

Bath Monitor Farm

Meeting 5: Cover Crops

10 November 2015

Manor Farm, Stratton-on-the Fosse, Bath

Rob Addicott (Monitor Farmer) & Philip Dolbear (AHDB)

For more information, visit cereals.ahdb.org.uk/bath



Rob Addicott

Meeting summary

- Farm and Harvest 2015 update
- Cover Crops
- Tackling the yield plateau
- Benchmarking



Farm and Harvest 2015 update

- In summary, lots of yield and lots of stress!
- A new member of the family amongst it all!

Harvest results:

<u>CROP</u>	<u>VARIETY</u>	<u>YIELD T / HA</u>
Winter wheat	Leeds	11.31
	Revelation	11.95
	Evolution (2 nd Wheat)	10.11
	Wheat average	10.95
Winter Barley	Volume	10.62
	Cassia	9.60
	Barley average	10.16
Winter OSR	Amalie	4.35
	Harper	4.20
	OSR average	4.24
Spring Linseed	Altess	2.23

- The best wheat field was Revelation after oilseed rape. Rob puts this down to variety as usually, his best yields follow beans
- Further to discussions last winter on the economics of second wheats, results this summer pose further questions and they may now be dropped giving way to more barley.
- To be fully costed, but Volume barley yields covered additional seed and fertiliser costs. Seed costs have reduced for 2016 and Rob wants to stay with it because of its better ground coverage characteristics.
- Despite rape now being 1 in 6 in the rotation after being 1 in 3, Rob felt yields were still a little disappointing. Amalie just edged Harper but Rob feels the 'jury is still out'. He is not convinced the yield advantage was down to its Turnip Yellow Virus resistance characteristics
- Rob is very pleased with the linseed which was a low fibre variety and combined (after desiccation), with no problems, even on a less than ideal day. We await the figures, but Rob believes it will produce a better margin than beans would have done. He is continuing in 2016 with the added benefit of a seed contract worth an additional £40/t
- Lupins being considered for a 2016 greening crop

Questions from the harvest?

1. Why were yields so good? – good establishment, kind winter, low spring disease pressure, rain through the season at the right times, not too hot through June/ July during grain fill. There are few things Rob would change from a management perspective – much of it is down to weather.
2. Grain storage. Where does he store such a big crop – to be addressed in a later meeting
3. Farm labour. "The farm student was not as good as some years and Dad is not getting younger". Rob needs to plan for the future. This will also be addressed in a future meeting.

Looking at the soil

- We recorded the soil temperature at 13 degrees, nearly 30% above average
- Only dig a soil pit from one face
- Rob's soils are already well structure producing good rooting
- Look for irregular sized peds and rooting through the middle
- Dig a hole under the hedge first to see what undisturbed good soil structure looks like



Cover Crops

- Rob has not made much use of cover crops, sometimes rye or mustard between winter barley and spring beans.
- Considers ploughing and weathering more effective than minimum tillage, but flexible about the use of cover crops dependant on cost and subsequent value.
- Rob still retains the benefits of two drills for flexible working with a broad range of soil types
- Cover crops may cost £150/ha seed and establishment.
- Not necessarily cheaper
- Raising soil organic matter seen as key long term objective for long term soil sustainability and productivity. Some at the meeting had the view it would be better to spend the money importing sludge, although high Phosphate levels may negate the possibility of this. Rob's soils already in excess of 3% organic matter which is acceptable
- Problem establishing cover crops on Rob's heavier soils before 1 Oct. Potential problems drilling in spring in difficult conditions. No Cross slot drill available that drills into trash
- Concern with cover crops and slug control on heavier soil with possible restriction on Metaldehyde.
- Rob has to consider black-grass control and cover crops don't necessarily smother any germination
- Currently Rob still sells straw for value and hence reducing P and K return. Cover Crops may be an economic way of redressing the balance
- On Rob's soils, he would consider deeper rooting cover crops rather than a subsoiler if it became necessary due to soil stone content
- Cover crops may need to be considered more in the future to meet regulatory requirements eg Water Framework Directive.



- Cover crops may become more viable and a crop in their own right as fuel source crop. Nearest one currently believed to be Andover

The yield plateau

Rob entered a wheat crop into ADAS YEN (Yield Enhancement Network) competition. It turned out to not be the best field on the farm. However parts of the field showed 14-15t/ha which would have been 80% of physiological potential yield (17.2 t/ha) and put Rob in the winning positions. He is again entering a crop for 2016. This will be a 'management project' for our Monitor Farm Group to see just how much we can get one of Rob's crops to yield. We will discuss the management of the chosen crop at each meeting

CropBench+ benchmarking

'Top performers are marginally better in everything rather than significantly better in one thing'

- It is now time to upload your 2015 harvest data
- The feedback meeting is scheduled for the evening of 21 January
- To find out more about AHDB's CropBench+ benchmarking tool, please contact:

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Next meetings

- Tuesday 19 January 2016 – Labour power and machinery cost analysis
- Thursday 25 February 2016 – Grain storage
- Thursday 7 April 2016 – Tackling the yield plateau

Meeting times and locations will vary so please ensure you have registered your contact details to receive notification of details throughout the year

To attend the meetings, please email Philip.dolbear@ahdb.org.uk or call 07964 255614