



MGA Conference 2022

Trial results – Day 2

Jon Myhill- MGA Agronomist



Fertiliser trials 2021



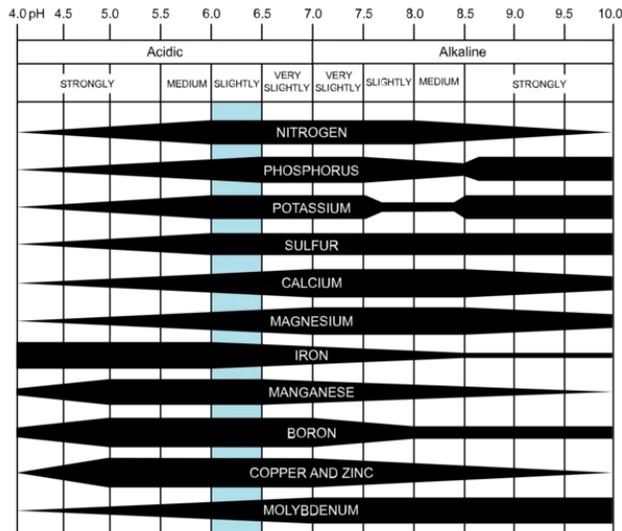


Biostimulant and Fertiliser Trials 2021

Soil Analysis 2021

LOCATION	PHOSPHATE	POTASSIUM	MAGNESIUM	pH	ORGANIC MATTER
HARPER (Fert trial)	5	2-	1	6.5	2.1
HARPER (Biostims trial)	5	3	2	6.5	2.7
LACKHAM	3	2-	3	7.1	5.6
NORFOLK	1	1	1	7.3	2.2

pH and nutrient lock-up





RB209 Fresh phosphate that can be applied to a maize crop

- Index 4+ = 0kg/ha
- Index 3 = 20kg/ha
- Index 2 = 55kg/ha
- Index 1 = 85kg/ha

European maize meeting paper 2019:

Danish work 2003-2017:

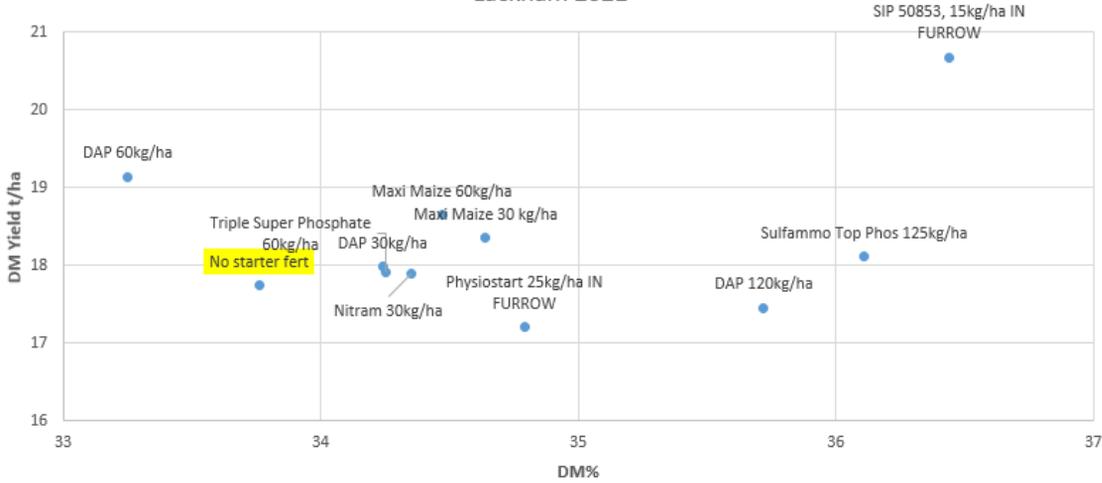
Dry matter yield curve tops out at 20 to 25 kg of fresh phosphate per hectare



Placement fertiliser trials

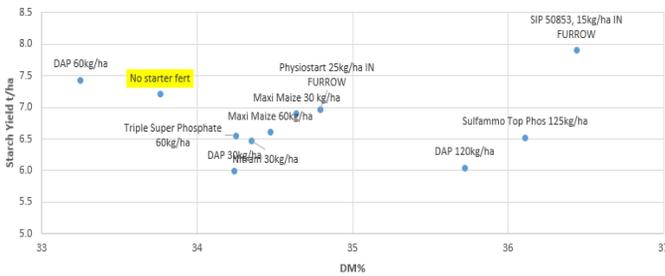


MGA Placement Fertiliser Lackham 2021

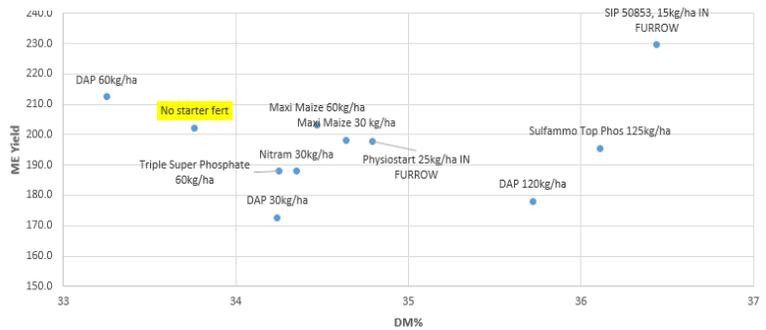


LACKHAM	3	2-	3	7.1	5.6
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MGA Placement Fertiliser Lackham 2021

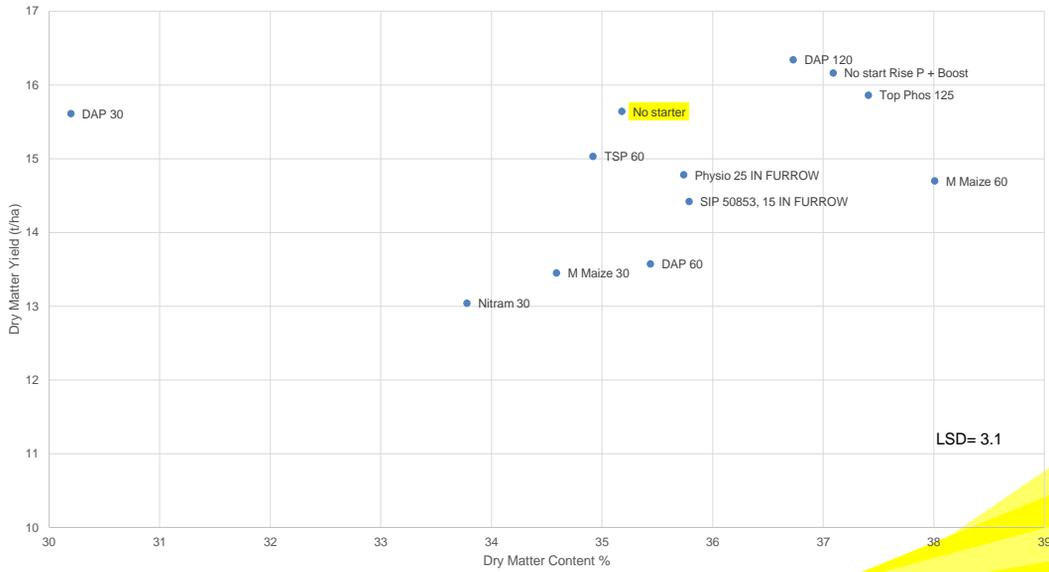


MGA Placement Fertiliser Lackham 2021





MGA Placement Fertiliser 2021
Harper Adams Harvested 29 September



HARPER (Fert trial)	5	2-	1	6.5	2.1
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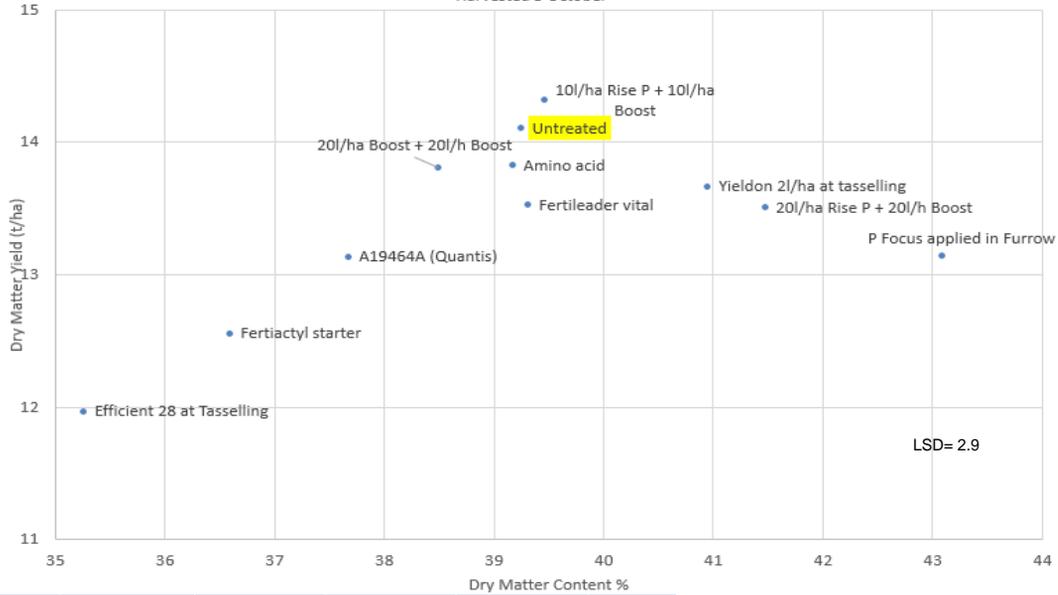
Biostimulant trials





MGA Biostimulant Trial Harper 2021

Harvested 5 October

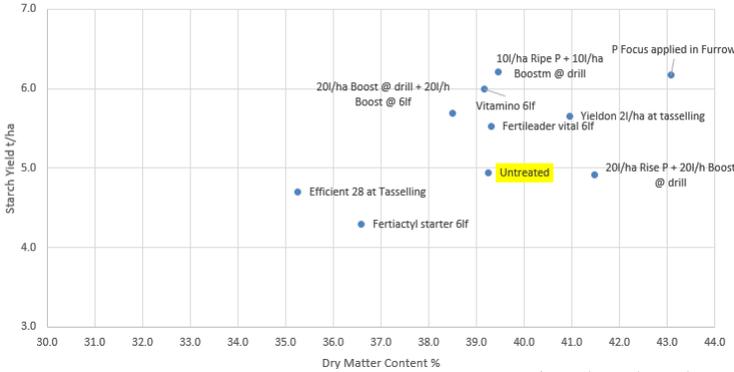


LSD= 2.9

HARPER (Biostims trial)	5	3	2	6.5	2.7
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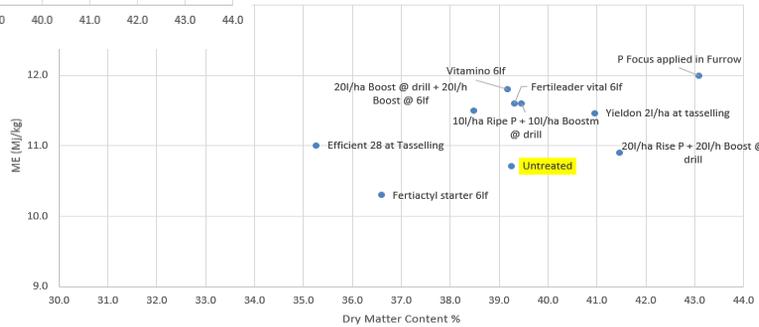
MGA Biostim Trial Harper 2021

Starch Yield vs DM%



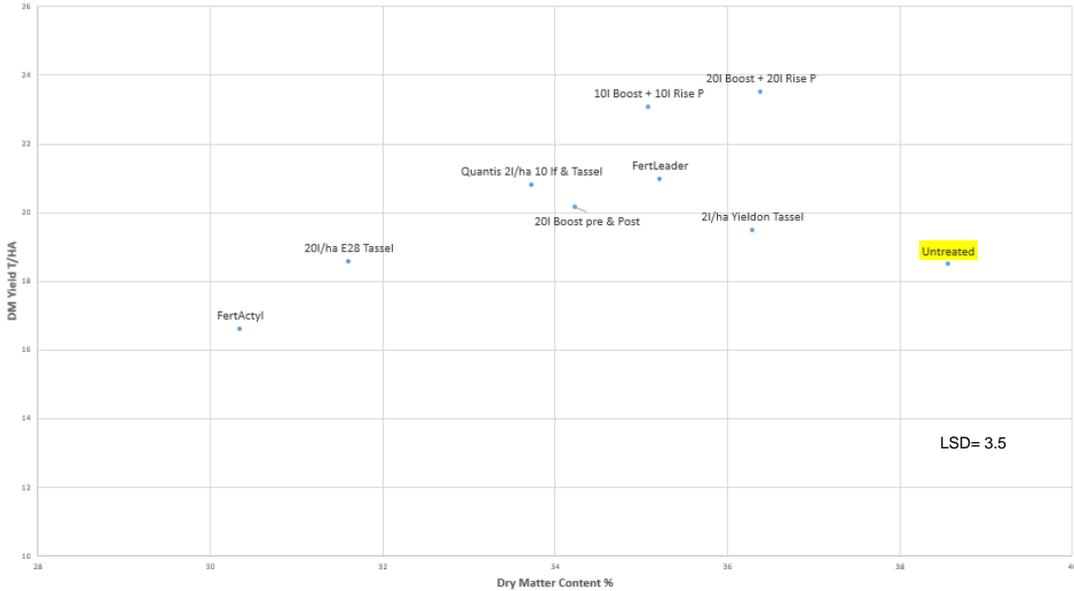
MGA Biostim Trial Harper 2021

ME vs DM%



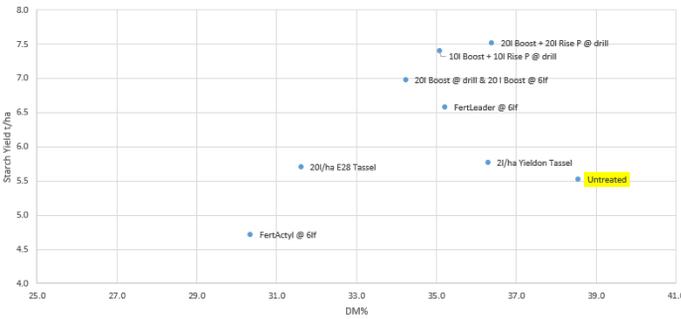


MGA Lackham Bio Stim Trial 2021
Lackham Harvested 24 September

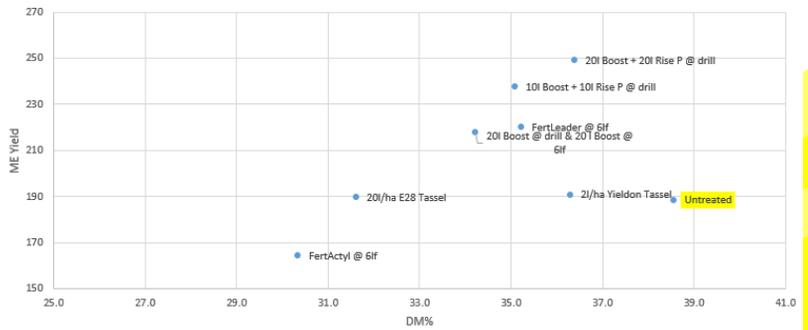


LACKHAM	3	2-	3	7.1	5.6
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MGA Biostim
Lackham 2021 Starch Yield vs DM%

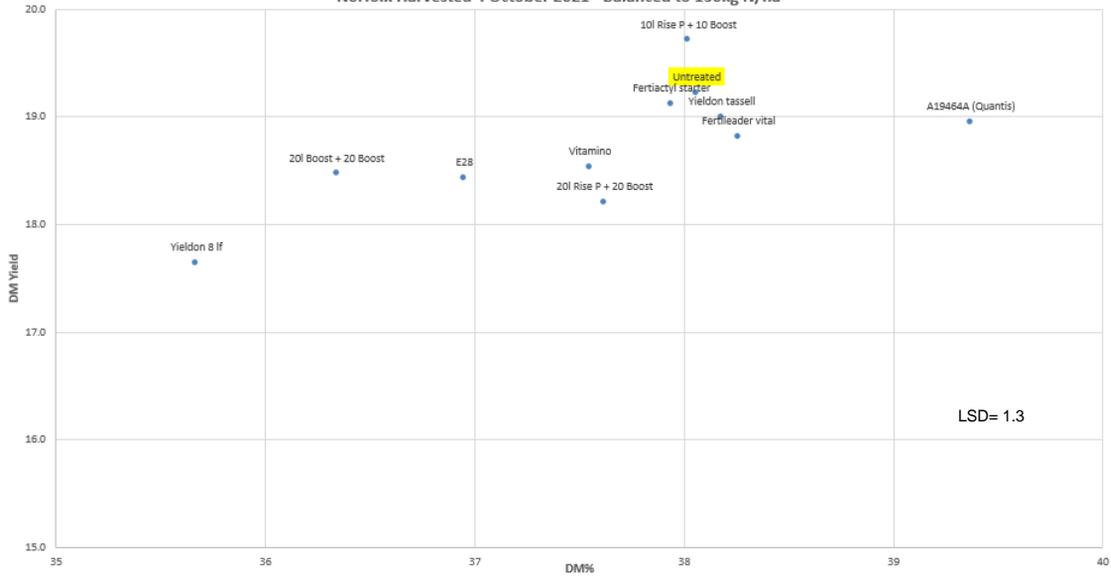


MGA Biostim
Lackham 2021 ME Yield vs DM%



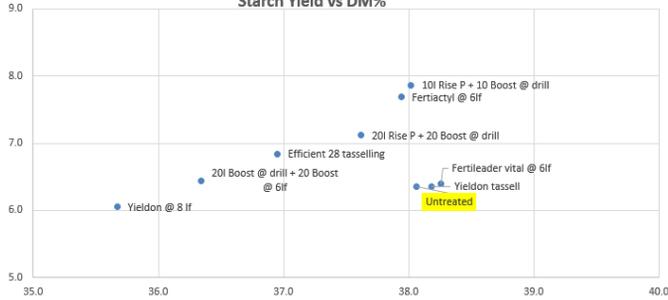


MGA Bio-Stim Trial 2021
Norfolk Harvested 4 October 2021 - Balanced to 150kg N/ha

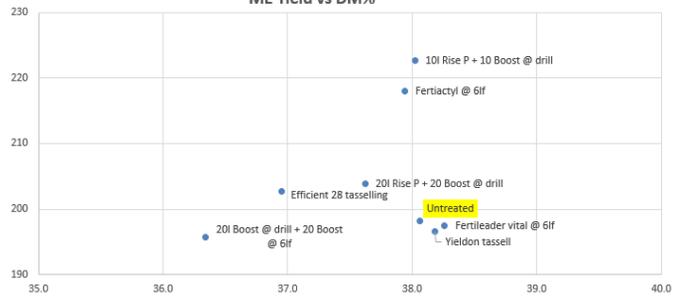


NORFOLK	1	1	1	7.3	2.2
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MGA Bio-Stim Trial 2021
Norfolk Harvested 4 October 2021 - Balanced to 150kg N/ha
Starch Yield vs DM%



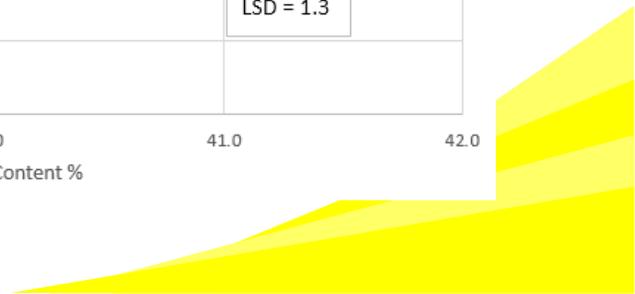
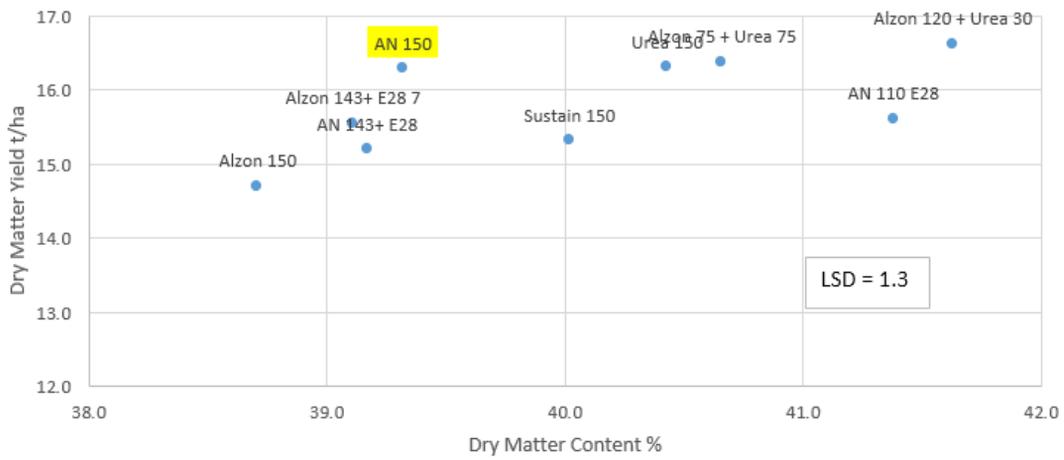
MGA Bio-Stim Trial 2021
Norfolk Harvested 4 October 2021 - Balanced to 150kg N/ha
ME Yield vs DM%



Nitrogen Inhibitor & N curve trials

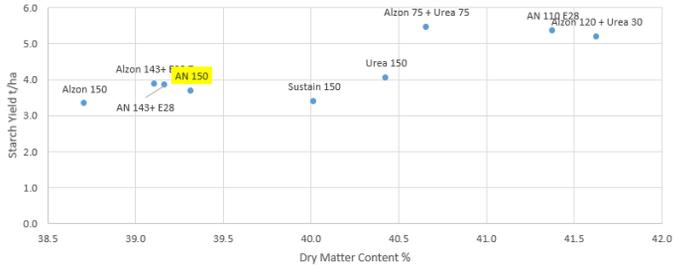


MGA N Inhibitor
Harper 2021

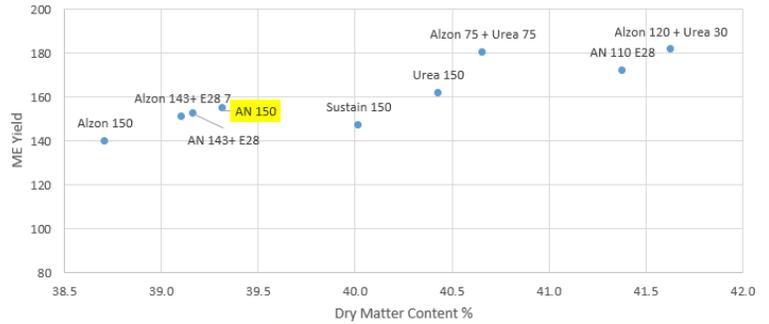




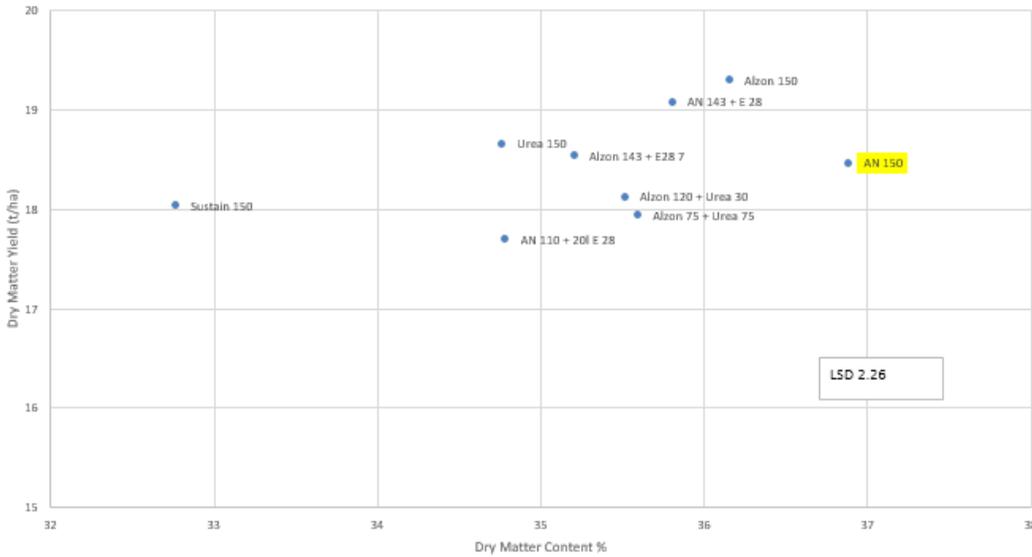
MGA N Inhibitor
Harper 2021



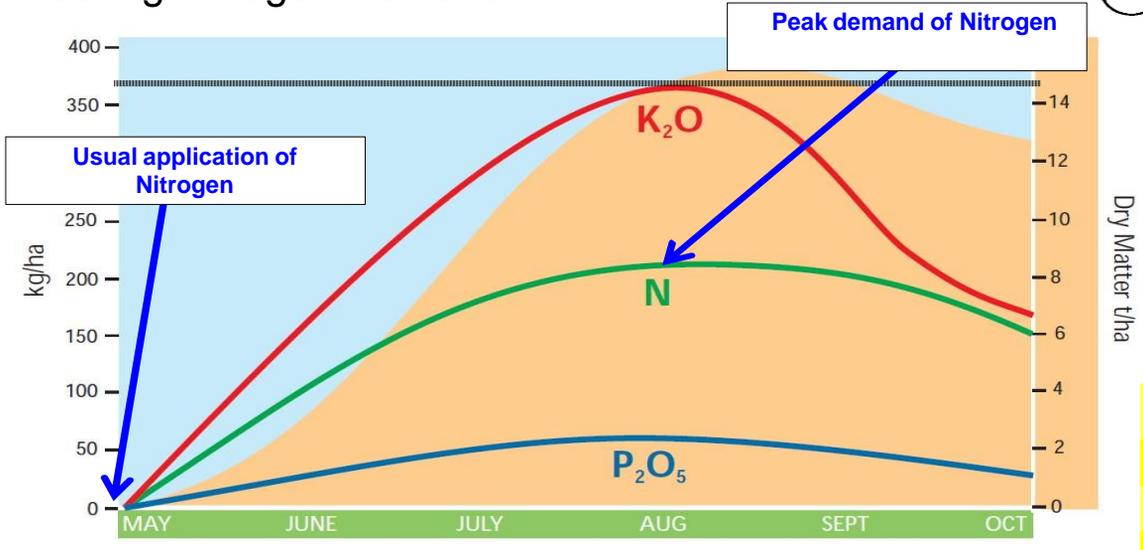
MGA N Inhibitor
Harper 2021



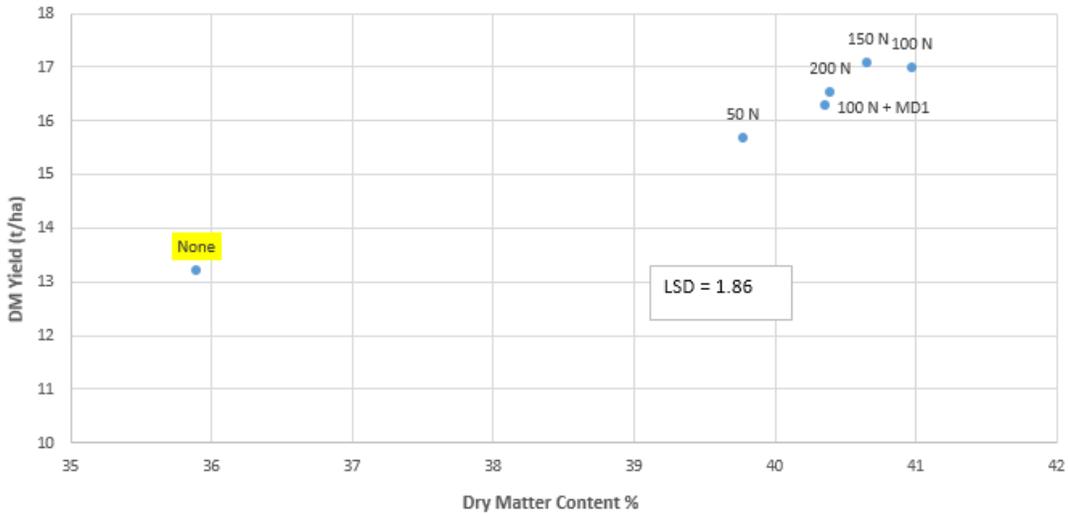
MGA Nitrogen Inhibitor Trial - Norfolk
Harvested 4 October



Meeting Nitrogen Demand

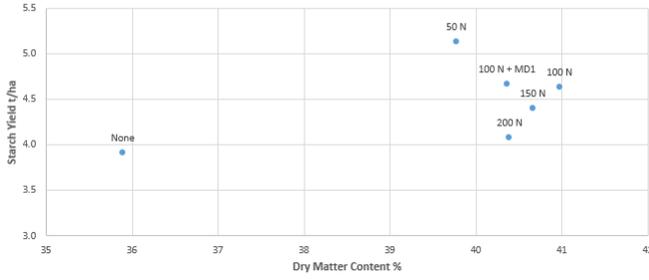


MGA N Curve 2021
Harper Adams Harvested 29 September

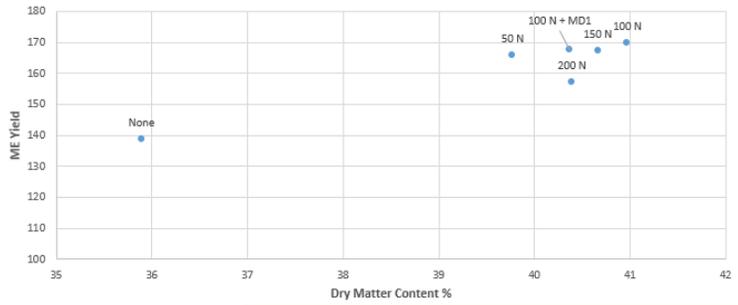




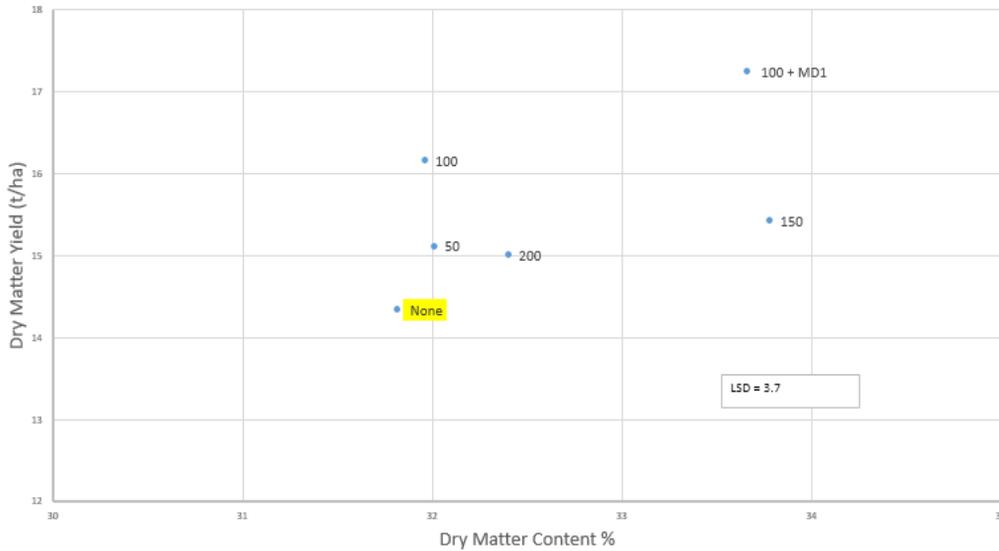
MGA N Curve 2021
Harper Adams Harvested 29 September



MGA N Curve 2021
Harper Adams Harvested 29 September



MGA N Curve 2021
Norfolk Harvested 4 October

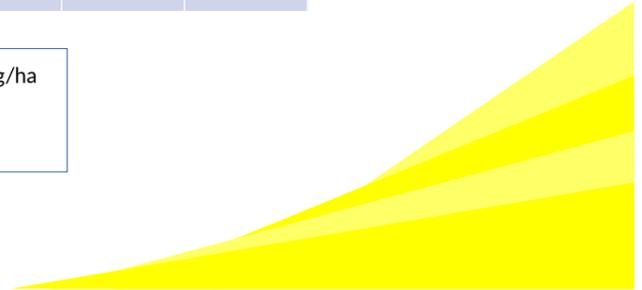




Planning for 2022 Crop - Starter fertiliser analysis

Product	Kg of N	Kg of P	Kg of K	MgO	Others	Trace elements
120kg/ha of DAP	21.6	55	0	0	0	0
50kg/ha of DAP	9	23	0	0	0	0
Maxi-Maize Plus 60kg/ha	11.8	25	0	0.3	0.6 CaO	Wolftrax Zn Bo Cu

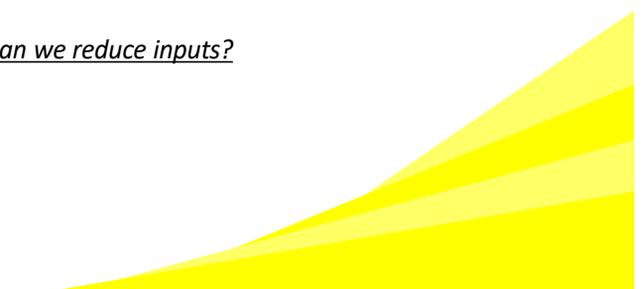
- Index 4 or more = 0kg/ha
- Index 3 = 20
- Index 2 = 55
- Index 1 = 85



Conclusions

- Phosphate is needed near to maize roots to support growth
- Maize fields often receive more phosphate than is required
- Fully account for phosphate applied via organic manures
- If you have an index of 4 or over your crops do not need phosphate
- Check what nitrogen your maize requires

Need to be farming sustainably and profitably- can we reduce inputs?





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Thank you for your time

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