agrovista
seeds

Guide to

environmental and cover crop seeds

2025 *season*

growing through ***innovation***

agrovista seeds

Welcome

to our 2025 environmental stewardship and cover crops brochure

Environmental stewardship has been a part of farming in the UK for over 30 years in one form or another, but the advent of the Sustainable Farming Incentive coupled with the accelerated phasing out of the Basic Payment Scheme has put the subject firmly in the spotlight.

Within the pages of this brochure, you will find a range of seed mixtures that have been developed to meet the requirements of a range of actions within both the Countryside Stewardship Scheme and the Sustainable Farming Incentive.

The advent of SFI has blurred the lines between what we have been doing for many years with cover crops and also traditional game cover mixtures. Cover crops now sit firmly in the environmental camp and game cover mixtures have also joined that migration.

Our entire range of cover crop seed mixtures, developed over the last 13 years through the ongoing work at our flagship Lamport soil health site in Northamptonshire, is now suitable for use within the SFI SAM2 and CSAM2 multi species cover crop actions. New mixtures designed to meet the requirements of SOH2 and SOH3 spring and summer cover crop actions have now joined the range and also benefit from the many years of experience we have of cover cropping.

These mixtures have been developed with species selected for their ability to maximise biomass production both above and below ground whilst avoiding the issue of problematic volunteers further down the line.

The Agrovista range of environmental and cover crop seeds, when grown in the way they are intended can deliver tremendous benefits in terms of soil health and fertility, livestock performance and biodiversity.

We are farming under increasing scrutiny in the UK and public goods for public money is something that is now expected of all of us. The fact that we can deliver these public goods whilst improving our soils, maintaining the health and productivity of our livestock and reducing input costs is something we should all be grasping and I for one am proud to work in an industry that leads the world in sustainably responsible food production.

NIGEL STORER
Forage and Environmental Seeds Technical Manager

Contents

The seed mixtures in this brochure have been designed to be compatible with a range of actions within the countryside Stewardship Scheme (CSS) and the Sustainable Farming Incentive (SFI). However, these mixtures alone are no guarantee of compliance and should therefore be grown and managed in a way that can be reasonably expected to meet the aims of the action.

Benefits
of cover crops

Nutrient capturing, fixing and recycling

Cover crops can undoubtedly help to mop up residual nutrients in the soil, and then hold them in stable forms before releasing them ready for the following commercial crop. This can significantly cut the risk of nutrients such as nitrates leaching into water and reduce inorganic fertliser requirements.

The time of destruction and the carbon:nitrogen (C:N) ratio of the cover crop will determine how quickly trapped nitrogen will be available to the following crop. Species with lower C:N ratios e.g. vetches release nitrogen in an available form more quickly.

Legumes can also fix nitrogen from the atmosphere. They may not be in the ground long enough to fix huge amounts, but the effect can still be significant.

Complementary rooting structures from different cover crops can also access areas in the soil, in micropores for example, which roots from most arable crops would not be able to access, hence they can increase availability of 'free' nutrients in the soil. This can be improved further by selecting species with good mycorrhizal relationships. Cover crops are very efficient at helping recycle nutrients into crop-available forms.

Soil structure improvements

A huge benefit of cover crops is the ability of species with vigorous and active root systems to open soils with their roots and hence improve soil structure. There is much debate about the "roots not iron" philosophy of no-till conservation agriculture, but comprehensive Agrovista soil health work has shown huge benefits from a combination of roots and reduced reliance on iron.

In some cases iron may not be needed at all. Where it is required, the work has clearly shown the target should be to use only just enough iron to stretch soils sufficiently to provide a conduit for the roots from cover crops to penetrate through any compacted layers.

By using cover crops with complementary but differing rooting morphology and depth potential, they can open the soil throughout the whole profile allowing free movement of air and water. Through improving soil structure, cover crops can provide savings in cultivation costs.

Cover crops can undoubtedly help to mop up residual nutrients in the soil, and then hold them in a stable forms before releasing them ready for the following commercial crop.

Reducing soil erosion

During high-risk periods for soil erosion from wind and/or water, actively growing plants play a vital role in holding soils together, reducing velocity of both rain and wind on the soil and thus preventing losses of soil, sediment, nutrients and pesticides to the natural environment. The comprehensive root systems from cover crops also hold the soil particles together, reducing risk of soil movement and potential runoff.

Managing pests

Cover crops can be used for the control of certain soil-borne pests such as nematodes through either trap cropping or soil biofumigation. The main species available are typically brassicas with high isothiocyanate levels and this has led to the creation of cover crop mixes containing specific mustards and radishes such as the Hardy mix.

Managing weeds

Cover crops can offer short-term suppression of weeds to give a clean seed-bed ahead of a crop, for example where chemical weed control options might be limited. More importantly they can be used as a long-term strategic tool to reduce the overall burden of problem weeds like blackgrass, as developed by Agrovista at Project Lamport.

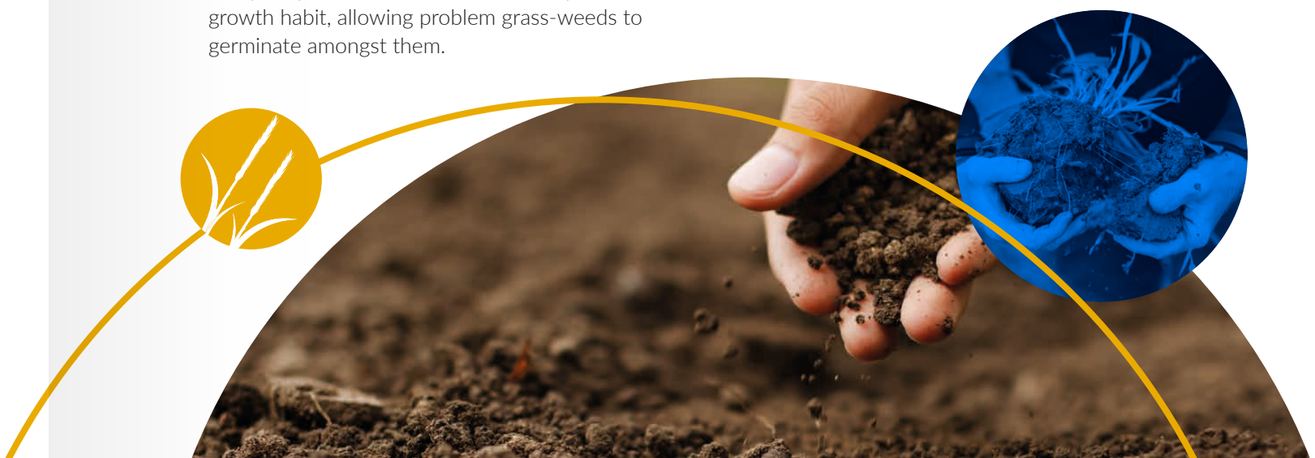
Specific cover crops usually based around black oats are sown in the autumn, acting as a trap crop. Black oats have an initial open growth habit, allowing problem grass-weeds to germinate amongst them.

The cover crop and weeds are then destroyed together before any seed is set. The extensive rooting system provided by the black oats not only helps to condition the soil and dry the soil over winter, allowing spring cropping to be utilised on even the heaviest of land, but also serves to stabilise the soil. This means when the commercial crop is sown with a direct drill, there is minimal soil disturbance, hence further grass-weed seeds are not encouraged to germinate with the spring crop. This helps to both deplete the weed seedbank and give the following crop a clean start.

Building soil fertility and nutrition

Using cover crops to give soils a nutritional boost is the basis of the term "green manure", The cover crop also helps stimulate and feed biological activity in the soil and increase worm numbers – a very useful indicator of soil health.

One of the key requirements of 'Regenerative' agriculture is to maintain living roots in the soil at all times, highlighting the importance of using cover crops to ensure we harvest sunlight and feed soil biology throughout as much of the year as possible, which is fundamental to long-term functionality of soils. Well-managed cover crops will not only build long-term soil organic matter, but will also help increase the quantity of soil biota, increasing the breakdown speed of organic matter and recycling nutrients into crop-available forms.



Managing cover crops
– the principles

Good management is the key to a successful cover crop, particularly on heavy land where the two biggest challenges are optimum establishment and effective destruction.

More than any other factor, the way these operations are managed has had the most significant impact on yield in following crops at Project Lamport, our flagship Regenerative Agriculture research site in Northamptonshire.

In the main, it is poor decision-making that leads to failure and gives cover cropping a bad name. The following guidelines will greatly increase the chances of growing an effective stand, regardless of soil type, weather, or cover crop species.

Timely establishment

Regardless of a cover crop's purpose or the species selected, sowing seeds into an appropriate seedbed will help ensure quick establishment and strong growth.

Good timing is critical. A few days' delay in sowing can adversely affect a cover crop's performance, as plants need to harvest as much sunlight as possible, as quickly as possible, to maximise root and top growth. A short-term cover crop planted ahead of an autumn-sown cereal may only be in the ground for two months, and time is also of the essence for an over-wintered cover as growth slows during the late autumn and winter.

While timely drilling is key, ideally soon after the combine has left the field, this should not be at the expense of seedbed quality.

Straw management

The first step to good establishment should be taken before the preceding crop is harvested. The combine's straw chopper should be set to produce a fine chop that spreads across the full width of the cut, as there will be little time for crop residue to break down before the cover crop is drilled and no stale seedbed cultivations to aid the process.

Cultivation strategy

The next step is to assess soil structure and the need for remedial cultivations. If yields in the preceding cash crop were good and pretty even across the field, and steps were taken to minimise soil damage during harvesting, there is unlikely to be a problem.

Suspect areas warrant closer inspection with a spade. Work at Project Lamport has shown that 'cracking' the soil using a low-disturbance subsoiler at 100-125mm is generally sufficient. Provided the correct cover crop species have been chosen, the roots will sort out deeper compaction as they grow.

> *Good timing is critical. A few days' delay in sowing can adversely affect a cover crop's performance, as plants need to harvest as much sunlight as possible, as quickly as possible, to maximise root and top growth*

MANAGING COVER CROPS

Sowing

As with any crop, covers can be established in several ways, including direct drilling. This has been very successful. With other types of drill, a very shallow cultivation either as a separate operation or during drilling where appropriate should be sufficient to mix in the straw and mineralise some nitrogen to help kick-start crop growth.

Cover crop mixtures often consist of seeds of varying sizes that require differing sowing depths. Modern drills can often deal with this, while older equipment that suits larger seeds will benefit from the addition of a small seeds application kit.

After drilling, the seed-bed can be rolled as necessary – soil moisture conservation is important throughout this process.

In a new area of intensive research to help improve establishment and timeliness, Agrovista is also investigating broadcasting the cover crop seed into the preceding standing crop several weeks before harvest. Early results suggest this is viable with smaller seeds and work is continuing to pinpoint appropriate timings and species.

Effective destruction

Destruction timing is closely linked to several factors, including drill capability, land type, size of covers and, most importantly, the carbon:nitrogen ratio.

Where covers with higher C:N ratio such as cereals and brassicas are grown, especially on heavy land, it is vital to apply glyphosate early (December or January if possible) so plant material has time to break down. This enables mineralisation of nutrients and increases the diversity of soil biology. If destruction is too late, nutrients will be immobilised in an excess of cover crop residue, so the following crop will not benefit when it needs them most.

Early destruction also allows the soil surface to dry, improving drill performance and reducing slotting, whilst minimising the green bridge risk.

Work at Project Lamport using a black-oat based cover crop has shown a distinct yield advantage in spring wheat that followed destruction in late December/early January compared with two weeks pre-drilling (see table).

In practice, a second application may be needed in bulky cover crops to ensure a complete kill before drilling.

Most drills, with some adjustment, will comb through reasonable amounts of cover crop residue provided it remains anchored to the roots. It is best to avoid surface cultivations before drilling.

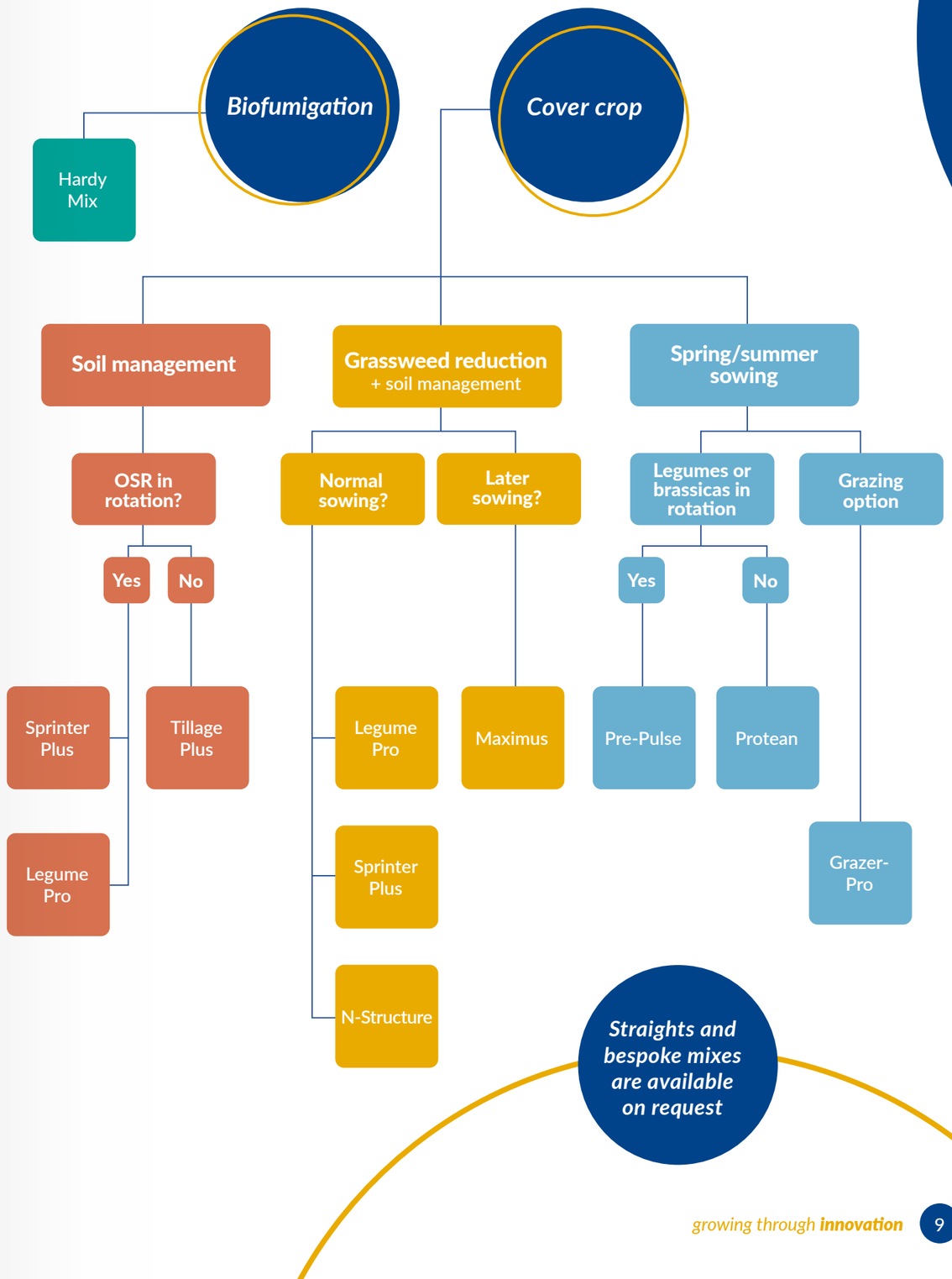
Where covers consist of lower C:N ratios, such as vetch, early destruction is less important, especially on lighter land. Growers who own specialist drills that work in a standing cover crop can spray just before or just after sowing the following crop.

Impact of cover crop destruction timing on spring wheat yield (t/ha)

	Early destruction	Later destruction	No cover crop
Year 1	10.30	9.12	9.59
Year 2	8.65	7.75	6.01
Year 3	8.60	7.31	7.35

Early destruction has always out-performed no cover crop.

What function do you want the cover crop to perform?



Mixtures

Key to icons

The icons that the appear alongside all mixture description indicate the benefits

- Soil structure
- Nutrient capture
- Grass weed control
- Nematode reduction

Protean spring and summer cover crop

Buckwheat, Crimson clover, Fodder radish, Linseed, Phacelia

Versatile spring or summer sown cover crop suitable for a wide range of cropping rotations.

Sowing window	SOH2: MAR, APR, MAY · SOH3: JUN, JULY, AUG		
Sowing rate	10-15kg/ha	Sowing depth	10-15mm
SFI compatibility	SOH2, SOH3, SAM2, CSAM2	Pack size	20kg
Product information	The components in Protean have been selected to give complementary rooting profiles ensuring the best possible soil structure benefits for a short season cover crop.		
Destruction guidelines	When destroying a multi species cover crop you can choose whatever method best suits your farming system.		

Pre-Pulse spring and summer cover crop

Black oat, Linseed, Berseem clover, Phacelia

Pre-Pulse has been developed with pulse crops in mind, though it's brassica free formulation also lends itself to growers of vegetable brassicas such as cauliflower and broccoli.

Sowing window	SOH2: MAR, APR, MAY · SOH3: JUN, JULY, AUG		
Sowing rate	10-15kg/ha	Sowing depth	10-15mm
SFI compatibility	SOH2, SOH3, SAM2, CSAM2	Pack size	20kg
Product information	The components included in Pre-Pulse have been shown to deliver multiple benefits due to their soil conditioning roots. The legume Berseem clover has never been shown to increase the risk of foot rot in vining peas in BBRO trials.		
Destruction guidelines	When destroying a multi species cover crop you can choose whatever method best suits your farming system.		

Grazer–Pro spring and summer cover crop

Fodder radish, Italian ryegrass, Crimson clover, Leafy turnip

Designed with grazing in mind as the chosen destruction method, this cover crop will provide a decent level of nutrition as well as valuable soil conditioning and nitrogen fixation

Sowing window	SOH2 / SOH3 JAN FEB MAR APR MAY JUN JULY AUG SEP OCT NOV DEC		
Sowing rate	10kg/ha	**Sowing depth**	10-15mm
SFI compatibility	SOH2, SOH3, SAM2, CSAM2	**Pack size**	20kg
Product information	Grazing quality is excellent with this cover crop and when coupled with the soil conditioning roots of fodder radish and nitrogen fixing from crimson clover this is a win-win for growers wanting to make the most of the brief growing window.		
Destruction guidelines	Destroy by grazing before the fodder radish flowers.		

Maximus cover crop

Black oats, Common vetch

The original cover crop solution for grass weed control. When used correctly weed seeds will germinate and soil structure will be improved due to complimentary root systems. Provides an ideal seedbed preparation for direct drilling spring crops.

Sowing window	JAN FEB MAR APR MAY JUN JULY AUG SEP OCT NOV DEC		
Sowing rate	20kg/ha	**Sowing depth**	15-25mm
SFI compatibility	SAM2, CSAM2	**Pack size**	20kg
Product information	Maximus cover crop is the original cover crop solution for problem grass weeds using the “Lamport System”. For grass weed scenarios following OSR or early sowing the lower seed rate should be used. Previous herbicide use should be considered to avoid residual herbicide issues with the cover cop.		
Destruction guidelines	Glyphosate applied 6-8 weeks prior to drilling the following crop where possible followed by a second application to control small grass weeds.		

Sprinter Plus cover crop

Black oats, Phacelia

Sprinter Plus can be tailored for use in grass weed situations or where more extensive ground cover is required by simply adjusting seed rate to suit requirements

Sowing window	JAN FEB MAR APR MAY JUN JULY AUG SEP OCT NOV DEC		
Sowing rate	10-15kg/ha	**Sowing depth**	10-15mm
SFI compatibility	SAM2, CSAM2	**Pack size**	20kg
Product information	Phacelia has a complementary root structure to black oats making Sprinter Plus perfect for improving soil structure. Ideal where concerns about pests such as pea and bean weevil rule out species such as common vetch.		
Destruction guidelines	Glyphosate applied 6-8 weeks prior to drilling the following crop where possible followed by a second application to control small grass weeds.		

Legume Pro cover crop

Berseem clover, Phacelia, Common vetch

A non-cereal cover crop providing a range of root types to provide optimal soil structuring. Nitrogen fixation is possible when sown into warmer soils.

Sowing window	JAN FEB MAR APR **MAY JUN JULY AUG** SEP OCT NOV DEC		
Sowing rate	10kg/ha	**Sowing depth**	10-15mm
SFI compatibility	SAM2, CSAM2	**Pack size**	20kg
Product information	Legume Pro is the ultimate soil conditioning catch crop for use ahead of late sown winter cereals. Check previous herbicide use to avoid impacting the development of Legume Pro.		
Destruction guidelines	Glyphosate applied 1-2 weeks prior to drilling a following winter wheat crop.		

Tillage Plus cover crop

Black oat, Buckwheat, Oil radish

Superb combination of species for improving soil structure

Sowing window	JAN FEB MAR APR **MAY JUN JULY AUG SEP** OCT NOV DEC		
Sowing rate	15-20kg/ha	**Sowing depth**	15-25mm
SFI compatibility	SAM2, CSAM2	**Pack size**	20kg
Product information	The combination of black oats and oilseed radish are ideal for improving soil structure at mid and lower levels. The addition of buckwheat not only gives the benefit of phosphorous scavenging but also improves weed suppression and near surface soil conditioning.		
Destruction guidelines	Glyphosate applied 6-8 weeks prior to drilling the following crop where possible followed by a second application to control small grass weeds.		

Hardy Mix cover crop-PCN reduction

Terranova oilseed radish, Tabor berseem clover, Rocket

Proven reduction of PCN with good levels of soil structure improvement and nutrient capture.

Sowing window	JAN FEB MAR APR MAY JUN **JULY AUG SEP** OCT NOV DEC		
Sowing rate	15kg/ha	**Sowing depth**	15-25mm
SFI compatibility	SAM2, CSAM2	**Pack size**	15kg
Product information	Hardy Mix is designed to reduce PCN levels whilst having a beneficial affect on soil structure. For autumn incorporation sow from the end of July to mid August. For spring incorporation sow from September onwards. Treat as a commercial crop drilling into a clean seedbed and adding N:P:K as required. Up to 90% of any applied nutrients will be available to the following crop.		
Destruction guidelines	Macerate crop ten days after flowering and immediately incorporate into the soil.		

Environmental stewardship mixtures

Agrovista pollen and nectar mixtures

Pollen and nectar mixtures provide a valuable food source for beneficial pollinators such as Bumblebees, solitary bees, butterflies and hoverflies and to encourage the natural predators that feed on crop pests.

This forms part of an integrated pest management approach to crop protection.

When planted near cropped areas the natural predators that these plots encourage can help to reduce the use of pesticides as well as improving overall biodiversity.

Agrovista's pollen and nectar mixtures should be sown into a firm, fine, warm seedbed.

Agrovista pollen and nectar Medium to heavy land

Sowing window	JAN FEB MAR **APR MAY JUN JULY AUG** SEP OCT NOV DEC		
Sowing rate	15kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	AHL1, AB1, CAHL1	Pack size	15kg
Mixture information	Common vetch, Alsike clover, Birdsfoot trefoil, Yellow blossom clover, Red clover, Crimson clover, Yarrow, Oxeye daisy, Black medick.		

Agrovista pollen and nectar Light land

Sowing window	JAN FEB MAR **APR MAY JUN JULY AUG** SEP OCT NOV DEC		
Sowing rate	20kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	AHL1, AB1, CAHL1	Pack size	15kg
Mixture information	Common vetch, Sainfoin, Birdsfoot trefoil, Yellow blossom clover, Red clover, Yarrow, Oxeye daisy.		

Agrovista premium pollen and nectar

Sowing window	JAN FEB MAR **APR MAY JUN JULY AUG** SEP OCT NOV DEC		
Sowing rate	10kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	AHL1, AB1, CAHL1	Pack size	15kg
Mixture information	Common vetch, Sainfoin, Birdsfoot trefoil, Yellow blossom clover, Phacelia, Red clover, White campion, Common knapweed, Musk mallow, Red campion, Yarrow, Borage.		

Mixture composition may change subject to availability

Agrovista grass and wildflower mixtures

These diverse mixtures will provide foraging sites for invertebrates such as bumblebees, solitary bees, butterflies and hoverflies throughout the late spring and summer as well as providing valuable habitat for farmland birds such as Yellowhammers.

Sown into a warm, moist seedbed in late spring or summer the established mixture will produce flowers throughout the late spring and summer months providing a valuable source of pollen and nectar.

The tussocky grasses will also provide a valuable over wintering habitat for invertebrates and small mammals.

Agrovista grasses and wildflowers mixture

Sowing window	JAN FEB MAR **APR MAY JUN JULY AUG** SEP OCT NOV DEC		
Sowing rate	20kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	AB8, IPM2, CIPM2	Pack size	10kg
Mixture information	Strong creeping red fescue, Tall fescue, Smooth stalked meadow grass, Chewings fescue, Red clover, Birdsfoot trefoil, Oxeye daisy, Alsike clover, Yarrow, Ribwort plantain, Yellow blossom clover, Common vetch, Crimson clover, White clover.		

Agrovista premium grasses and wildflowers mixture

Sowing window	JAN FEB MAR **APR MAY JUN JULY AUG** SEP OCT NOV DEC		
Sowing rate	20kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	AB8, IPM2, CIPM2	Pack size	10kg
Mixture information	Slender creeping red fescue, Crested dogs tail, Smooth talked meadow grass, Meadow foxtail, Small Timothy, Birdsfoot trefoil, White campion, Alsike clover, Yarrow, Red campion, Yellow blossom clover, Common knapweed, Musk mallow, Borage.		

Legume fallow mixtures

Legume fallow mixtures provide food for farmland wildlife, such as pollen and nectar for pollinators including bumblebees, solitary bees, butterflies and hoverflies throughout late spring and summer months. As well as chick food for farmland birds between April and July, it can also be a useful part of a rotation aimed at reducing blackgrass populations, where the inclusion of grasses can be useful.

Though rotational the legume fallow mixture must be grown in a way that can be reasonably expected to meet the aims of the action. For this reason, sowing is best done after harvest. Legume fallow mixtures sown in spring must remain in place long enough to meet the aims of the action.

Agrovista Legume fallow mixture with grasses

Sowing window	JAN FEB MAR **APR MAY JUN JULY AUG** SEP OCT NOV DEC		
Sowing rate	25-30kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	NUM2, CNUM2, AB15	Pack size	20kg
Mixture information	Strong creeping red fescue, Smooth stalked meadow grass, Common vetch, Alsike clover, Buckwheat, Phacelia, Lucerne (inoculated), Red clover, Yellow blossom clover.		

Agrovista Legume fallow mixture without grasses

Sowing window	JAN FEB MAR **APR MAY JUN JULY AUG** SEP OCT NOV DEC		
Sowing rate	15-20kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	NUM2, CNUM2, AB15	Pack size	20kg
Mixture information	Common vetch, Buckwheat, Phacelia, Alsike clover, Lucerne (inoculated), Red clover, Yellow blossom clover.		

Winter bird food

These diverse mixtures will provide foraging sites for invertebrates such as bumblebees, solitary bees, butterflies and hoverflies throughout the late spring and summer as well as providing valuable habitat for farmland birds such as Yellowhammers.

Sown into a warm, moist seedbed in late spring or summer the established mixture will produce flowers throughout the late spring and summer months providing a valuable source of pollen and nectar.

The tussocky grasses will also provide a valuable over wintering habitat for invertebrates and small mammals.

Agrovista 1 year winter bird food mixture

Sowing window	JAN FEB MAR APR MAY JUN JULY AUG SEP OCT NOV DEC		
Sowing rate	40kg/ha	Sowing depth	15-20mm
SFI/CSS compatibility	AHL2, CAHL2, AB9	Pack size	20kg
Mixture information	Spring triticale, Spring barley, Spring wheat, Quinoa, Gold of pleasure, Dwarf sunflower.		

Agrovista 2 year winter bird food mixture

Sowing window	JAN FEB MAR APR MAY JUN JULY AUG SEP OCT NOV DEC		
Sowing rate	40kg/ha	Sowing depth	15-20mm
SFI/CSS compatibility	AHL2, CAHL2, AB9	Pack size	20kg
Mixture information	Spring triticale, Spring barley, Spring wheat, Kale, Gold of pleasure, Stubble turnip, White millet, Red millet, Perennial chicory, Green fennel.		

Agrovista Take-all break winter bird food mixture

Sowing window	JAN FEB MAR APR MAY JUN JULY AUG SEP OCT NOV DEC		
Sowing rate	35kg/ha	Sowing depth	15-20mm
SFI/CSS compatibility	AHL2, CAHL2, AB9	Pack size	20kg
Mixture information	Linseed, Spring oats, Quinoa, Gold of pleasure, Dwarf sunflower, White millet, Red millet, Forage rape.		

Agrovista 2 year late sown winter bird food mixture

Sowing window	JAN FEB MAR APR MAY JUN JULY AUG SEP OCT NOV DEC		
Sowing rate	40kg/ha	Sowing depth	15-20mm
SFI/CSS compatibility	AHL2, CAHL2, AB9	Pack size	20kg
Mixture information	Winter barley, Winter wheat, Winter linseed, Phacelia, Buckwheat, Stubble turnip, Kale, Perennial chicory, Green fennel.		

ENVIRONMENTAL STEWARDSHIP

Agrovista autumn sown bumblebird mix

This mixture provides food resources for farmland birds such as tree sparrow and corn bunting as well as a range of nectar feeding insects such as butterflies, bumblebees and solitary bees on arable and mixed farms.

Whilst the mixture is primarily designed to meet the aims of the CSs AB16 and AHW1 SFI action it is also suitable for the AHL2 winter bird food action under SFI.

The mixture will last for two years but as with all mixtures should be grown in a way that can be reasonably expected to meet the aims of the action if it is to be compliant.

Agrovista autumn sown bumblebird mixture

Sowing window	JAN FEB MAR APR MAY JUN JULY AUG SEP OCT NOV DEC		
Sowing rate	40-50kg/ha	Sowing depth	10-20mm
SFI/CSS compatibility	AHW1, AHL2, CAHL2, AB16	Pack size	20kg
Mixture information	Winter triticale, Winter wheat, Gold of pleasure, Fodder radish, Kale, Winter linseed, Alsike clover, Birdsfoot trefoil, Crimson clover, Winter vetch, Phacelia, Lucerne (inoculated).		

Grass margin mixtures

These long-lasting tussock forming grass mixtures are ideal for reducing soil erosion, preventing leaching of surplus nutrients and providing habitat for invertebrates, small mammals and ground nesting birds.

These mixtures are suitable for a wide range of uses from creating beetle banks to providing a hard-wearing headland buffer around cropped areas.

Agrovista grass margin mixture with cocksfoot

Sowing window	JAN FEB MAR APR MAY JUN JULY AUG SEP OCT NOV DEC		
Sowing rate	20-25kg/ha	Sowing depth	10-20mm
SFI/CSS compatibility	AB3, AHL3, CAHL3, AHL4, CAHL4, IGL3, CIGL3	Pack size	20kg
Mixture information	Strong creeping red fescue, Smooth stalked meadow grass, Cocksfoot, Tall fescue, Timothy.		

Agrovista grass margin mixture without Cocksfoot

Sowing window	JAN FEB MAR APR MAY JUN JULY AUG SEP OCT NOV DEC		
Sowing rate	20-25kg/ha	Sowing depth	10-20mm
SFI/CSS compatibility	AB3, AHL3, CAHL3, AHL4, CAHL4, IGL3, CIGL3	Pack size	20kg
Mixture information	Strong creeping red fescue, Smooth stalked meadow grass, Slender creeping red fescue, Tall fescue, Timothy.		

Herbal leys

Key benefits

- Improvements in soil structure and fertility
- Drought tolerance
- Improved animal performance and health
- Good for building soil carbon stocks
- May be suitable for environmental schemes

Drought tolerance

Diverse swards containing a range of grasses, herbs and legumes have a wide range of root types and depths, from shallow fibrous roots to deep penetrating tap roots that can extend to several metres below ground, breaking through compacted soil to reach moisture at levels that ryegrass could never reach.

Additionally; the diverse root structures in herbal leys help to build soil organic matter and for every 1% increase the soils water holding capacity can increase by up to 188,000l per hectare.

Soil health and fertility

Diverse herbal mixtures are made up of multiple stratified layers both above and below ground with the different species growing to different heights within the sward and with varying leaf sizes and shapes. This allows for maximum capture of sunlight whatever the time of day and position of the sun. This in turn means that more CO^2 and water are converted to sugars. Sugar that is surplus to the plants requirements is released into the soil around the roots and is used by the mycorrhizal fungi encouraging them to colonise the area around the roots where they form a symbiosis with the plant which helps the plant to make use of soil nutrients such as phosphorous.

Animal health and performance

Diverse swards containing herbs and legumes benefit livestock performance in several different ways:

- Legumes are protein rich and have the benefit of fixing N
- The deep roots of many of the species bring up essential minerals, trace elements and vitamins from deep within the soil
- Some legumes are bioactive meaning at they contain condensed tannins or polyphenol oxidase. These compounds can protect protein from rumen fermentation meaning that the risk of bloat is reduced, and the protein is degraded in the hind gut where it is used more efficiently by the animal
- Fermentation within conserved forages is also improved and dry matter losses at ensiling are reduced
- Some herbs and legumes have anthelmintic properties, and so reduce parasitic worm burdens
- The diverse nature of the sward tends to drive up utilisation and dry matter intakes

Herbal ley forage analysis
(TechniSward medium to heavy land)

	Fresh (May 2023)	Silage (August 2023)
Dry matter (%)	18.8	30.4
Crude protein (%)	18	16.1
NDF (%)	49.2	44.2
Sugar (%)	12.2	4.4
D Value	70.2	69.00
ME (MJ/kg DM)	11.00	11.30
Oil-A (g/kg)	21	41

The deep roots of many of the species bring up essential minerals, trace elements and vitamins from deep within the soil

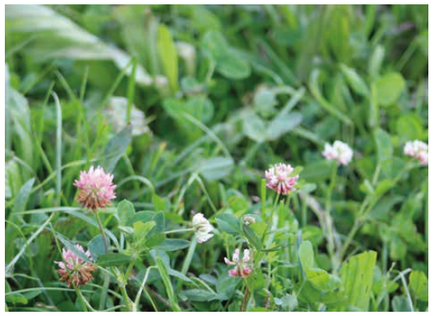
TechniSward herbal leys

TechniSward Herbal medium to heavy land

- TechniSward herbal medium to heavy land is designed to work across a wide range of growing and soil conditions
- The grasses and legumes have been selected to provide optimum performance in both grazing and cutting scenarios
- Chicory is included at a low level to reduce the issues associated with ensiling whilst still taking advantage of its animal health and soil improving benefits

Sowing window	JAN FEB MAR **APR MAY JUN JULY AUG** SEP OCT NOV DEC		
Sowing rate	30-35kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	GS4, SAM3, CSAM3	Pack size	20kg
Mixture information	Lofa Festulolium, Nolwen (T) intermediate perennial ryegrass, Donta soft leaved cocksfoot, Comer Timothy, Laura meadow fescue, Red clover, Alsike clover, Birdsfoot trefoil, Plantain, Sheeps burnet, Sheeps parsley, Black medick, Yarrow.		

TechniSward Herbal light land



- TechniSward's light land herbal mixture contains species specifically selected to work well in drought prone soils.
- Fojtan festulolium with its tall fescue genetics is deep rooting and incredibly drought tolerant whilst its perennial ryegrass genetics ensure excellent grazing quality.
- Sainfoin and lucerne are light land specialists that fix nitrogen and provide high quality protein and health benefits.

Sowing window	JAN FEB MAR **APR MAY JUN JULY AUG** SEP OCT NOV DEC		
Sowing rate	30-35kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	GS4, SAM3, CSAM3	Pack size	20kg
Mixture information	Fojtan grazing festulolium, Nolwen (T) intermediate perennial ryegrass, Donata soft leaved cocksfoot, Comer Timothy, Laura meadow fescue, Red clover (Altaswede), Sainfoin, Birdsfoot trefoil, Lucerne (inoculated), Plantain, Sheeps burnet, Sheeps parsley, Yarrow.		

TechniSward Herbal sheep grazer

- Formulated to eliminate the risk of poor ovulation rates associated with the phytoestrogens found in red clovers.
- Contains Birdsfoot trefoil and chicory for their ability to reduce parasitic worm burdens.
- The grasses used in this mixture have been chosen for their excellent grazing on the shoulders of the year.
- Fojtan festulolium and Donata cocksfoot are drought tolerant, palatable and have excellent digestibility.
- Optimum sowing rate 13kg/acre (32kg/ha).

Sowing window	JAN FEB MAR **APR MAY JUN JULY AUG** SEP OCT NOV DEC		
Sowing rate	30-35kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	SAM3, CSAM3	Pack size	20kg
Mixture information	Fojtan grazing festulolium, Galgorm intermediate perennial ryegrass, Agaska intermediate perennial ryegrass, Bowie Late perennial ryegrass, Thegn (T) late perennial ryegrass, Comer Timothy, Laura meadow fescue, Grazing white clover blend, Plantain, Sheeps burnet, Sheeps parsley, Birdsfoot trefoil.		

TechniSward Herbal overseeding mixtures

These herbal overseeding mixtures have been designed for topping up existing herbal leys across most soil types to extend their productive life and ensure compliance.

As with all overseeding success is reliant on good practice. Overseeding should take place in mid to late summer as the growth rate of existing grasses slows. Seed to soil contact is critical so using a slot seeder and rolling is strongly advised.

Sowing window	JAN FEB MAR **APR MAY JUN JULY AUG** SEP OCT NOV DEC		
Sowing rate	8-15kg/ha	Sowing depth	15-20mm
SFI/CSS compatibility	GS4-when used to top up an existing herbal ley, SAM3, CSAM3	Pack size	20kg

Mixture information	Sheep + chicory	Sheep no chicory	Red clover cutting	Red clover grazing
Perennial ryegrass (T)	✓	✓	✓	✓
Timothy	✓	✓		✓
Festulolium	✓		✓	
Sheeps burnet	✓	✓	✓	✓
Yarrow				✓
Plantain	✓	✓	✓	✓
Chicory	✓			
Sheeps parsley		✓		
White clover	✓	✓	✓	✓
Birdsfoot trefoil	✓	✓		
Red clover			✓	✓ (Altaswede)

Agrovista herbal leys

The Agrovista Stewardship herbal ley is designed to deliver all the soil health benefits that these leys are capable of but is not as productive in livestock terms as the TechniSward herbal leys and so is principally aimed at arable rotations.

The short term cut and graze mixture is capable of 3 years full production and could be aimed at livestock farmers looking for a cheaper rotational mixture without compromising on forage yield and quality or at arable farmers looking for a simpler mixture with more rapid establishment.

Agrovista Stewardship herbal ley

Sowing window	JAN FEB MAR **APR MAY JUN JULY AUG** SEP OCT NOV DEC		
Sowing rate	30-35kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	GS4, SAM3, CSAM3	Pack size	14kg
Mixture information	Meadow fescue, Tetraploid intermediate perennial ryegrass, Cocksfoot, Tall fescue, Strong creeping red fescue, Red clover, Alsike clover, Sainfoin, Birdsfoot trefoil, Plantain, Sheeps burnet, Sheeps parsley, Yarrow.		

Agrovista Short term herbal cut and graze

Sowing window	JAN FEB MAR **APR MAY JUN JULY AUG** SEP OCT NOV DEC		
Sowing rate	30-35kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	SAM3, CSAM3	Pack size	20kg
Mixture information	Lofa/Merlin Festulolium, Hybrid ryegrass, Donata soft leaved cocksfoot, Red clover, Alsike clover, White clover blend, Plantain, Sheeps burnet, Sheeps parsley.		

TechniSward Maize undersowing and post harvest mixtures

Taking a more holistic approach to maize growing can drastically reduce the environmental impact of the crop. Cover cropping maize ground reduces soil erosion, protects the soil profile and reduces nutrient leaching and one of the most reliable ways to establish a cover crop is by undersowing the growing maize crop.

There are now a number of options for maize growers within the Sustainable Farming Incentive including SAM2 multi-species winter cover crop, CSAM2 multispecies winter cover crop for growers entered into the expanded 2024 offer and SOH4 winter cover crops for maize, also within the expanded offer. All these options can be undersown with the growing crop. Agrovista's range of maize undersowing and postharvest mixtures offer flexibility around sowing, are fully compliant for the relevant SFI actions when grown in a way that meets the aims of the action and come backed by many years of research and experience.

TechniSward SoilMax

Slower to establish, SoilMax is the ideal undersowing mixture for sowing at the same time as the maize crop. Extensive trial work has shown that there is little if any yield check associated with this mixture. The deep rooting nature of the grasses improve and stabilise the soil structure, mop up excess nutrients and protect the soil surface over winter.

Sowing window	At time of maize sowing		
Sowing rate	7.5-12.5kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	SAM2, SOH4	Pack size	20kg
Mixture information	Fojtan festulolium, Tower tall fescue, Donata soft leaved cocksfoot.		

TechniSward SoilMax Plus

SoilMax Plus exhibits all the benefits of the original SoilMax but has the added clover to fix nitrogen and further help soil stabilisation due to the clover's stoloniferous nature.

Sowing window	At time of maize sowing		
Sowing rate	7.5-12.5kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	SAM2, CSAM2, SOH4	Pack size	20kg
Mixture information	Fojtan festulolium, Tower tall fescue, Rivendel small leaved white clover.		

TechniSward EnviroMax

Designed to be sown when the established maize crop is at the 4-6 leaf stage, EnviroMax is faster to establish than SoilMax meaning that it has the chance to establish before the maize canopy closes.

Sowing window	At 4 to 6 leaf stage		
Sowing rate	7.5-12.5kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	SAM2, SOH4	Pack size	20kg
Mixture information	Fojtan festulolium, Twymax (T) late perennial ryegrass, Donata soft leaved cocksfoot.		

TechniSward EnviroMax Plus

The common vetch in EnviroMax Plus acts as an efficient weed suppressor as well as providing soil structuring with its roots and improved stabilisation. Any vetch that grows high enough to be harvested with the maize will provide a boost to the protein content of the maize silage.

Sowing window	At 4 to 6 leaf stage		
Sowing rate	7.5-12.5kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	SAM2, CSAM2, SOH4	Pack size	20kg
Mixture information	Twymax (T) late perennial ryegrass, Donata soft leaved cocksfoot, Common vetch.		

FastMax

Designed to be sown at the 4 to 6 leaf stage, this mixture is fast to establish before the canopy closes and slows growth down but then grows away again quickly once the maize is harvested.

Can provide an early silage cut the following spring if ground conditions allow, though care should be taken to avoid soil contamination.

Sowing window	At 4 to 6 leaf stage		
Sowing rate	7.5-12.5kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	SAM2, SOH4	Pack size	20kg
Mixture information	Fox Italian ryegrass, Lofa festulolium, Donata soft leaved cocksfoot.		

After maize cover crop

This fast-establishing post harvest cover crop can provide late winter grazing or even an early silage crop the following spring. As with FastMax soil contamination should be avoided.

Sowing window	Post harvest up to mid-October		
Sowing rate	30-37kg/ha	Sowing depth	10-15mm
SFI/CSS compatibility	SAM2, CSAM2, SOH4	Pack size	20kg
Mixture information	Westerwolds ryegrass, Winter vetch.		

agrovista
seeds

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