Tree Row Volume Calculations

Metric Calculations Date:_____

Block	Description	Tree Height (metres) **H**	Tree Width (metres) **W**	Row Spacing (metres) **R**	TRV = (**H** x **W** x 10,000) ÷ **R**	% of standard TRV = (TRV ÷ 35,676) x 100

TRV = (tree height x tree width x 10,000) ÷ row spacing

% of standard TRV = (TRV ÷ 35,676) x 100

To adjust the delivery rate of your sprayer to apply a rate determined by the tree row volume calculation of a particular orchard block, the following things may be done:

1. To make large changes, use more or less nozzles, or use different nozzle sizes. Nozzle output tables should be obtainable for different brands of nozzles.

2. Changing the forward speed will adjust the delivery rate.
   Travelling slower increases the amount applied.
   Travelling faster reduces the amount applied.

A delivery rate of 150 gallons per acre at 2 miles per hour will be 75 gallons per acre at 4 miles per hour.

3. Changing pressure will only change the delivery rate slightly. Pressure must be increased four times to double the delivery rate. This could have a negative effect on spray droplet size, depending on much it is varied.

Tree Row Volume Calculations

Imperial Calculations Date:_____

Block	Description	Tree Height (feet) **H**	Tree Width (feet) **W**	Row Spacing (feet) **R**	TRV (**H** x **W** x 43,560) ÷ **R**	% of standard TRV (TRV ÷ 509,873) x 100

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