Messium

Maximise your Nitrogen Use Efficiency (NUE) & profit!

--- Trial Messium's new AI-driven Crop Growth Model ---

About Messium 🛰️

Messium is an Agri-Tech start-up backed by Innovate UK, the UK & European Space Agencies. We use cutting-edge hyperspectral satellites and crop models to offer accurate and frequent insights to growers on the level of Nitrogen in wheat crops. With these insights, growers can optimise their fertiliser regimes to maximise yield and protein, minimise waste, and reduce harmful emissions. Our model has been rigorously trained on 13,000+ samples from over 300 trial sites in 23 countries, including 50 strip trials with rate-specific recommendations.

Commercial Trials (in 2025) 🧪

We're excited to offer you the opportunity to take part in our commercial trials for next year's Winter Wheat season. As a participant, you'll receive:

- **Hyperspectral satellite images** – Nitrogen concentration heatmaps across your farm for precise monitoring
- **Opportunity identification** – areas of greatest over- and under-fertilisation highlighted
- **Lab sample analysis** – crop sampling from areas of over- and under-fertilisation for enhanced accuracy
- **Optimised fertiliser recommendations** – specific timing and quantity of Nitrogen applications to rectify opportunity areas (focus on 2nd and 3rd N splits)

The Offer 🤝

For a flat fee of £600 per farm, we guarantee that we will:

- Increase profitability of trial strip yields by at least 10%
- Provide a 100%, no-questions-asked refund if we fail to deliver this

Requirements ⚙️

To participate in our trials, we require the following commitments:

- Allocate a couple of strips (~10-20 hectares) to implement Messium's recommendations
- Collect a small amount of crop samples and send them to our laboratory for analysis (~10-20 samples in total)
- Send Messium the yield data at harvest (e.g. via a sensor on the combine)
- You are happy for Messium to create a case study from your experience to showcase the benefits of our technology (assuming the trial meets your expectations)