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Technical

OSR alternatives

With a harvest that has been dismal for most and a rotation that's gone out of sync, the decision to stop growing oilseed rape further complicates matters. *CPM* looks at the possible options to fill the gap and get cashflow back on track.

By Lucy de la Pasture

Getting the rotation back on track is the best way to get farm incomes back up for harvest 2021, says Jock Willmott, specialist in crop management, arable benchmarking and machinery restructuring at Strutt & Parker.

Many oilseed rape growers have taken the decision that the risk in growing the crop is no longer balanced by its reward. Looking at the results of harvest 2020, that's the right decision where cabbage stem flea beetle (CSFB) have been a problem, he says.

"The difficulty with managing CSFB is that even though adult feeding damage can be mitigated to some extent by early sowing, this provides more opportunity for the larvae to cause damage. In East Anglia we've just experienced the first spring where larvae numbers were so severe, crops never grew away in the spring and eventually either killed plants in parts or whole fields. By this time 60% of input cost had already been spent."

Additional problems

But the knock-on from CSFB damage isn't just financial, there's an agronomic cost as well, he points out. "Inevitably crops with CSFB are patchy which leads to additional problems with grassweeds, soil structure as well as poor yields."

Strutt & Parker has been involved with analysis of data for AHDB's Farmbench and in 2019 the gross and net margin figures for OSR still stood up well in comparison with the alternatives, says the company's head of farming, Will Gemmill.

"Data from 350 farms when broken down into the top 25%, middle 50% and bottom 25% indicates that for most growers, OSR still provided good margins for all but the bottom quartile of growers, bearing in mind the Farmbench figures are probably based on the top 50%."

There is some data that suggests OSR yields across the UK averaged at 3.22t/ha, but where flea beetles were problematic yields were more likely in the region of 2.0 -2.8t/ha, he says.

"This harvest yields of c.2.5t/ha change the dynamics considerably and many more growers will be pushed into the bottom 25% gross margin range. So if you're at a high risk of CSFB damage then OSR isn't looking so good," he says.

With grain stores that are far from bursting at the seams this harvest, cashflow is something many growers will have concerns about. Jock is fully expecting cash to reach a critical level after Christmas for many.

"2020 has been a very tough year but will be slightly held up by the harvest of 2019. Getting the rotation back into some sort of order will give growers the best crack at getting income back for 2021," he comments.

Losing OSR from the rotation presents a number of problems. "It was early to harvest so spread the workload and provided a break before growing a first winter wheat, which is the crop that drives profit on the farm."

Looking at the options that could replace it, he suggests growers don't rush into something new without experience. "There will be compromises to make as another crop isn't going to have the advantages of OSR, most other break crops are late to harvest, for example. The most important thing is not to gamble with crop performance as farm incomes need stability in 2021."

Many growers will have a legacy of cereal seed on the farm that wasn't planted last autumn, so this will dictate some planting decisions. "Winter barley

OSR alternatives

OSR gross and net margins			
	Top 25%	Middle 50%	Bottom 25%
Farmbench Gross margin £/ha (350 farms)	1,003	709	393
John Nix Pocketbook (2020) for UK Gross margin £/ha	796	636	463
Farmbench Net margin	485	183	-140

Source: AHDB Farmbench 2019 data and John Nix Pocketbook (2020)

was a useful crop in the rotation to provide an early entry for OSR, but it historically has lower gross margins than winter wheat, with grain prices typically £20+/t lower." The Farmbench GM (middle 50%) for winter barley in 2019 was £691/ha compared with winter wheat at £942/ha. Of the cereal crops oats and rye are both better placed to enhance

A clean start for winter beans

Winter beans are an attractive alternative break crop to OSR in terms of gross margin output, weed control and as an entry to first wheat, especially on heavier soils, says Hutchinson's agronomist Mike Thompson.

Growers disillusioned by years of poor oilseed rape establishment, due mainly to flea beetle damage, could look to include break crops such as winter beans and peas in their arable rotation, while keeping a level of OSR too, he suggests.

Winter beans drilled in October allow growers more time for stubble management for grassweed control, have lower growing costs and currently offer attractive forward prices of over £220/t.

"Winter beans are good for heavier soils and the later drilling, starting around mid-Oct, helps with stale seedbed management, and allows nature and the weathering process to break the soils," he says. "They can tolerate some weeds but any that aren't taken out in the winter and survive through to spring are much harder to

Provided weed programmes start early so competition is removed, winter beans can produce a gross margin potential equal to a second wheat.



control with the limited post-emergence herbicide options available, primarily bentazone," says Mike.

farm incomes, he suggests. The rye market has opened up in recent years, explains Will. "The Ryvita contracts have been a closed door for some time but there are now pig feed contracts available. Rye bisects winter barley and winter wheat in terms of margin and can be grown on the same land that suits barley but with a better return. It also works well in the rotation as a second cereal. "On 2019 figures, oats

compete well with other break

crops (GM £740/ha) and even

though a cereal it still provides

a bit of a break from take-all,"

says Will. He adds that it's a

crop that's dependent on

obtaining a milling contract

but there was a record area of

"Growers either like growing beans or they hate them. But they aren't difficult to grow and provided weed programmes start early so competition is removed, they can produce a gross margin potential equal to a second wheat. Where beans have been grown as an entry to first wheat, we regularly see yields of over 10t/ha.

"Poor yield in beans is often a result of forced drilling conditions," he explains. "They need to be drilled in good conditions and not just muddled in. The pre-emergence application is critical because a clean crop going into the winter has a better chance of reaching full potential. Weeds that have been allowed to establish can knock yields by as much as 1.5t/ha."

In previous seasons a pre-em contact herbicide application of diquat has been applied, but with diquat now gone and only glyphosate left, timing of the application becomes more critical. "The effects of diquat were felt within a week of application, whereas glyphosate can take up to 12 days to remove weed pressure," he says.

"It's so important to get the crop clear of weeds in the early stages of crop establishment and pre-em application of the residual herbicide Centium (clomazone) gives beans the best chance of establishing well. Once the winter weed burden is under control on medium to heavy land, there's a reduced chance of a spring weed flush.

Jock Willmott says that the most important thing is not to gamble with crop performance as farm incomes need stability in 2021.

oats planted in 2020. Jock warns that oats aren't for everyone. "There's precious ►



Mike Thompson believes growers cutting back on their OSR acreage should consider winter beans, particularly on heavier land.

"The most cost-effective pre-em herbicide programme is based on Centium in tank mix with pendimethalin, imazamox, carbetamide and propyzamide, ideally sprayed within 3-4 days of drilling," he says.

"But the window is before emergence. This should give excellent control of cleavers, chickweed, shepherds purse, red dead nettle and activity on groundsel, speedwell and sow thistle."

Because Centium is an encapsulated suspension it makes the active very stable on the soil surface, which leads to a controlled rate of release — remaining active for up to three months — weed control is enhanced, he adds. In-field observations have also shown that when clomazone is mixed with carbetamide and propyzamide, it can sensitise and enhance blackgrass control.

OSR alternatives



A popular option this season has been to apply for AB15 – two-year sown legume fallow – under CSS, which pays £522/ha (GM £437/ha), explains Will Gemmill.

► little available to control blackgrass or brome in oats but it is a crop that fits in well in a combinable crops rotation, produces straw which has value and is reliable on heavier land."

Forage maize and forage rye for AD plants can also perform well financially, providing either a fixed rental income or per tonne of dry weight delivered, which is the more lucrative of the two, says Will.

"If maize is grown for AD then it's important to make sure it's harvested by

frogtier



Source: AHDB Farmbench data, 2019 harvest

the end of Sept/first week of Oct so that a decent crop of winter wheat can go in behind it."

There's a perception that spring break crops aren't performing as well as they did five years ago, and Jock believes that has a lot to do with the weather patterns the UK is now experiencing. "Spring oats in particular need moisture retentive land to do well. If they run out of moisture, then it's impossible to get the required specific weight." With the exception of spring barley, the other traditional spring crops aren't proving to be very reliable, says Will. "Spring linseed can be very variable and the performance from spring beans has become more erratic in recent years, with winter beans having the more stable GM."

Sugar beet is a crop that many of Strutt & Parker's farms have either expanded acreage or branched into in recent years. "British sugar has extended the range crops

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OSR alternatives

can be grown from 40 miles to 55 miles from the factory. We've found yields of 80+t/ha are achievable for crops lifted at the end of Sept/first week of Oct, which provides a good entry into wheat and a GM of £850/ha," he says.

Virus yellows

"The impact virus yellows will have on the crop remains to be seen and is likely to become more of an issue. In France yields have been impacted by 10-20t/ha."

Jock can see the same thing happening in sugar beet as has happened in OSR since the withdrawal of the neonicotinoids. "In 2019 we could spray effectively to control aphids but this season it has been dismal. It's notable that France has said it will apply for a derogation to use neonics in 2021 when they were the country that pushed for the ban."

Virus issues aside, Will believes sugar beet can work well as an alternative crop in the rotation if you can get a contract and advances in drilling and harvesting technology now mean it's possible to grow the crop on reasonably bodied soils.

Most other crops fall into the niche category which need a contract, says Jock. "Borage is one that is paying well but it's very difficult to get a contract to grow it. The seed realises £3000/t and the crop yields 0.25-0.4t/ha."

Soya is a crop that both consultants describe as 'a watching brief'. Neither of them discount soya completely but see the late harvesting of the varieties currently available as a major drawback.

"Naked oats are another option and are achieving £45/t over feed wheat. Canary seed is a crop that doesn't require a lot of input and millet is another possibility. Even though it's harvested relatively late (end of Sept), there's still a likelihood that a first wheat can go in after it. Volunteers can be an issue, but these can be easily controlled with graminicides. Harvesting can be more of a challenge since the loss of diquat," he says.

A popular option this season has been to apply for AB15 — two-year sown legume fallow — under the Countryside Stewardship Scheme (CSS), which pays £522/ha (GM £437/ha), explains Will.

"It's now too late to apply for the coming year, which may be over-subscribed in any case. Where machinery costs can be offset (eg contract farming) AB15 and, to some extent extra fallow, really comes into its own. A possible rotation would be AB15,



Oats had a resurgence in 2020 and could prove a good option for some farms if milling contracts are available.

AB15, wheat, oats, wheat.

"The financials of the CSS won't stack up for all farms and the timing of payments also has to be taken into account. But there are good environmental, financial and agronomic reasons to consider including whole field environmental crops into the arable rotation now under CSS, particularly as the farming system will need to deliver environmental and economic returns under the forthcoming Environmental Land Management scheme." ■

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