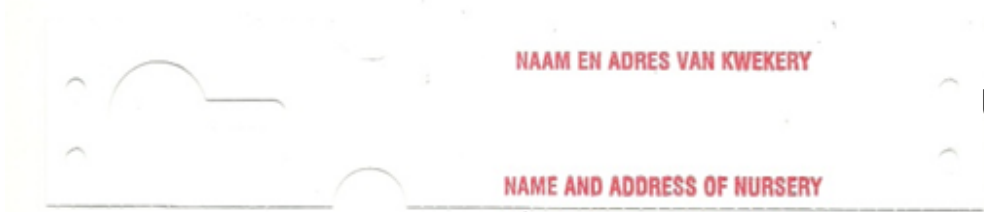


Cost of Certified vs Uncertified Vines ?



CERTIFIED

CANDIDATE



UNCERTIFIED

VERSKILLENDE STOKGROOTTES

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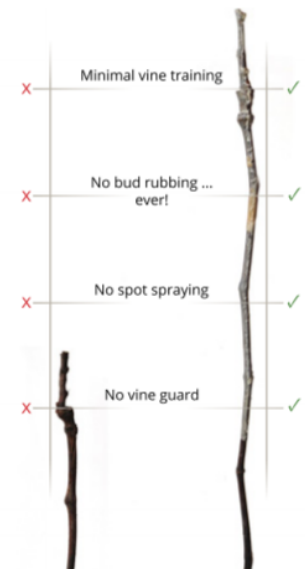
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KONTROLEYS VIR PRODUSENTE VIR BESTELLINGS EN PLANT VAN GE-ENTE TAFELDRUIFSTOKKE

1. OORSPRONG (BRON) EN HANTERING VAN ENTMATERIAAL

-Inligting wat nie op etiket verskyn nie:

Vrae die volgende vrae en dring aan op die volgende inligting van u kweker en PVO's waar materiaal gesny is

2. KWEKERY

- Bestuursrekords / SOP's

**Verhouding
met Kwekery
en PVO**

3. GE-ENTE STOKKE

- Produsent moet self-evalueer: a) Bondels, b) individueel-ekstern, c) individueel-intern.

4. HANTERING (STOOR, VERVOER EN VERPAKKING)

- Kwekery Protokol?
- Data (Tye/Temperature)

5. PRODUSENTE SE SELF-CHECKLIST

- Korrekte Plantprosedure gevolg
- Sorg na plant van stokke

**SELF-
INSPEKTEER**



3. GE-ENTE STOKKE

b) Evalueer individuele stokke -ekstern,

- Fisiese Standaarde – Afmetings / Homogeen ens Bostok dikte = Onderstok dikte**
- Verwyderde ogies – Wonde gesond? Penetreer nie die pithout?**
- Kallus**
- Peste: Nematodes, galle, fikkosera?**



KONTROLEYS VIR PRODUSENTE VIR BESTELLINGS EN PLANT VAN GE-ENTE TAFELDRUIFSTOKKE

3. GE-ENTE STOKKE - Kontroleer

a) Bondels – Risiko Faktor?

b) individueel-ekstern – Risiko Faktor?

c) individueel-intern.. – Risiko Faktor?



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