



R-leaf



**Growing Sustainably
for a Brighter Farming Future**



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A NEW SUSTAINABLE SOURCE OF NITROGEN

- Turning Air Pollution into Nitrogen Fertiliser
- Manufacturing Nitrogen Directly on the Foliage
- Achieve Carbon Neutrality and Farm Profitability

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HARNESS NATURE FOR PLANET-FRIENDLY FARMING

R-Leaf is an innovative technology developed by Crop Intellect converting air pollution into fertiliser. Specifically, R-Leaf captures atmospheric nitrogen oxides (NOx) and through photocatalysis using day light converts them into nitrogen fertiliser. The technology is embedded into a liquid fertiliser formulation and sprayed tank-mixed on plant surfaces using standard farm sprayers.

The photocatalyst in R-Leaf is a specially processed titanium dioxide with enhanced ability to produce nitrogen daily whilst remaining on plant leaves for several weeks. This makes it a valuable tool for farmers to reduce their reliance on synthetic nitrogen fertilisers resulting in increased soil resilience and reduced carbon footprint without yield compromise.

Moreover, R-Leaf's proven ability to breakdown atmospheric N₂O - a recognised greenhouse gas 295 times more harmful towards climate change than CO₂ - provides the opportunity to farmers to monetise on meeting their net-zero emission targets.

Extensive independent trials have demonstrated that R-Leaf positively impacts crop yield or compensates for the reduced use of synthetic nitrogen fertilisers. Its practical simplicity and effectiveness make it a solution for widespread agricultural use across a variety of crops.

These benefits make R-Leaf a promising technology for farmers aiming to improve their crop productivity while also contributing to environmental sustainability.



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R-Leaf is an EC Fertiliser with a suspension concentrate liquid formulation, packed in 5 litres HDPE white bottle, 2 x 5lt per carton box. It has 1.5 specific gravity (1.5kg/lt) and a pallet contains 640lt. Under standard storage condition the shelf-life of the product is 24 months.

APPLICATION DOSE & RATE

Mixing Instructions

Use 1 litre of R-Leaf per hectare with at least 130 litres of water. Ensure thorough shaking of each bottle (at least 1 minute) before transferring to the spray tank.

Cereals

Apply at T1 and T2 stages, specifically during growth stages 31-33, 38-40, and optionally 45-47. If T2 timing is less than 14 days from T1, then apply 0.5lt/ha at T2 and 0.5lt/ha at T3.

Potatoes: Apply 0.5lt/ha at 80% soil cover and every 7-10 days thereafter tank mixed x 4 (Total 2lt/ha)

Amenity Grass: Apply after each mowing or every 2-4 weeks

Vegetables: Apply when plants have 4-5 true leaves and subsequently every 4-6 weeks

Fruit Trees: Apply during full leaf growth and adjust for N requirement

Ornamentals: Apply every 3-5 weeks

Other Crops: Use 1 litre per hectare mixed with a minimum of 200 litres of water, apply every 4 weeks

