

## EXTENSION BRIEFS JUNE & JULY 2005

HENNIE LE ROUX

CRI - Nelspruit

### CROP LOAD & FRUIT QUALITY ENHANCEMENT

G.H. BARRY

#### Flower induction

Citrus trees require a rest period of about 6 weeks to ensure adequate flower induction takes place. The two mechanisms involved in floral induction in citrus involve (i) low temperature to ensure no root activity; or (ii) controlled-drought stress to ensure no root activity. In the absence of low-temperature rest, citrus trees should be exposed to controlled-drought stress for a 4 to 6 week period during June and July.

Where alternate bearing occurs and orchards are expected to be in an "on" year in the coming season, flowering intensity can be reduced with the application of 10 ppm gibberellic acid applied during early June. N.B. Do not apply winter GA where a light or normal crop is anticipated.

#### Degreening

The publication "Common Defects Associated with Degreening of Citrus" by Andy Krajewski and Tim Pittaway is a must for any grower who degreens fruit. It is available from CRI. It puts degreening in perspective, gives the correct manner of treatment as well as a photographic identification of degreening defects. Contact Bella Thulare at 013 759 8000.

### INTEGRATED PEST MANAGEMENT

A.B. WARE

#### Red scale

Those growers who have experienced red scale problems during the past season need to consider applying narrow distillation range horticultural mineral oils.

The generally accepted period to apply this treatment is from budswell to budburst (sometime in July and August). The concentration to be used is dependent on the grade of the oil to be applied (generally 1.0 - 1.25% medium grade oil). When spraying oil, care must be taken to apply the oil as a full cover film spray. This is because oil is believed to suffocate the insect, a job it cannot do if the scale is not covered with oil. Trees to be sprayed must also not be under any stress.

### LEAF ANALYSIS, THE MAGIC WAND?

J.G.K. COETZEE

During 1967/68 Dr Doug Stanton reminded citrus growers of the limitations of leaf analyses. He pointed out that leaf analyses can only assist in getting the trees in an optimum nutritional state. Nutrition cannot substitute any of the other production factors. Without optimal root conditions, irrigation, pest control and other horticultural practices, fertilisation cannot sustain optimal production.

Gedurende die 2005 blaarontledingseisoen is die feit weer onderstreep. Menige boorde met 'n optimale voedingstatus produseer nie na wense nie. Die basiese feit is dat voeding maar een van die produksie faktore is wat die finale produk bepaal. Die invloed van voeding op produksie kan grootliks uitgeskakel word indien op die volgende gelet word.

- Stel alle tekorte reg.
- Stel alle oormate reg.
- Handhaaf 'n optimale voedingstatus.
- Gebruik bespuitings met ureum en kaliumnitraat om blom en vrugset te bevorder.

Taking care of all these and still not getting the production, one has to resort to other methods to correct the problem. That implies that one has to investigate and identify the limiting factor or factors. These methods will include any of the following depending on the problem.

- Applications of gibberellic acid.
- Pruning.
- Fruit thinning.
- Changing the irrigation schedules.
- Application of nematicides.
- Treatments for Phytophthora.
- Etc etc.

Met bemesting kan ons net sover gaan en nie verder nie. Dit is byvoorbeeld sinloos om meer en meer kalium toe te dien as kalium nie die oorsaak van die te klein vrugte is nie. Oorweeg dan een of meer van die praktyke wat vruggroottes sal verbeter. Sulke praktyke sluit optimale besproeiing, uitdun van vrugte, bespuitings met oksiene en snoei in.

Dit is dus uiters belangrik om eers die beperkende faktore te identifiseer voordat besluit word wat daaraan gedoen kan word. Onthou bespuitings met ureum stimuleer 'n sterk en egalige blom, maar sal nie heeltemal die genetiese probleme van Midnights met vrugset kan oorkom nie. Ringelering of bespuitings met gibberielsuur is nodig. Verder sal bespuitings met kaliumnitraat vruggroottes verbeter slegs indien die kaliumstatus van die bome te laag is.

Blaarontleding is nie 'n towerstaf nie. Dit is 'n betroubare manier om die voedingstatus te bepaal en help om die regte bemestingsprogram te formuleer. Blaarontleding vorm 'n integrale deel van die totale proses van sitrusproduksie.