Why Choose CCm Growth®?

CCmGrowth® combines activated and stable organic matter with conventional Nitrogen to provide a compound crop nutrition product which delivers improved nutrient use on farm to achieve sustainable crop yields and soil resilience. CCmGrowth® aims to combine existing resources used on farm to deliver a more effective crop and soil solution.

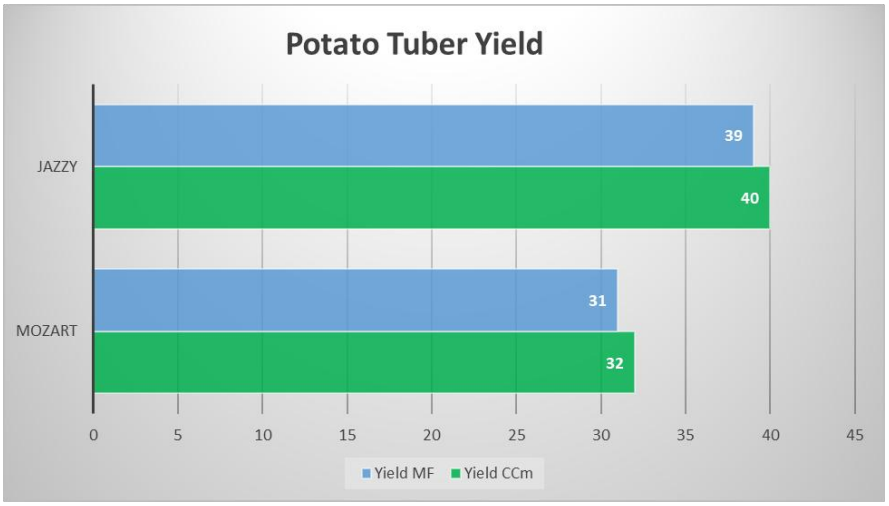
Key Benefits

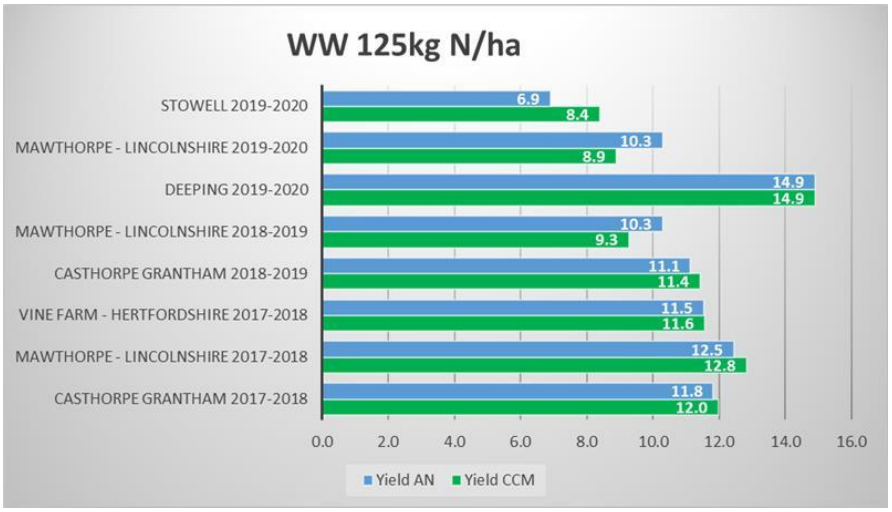
- **1t of CCm Growth®** provides the equivalent of **3t of Organic Matter**
- **Performance equivalent to Ammonium Nitrate**
- **80% less surface runoff** vs Ammonium Nitrate
- **Improves microbial activity of up to 75%**
- Reduces in-field N_2O emissions
- Promotes increased root growth
- Ensures healthy and fertile soils

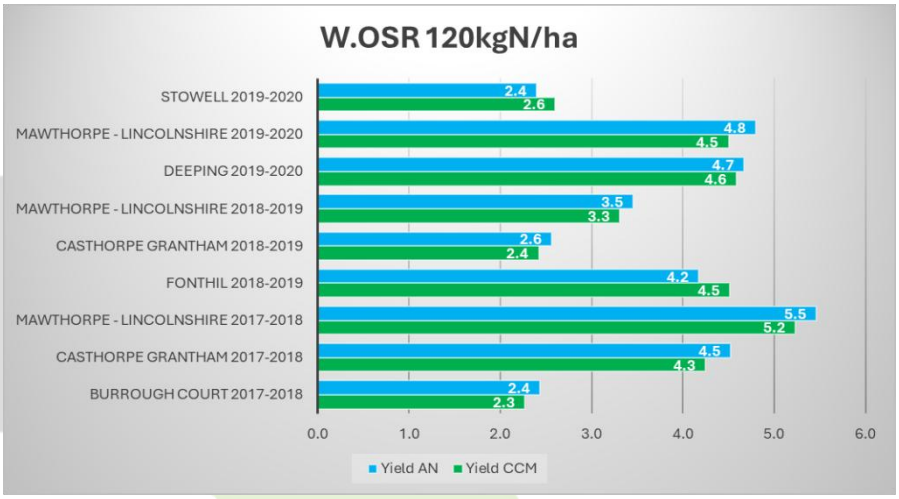
Source: Cranfield University trials(2023-25), Mirico Trials (2025), Velcourt (2017-2025).

Field Trial Results

Fig1. Potatoes, Winter Wheat and OSR:







Source: Trial Data supplied from Branston, Tesco, WWF innovation trials. Winter Wheat and OSR yield data supplied from Velcourt Farming. Further crop yield data is available on request.

Organic Matter

Soil organic matter (SOM) is crucial for healthy soil and water systems, influencing soil fertility, structure, and water retention. It acts as a reservoir for nutrients, enhances water holding capacity, and supports beneficial soil organisms. Academic and industrial trials have positive results to enhance sustainable agriculture, climate change mitigation, and overall soil health.

Here's a more detailed look at the value of organic matter in soil and water:

1. **Enhancing Soil Fertility:**
   - Nutrient Cycling
   - Cation Exchange Capacity (CEC)
   - Improved Nutrient Availability
2. **Improving Soil Structure and Water Management:**
   - Water Retention
   - Reduced Runoff and Erosion
   - Improved Aeration
   - Reduced Compaction
3. **Supporting Soil Biology:**
   - Food Source
   - Habitat
   - Decomposition
4. **Climate Change Mitigation:**
   - Carbon Sequestration
   - Reduced Greenhouse Gas Emissions
5. **Sustainable Agriculture and Farm Management:**
   - Reduced Reliance on Inputs
   - Improved Crop Yields
   - Resilient Ecosystems

For more detail on the benefits of Organic Matter supplied from CCmGrowth® please contact CCm.

Carbon Benefits

"Cradle-to-Gate" – CCm Manufacturing Carbon Footprint

Following the *"cradle-to-gate"* protocols set out by the Carbon Trust on CCm's 2023 product, we have assessed the Carbon footprint of the 2026 **CCmGrowth® 15N-1P-1K** at **-0.7 tonnes CO_2e per tonne of product**. The assessment which is now pending Carbon Trust certification includes a review of raw materials, upstream transportation and manufacturing, and is aligned to the international standard **ISO 14067;2018** greenhouse gases (GHG).

CCm's 2023 12N-4P-4K product received Carbon Trust verification for a *"cradle-to-gate"* carbon footprint of **-0.9t CO_2e** per tonne of product.

Carbon Value on Farm

Fertiliser Displacement: CCm vs Market Equivalent

If CCm were to replace an equivalent NPK product manufactured using synthetic minerals, the **Carbon Saving potential on farm would be 1.47t CO_2e per tonne of synthetic fertiliser displaced**.

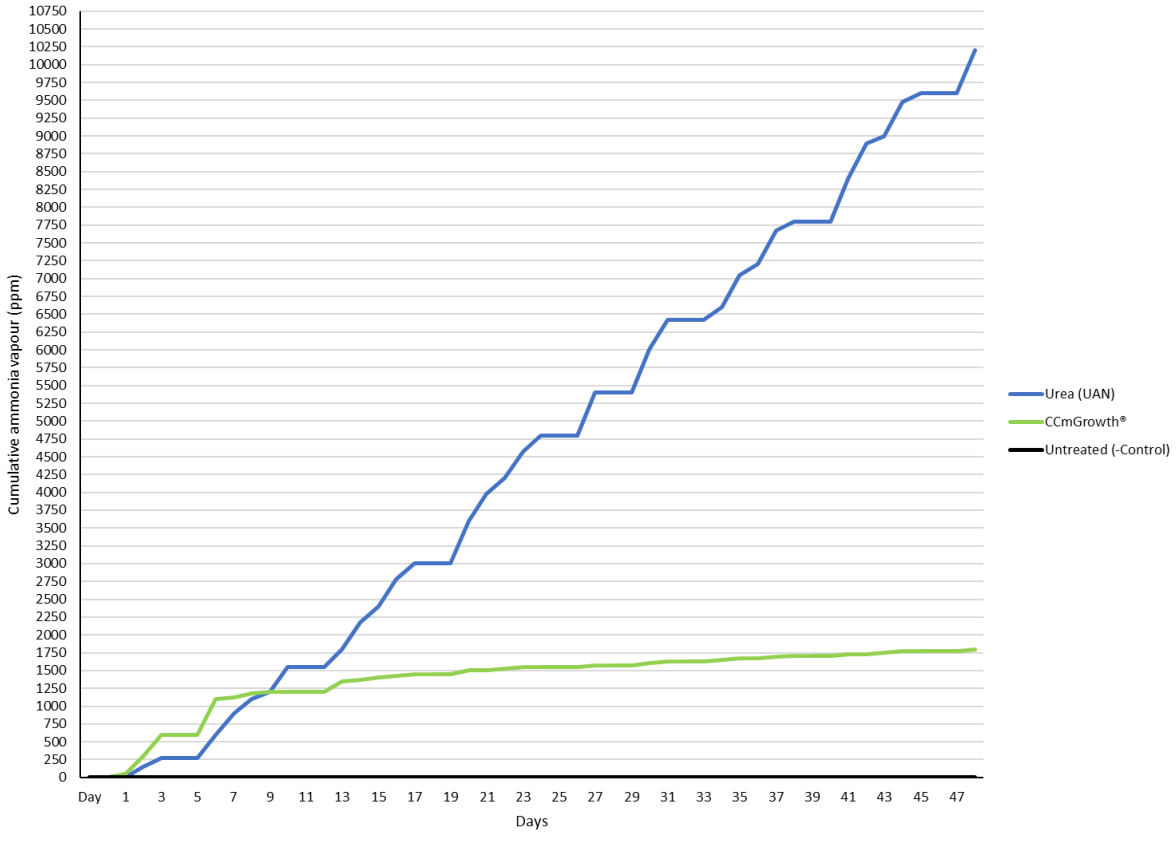
Carbon Savings per tonne of wheat: worked example

Applying **CCm product to grow 1t of Wheat would save 484 kgCO_2e per tonne of wheat** grown, compared to a conventional synthetic equivalent.

Emissions Reduction Data

Ammonia emissions trials verified by UK Agri Tech Centre in controlled conditions have shown **CCm to reduce ammonia emissions by at least 80%** compared to an uninhibited Urea alternative.

Fig2. Ammonia Emissions (in lab) – UK Agri Tech Centre

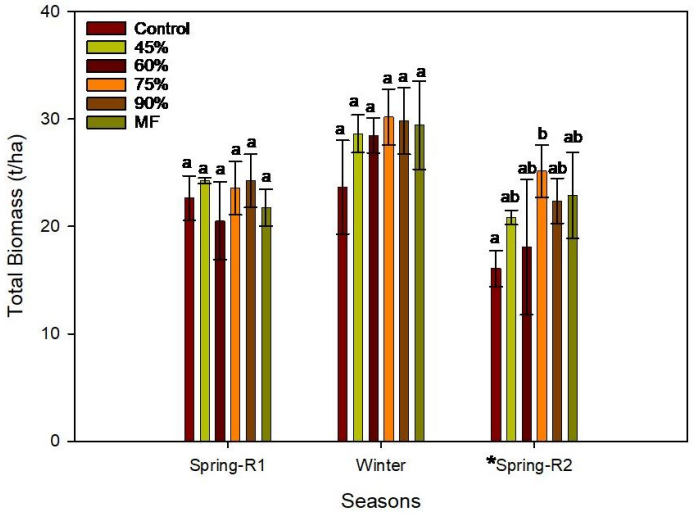


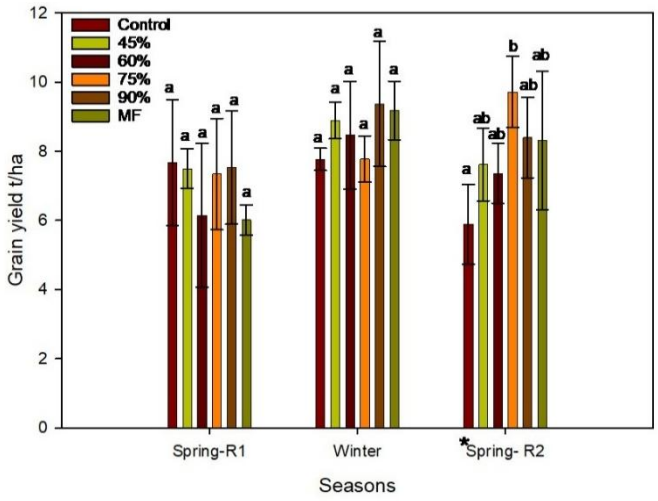
Source: UK Agri Tech Centre – Full report available on request.

Application Rate Efficiencies

A Cranfield University study which focused on three seasons of glasshouse lysimeter measurement on sub-optimal CCm product application rates vs Ammonium Nitrate has shown that **a 10N CCm product applied at 45% less than an equivalent AN product, achieves equivalent biomass and yield in wheat crops.**

Fig3. Biomass & Yield (t/ha)





Source: Cranfield University glasshouse study. Full details available on request.

Industry Compliance

- **AIC FIAS** and **ISO 9001** certifications achieved.
- CCm OMF product sits outside of defined UK Urea application protocols.
- Aligned to **Red Tractor** fertiliser and organics application guidance.

Application Guidance

- Please contact CCm for crop specific application rate guidance from our FACTS and BASIS qualified Agronomists.

Product Application

- ***CCmGrowth***® can be accurately spread between 24m and 36m widths using standard fertiliser spreaders.
- **Suitable Spreading Equipment**
  - ✓ Standard Fertiliser Spreaders *(for calibration advice available – please contact **Lawrence**)*
  - ✓ Belt Spreaders
  - ✓ Rear Discharge Spreaders

Note: *Spreading data on a range of spreading equipment is available on request.*

Farmer Testimonials

Richard Ling (Suffolk) – Wheat/Barley

"Following a two season trial programme using CCm product in collaboration with Nestlé, I have continued using CCmGrowth over the 2024 and 2025 seasons. I have been impressed with yield performance on my barley and wheat crops on plot and field trials, achieving at least equivalent yields to conventional products. Whilst 2025 yield data is still due to be received, I am surprised by the performance of CCm, particularly given the vagary of weather conditions. Overall, I am happy to be using CCmGrowth as part of my farm development towards a more regenerative solution."

Edward Phillips (Bedfordshire) – Wheat/Barley/OSR

"I like the slower release nature of the CCm product which on early indications is showing a 30% reduction in application rates compared to our conventional fertiliser applications. If we commit to CCm it looks like we could have a farm emissions reduction of up to 90%."

Holkham Estate (Norfolk) – Potatoes

"The Holkham Estate used CCm fertiliser in 2024 on a 10ha trial and experienced no difference in useability or yields. The outcome, along with our other regenerative initiatives, was a Net Zero potato to the edge of the field (during the growing cycle)."

Contact us for Further Information

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