



The Cutting Edge

RESEARCH NEWS FROM CITRUS RESEARCH INTERNATIONAL

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Citrus topworking

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Outspan Foundation Block, Uitenhage

The citrus industry is constantly subject to change and adaptation. The market demand for cultivars may change rapidly, resulting in the grower having to react quickly to remain in business. To replace an orchard with new plantings is costly and results in the loss of a few years production.

The topworking of trees to an alternative cultivar is the most cost effective way to replace an orchard. The main reasons being:

- No soil preparation is necessary
- Existing tree size is achieved within 2 to 3 years
- Production can return to normal within 3 to 4 years

An orchard earmarked for topworking must comply with the following requirements:

- Have a healthy root system
- Be on the correct rootstock for the new combination

An important prerequisite is the use of certified plant material for the following reasons:

- Prevent the spread or contamination of bud transmissible diseases, e.g. greening, Exocortis, Tristeza, etc.
- Ensure horticulturally true-to-type material

Budwood will be supplied by the Outspan Foundation Block (OFB) to meet current topworking technique requirements.

Should you be interested, kindly contact an accredited citrus nursery closest to you or the OFB for more information. A comprehensive topworking guide compiled by Chris Alexander is available on request.

Special budwood prices for topworking are negotiable

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CRInet

Tim G Grout

Citrus Research International, Nelspruit

CRInet was launched in July this year as a means to improve technology transfer between researchers, growers and consultants within southern Africa. Subscribers are able to post questions and pest or disease alerts on the net and may receive responses from anyone else on the net, including researchers. CRInet may also be used for the dissemination of research results in a summarised form or the announcement of technology transfer events. Subscription to CRInet will as far as possible be limited by the moderator to people residing in southern Africa. In order to do this, some proof of residence must be provided.

If you would like to subscribe to CRInet, send an email to CRInet-subscribe@yahoo.com with the word "subscribe" in the subject box. You will also need to send your name, company or farm name, the nearest town and your office phone number (not cell phone) with area code, in an email to CRInet-owner@yahoo.com.

Narrow distillation range oils available in 2001

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Citrus Research International, Nelspruit

Over the last year a number of new spray oils became available for use on citrus, and in the last few weeks it became known that Sunspray 7E and Sunspray 9E will no longer be available. An update on the registered spray oils and some of their properties is therefore pertinent.

With severe damage to the Sunoco refinery in Puerto Rico caused by a hurricane, Sunoco decided to stop production of Sunspray 7E and 9E, although small quantities of 6E may still be ordered through Avima. Fortunately, BP will have their Medium spray oil on the market this year which has very similar properties to Sunspray 7E. Two products with distillation temperatures (DT) similar

to Sunspray 9E will also be available this year. One is Citrole 100 from Total and the other is DC Tron Plus from Caltex. Castrol has been taken over by BP so the light oil Castrol Spraymist will now be known as BP Spraymist and will continue to be available this season. On the heavy side of the spectrum, the locally produced heavy oils (Bac, Cipron, Toxona) are all being produced from a base oil that has a wider distillation range than

normal. This means that their 10-90% distillation temperature range will be closer to 60°C than 40°C and the chance of phytotoxic effects on sensitive cultivars will be greater. A new extra heavy oil will also be available for use in summer this year. This oil is called Winspray and is an imported oil with very narrow distillation range, but high distillation midpoint temperature (261°C). It can be used with caution in summer on oil tolerant cultivars such as Valencias.

The recent trend with all imported oils is to have a narrower 10-90% distillation range and a higher Unsulphonated Residue (UR) percentage. This combination of factors means that these oils are safer than oils with the same distillation midpoint were in the past. However, there is little to be gained from UR% rates above 96%. The precautions on the product label must still be observed and trees to be sprayed must be in good condition.

TYPICAL PROPERTIES OF CITRUS SPRAY OILS AVAILABLE IN 2001

Property	Wenfinex	Sunspray 6E	BP Spraymist	Sunspray 7E*	BP Medium	Orchex 796	Citrole 100	DC Tron Plus	Sunspray 9E*	Bac/Cipron /Toxona	Winspray
Viscosity	7.5	13.4	12.25	15.23	15	12.95	9.3	17.2	17.12	21.5	19.49
Paraffinic %	70	60-70	58	58	63	71	72	72	60	63	70
UR %	96	94	94	96	>94	96.8	96	99	96.1	96	99.8
50% DT	203	212	215	223	224	226	228	233	234	245	261
10-90% range	<46	<44	29	<44	29	<44	<46	25	<44	<60	24

* No longer available but included for comparison purposes.

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wyer distillasiereeks as gewoonlik het. Dit beteken dat hulle 10-90% distillasie-temperatuurreeks nader aan 60°C as 40°C sal wees. Die kans vir fitotok siseit op gevoelige kultivars is dus dienoooreenkomstig groter. 'n Nuwe ekstra swaar olie sal ook dié jaar vir gebruik in die somer beskikbaar wees. Dit word Winspray genoem en is 'n ingevoerde olie met 'n baie smal distillasiereeks, maar met 'n hoë distillasie-midpunttemperatuur (261°C). Dit kan met versigtigheid in die somer op olieverdraagsame kultivars soos Valencias gebruik word.

Alle ingevoerde olies neig deesdae om 'n smaller 10-90% distillasiereeks en 'n hoër persentasie ongesulfoneerde residu's (OR%) te hê. Dié kombinasie van eienskappe beteken dat hierdie olies veiliger is as wat olies met dieselfde distillasiemidpunt in die verlede was. Daar is egter min voordeel te trek uit 'n OR% vlak hoër as 96%. Die voorsorgmaatreëls op die produketiket moet nog steeds nagekom word en die bome wat gespuit gaan word, moet in 'n goeie toestand wees.

TIPIESE EIENSKAPPE VAN SITRUSSPUITOLIES WAT IN 2001 BESKIKBAAR IS

Eienskap	Wenfinex	Sunspray 6E	BP Spraymist	Sunspray 7E*	BP Medium	Orchex 796	Citrole 100	DC Tron Plus	Sunspray 9E*	Bac/Cipron /Toxona	Winspray
Viskositeit	7.5	13.4	12.25	15.23	15	12.95	9.3	17.2	17.12	21.5	19.49
Paraffiniese %	70	60-70	58	58	63	71	72	72	60	63	70
OR%	96	94	94	96	>94	96.8	96	99	96.1	96	99.8
50% DT	203	212	215	223	224	226	228	233	234	245	261
10-90% DT reeks	<46	<44	29	<44	29	<44	<46	25	<44	<60	24

*Nie langer beskikbaar nie maar word vir vergelyking ingesluit.

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