



ChemCert Connections

Calibration Issue
August 2006



What's new?

- **Rain** – in some parts of NSW. Spraying is on in southern NSW following good rain in the past few weeks. It's looking like another big year for weed control. Demand for pesticides is also on the rise! Good time to remind farmers of the importance of calibration and risk assessment before spraying!
- After a slow start to the year we are pleased to see that **training numbers are starting to rise**.
- **100 points to reaccreditation**, if you are not already offering your clients skills recognition you should be. *ChemCert's* guide to RPL and skills recognition is available from the Secretariat. Get your copy now!
- **Animal Health New Hotline** - Virbac customer hotline for technical support 1800 009 847.



TeeJet

TeeJet Australasia has announced the arrival of two new spray nozzles that will improve spray efficiencies on farm – the **Turbo TwinJet** and the **Turbo TeeJet Duo**.

TeeJet Australasia technical specialist Jake Lanyon said the Turbo TwinJet is ideal for fungicides, insecticides and pre- or post-emergent contact herbicides. The Turbo TeeJet Duo (TT Duo)



Turbo Twin Jet



Turbo TeeJet Duo

provides better canopy penetration and coverage than single flat spray nozzles and produces larger droplets than other dual spray nozzles for greater drift control. The TT Duo is ideal for contact post-emergence herbicides, insecticides and fungicides and for systemic post-emergence herbicides and fungicides.

For more info contact TeeJet on tel. (03) 5223 3020 or visit the website www.teejet.com.

Diary Dates

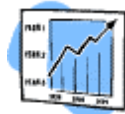
- **ChemCert Australia Workshop**
23rd August, Canberra
- **Weed Society Seminar** 6th September, Sydney
- **Riverina Field Days** 7th & 8th Sept, Griffith



Droplets

Some of the activities CCN has undertaken recently:

- Attended APVMA Spray Drift Forum
- Met Syngenta to explore skills recognition options
- Progressed skills recognition and on-farm audits
- Commenced reviewing AQF2 Workbook



Statistics

ABS Agricultural Census – around 160,000 genuine farm businesses are expected to be confirmed to be operating as at the 30th of June 2006!

This increase is the result of the ABS using the Australian Business Register to identify farm businesses.



Resources

Available from the *ChemCert* Secretariat

- *ChemCert's* Guide for RPL / Skills Recognition
- Guide for Registered Training Organisations, Trainers and Assessors on Delivery and Assessment for *ChemCert* NSW Accreditation – using 100 points for reaccreditation.



Calibration

This issue highlights the importance of calibration and provides tips for users of agvet chemicals. For a copy of *ChemCert's* "Chemical Application Risk Assessment" and a Calibration Worksheet, please visit our website – www.chemcert.com.au.

Calibration is the procedure for checking application equipment to ensure it delivers the correct dose (label rate) of pesticide to the target, and that it is distributed uniformly and effectively.

Different types of equipment require different calibration procedures however the principles are the same.

There are different ways to calibrate spray equipment. Some methods are easier and more accurate than others.

Produced by *ChemCert* (NSW) Ltd
PO Box 2600 Bondi Junction NSW 1355
P: 02 9387 4714 F: 02 9387 4746

www.chemcert.com.au
info@chemcert.com.au



ChemCert Connections

Calibration Issue
August 2006



Drench guns, vaccinators, back liners – checklist

- Check the gun for leaks using water
- Make sure the plungers and valves are working properly
- Set the required dose on the gun
- Squirt 10 to 20 doses into a measuring cylinder. Check that the fluid level in the measuring cylinder is the same as the measure on the gun multiplied by the number of dose.
- Make sure there are no pockets of air in the gun.



Plunge Dips

Over-strength dips are uneconomical due to the wastage of expensive chemicals; they may also cause death, particularly in case of young calves and weak animals. High residues in meat may result. This could jeopardise export markets.



Litres per hectare spray application rate

There are three parameters which must be measured or adjusted to determine the litres per hectare spray application rate:

- The output (litres of spray) in a given time. The flow rate depends on nozzle size plus pressure
- The effective spray width of the nozzles or full machine
- The forward speed of travel or the distance covered in a given time.

There are a number of approaches to calibrating sprayers for L/ha spray application rates (refer to the NTR for more information)



Knapsack Sprayers

The aim of calibration is to determine the sprayer output over a given area. Once you know the output other calculations can be done to determine, for example how much chemical to add to the tank, or how many tanks you will need to complete a job.

Measure a test area:

- Calculate the amount used to spray the area e.g., spray into a container for the same time taken to spray the area and measure the amount collected
- Calculate the output of the sprayer by dividing area into amount used.
- Calculate the amount of chemical to put in each full tank (you will need to know tank size and refer to the label)
- Calculate the total amount of spray mix and total number of tanks.



Silvan

Checklist for efficient Spraying Operations

- Ensure the target pest or disease is at its most susceptible
- Choose the chemical most suited to the job
- Check that the weather conditions are appropriate for spraying
- Match nozzle type and size to the spraying job
- Physically check all components of the sprayer for wear and correct function
- Check calibration factors
- Ensure the correct concentration of chemical goes into the tank
- Be aware of any change in environmental conditions during spraying

Record accurately all details of the spraying job.

For more information please refer to the National Training Resource

NEXT ISSUE - RESIDUES & FOOD SAFETY

Produced by ChemCert (NSW) Ltd
PO Box 2600 Bondi Junction NSW 1355
P: 02 9387 4714 F: 02 9387 4746

www.chemcert.com.au
info@chemcert.com.au