Calibration of liquid insecticide applicators for canegrub management

This calibration method can be used for all liquid imidacloprid products (Confidor® Guard, Senator®, Nuprid® and generic brands) and SHIELD systemic insecticide™.

Record the following:

Date: ____________________________

Product applied: ____________________________

Required insecticide product application rate in mL/100 m of row =

Row spacing in metres = ________ m (B)

Tank volume in litres = ________ L (C)

Equipment needed

• 100 metre tape measure.

• Measuring cylinder to measure up to 50 mm (with 1 or 2 mm increments).

• Stop watch.

Keep this sheet as a record of calibration

Calibration procedure:

1. Convert application rate to L/ha:

\[
0.1 \times \frac{\text{Product rate (mL/100 m row)}}{\text{Row spacing (m)}} = \frac{\text{L/ha}}{(D)}
\]

2. Mark out 100 m and measure the time taken to drive that distance, in field conditions.

Tractor: _______________________ Gear: _______________________ Engine rpm: _______________________

Run 1: ________ secs Run 2: ________ secs Average time: ________ secs (E)

3. Measure output of all nozzles over one row, for the time recorded in Step 2.

Total nozzle output over one row: ________ L (F)

4. Calculate the water rate:

\[
\frac{\text{Total nozzle output over one row}}{\text{Row width (m)}} = \frac{\text{L/ha}}{(G)}
\]

5. Calculate the amount of liquid product to add to your spray tank

\[
\frac{\text{Spray tank volume (L)}}{\left(\frac{\text{Water rate (L/ha)}}{(G)}\right)} \times \frac{\text{Product rate (L/ha)}}{(D)} = \text{L}
\]