

Malemesbury Monitor Farm meeting report

What can we learn from organic farming?

Speaker: John Pawsey (Shimpling Park Farm)

Date: 13 December 2018



Key messages

- John's golden rule "Never put a crop in the ground without securing a market for it"
- Integrated weed, pest and disease control is essential for his organic system and he has to be doing absolutely everything
- John states that organic has important lessons for Integrated Pest Management (IPM) in regards to herbicide resistance and shrinking chemical tool-kit
- His organic system has led to an increased richness of farmland bird communities, in comparison to surrounding areas, in which reduced diversity and lower populations of birds have become commonplace within the past 60 to 70 years
- His organic system has resulted in average increase per hectare of +£92/ha without sheep and +£172/ha with sheep
- If you are thinking of making a change – first go and visit a practitioner who is doing it well already
- Main problems of an organic rotation are losing fertility and weed problems – therefore you need a wide, varied rotation and sheep could be considered

Integrated weed management

- There is no one solution to weed control "many little hammers"! Diversity is everything.
- Mechanical weeding has a cost. Crop competition is better and cheaper
- Black-grass control – do it in the ley in a rotation – cut more often, lower and lower
- Grazing winter wheat to reduce black-grass, will only reduce populations 20%, so need integrated approach for the other 80%
- Rotation design – keep it broad, give different chances to attack weeds
- Cultivation – know your weeds and choose the cultivation depth accordingly
- Drilling dates – consider the weed problem and choose a variety with a drill date optimal for weed control
- Crop competition – choosing the right crop for a particular weed problem can make a huge difference
- Crop spacing – balance crop competition against weeds with light into crop leaves
- Companion cropping – an effective option if drill capacity and guidance technology is available to do so
- Allelopathy – difficult to prove but experiment!
- Drainage – essential for creating a good seedbed; spend money cleaning ditches and do remedial work in good conditions
- Livestock – choose breeds carefully favouring those which require low labour input or where the benefits outweigh the costs
- Problem weeds include wild oats (rogue early), creeping thistle (use a clover ley) and docks (dig them)
- Mechanical weeding – if all else fails!

Integrated pest management

- It was acknowledged pest control could be more challenging in the SW with its climate. However, take heart, if a pest problem develops a predator usually follows

- Diversity in cropping rotation to prevent build up across a whole rotation
- Diversity within cropping – vary drill dates
- Disrupting life cycles – consider livestock and rotations
- Building beneficials – Insect banks can be good for pest control but be careful not to create a weed seed bank
- No-go areas – consider which areas need to be cropped as some areas better suited to the Stewardship Scheme can benefit adjoining commercial crops

Integrated disease management

- Sowing date – choose varieties that have good resistance criteria for the expected disease pressure at the expected drilling period
- Crop spacing – creating more space between crops will allow more air around each plant and reduce the risk of septoria spreading through the crop, however, space needs to be balanced with weed control
- Bi-cropping – but can the farm facilities cope with bi-harvest?
- Varietal blending – questionable solution to a disease problem
- Plant populations – lower is better but this needs to be balanced with drill date and weed pressure
- Disease issues – walk crops regularly yourself and identify the disease issues

Find out more – Links to AHDB information sheets or research

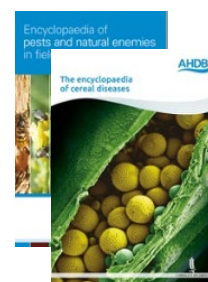
For more information on pest, disease and weed management, visit cereals.ahdb.org.uk/crop-management

[Encyclopaedia of pests and natural enemies in field crops](#)

[Encyclopaedia of cereal diseases](#)

[Encyclopaedia of arable weeds](#)

[Weed control in conventional and organic oats](#)



Next meeting

Date: 4 March 2019

Topic: Fungicide strategies

Location: Lower Odd Farm, Crudwell, Malmesbury, Wiltshire SN16 9SN



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