



UPDATE: THIABENDAZOLE (TBZ) USE ON JUICING FRUIT

Dear Growers and Packhouse Managers

Concern raised by juice processors over the use of Thiabendazole (TBZ) treated fruit intended for juicing is being addressed by CGA and CRI with the view to find workable solutions with all stakeholders. Growers and packhouse managers need to remain informed of developments and hence a few points here on where we are now and where we are trying to go to.

CGA and CRI became aware towards the end of 2005 that packhouses were hesitant to use TBZ as a post-harvest treatment in their packhouse. It later emerged that juicing factories did not support its use on the request of juice importers. Importers specifically stated they required a residue of below 10 ppb, which for all intents and purposes precludes TBZ's use.

During 2005 and in early 2006 CRI distributed notices (Cutting Edge 37) encouraging packhouses to use TBZ, while Keith Lesar engaged with packhouses directly during his routine visits before the 2006 season to further promote its use. The technical justifications for using TBZ are simply:

1. Avoiding the build up of resistance to Imazalil. Some packhouse have already observed alarming resistance build up.
2. The beneficial effects of TBZ on reducing chilling injury during cold storage or cold sterilization.

Growers uncertain of the status of the TBZ MRL then requested CGA to provide guidance. A communiqué went out in November 2005 presenting the legal status of TBZ use in South African and the legality of the EU harmonized MRL. Essentially the CGA notice indicated that the use of TBZ is permissible on citrus fruit intended for juicing where the juice is exported to the EU.

However, a letter from the South African Citrus Processors Association (SACPA) was sent on

the 23 February 2006 indicating the insistence of international juice buyers that TBZ should not be used and the "catastrophic effects" its use would have on SA citrus juice concentrate exports. An invitation was extended for CGA to engage with SACPA. In responding it was again pointed out how the threat of resistance build up to Imazalil due to avoidance of TBZ was concerning and would be extremely damaging to fresh fruit exports should its prevalence grow.

Drawing on experience in other "demanding markets" it was conveyed to the SACPA how as an industry it was undesirable to allow buyers to determine "food safety" requirements, or have a situation where exporters compete on the basis of food safety. Where such a situation persists, the natural conclusion will be post-harvest treatments will not be used at all, putting South Africa at a significant competitive disadvantage. The legal status of the MRL must apply, since it is defensible, ensures safe food and juice, and retains market access for SA citrus products.

Paul Hardman made telephonic contact with Prof Piet Van Wyk, a technical adviser to SACPA, on his return from Japan in March 2006. The discussion can be summarized as follows:

1. Prof Van Wyk explained the requirements of his juicing clients, and maintained juice importers would not likely adjust their 10 ppb residue limit for TBZ in juice.
2. CGA or CRI had not participated in these discussions, or had an opportunity to assist SACPA in their efforts to persuade juice importers otherwise.
3. Prof Van Wyk agreed that the legal requirement should be applicable, but this was difficult to foresee in practice.
4. Pre-sorting juicing fruit: Although this is one option it was not practical or cost effective, and would not necessarily solve all the problems (e.g. what alternatives are there for fruit culled after entering the packhouse?).
5. Consideration should be given to the merits of conducting research to

determine the effectiveness/impact of washing the fruit prior to entry into the juicing plant to achieve a lower residue. This approach must also be tested with the main juice importers.

6. Paul explained the successful partnership created by CGA/CRI and some retailers to maintain the use of relevant plant protection products on the one hand while on the other satisfy the retailers' need to ensure exceedances of the MRL are reduced. This model should be considered in this the case of citrus juice.
7. **Finally CGA, CRI and SACPA need to get together to find longer-term solutions. In particular finding ways to ensure juice importers accept the legal requirements. After all, this is the key issue. A meeting in early May is scheduled.**

Growers, packhouse managers and citrus processors wishing to be part of the discussions should contact Paul Hardman (ph@cga.co.za) for more details of the meeting.

As a separate issue around TBZ, please note the following:

Post-harvest declaration on the carton for Japan

At the Japan Focus Group meeting held on the 29th March 2006 it was agreed that all cartons going to Japan in 2006 must have the following **standardized** declaration with respect to the use of post-harvest treatment on the cartons: **TREATED WITH THIABENDAZOLE AND/OR IMAZALIL.**

The basis for this decision by growers and exporters is simply to eliminate the opportunity for importers to force exporters to compete on the basis of food safety (i.e. encourage them to use less post-harvest treatments). Not using TBZ exposes the citrus industry to significant risk of building resistance to fungicides such as Imazalil. Such a declaration follows the approach adopted by the Californian Citrus Industry in Japan. The additional costs of residue testing in Japan were presented and it was the feeling of the meeting that these were less significant in light of the sustainable supply of fruit into Japan.

Later correspondence from Japan indicated that the Japanese do not have an equivalent

translation for AND/OR. The alternative has been suggested as:

**TREATED WITH ONE OR MORE OF THE FOLLOWING:
THIABENDAZOLE
IMAZALIL**

Kind regards
By email
Paul Hardman
CGA

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