

Winchester Monitor Farm

Meeting 11: **Diversification**

11 January 2017

Swarraton Village Hall

Speakers:

- Andy Howard – Companion cropping
- Guy Hildred – Farming with an AD plant
- Robert Raimes – English sparkling wine

For more information, visit:
cereals.ahdb.org.uk/winchester



*Ian Cammack and Andy Bason,
Winchester Monitor Farmers*

Companion cropping

Companion cropping is nothing new – mimic what is happening in nature:

- Mixed varieties
- Strip intercropping
- Relay cropping – 2nd crop, even just a cover crop sown pre harvest of 1st
- Temporary intercropping – mopping up nutrients
- Full season intercropping (wheat and peas)
Better for organic? Separator?

Things to consider before starting:

- Is there a market for the produce?
- Soil fertility and soil nitrate levels
- Crop rotation
- Field weed pressure
- Choose which intercrop component you want to dominate and which to be the subsidiary
- Drilling depths and crop row widths
- Drilling timings
- Choice of cultivars
- Harvest dates
- Can your intercrops be separated after harvest



Guy Hildred – Farming with an AD plant

Life before the AD plant:

- Rotation: break crop/wheat/wheat or barley/
break crop (OSR, poppy, beans)
- All grass is permanent
- Problems
 - Black-grass increasing
 - Dubious profitability long term
 - Boring
 - Sustainable??



The project – two years old

- Gas to grid at equivalent of 2.9MW if all electric
- Pay-back time around 9-10 years. Project life time of 20 years with two already gone.
- Gas price is similar to domestic price with gap between wholesale and retail price being from the RHI
- Plant energy efficiency around 79%
- One fulltime manager with two part time cover
- Build cost circa £9.5 whole site is mine after 20 years
- Looking to buy out EIS investors this year

Benefits:

- Digestate is a complete maize fertiliser
- 70% saving in purchased fertiliser
- Crops have a healthier colour but are not lush. Cold spring this year so next year???
- Applications rates of 30 m³/ha - huge machinery. Soil structure on tramlines?
- Application costs equal saved fertiliser.
- Plenty of K so will be baling all straw, so extra income potential
- Never ever boring

More information is available online:

- [Understanding Triticale](#). A research report and guide to optimising inputs, and the potential of triticale as a biofuel feedstock

Annual demand:

- 16,000 tonnes silages
- 6000 tonnes grain wastes e.g. screenings, ergot, bugs, low bushel weight
- 6000 tonnes oat hulls
- 3000 tonnes pig slurry

Current rotation:

- Maize/ wheat / whole crop cereal + stubble turnips
- Black-grass can only increase in the wheat part of the rotation
- Digestate can be spread on growing crops through most of the season
- Gives two AD crops and two food crops in three years

