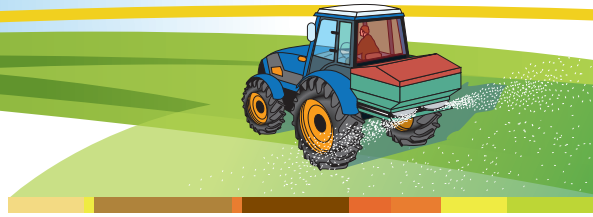
Soils, Nutrients and Fertiliser Factsheet

Fertiliser Spreader – Basic Setup and Calibration



1. Check the spreader before use

- No damage on hopper or frame
- Disc rotating freely, no play in bearing or gearbox
- Regulator mechanism functions, no wear in linkages
- Vanes not damaged or worn
- Check the spreader before use
- Agitator functions
- Headland control functions, fins not bent
- Lights are working
- PTO cover & chains in place

2. Fit the machine correctly

- Check operators manual, ensure tractor and spreader are compatible
- Fit front weights as necessary. Check tractor controls
- Ensure machine is level when viewed from rear. If not spread pattern will be wrong
- Check the tyre pressure and adjust lower link arms. Machine height is measured over the crop
- Set the height of the spreader according to instruction manual for example 75 cm+ over the crop

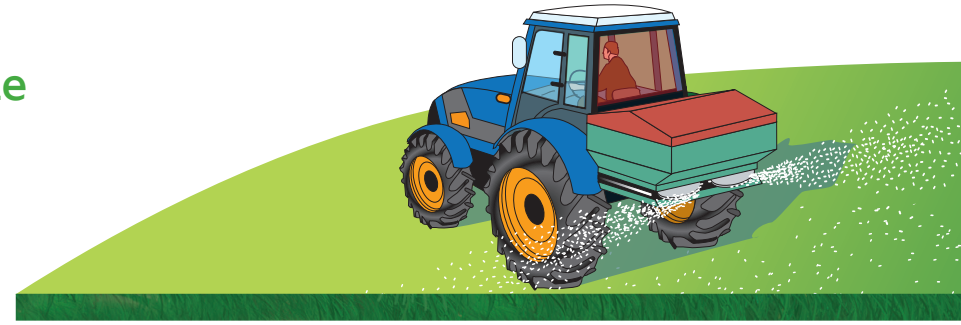
3. Machine settings

Set the machine for bout width, fertiliser and rate you intend to use. Use the Smart phone app, website or calibration/setting book to determine (depending on model)

- Disc / vane choice and vane setting
- Fertiliser drop point setting
- Height of machine
- Front/back angle of machine
- Regulator setting, some apps will also give you the flow rate, kg/min of fertiliser

$$\text{Flow rate kg/minute} = \frac{\text{Application rate (kg/ha) x forward speed (km/hr) x working width (m)}}{60}$$

4. Calibrate the machine



Depending on machine type:

Example

- Remove a disc
- Turn on machine (agitator needs to be operating)
- Open shutter for 30 seconds
- Collect fertiliser in a bucket
- Weight of fertiliser collected (kg) x 4 = flow rate (kg/min)

If the actual flow rate from the machine does not match the desired flow rate adjust the regulator and recalibrate

5. Forward speed and PTO speed

Calibrate the tractors forward speed

- mark out 100 m
- select desired forward gear
- set engine revs to give PTO speed of 540 rpm
- Use a rolling start
- Record time taken to cover 100 m

$$\text{Forward speed (kph)} = \frac{360}{\text{Time taken in seconds}}$$

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