

Winter Oilseed Rape

TILLAGE SPECIALISTS 2007

There is increased interest in growing winter oilseed rape (OSR) because of improved market outlets such as biofuels and improved disease resistance, straw characteristics and yields.

Rotation and soils

Free draining, medium to heavy soils with a pH of 6.3+ are best suited to OSR production. OSR should not be grown on land where brassicas have been grown during the previous four years. Beet should not be grown on land that has grown OSR in the previous three years.

Establishment

Winter OSR should be sown from mid-August to mid-September depending on location. Prepare a fine, firm, level seedbed and sow to a depth of 1.5cm (0.5 inch). Many methods can be employed to establish OSR including; autocast in a standing cereal crop; autocast into stubble; minimum tillage; and ploughing followed by one-pass drilling. The later mentioned techniques require lower seeding rates.

Seed rate

Sow conventional varieties (e.g. bravour) at 4 - 6 kg/ha and hybrids (e.g. excalibur) at 2.5 - 5.0 kg/ha. Target plant population is in the region of 40 - 60 plants per square metre.

Varieties

Yield, disease resistance, standing power and earliness of maturity are the most important factors influencing variety selection. The HGCA recommended list is our best guide to the most promising varieties. (see www.hgca.com)

Top varieties include ES astrid, NK bravour, castille, excalibur, lioness, winner.

Lime and fertilisers

The pH for OSR should be above 6.3. The first split of nitrogen (N) should be applied in late February (30 per cent of the total) and the remainder in late March to early April. Fertiliser applications should not be combined drilled as this may delay germination.

Table 1 - N, P and K for Winter Oilseed Rape (kg/ha)

Soil N, P and K Index	N	P	K
1	225	35	65
2	180	30	35
3	160	20	25
4	140	None	None

Sulphur

OSR is responsive to the application of sulphur. A dressing of 25 - 40 kg/ha sulphur should be adequate. This should be applied as part of the fertiliser programme in the spring with either the first or second nitrogen application.

Boron

Boron should be applied for OSR, especially when the soil test is below 1 mg/l, on light soils. These conditions can be induced by severe summer drought. Boron can be applied as part of the fertiliser with the P and K or as a foliar spray.

Weed control

Grass weeds, particularly volunteer cereals and wild oats are very damaging to OSR yield. Weed control is costly ranging from; Treflan at €15/ha; to graminicides at €30/ha; to Kerb Flo at €96/ha and Butisan S at €104/ha.

Pre-sowing

Trifluralin (Treflan) 2.3 l/ha can be incorporated in top 5 - 8 cm (2 - 3 inches) of soil within 30 minutes of application. Susceptible weeds include chickweed, fathen, hempnettle, speedwells and polygonums.

Pre-emergence

Butsan S (2 - 2.5l/ha) can be applied within 48 hours of sowing. Split-treatment: Apply 1.5 l/ha Butisan S pre-emergence. Follow with a post-emergence application of 1 l/ha Butisan S.

Post-emergence

Graminisides e.g. Co-pilot, Falcon, Satchmo, Fusilade Max, Gallant Solo and Stratus Ultra can be used from the one true leaf stage of the OSR up to early flower bud stage. Kerb Flo at 1.75 l/ha controls grassweeds, volunteer cereals, wild oats and a range of broad leaved weeds. Apply after the crop has three true leaves from October to January.

Disease and pest control

The main diseases of concern are phoma leaf spot (canker), light leaf spot and sclerotinia. Other diseases include alternaria which can infect pods and result in pod shattering, but generally would not warrant a fungicide application. OSR is also susceptible to club root but rotation will take care of this.

A fungicide programme for the control of the main diseases phoma and light leaf spot will involve one to two fungicide applications. Monitor crops closely from October to December to identify phoma and light leaf spot symptoms. Apply a triazole fungicide e.g. Proline, Folicur or Punch C at 0.5 full rate when symptoms of light leaf spot are found before stem extension or if 25 per cent of plants show symptoms at early stem extension. A second fungicide will be required if re-infection occurs in the spring. Triazoles with PGR activity e.g. Caramba has the added benefit of reducing plant height. Sclerotinia can occasionally be a problem in OSR. Well-timed treatments, usually early to mid-flowering, are very effective.

Slugs and pigeons can attack rape and should be controlled as early as possible. Flea beetle can occasionally be a problem during emergence. Control with a synthetic pyrethroid. Pollen beetle are sometimes a problem at the green bud to flowering stage, control with a contact synthetic pyrethroid insecticide e.g. Karate, Decis, etc. when numbers exceed 15 - 20 beetles per plant.

Harvesting

Harvesting of winter OSR usually takes place towards the end of July to early August. The crop can be direct combined or swathed. Desiccation e.g., Roundup and direct combining is preferable in weedy crops. Swathing is completed six to seven weeks after flowering has finished and is favoured in exposed locations. Direct combining (no desiccation) can result in higher grain loss at harvest but combined with extendable tables can reduce these losses.

Desiccation and direct combining

Glyphosate products should be applied approximately 14 - 21 days before harvest. Diquat products are applied slightly later than glyphosate, seven to 10 days before harvest. Use a high water volume (350 litres+/ha) as spray is contact only. Pods become more brittle than with glyphosate products. Use high ground clearance tractor/sprayer as losses can be significant when desiccating.

Aid/marketing

In addition to the Single Farm Payment, an additional aid of €125/ha is paid where OSR is grown as an "energy crop - for biofuel". OSR may also be grown for non-food use on setaside but the additional aid of €125/ha is not paid here.

Note: A contract with the end-user is essential in the case of OSR grown for biofuels under the Single Farm Scheme and for non-food use on setaside. The contract must be submitted with the Single Farm Payment form.



Further information:

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