

R-Leaf[®]

Trials Overview

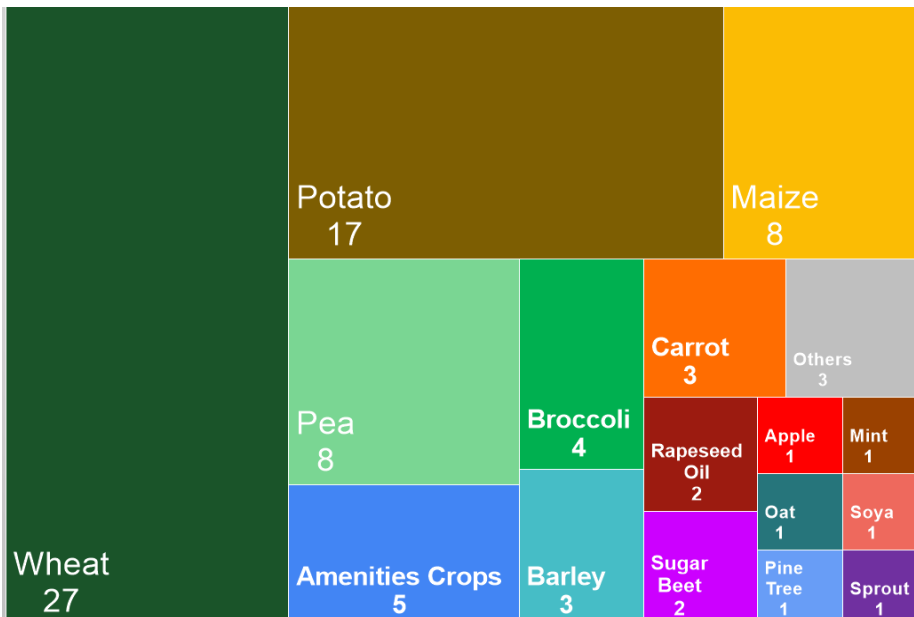
Prepared
January 2025



R-leaf

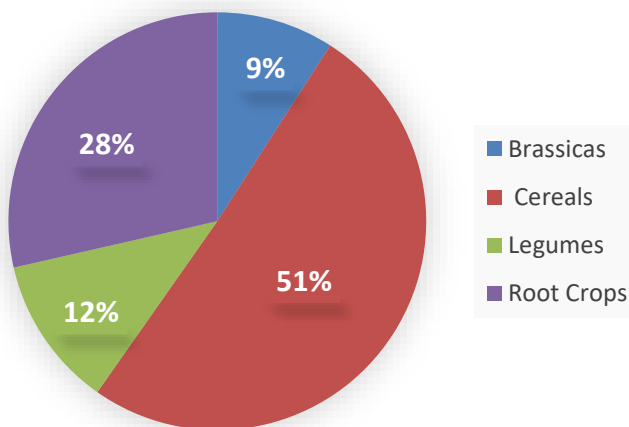
R-Leaf Trials Data Overview

Number of Trials by Crop

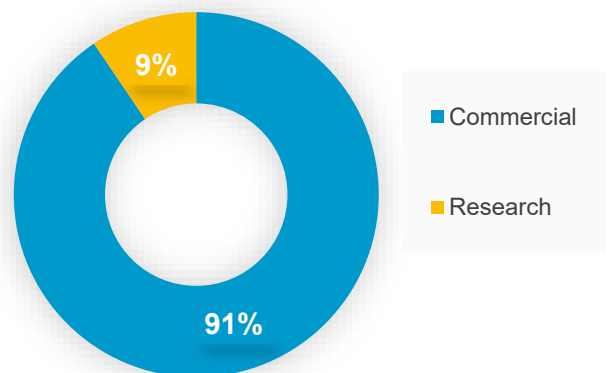


Total Trials	115
Trials in 2018 - 2021	11
Trials in 2022	18
Trials in 2023	19
Trials in 2024	40
Trials confirmed 2025	27

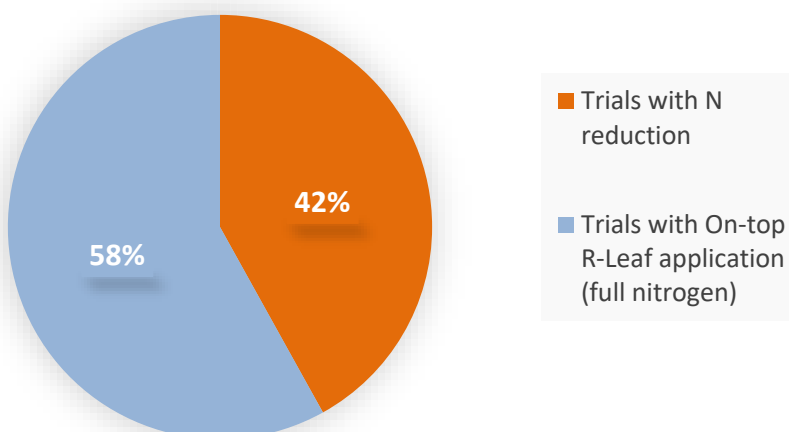
Total trials by crop types



Trials Type



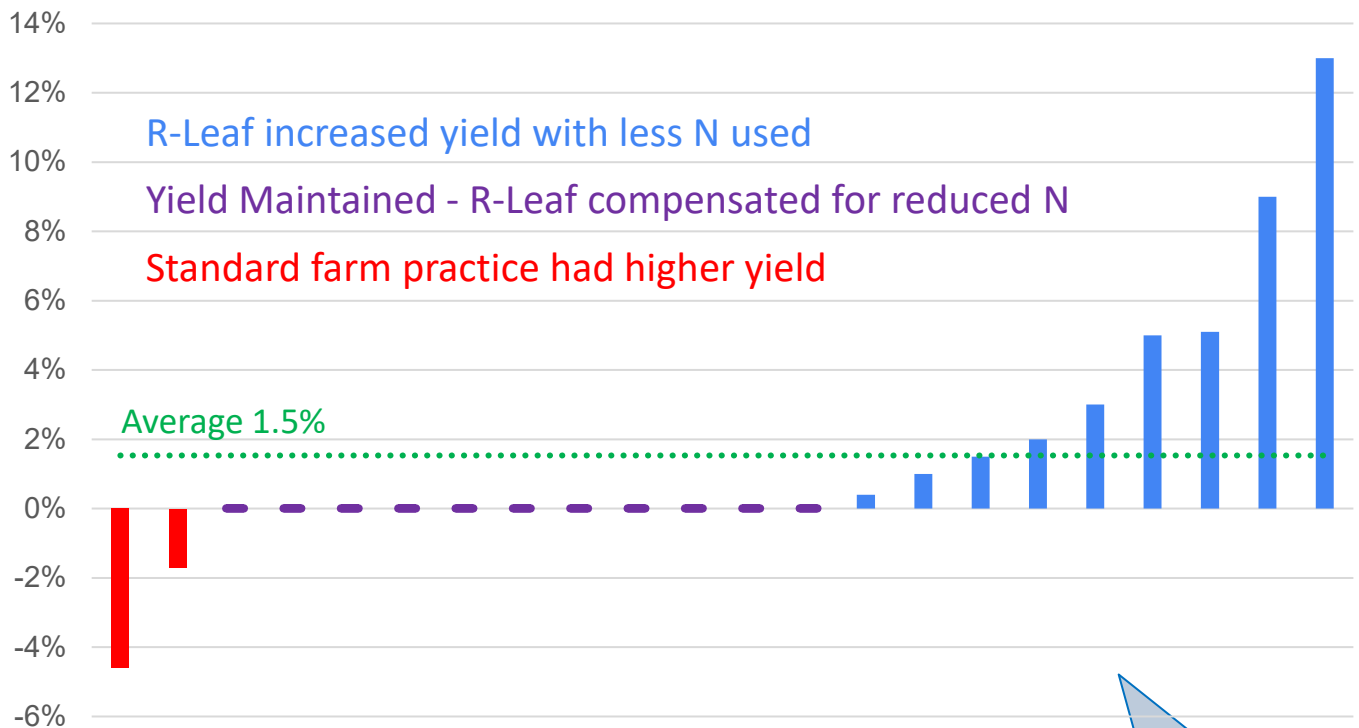
N reduction vs On-top R-Leaf application (full N)



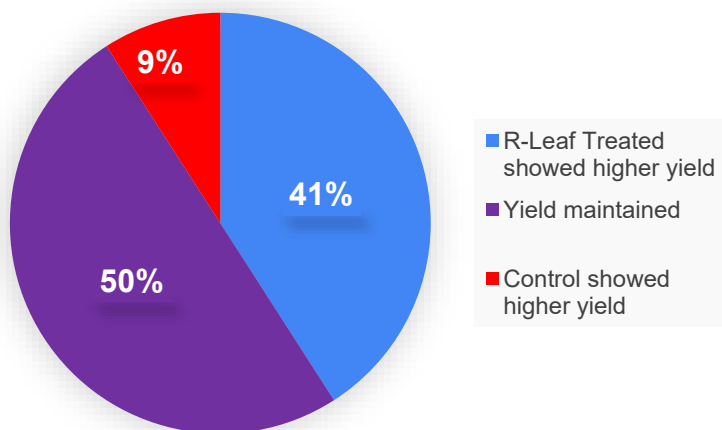
R-Leaf® technology offers a powerful solution for reducing synthetic N fertiliser use by up to 25%, without crop yield compromise.

Reduced Nitrogen Trials

R-Leaf in Reduced Nitrogen Trials –Yield Compensation/Increase



Efficacy of R-Leaf



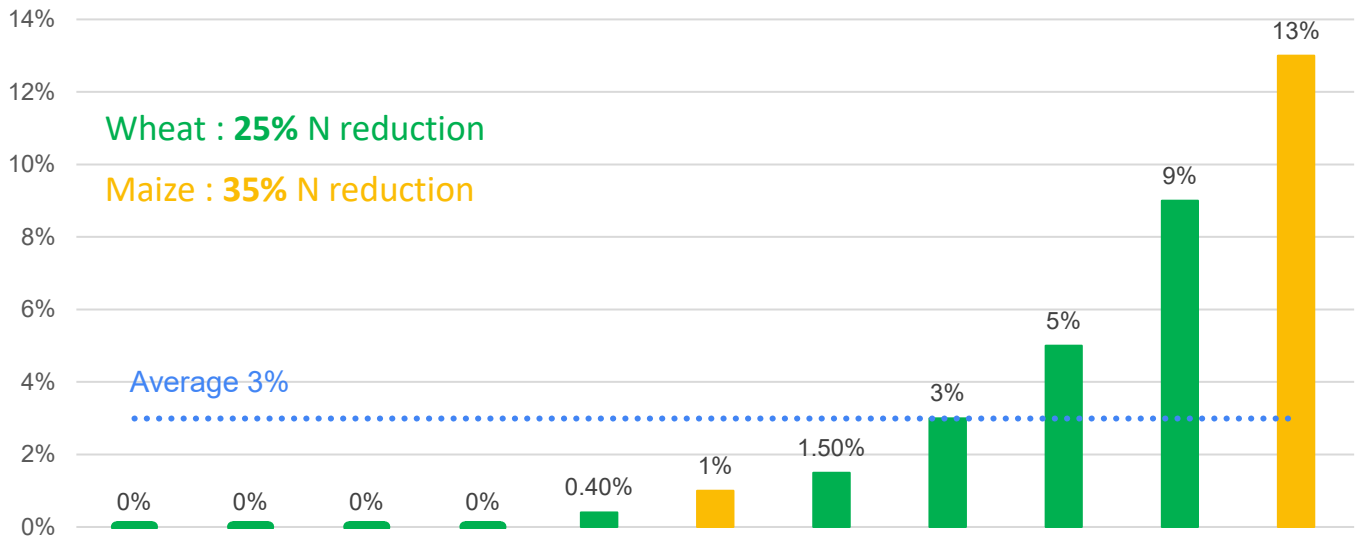
Reducing synthetic Nitrogen fertiliser application has shown to enhance R-Leaf's effectiveness leading to yield compensation with proven efficacy in 91% of the trials and increase in yield in 41%.

The total emissions from 50kg of Nitrogen derived from ammonium nitrate are 450 kg CO₂e
(Field Emissions 215 kg CO₂e and Production/Transport 235 kg CO₂e)

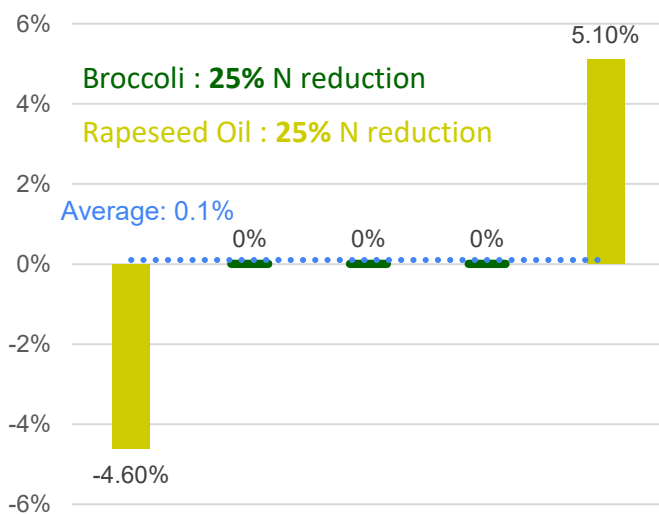
Reference: IPCC & EFMA,2000

Reduced Nitrogen Trials

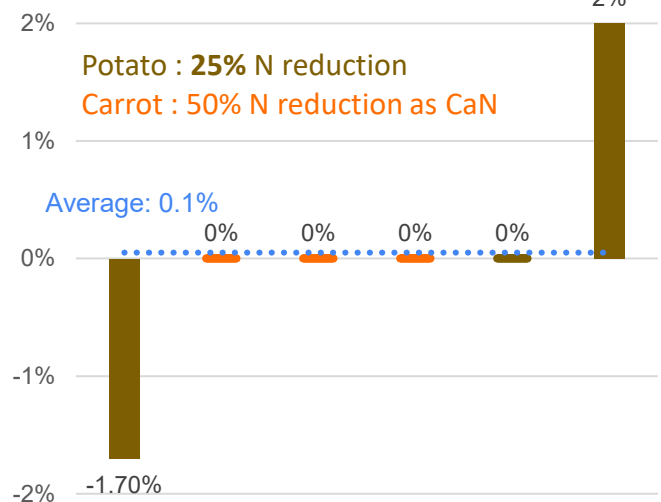
R-Leaf in Reduced Nitrogen Trials –Yield Compensation/Increase



Brassicas - Reduced Nitrogen trials



Root crops - Reduced Nitrogen trials



The cost of Nitrogen saved by using on average 25% less in these crop types is around £55 per hectare therefore compensating for the cost of R-Leaf at farmgate with RRP of up to £50 per hectare.



Reduce Reliance on Synthetic Nitrogen



Prevent Soil Degradation



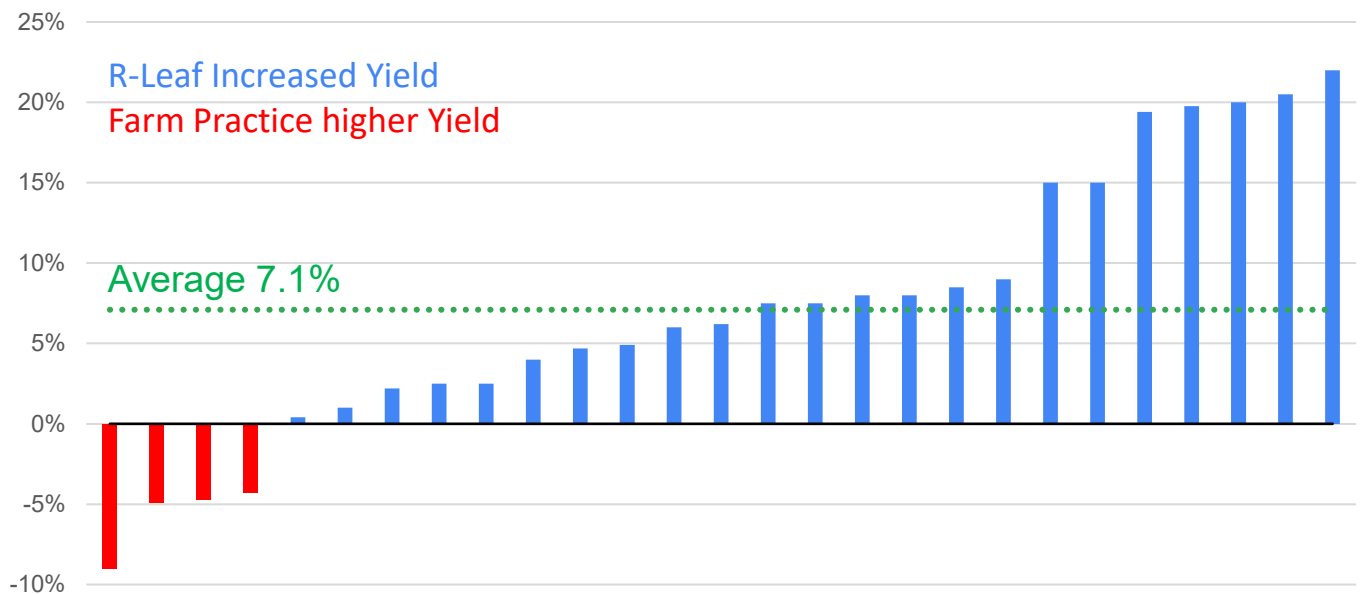
Enhance Crop Productivity



Carbon Footprint Reduction

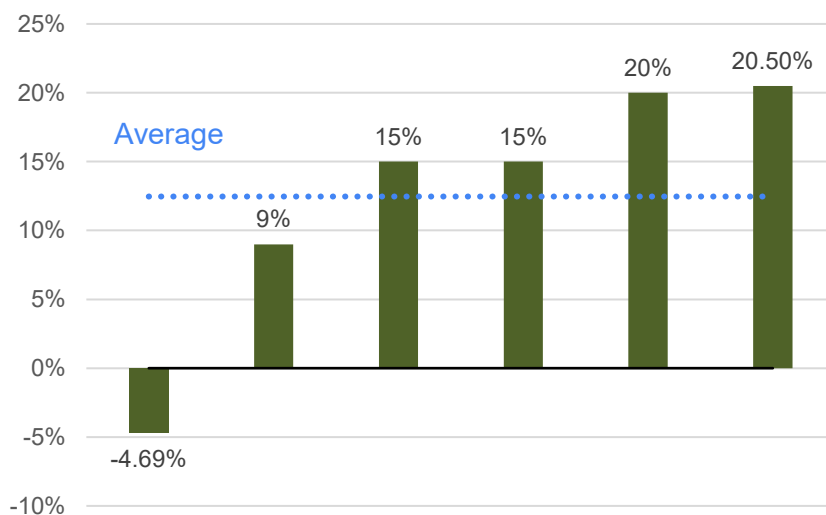
On-top R-Leaf application (full N) Trials

R-Leaf in full Nitrogen Trials –Yield Increase

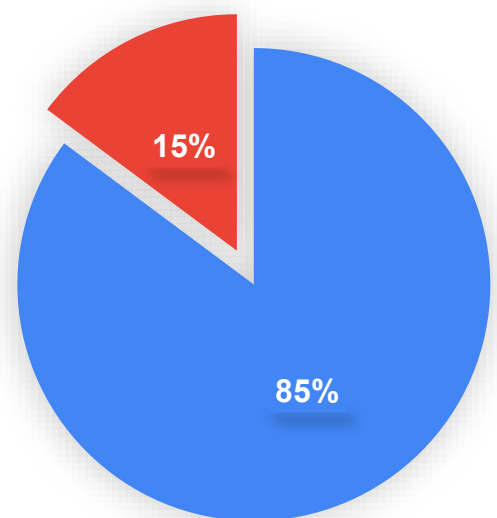


Peas

On-top R-Leaf application trials



Efficacy of R-Leaf

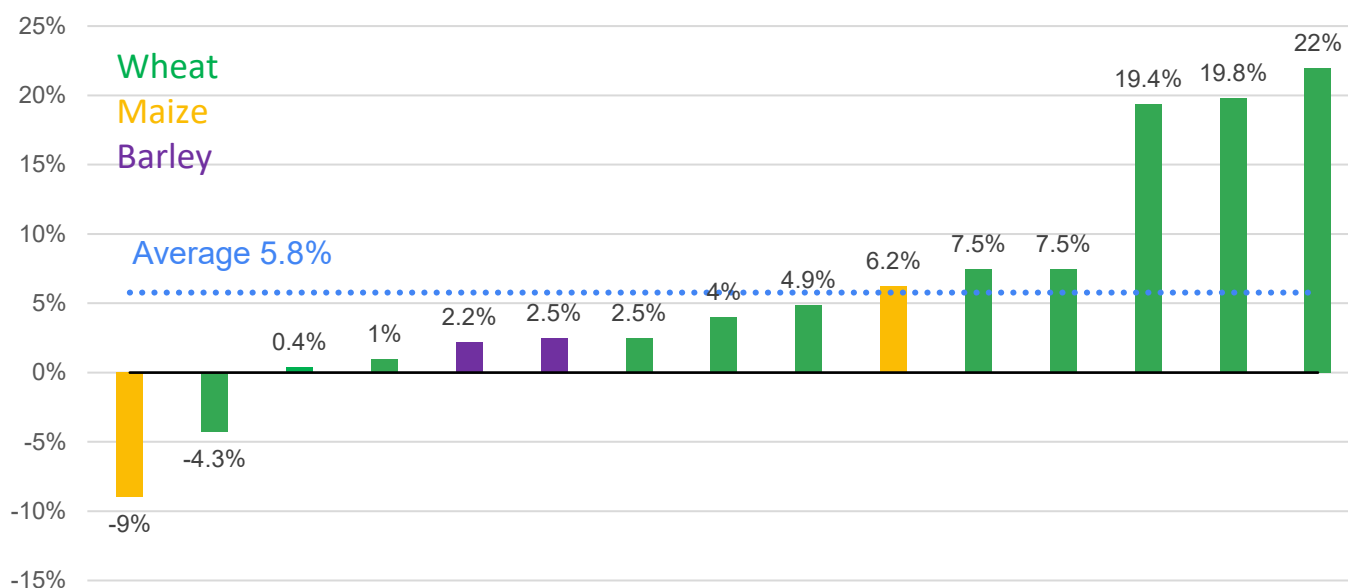


■ R-Leaf treated showed higher yield
■ Control showed higher yield

"R-Leaf® enhances yield performance when applied alongside standard nitrogen inputs, delivering exceptional results across a variety of crops, which makes it a valuable stand-alone yield optimisation input.

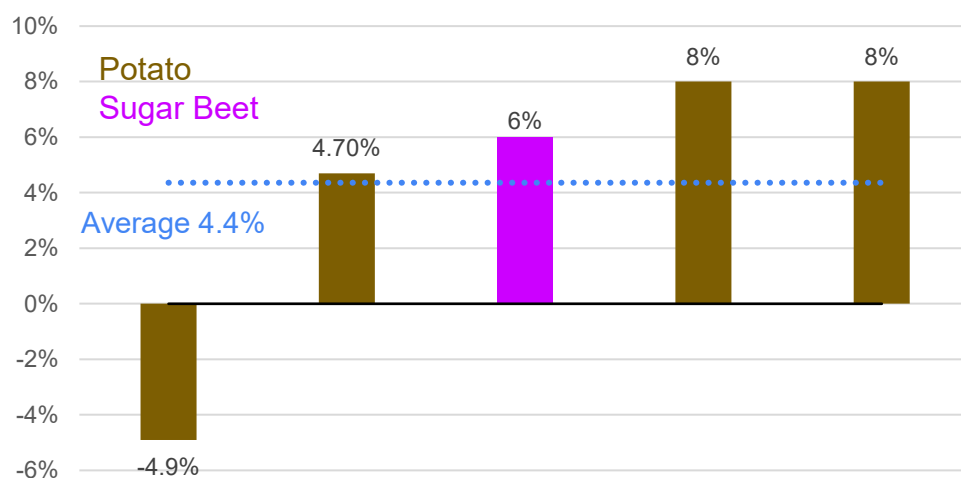
On-top R-Leaf application (full N) Trials

R-Leaf in full Nitrogen Trials –Yield Increase



Root Crops

On-top R-Leaf application trials



R-Leaf® delivers an impressive average return on investment (ROI) of 5:1, providing £5 in value for every £1 spent. The reduced N (0.5t/ha CO₂e) and N₂O removal (1-3 t/ha CO₂e) carbon value increases the ROI to 9:1, highlighting its cost-effectiveness and significant contribution to sustainable and profitable farming practices.