

The background of the slide features a close-up photograph of several ripe oranges and lemons. The oranges are a vibrant orange color, while the lemons are a bright yellow. Some green leaves are interspersed among the fruit. A semi-transparent white banner is overlaid across the middle of the image, containing the text 'Introducing' and the 'TIP Agri' logo.

Introducing



A company dedicated to the development of agricultural products in the field of plant physiology.

Tip Plus® Label Introduction

TIP PLUS • TIP PLUS • TIP PLUS

TIP PLUS

SA patent no.
2017/07517

TIP PLUS • TIP PLUS • TIP PL

Reg. No. L10815, Act No 36 of 1947.

Reg. No. L10815, Wet No. 36 van 1947.

A suspension concentrate plant growth regulator used to increase yields and reduce alternate bearing in citrus (Mandarins and Lemons).

'n Suspensiekonsentraat plantgroeireguleerder vir gebruik in sitrus (Mandaryne en Suurlemoene) vir verhoogde oesopbrengs en vermindering van alternatiewe drag.

Active Ingredient:
Uniconazole(Triazole)
(Proprietary Formulation)

50g/ℓ

Aktiewebestanddeel:
Unikonasool(Triasool)
(Eiendomsregformulasie)

®
– Nett Volume

Netto Volume

Batch No

Distributed by:
Harvest Chemicals

Lot Nr

Reg. No.: 2016/493406/07.

25 Dan Pienaar Road, Kloof, 3610

Tel: +27 (0) 31 764 6315

Poison Helpline: 085 1 55 5777

Date of
manufacture

Vervaardigings-
datum

TIP Agri



CAUTION



Tip Plus®

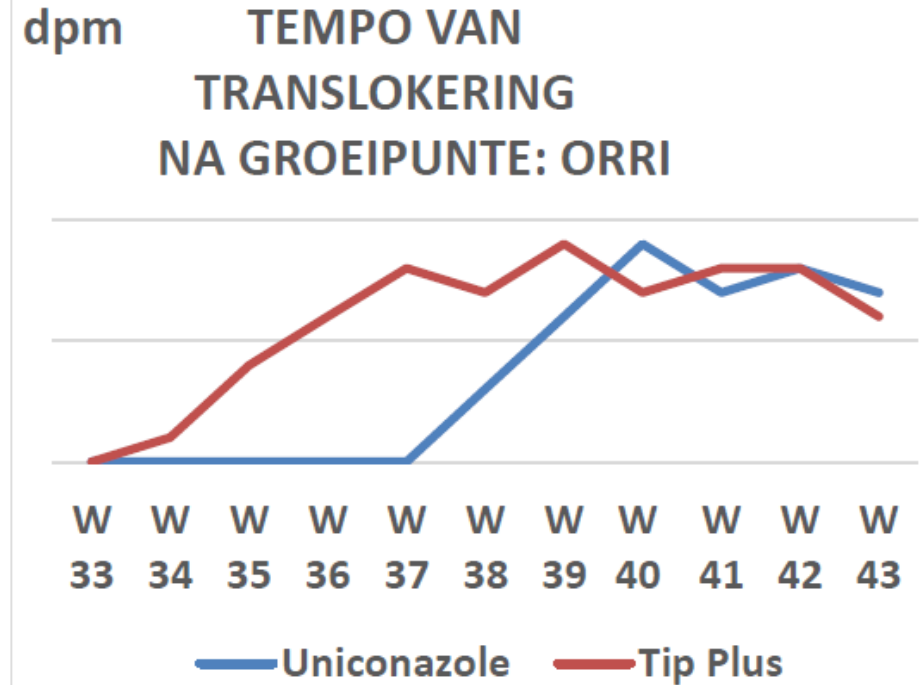
- A proprietary formulation of Uniconazole 50 g/lit suspension concentrate.
- It is the first registration in the world of Uniconazole on Citrus.

Mode of action

- Tip Plus® is a Gibberellin biosynthesis inhibitor, which is a synthetic plant growth regulator that is absorbed by the roots of the plant, with translocation in the xylem to the growing points.

Translocation

- Tip Plus® is taken up and translocated faster through the plant to the apical meristem via the xylem.
- The graph shows that the
- Tip Plus® formulation was 2-3 weeks faster in the growth points than a normal Uniconazole formulation.



Objective

- To manipulate the characteristics of the chemical compound to convert the phenological growth of the tree, redirecting energy levels from vegetative growth to reproductive growth (flowers and fruit).
- This activity will also convert younger trees from the youth phase to a more productive phase.

Activity (Plant Physiological)

- Inhibiting gibberellin biosynthesis resulting in kerbing excessive vegetative growth which would be conducive to flower initiation, improved fruit set, increased fruit size and more desirable fruit colour.

Application

- Application through drip- or micro irrigation.
- Where the irrigation system is not good it can be applied as a soil drench in a 75cm radius around the trunk.



Autumn Application

- Late April/early May before flower initiation starts
- Inhibits Gibberellin in the green rind of the developing fruit which suppress flower initiation behind the green/developing fruit.
- Lower levels of Gibberellins are conducive to stimulation of flowering genes for flower development in the buds behind the developing fruit.

Application timing Autumn



Orchard Observations

- No flowering behind point of fruit picking, No Autumn application. Fig 1
- Flowering behind point of fruit picking, resulting from Autumn application. Fig 2



Fig. 2



Fig. 1

Orchard Observations

- Suppression of Gibberellins in the rind of the fruit reduces the green chlorophyll and promote the accumulation of carotenoid (orange/yellow) pigmentation, enhancing the fruit colour.





Application timing Spring- Mandarins



Orchard observations

- Spot the difference
- Orri treated vs untreated.
 - Left row had 3 years of 5ml in spring.
 - Right row was untreated

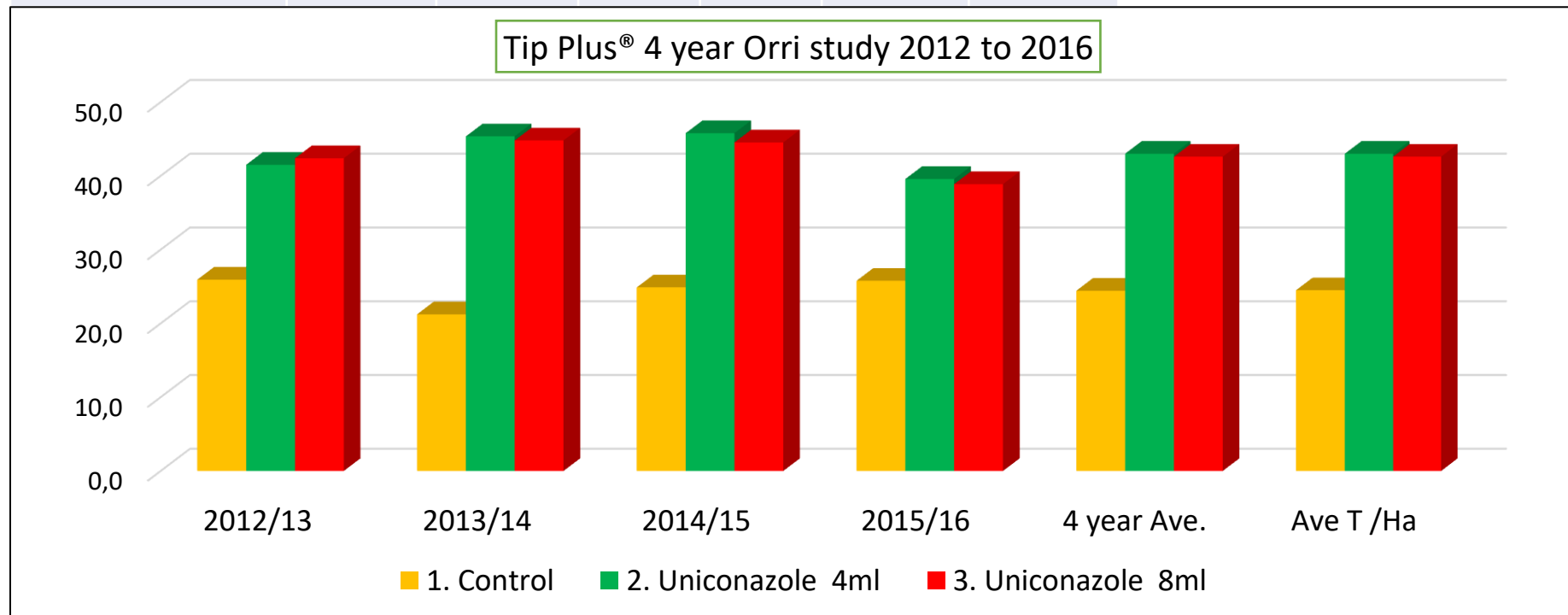


Tip Plus® (Uniconazole 50g/l)

Data: Orri mandarin

4 year study 1000 trees/Ha

	Kgs/tree	2012/13	2013/14	2014/15	2015/16	4 year Ave.	Ave T /Ha
1. Control		25.9	21.2	24.9	25.8	24.4	24.5
2. Uniconazole 4ml		41.5	45.4	45.8	39.6	43.0	43.0
3. Uniconazole 8ml		42.38	44.8	44.53	38.88	42.6	42.6



Orchard Observations

- Nadorcott- Heavy fruitset following previous season's Autumn and Spring applications.
- Previous crop 60 T/ha. Current crop: treated estimate 65T/ha vs untreated estimate 40T/ha



Application timing Spring- Lemons



Orchard Observations

- Top picture: Treated. Shorter shoot length and more fruit.
- Bottom picture: Untreated control. Long shoot growth and less fruit than treated trees.



Orchard Observations

- Table shows that around 50% reduction in shoot growth was achieved with the 5ml registered treatment. Resulting in less wood that had to be pruned.

Table I. Mean shoot length from ten trees per treatment on 14th May 2018, 9 months after treatment.

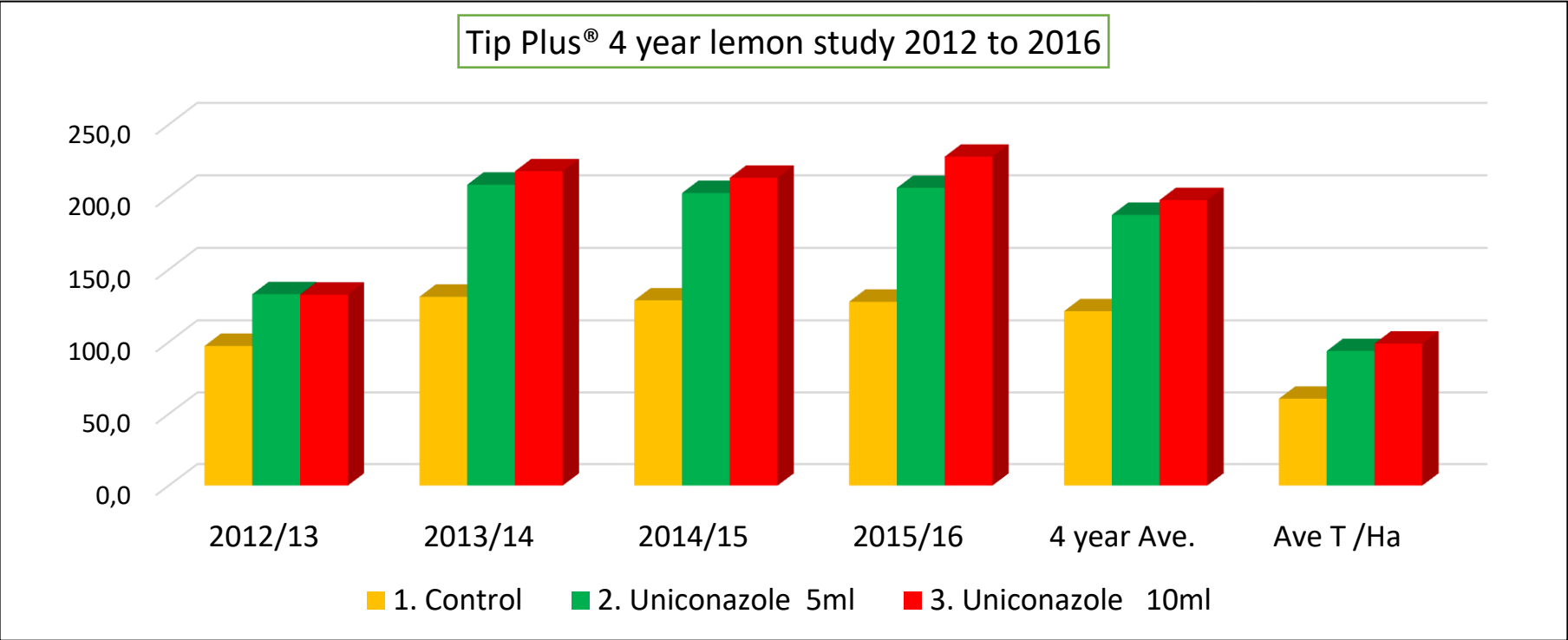
Treatment	<u>i</u>	<u>ii</u>	<u>iii</u>	<u>iv</u>	<u>v</u>	<u>vi</u>	<u>vii</u>	<u>viii</u>	<u>ix</u>	<u>x</u>	<u>Total</u>	<u>mean</u>	<u>sets</u>
1. Control untreated	91.3	90.6	98.3	91.0	95.6	94.6	99.3	98.6	88.0	87.6	934.9	93.5	c
2. Uniconazole 5ml	48.3	46.6	49.3	45.6	47.6	47.3	42.3	45.3	49.0	48.6	469.9	46.99	b
3. Uniconazole 10ml	32.6	34.3	40.0	42.3	38.0	37.6	38.0	39.6	39.3	35.3	377.0	37.7	a

Tip Plus® (Uniconazole 50g/l)

Data: lemons

4 year study 500 trees/ha

Kgs/tree	2012/13	2013/14	2014/15	2015/16	4 year Ave.	Ave T /Ha
1. Control	97.3	131.2	128.7	127.8	121.3	60.7
2. Uniconazole 5ml	133.0	208.5	202.8	206.3	187.7	93.8
3. Uniconazole 10ml	132.7	217.8	213.3	227.8	197.9	98.9



Orchard Observations

- Nethouse- untreated.
- Note: Runaway topshoots.



Orchard Observations

- Nethouse - treated.
- Note: Controlled topshoots and tree shape in conjunction with pruning.



Tip Plus Bouquet!!



Orchard Observations

- Induced flowering with May application on 3 year old trees.





Crop Safety

- Nineteen (19) studies with lab analysis by Hearshaw and Kinnes proved that no residues could be detected where Tip Plus[®] was applied on maturing fruit, approaching harvest.

Cautions!

- Block off all irrigation lines that serve windrows.
- Beef wood and Chinese poplar particularly susceptible.



ROI

TipPlus®@R4perboom	555	667	727	1000	1333	1667
Kosteperha	R220,00	R2668,00	R2908,00	R4000,00	R5332,00	R6668,00

	Produksie/ha	Uitpak%	prys	ProduksieKoste	TipPlusKoste	Inkomste
behandeld	55	85%	R1000,00	R12000,00	R4000,00	R343500,00
onbehandeld	50	85%	R1000,00	R12000,00	-	R305000,00
Verskil						R38500,00

A close-up photograph of a tree branch heavily laden with ripe, bright orange fruits. The oranges are of various sizes and are interspersed among dark green, glossy leaves. The lighting is natural, highlighting the texture of the fruit and the sheen of the leaves. The background is slightly blurred, showing more of the tree and some light filtering through the foliage.

Thank
You