

NITRATE FIELD TEST

December 2019

Soil Wealth
NURTURING CROPS



Integrated Crop Protection
PROTECTING CROPS

THINGS YOU'LL NEED

- Soil auger or spade
- Bucket to collect soil and mix it
- 1/8 cup measuring cup
- Approx. 20 mL clean plastic (or glass) container with lid (e.g. vegemite jar)
- 1/8 cup distilled (or rain) water
- Filter paper
- Nitrate test strips in original container (keep in fridge when not used)



Nitrate test strip

INSTRUCTIONS

1. Take at least 12 x 30 cm soil cores from the paddock you want to test (zig zag or diagonal pattern, kick any debris off the soil surface before inserting the auger). Mix and crumble soil well and remove all rocks and large debris.
2. Fill a 1/8 cup measuring cup from the soil in the bucket. Level the cup with the palm of your hand.
3. Place the 1/8 cup of soil inside the 120 mL container.
4. Measure 1/8 cup of distilled water and pour into the container.
5. Place the lid on the container. Shake to combine soil and water together about 25 times to dissolve the nitrates.
6. Fold a filter paper in fourths and open so that a cone shape is formed.
7. Place the filter cone tip-down rapidly into the test cup and leave until about 10 mL of water has soaked through the cone tip.
8. Open the test strip container and remove one test strip, holding it by the bare, nonpadded end.
9. Close the test strip container.
10. Dip the padded side of the strip into the test water for one second only (time exactly). Remove from the water, shake and hold in the air for 30 seconds (time exactly).
11. Immediately compare the colour of the strip with the test strip container colour blocks to determine parts per million (ppm = mg/L) of nitrates.
12. Record result, convert to kg nitrate N per hectare to compare to fertiliser inputs.
13. Repeat once or twice from the same soil sample and take a mean value of your measurement for the final result.

This work was originally produced by Tas Farming Futures.



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