

Session 4: Fitting YEN to the Future

Chair: Dave King, Head of Technical UK, Eire and Nordics, Syngenta





10 years of YEN: What next?

Sarah Kendall, Crop Physiologist, ADAS





"To foster and energise a new culture of yield-enhancing innovation in the arable industry"

- Supported growers & advisors with their innovations, understanding & progress
- Highlighted the value of action research
- Created a vast database resource
- Developed & expanded new networks: crop species, geographies & themes
- Created a framework model that can be applied to different problems
- Where next?





YEN Nutrition: For checking if nutrient capture was adequate



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YEN Zero – calculating & benchmarking carbon footprints





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Connecting across agriculture

People, Organisations, initiatives, resources

Agri-TechE

UK

ODGU

- Connected by Topics
 - with Wikipedia style summaries •

Free & Open to All

- >800 people
- >200 organisations
- >200 projects
- >200 Topics

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Created by Innovate UK project Sign up & Get involved! www.farmpep.net

2. Metrics

YEŇ

Sharing Data

- Created YEN Database online
 - Accessible by YEN members via <u>www.yen.adas.co.uk</u>
- Direct data entry online now for
 - YEN Nutrition
 - YEN Zero

- MAP OF AG

 Map of Ag Enabling sharing from
 - Gatekeeper & Muddy Boots

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2. Metrics

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Dynamic Benchmarking

Prototype developed for yield & grain nutrients – N, P, K, Mg, Mn

- Available to past YEN Members at <u>www.yen.adas.co.uk</u>
 - select data & filter comparisons by region, soil type, crop type & Year
- Now developing for a range of metrics & filters

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Focussing on one or this farm

Focussing on *my* favoured measure(s) of performance

Benchmarking *this farm's* performance against similar farms

Debating ideas to enhance *This Farm's* performance

Trying out new ideas, and discussing causes of results

Sharing *my own* thoughts & experiences .. as far as I like

Action Research by Farmers

Maximising performance

- farm by farm:
- Crop productivity
- Margins
- Carbon footprints
- Nutrient balances
- Overall farm profits
- Biodiversity

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Building Agricultural Intelligence – year by year:

- Policy support
- Research priorities
- Market needs
- Industry opportunities

Fitting Yen to the Future Panel

- Chair: Dave King Syngenta
- Sarah Kendall ADAS
- Mark Tucker Yara

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- Peter Nelson Glenmorangie
- Hannah Rigby DEFRA
- Joe Brennan UK Flour Millers

The Challenge: Sustainable Use of Nitrogen and Phosphate Fertilizer

What does Sustainability make us consider?

agronomic response.

Challenge:

How to mitigate against high fertiliser prices, sustain productivity and food security and protect the environment?

What are the sustainable measures that can be implemented on farm whilst ensuring productivity?

Knowledge exchange – how can we change and improve?

How can we monitor progress?

Hannah Rigby, Programme Manager, Defra agri-food chain science

Hannah.rigby@defra.gov.uk³⁹

A sustainable supply of milling wheat?

- UK flour millers need 5Mt of milling wheat each year. Typically, 80-85% now homegrown.
- UK milling industry needs <u>productive</u> and <u>profitable</u> domestic farming sector.
- There are significant, linked sustainability challenges:

Environmental

- High protein req. additional N fertiliser, with environmental costs (run-off etc, carbon emissions)
- Can additional N be justified to policymakers / customers?

Long-term availability

- Domestic and global demand for wheat rising.
- Pressures on UK arable land use.
- Production intensification needed?

A significant part of UK food security

UK FLOUR MILLERS

Table Discussion

10 mins for discussion5 mins for providing feedback & wrap-up

- Discuss the following questions on your tables, with help from floating ADAS facilitators
- 1) What are the main challenges facing UK farms?
- 2) How do initiatives like the YEN help farms to address these challenges?
- 3) How can YEN be better designed to support farmers with these issues?

Provide your answers/comments to each question via sli-do. Label your comments with number 1-3 to relate to the question.

Go to: sli.do.com & use the Event Code: #YENis10

Panel Discussion

