

# Quick Test Strips and Nitrogen Management

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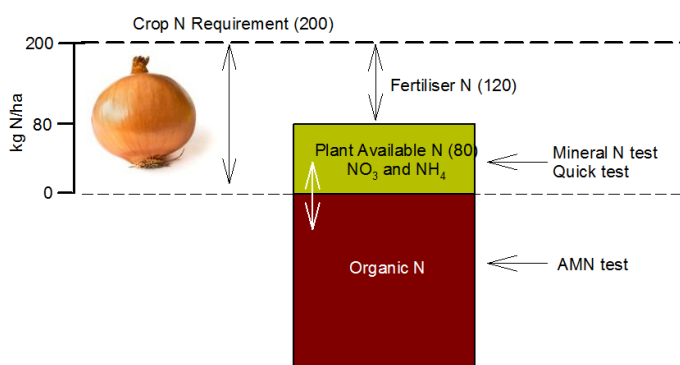
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## How much N do we need to apply to meet crop N requirement?

To answer this question we need to quantify our soil N pools. In the diagram below, Fertiliser N requirement (120) = Crop N requirement (200) – plant available N (80) – mineralisation from Organic N.



## Assessing plant available N: the Nitrate Quick Test Approach

To make an informed N management decision using the quick test approach, we first need to convert our volumetric quick test value (ppm NO<sub>3</sub>) to a gravimetric test value (mg NO<sub>3</sub>-N/kg DM) or a field equivalent basis (kg NO<sub>3</sub>-N/ha).



Using the gravimetric test value (mg NO<sub>3</sub>-N/kg DM) or a field equivalent basis (kg NO<sub>3</sub>-N/ha), we can make a more profitable and lower risk N management decision based on crop N thresholds or crop N requirement.

Nitrate Quick Test Value (ppm)	Soil NO <sub>3</sub> -N (mg/kg DM) *	Field NO <sub>3</sub> -N (kg N/ha, 0-30 cm) *
0	0	0
5	4	15
10	8	28
15	12	41
20	16	54
25	20	67
30	25	80
40	33	106
50	41	133
60	50	159
80	66	211
100	83	264

\* Values are for a moist silt loam and will vary based on soil texture and moisture content.