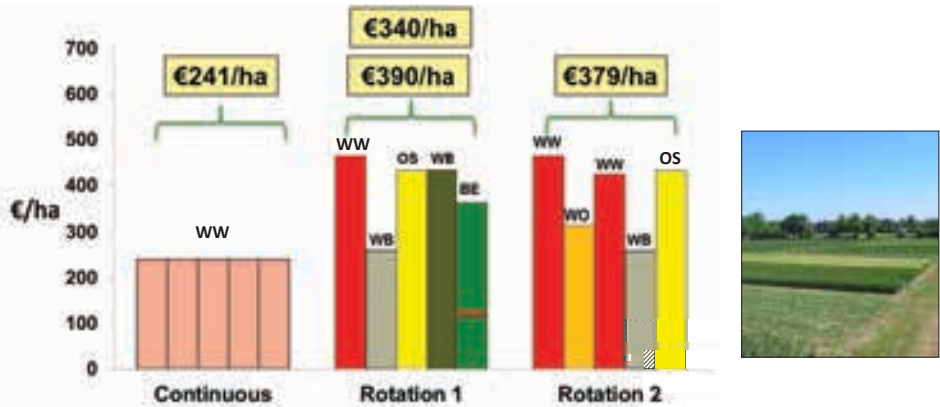




Rotations have value !



Crop and rotation annual margins (beans BE with and without protein payment)

- Break crops bring value to the following crops
- Must value entire rotation not single crops
- Consider benefits such as weed control, different markets etc.
- Break crops not all that volatile

Notes: _____



Establishing OSR

Why consider alternatives to ploughing?

- **Less expensive:** can be half the cost, depending on depth and intensity
- **Faster:** allowing OSR to be established quickly during busy harvest period
- **Reduced cultivation** can be applied across a rotation.



Oak Park Research

- Plough, Min-till and Strip-till evaluated
- Row widths of 125mm to 750mm and N response checked
- Row widths up to 600mm satisfactory
- Strip-till yielded similar to plough-based in 7 of 9 trials, but poorer establishment (variable seed depth) reduced yield in two
- Min-till (shallow tine cultivation and Vaderstad drill) also satisfactory
- Similar N and seed rate response across systems



Notes: _____



OPTI – BC: OSR management

Questions addressed

- Which is best. Early sown ‘big’ biomass or Later sown ‘small’ biomass?
- Does defoliation (bird damage) impact on the response?
- How should we manage crops with different post winter canopy structures?

Research programme

- 3 sowing dates: Aug15th, Sep 1st, Sep 15th.
- 2 post-winter defoliation regimes: Uncut and mechanically defoliated
- 7 N management approaches including ‘fixed’ and canopy management
- Year 2 of 3 year trial

Measurements

- Establishment
- Biomass / GAI through season
- Light interception
- Pre-harvest yield components
- Final Yield



Notes: _____



OPTI – BC: OSR survey

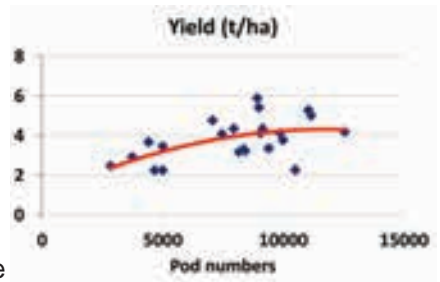
Grower survey, Why?

- Establish the range of crop performance in establishment, growth and yield
- Examine the impact of climate, weather and management
- To determine the prevalence of key diseases



Where and What's being collected?

- 20 crops / sites each year, 3 years
- 11 counties in 2018
- 4 visits:
 - Establishment
 - Post winter
 - Flowering
 - Pre-harvest
- Yield from grower returns
- Detailed management questionnaire



2018 Survey: Pod numbers and yield

Notes: _____



OSR: Key diseases

Light Leaf Spot (LLS)

- Key disease in our climate: Yield reductions up to 30%
- Early spring control essential even when leaf cover stripped by pigeons
- Varietal resistance should be exploited



▪ Phoma

- Causes Stem Canker
- Potential yield losses >10%
- Treat when 10-20% plants infected

▪ Sclerotinia

- High risk in tight rotations



Disease Control:

• Choose varieties carefully

- November (for Phoma and LLS. Use 1/2 rate triazole)
- February (for LLS. Use 1/2 rate triazole)
- ± March PGR fungicide (@green bud stage)
- ± April (for Sclerotinia @ early petal fall)

Notes: _____



OSR – Light Leaf Spot understanding populations

Pyrenopeziza brassicae – A pathogen infecting oilseed rape



Population analysis

Irish populations have been sampled in 2019

Molecular analysis on-going

Sensitivity to the azole, SDHI and QoI fungicides to be determined



How can understanding *P. brassicae* help OSR production?

- Do differences exist in the Irish population, e.g. fungicide sensitivity?
- Should control be focused on field, county, region or country basis?
- When should control measures be applied – before or during epidemics?



Notes: _____

