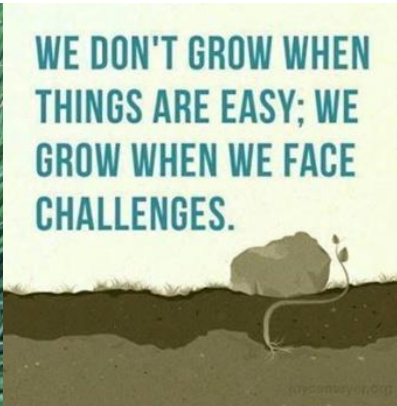


# 'A Farmers eye is the best fertiliser'

*Pliny the Elder (Roman author, naturalist and philosopher)*



Brian Barker – E.J. Barker & Sons

AHDB Strategic Farm (EAST)

@the\_barker\_boys



CEREALS & OILSEEDS



# Innovation is a MUST!!

Unlocking the tool box



Research give us the  
knowledge to produce more by  
applying less!



# A bit about us farmers!



We're gamblers.....

We invest money into growing crops.....

We sometimes apply too much.....

We can't control the weather.....

We don't know how much it will produce.....

We can't control how much we get paid for it.....



Farmers are also.....



..... resilient!

..... willing to learn!

..... brilliant innovators!

..... bloody good at what we do!

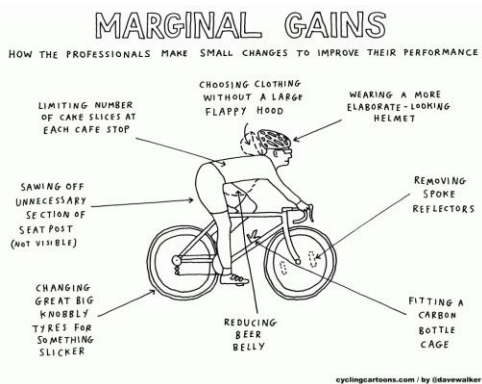
... passionate about our industry!



# AHDB Strategic Farm Programme

## Farmer led field scale trials

*“ Bridging the gap between research trials and farmers on the ground”  
“Farmers are asking the questions that they want answered”*



# No Silver bullet





# Losing our Prize Asset



**Removal of pesticides from drinking water costs the UK taxpayers**

**£92million per year and rising!**

**Removal of Nitrate from drinking water costs the UK taxpayers**

**£170million per year and rising!**

**Soil erosion and sedimentation of waterways costs the UK taxpayers**

**£305million per year and rising!**



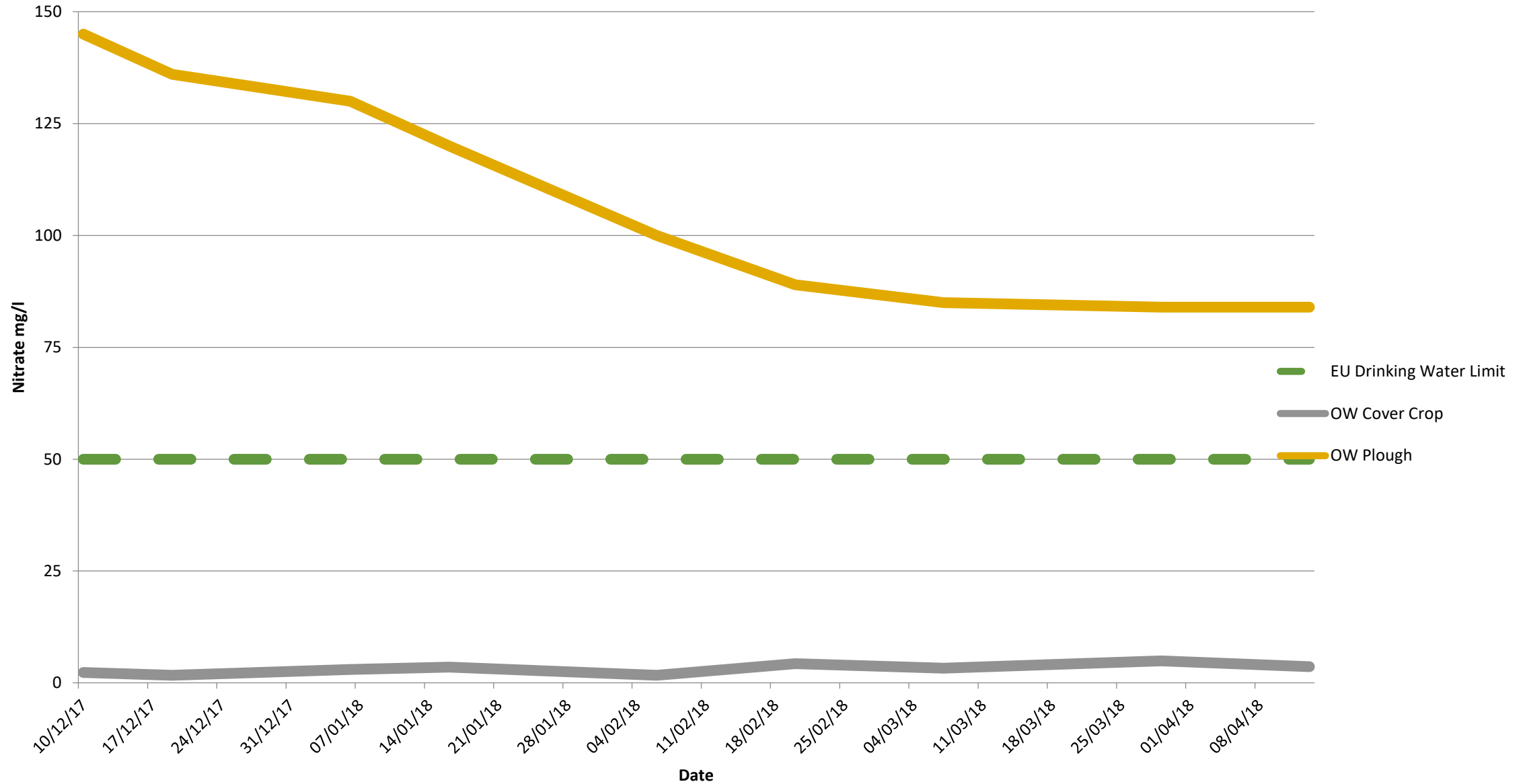
# Drain samples – Field urine test

- 92 samples taken from 14 set locations
- Analysis by Essex and Suffolk Water
- Fascinating insight into water quality
- Dramatic differences found





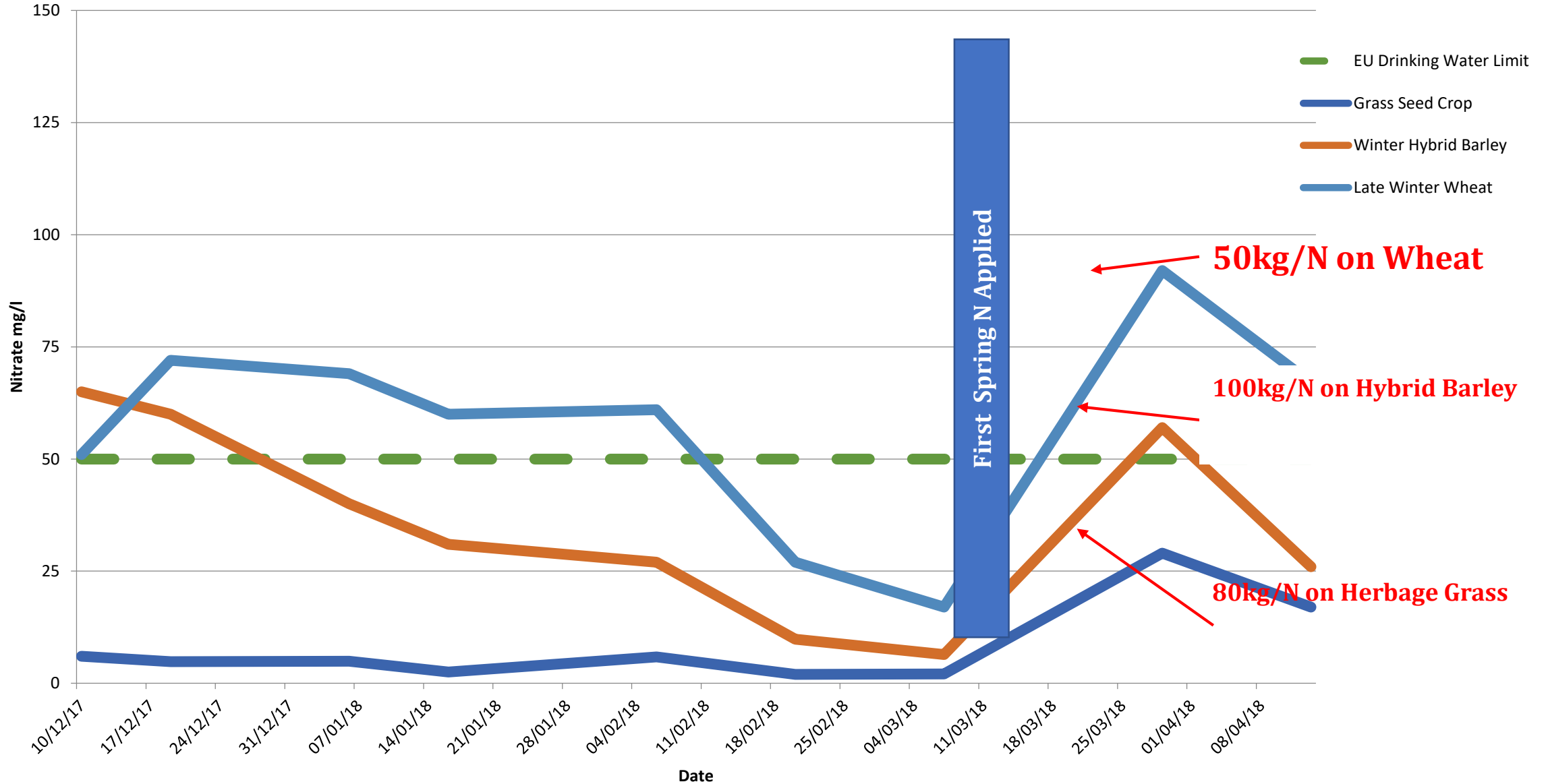
# Nitrate levels of field drain through winter 2017/18 (Over winter plough v's Over winter cover crop)







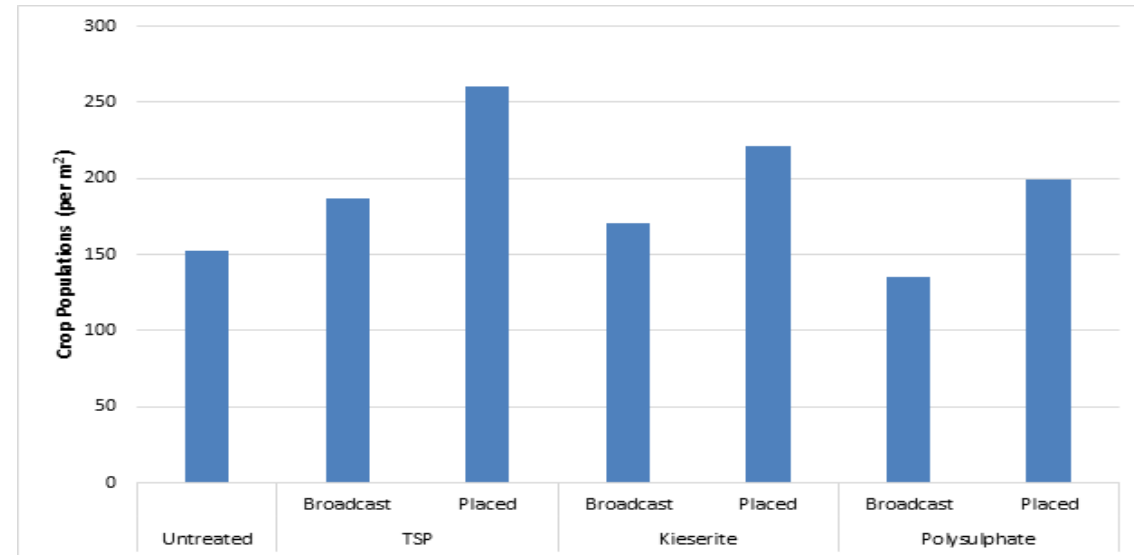
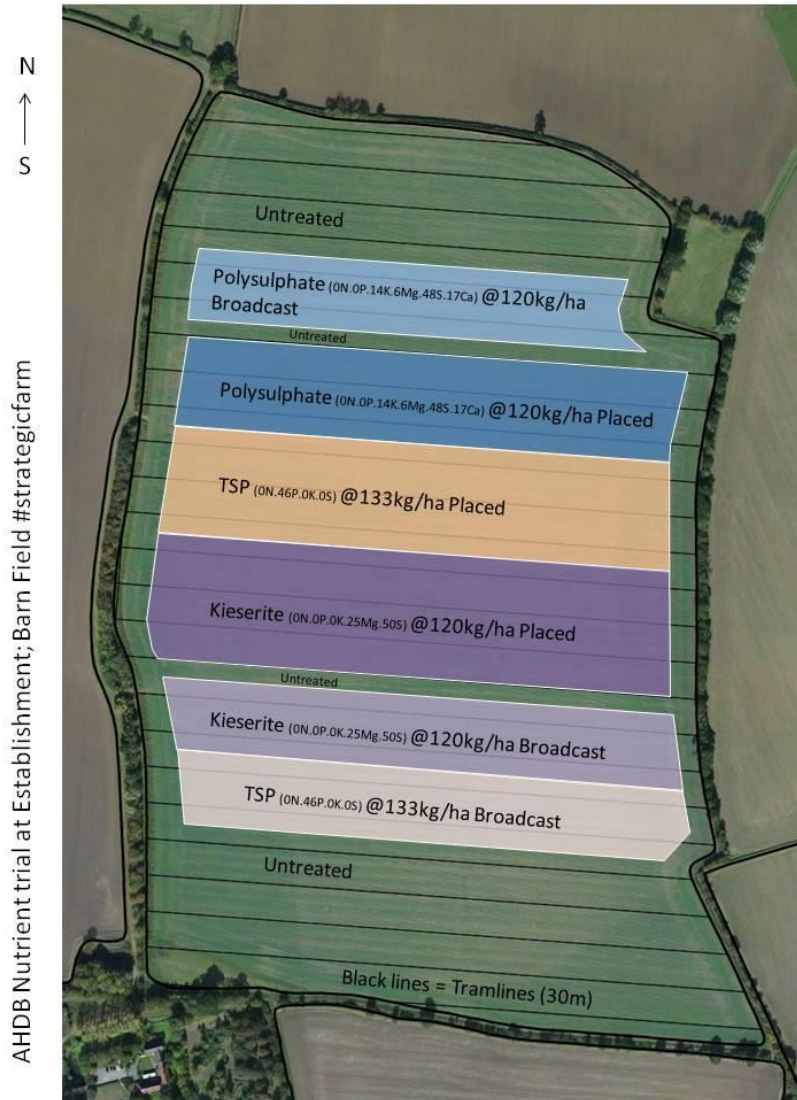
# Nitrate levels of field drains under different cropping winter 2017/18





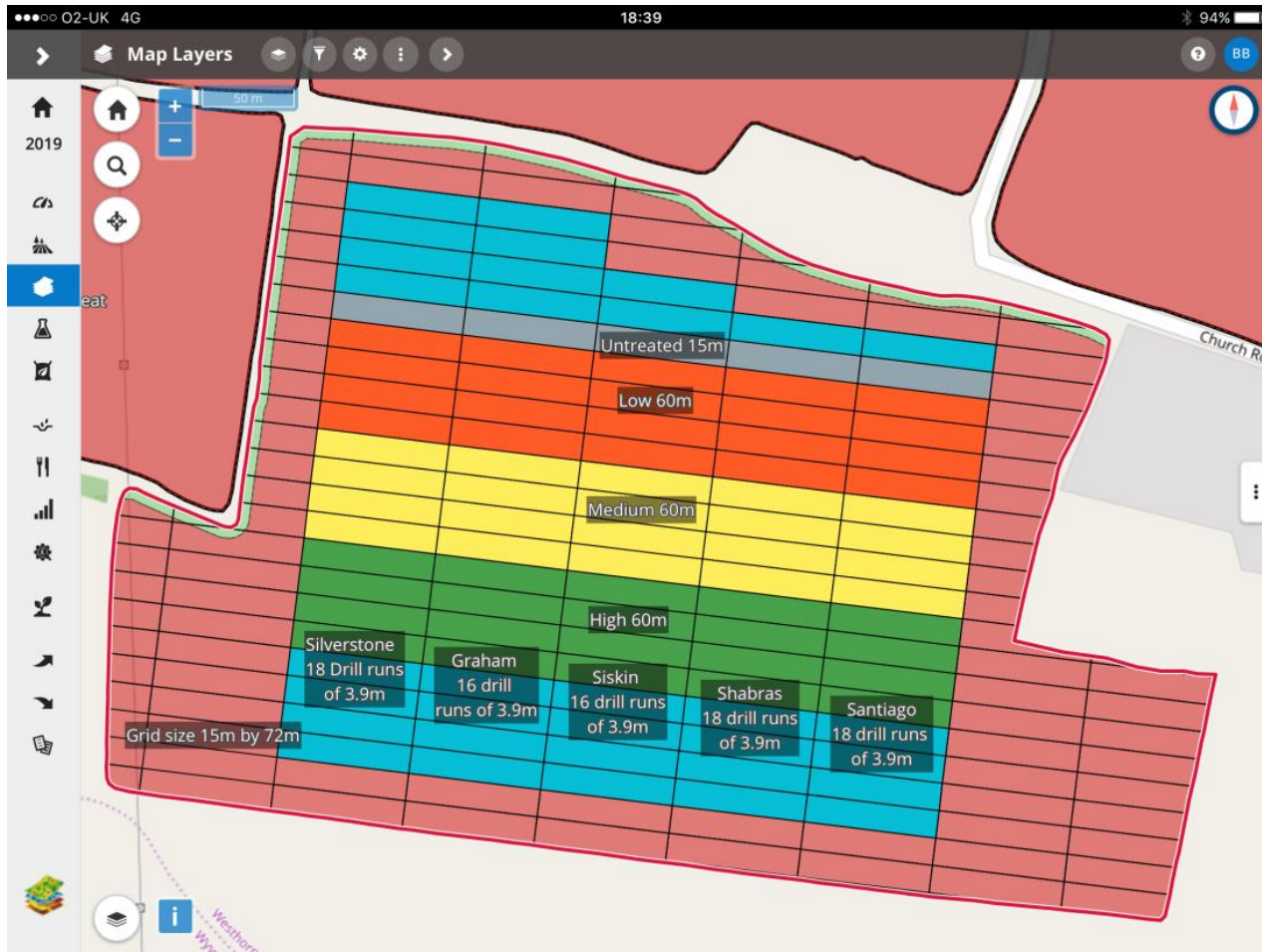
# Early biomass trial

- Following on from NIAB plot trial in year 1
- Response in Yield and Crop structure to autumn fertiliser
- This year TSP, Kieserite and Polysulphate compared on tramline scale
- Two methods of application; placed at planting and broadcast post planting.





# Return on investment trial



- 5 varieties in 17ha field
- 4 levels of sprayed inputs will be applied
  - Untreated
  - Low
  - Farm standard (medium)
  - High
- One tramline FR N for all varieties
- One tramline VR N calculated against biomass and yield potential



# 'Farmer to farmer knowledge Exchange'



“ I am always up for knowing what is out there and doing on farm trials. If you don't measure, you can't change ”

BRIAN BARKER  
Suffolk





# 'A Farmers eye is the best fertiliser'

*Pliny the Elder (Roman author, naturalist and philosopher)*

We have to challenge our mind set.....

We have to value our soil even more.....

We have to embrace new technology.....

We have produce more by applying less.....

We need to show our worth to politicians and the general public!

