

IMPLEMENTING INTEGRATED PEST MANAGEMENT (IPM)

IPM sits at the heart of Niab's science-led approach, linking better crops, better farming systems and better data to support resilient, profitable crop protection under real farm conditions.

Building resilient crops

- Regional variety trials, including contributing to the AHDB Recommended Lists, assess untreated performance and resistance to pest and disease pressures.
- Long-term experiments in Norfolk and Suffolk provide multi-decade insights into disease dynamics, soil health and rotation effects.
- Pre-breeding and precision-breeding programmes develop durable resistance traits, strengthening long-term protection against pathogens.

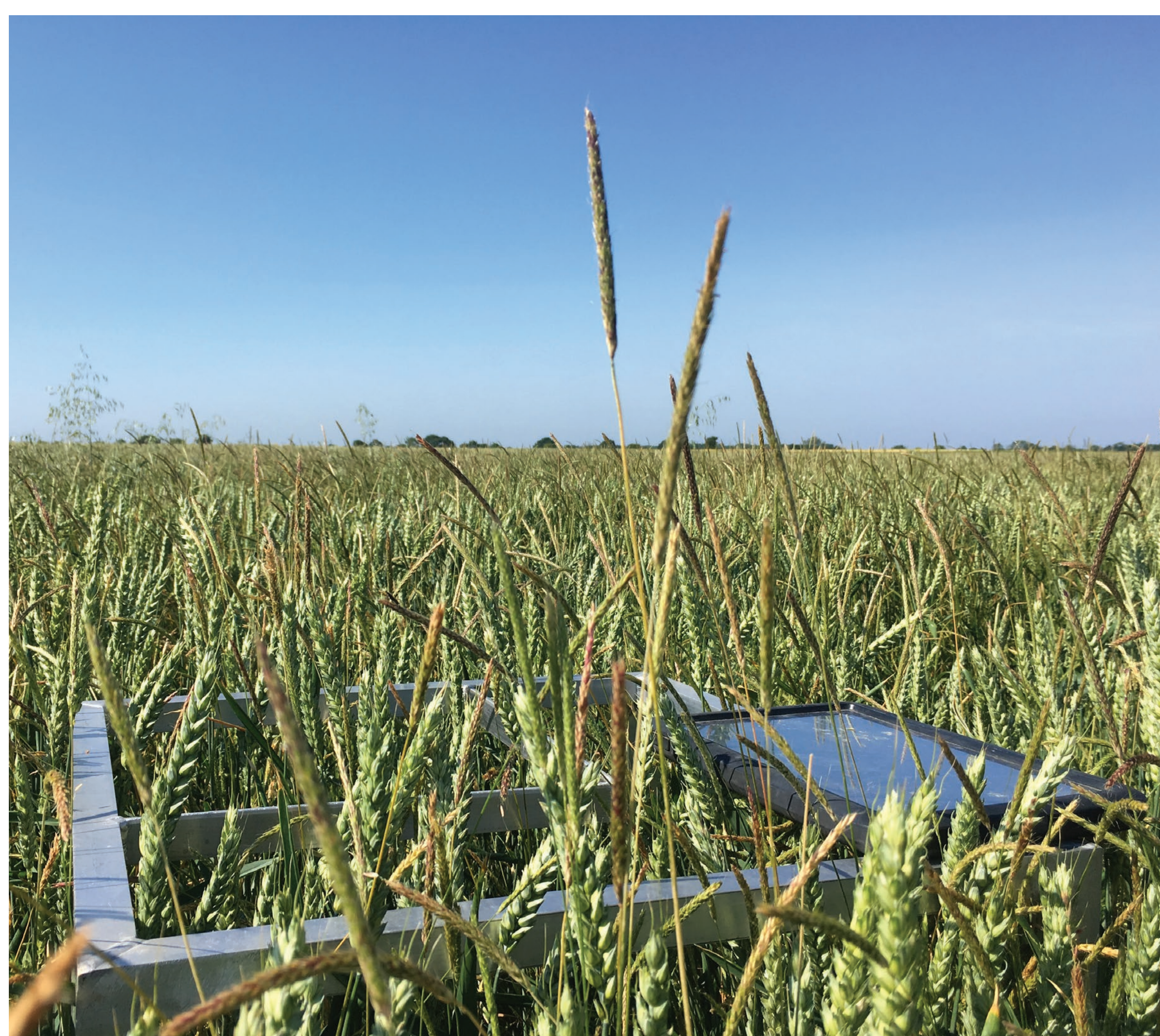
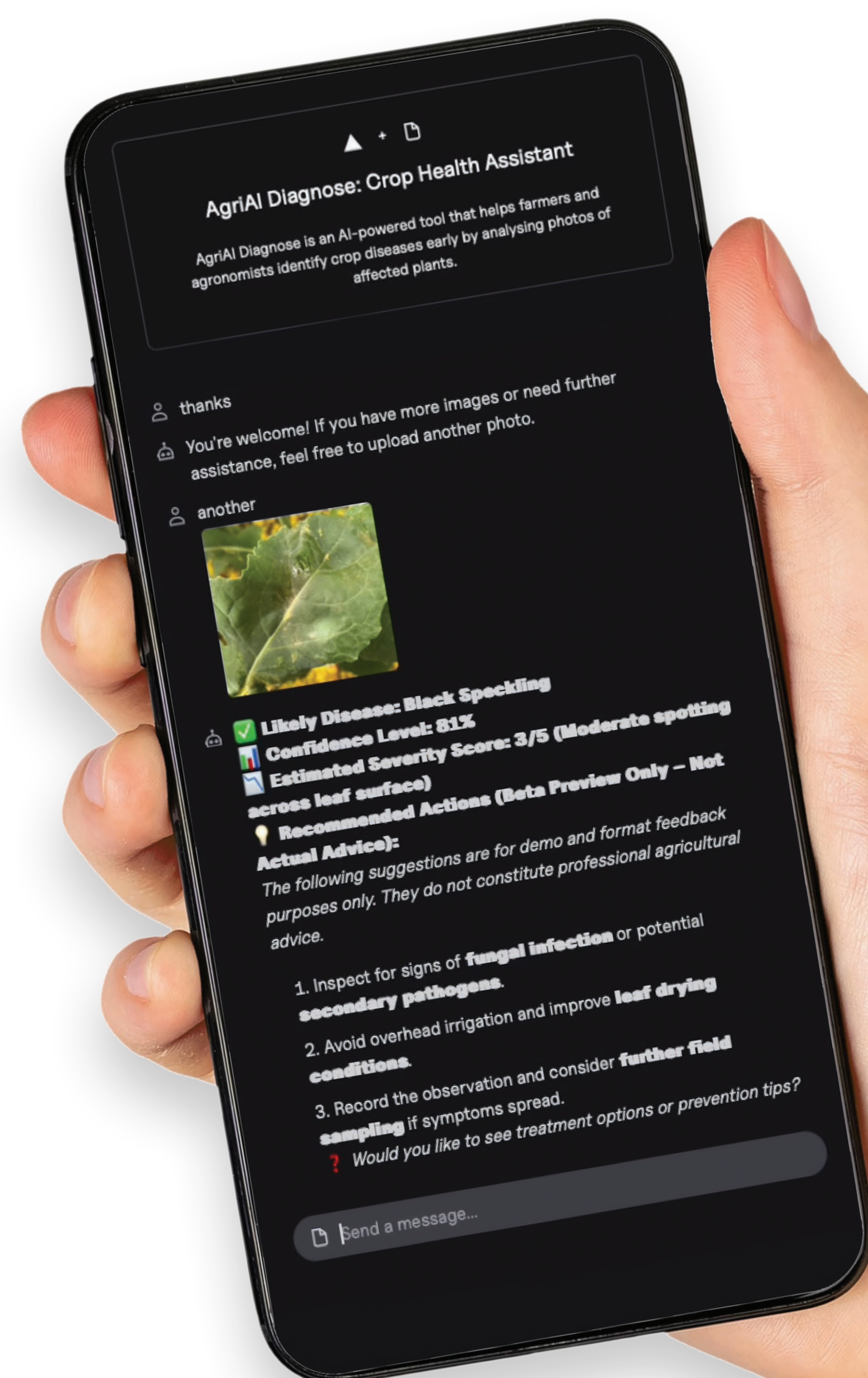
Smarter data for targeted action

High-quality data enables timely and proportionate interventions.

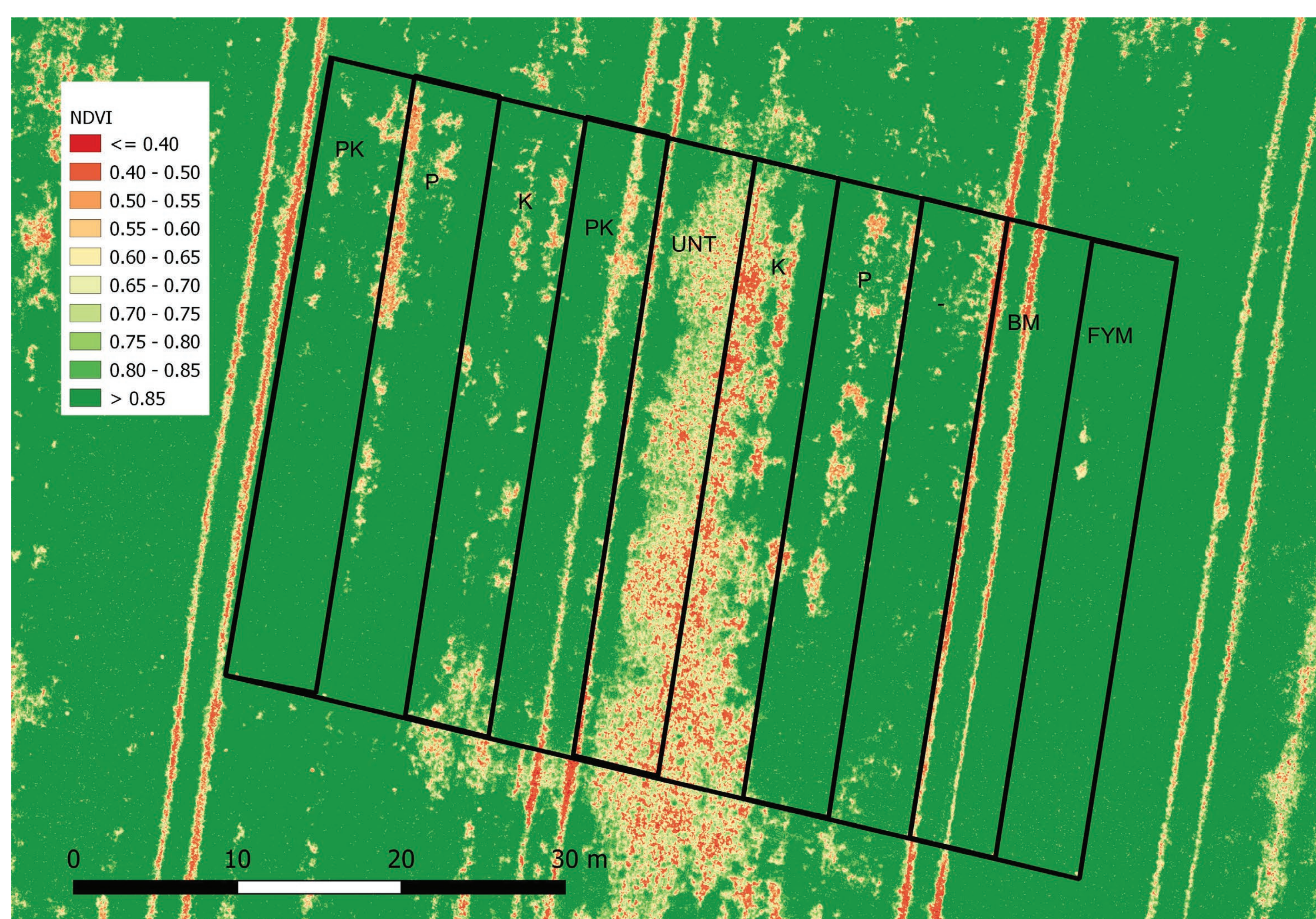
- Niab's molecular diagnostics and tests for pre-symptomatic disease support early detection before symptoms appear in the crop, allowing for better intervention.
- The Niab Field Trials Platform independently evaluates IPM tools including biopesticides, decision-support systems, and cultural control interventions, helping growers understand where new solutions fit alongside conventional practice.
- Our AI disease-identification platform uses mobile imaging to diagnose and score crop disease severity in the field.
- The weed management research programme investigates emerging threats such as barnyard grass and parasitic weeds, weed dynamics in regenerative systems and herbal leys, while providing practical guidance key arable weeds such as black-grass and ryegrass species.
- Our pesticide-resistance monitoring and research helps shape national guidance on fungicide and herbicide use.

Applying IPM in practice

- Through cross-sector partnerships – collaborating with agrochemical companies, breeders, technology developers, levy bodies and government we ensure that evidence-based solutions reach growers quickly and consistently.
- Niab Agronomy Membership delivers real-time guidance through Agronomy Strategies and Agronomic Interactions handbooks, weekly regional updates, and member-only trial results.
- National demonstration and knowledge-exchange projects, including the Defra Farming Innovation Programme and ADOPT initiatives, allow Niab to test IPM approaches across commercial farm networks.



Integrated weed management spanning key arable weeds, emerging threats and farming systems



Long term experiments supported by TMAF, delivered by Niab, investigate rotations, cultivations, fungicide response, soil amendments and mineral fertilisers