

An old friend with benefits

Winter Oilseed Rape brings many advantages to a crop rotation and deserves to occupy more hectares than it currently does.

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Despite the fact that winter oilseed rape offers many benefits, the area of the crop grown has remained at approximately 8,000ha for the last number of years. In 2017 figures from Teagasc e-Profit monitors (Table 1) show that the crop delivered a net margin of €511/ha. This was better than all cereal crops including winter wheat at €433/ha.

Break crops such as winter oilseed rape offer growers many benefits over growing continuous cereals:

- **Weed control** – oilseed rape gives growers the opportunity to tackle weeds with different chemistry, slowing down the development of resistant weeds. Growers also have a chance to control grass weeds and wild oats which can be difficult in cereals.
- **Disease break** – with cereal diseases becoming more difficult to control, oilseed rape offers the opportunity to break the cycle of these diseases. The next cereal crop will be grown in a cleaner environment.
- **Three-crop rule** – oilseed rape can help farmers to comply with the three-crop rule under 'Greening' for the Basic Payment Scheme.
- **Nutrition in following crop** – as with any "break crop", the following cereal generally has a lower requirement for nitrogen and fertiliser savings can be made.
- **Yield boost** – most cereal crops tend to give higher yields after a break crop compared with a continuous cereal situation.
- **Harvest spread** – oilseed rape is usually ready to harvest in late July

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or early August, offering growers the chance to get some fields cut before the main harvest. This helps lower workload in August and can also help to reduce machinery costs as you can extend the harvesting window. You may be able to get by with a smaller combine harvester.

Winter oilseed rape planting normally begins in late August. While this is usually a very busy period, sowing in August as opposed September can be the difference between having a profitable crop or not. Early sowing allows the crop to establish quickly which can help to reduce the amount of pigeon damage later in the season.

Pigeons will attack more backward crops first as they can easily land in them and see potential predators quicker than in tall, dense, crops. Severe pigeon attack in a September-sown crop can result in you having to replant.

Where pigeon grazing is prevented and crops grow well into the spring, significant savings can be made in nitrogen fertiliser as the leaves of the crop contain nitrogen. The more leaf you have, the bigger the potential saving.

The first decision is: What to plant? There are both conventional and hybrid varieties. When planting runs into September, the hybrids tend to have the advantage in terms of vigour. They are also planted at slightly lower seeding rates.

Target 60-80 seeds per square metre, the lower end of the range is for hybrids, with the aim of establishing in the region of 50 plants. Increase the seed rate once you move into September or if conditions are less than ideal.

A fine, firm, seedbed is essential for good establishment as the seed is very small and needs good soil contact for strong establishment rates. This

Table 1: Average Net Margin from e-Profit monitors 2017

Crop	Net margin €/ha
Winter wheat	433
Winter Barley	408
Spring feed barley	277
Spring malting barley	367
Winter Oats	234
Spring Oats	300
Spring wheat	337
Winter Oilseed rape	511

Conor O'Callaghan, Teagasc, Kellie Snow and her father Ronan.



FARMER PROFILE

Ronan Snow, Co Dublin

Ronan Snow grows potato and cereals in north Co Dublin. "About 10 years ago we started to incorporate winter oilseed rape into the rotation. We've found it to be beneficial, not only financially, but as a great entry for the following cereal.

"These crops benefit from the residual nutrients in the soil lowering their fertiliser requirement, especially compared with following crops of winter wheat." Last year Ronan grew 30ha of PT 256 (Variety) which yielded 3.9 t/ha. A slightly disappointing outcome in an unusual year. "We have averaged more than 5.0t/ha in good years," says Ronan.

The variety grown this year is, once again, PT256 and so far the crop looks promising. "We've been able to make significant savings in the spring on nitrogen as pigeon grazing was kept to a minimum and using crow/bird bangers last autumn."

"The crop had a green area index of 1.5 in February so instead of applying 180kg in total he only used 170kg/ha," adds his local Teagasc advisor Conor O'Callaghan.

"The crop also received three fungicides: one in autumn to control phoma, one in early spring to control light leaf spot and a final application at the mid-flowering stage to control schlerotinia."

Ronan concludes: "I can't speak highly enough about the benefits of winter oilseed rape in our rotation."

can be achieved by either using the conventional plough and one-pass operation or by using a direct drill. Research in Teagasc Oak Park has shown that yield differences between the two systems are quite small.

Weed control

First, assess which are the predominant weeds in the field and choose the appropriate chemistry to deal with them. For most growers, this will mean a pre-emergence application of

a herbicide usually containing pendimethalin eg Nirvana, which gives good broad-spectrum weed control of broadleaved weeds.

Where the pre-emergence timing is missed, there are herbicides that can be used. However, they tend to have a more limited weed spectrum. Grass weeds and wild oats can be controlled after emergence with a specific graminicide type herbicide, eg Falcon, Fusilade Max, Stratos Ultra, Centurion Max.

Table 2 :- Phosphorus (P) & Potassium (K) Requirements for A winter Oilseed Rape crop yielding 5t/ha

Soil Index	P (kg/ha)	K (kg/ha)	Suggested Fertiliser
1	55	105	550 kg 0-10-20/ha
2	45	90	450kg 0-10-20/ha
3	35	75	350kg 0-10-20/ha
4	0	0	Omit

Autumn Fertiliser Requirements for Oilseed Rape (OSR) Crops

Aim for soil pH 6.5 on mineral soils and if necessary apply lime based on soil analysis before sowing. The crop has medium demand for P and K as shown in Table 2 for a seed yield of 5t/ha. Consult your most recent soil test report and apply P and K at sowing time depending on soil fertility levels to ensure rapid crop establishment and good root development over the winter.

Alternatively, the crop's nutrient requirements may be supplied by organic manures such as farmyard manure, spent mushroom compost (SMC) or cattle slurry. Oilseeds have a good ability to take up nitrogen over the winter and this overwinter N will contribute to the crop's N requirement in spring.