



Cover crops what to sow and what they cost

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As combinable crop and maize harvest approaches, we thought a gentle reminder of the benefits and options for cover crops may be useful. There are several proven benefits of planting an over winter cover crop. These include protecting the soil from erosion, retaining nutrients in the soil, building nutrients using a green manure, keeping the soil food web active and better water infiltration.

There are many options for cover crops some of which have been listed below with suggested seed rates and current prices.

As a general rule the earlier cover crops are established the better in that soil nutrient release during warm summer months can be high. Early sown crops will establish well by the autumn protecting soil from was or erosion.

Alongside the crop and seed rate/cost data are a few guidance notes for each. If you would like more information, contact the office, the MGA agronomist Jon Myhill and or your own agronomist.

Crop	Seed rate (kg/ha)	Seed cost (£/ha)	Notes
Fodder Radish	18	68	Deep, binding roots. Early establishment important because not hardiest cover crop. Very effective at capturing N (up to 70kgN/ha if drilled late August) that might otherwise leach
Spring barley	130	91	Potential to use farm-saved seed
Mustard	14	100	An economical, quick growing crop that will provide effective green cover
Westerwold ryegrass	45	100	Hardy. Long term persistency but not problem if planning to sow maize following cover crop
Vetch	75	39	Winter hardy, nitrogen fixing
Phacelia	10	37	Dense mat of shallow roots. Relatively fast to establish
Berseem clover	15	65	Only if drilling pre-Sept, killed by frosts
Black oats	85	44	Good rooting for soil improvements
Forage rye (Rye Corn)	130	130	Good if using as spring forage. One of hardiest cereals, capable of withstanding frosts
Italian Ryegrass	35	110	Potential as spring forage. Rapid establishment. High yields. Relatively low seed costs
Triticale	130	85	Similar to Forage rye
Camelina	12	85	Also known as Gold of Pleasure. Good seed production for game birds
Winter oats	80	99	Grow in cool autumns
Winter barley	75	119	Potential to use farm-saved seed. Beware that seed rate will vary depending on whether this is a cover crop or cash crop following maize. Contact an agronomist to discuss your requirements.
Winter wheat	75	97	
Stubble turnips	5	29	Only if drilling pre-mid-Sept
Forage rape	10	42	

Buckwheat	50	195	Fast growing, good at scavenging for phosphate
Festulolium	35	165	Hybridisation of a ryegrass and fescue
Crimson clover	15	85	Annual clover. Only if drilling pre-mid-Sept
White clover	8	125	Sow March to September in a mix
Red clover	15	200	Best clover for nitrogen fixing, last for 2 years. Sown up to September

If a more complex mix was desired where for example you wanted to adhere to the new SFI payment for cover crops, then at

least 2 different species need to be included. This would qualify the field for the £129/ha payment.

Crop	Seed rate (kg/ha)	Seed cost (£/ha)	Notes
Volume and nitrogen fixing: Rye + vetch	120	110	September to October drilling
Volume and nitrogen fixing Oats + phacelia + vetch	50	80	Rapid establishment, nitrogen fixing
Nitrogen fixing and rooting: Berseem clover + black oat	18	60	Deep rooting, nitrogen fixing
Quick establishing cover crop: Mustard + fodder radish + phacelia	12	45	Rapid establishment, captures nitrogen that might otherwise leach, comparative low cost
Good for grazing: Rye + vetch + Clover + fodder radish + rape + stubble turnip + phacelia	27	55	Good grazing mix, high protein, soil conditioner, good ground cover, captures nitrogen that might otherwise leach
Good for grazing: Rye + vetch + black oats + mustard + fodder radish + linseed + phacelia + tillage radish	22	55	Forage species to provide grazing, soil conditioner, varying root sizes, captures nitrogen that might otherwise leach
Late winter cover crop: Westerwold, crimson clover, red clover, alsike clover, mustard, fodder radish, tillage radish, phacelia	12	60	Forage species to provide grazing, nitrogen fixing, soil conditioner, varying root sizes, captures nitrogen that might otherwise leach

(Source - John Nix Pocket book 2022 and 2023 and Seed merchant pricing)