

Establishment path to crop success



brought in over-the-weighbridge yields as high as 6.5t/ha from their silty loam with chalk ground.

"The consistent 4t/ha-plus we're getting works for us," says Rachel. "Wheat and potatoes are our main earners, but our break crops need to pay their way with the least possible risk. We've extended our rotation in recent years, adding vining peas and winter barley. Like the potatoes, we're now only growing OSR every six or seven years."

Hybrid barley

"The advent of hybrid barley has made the crop economic here, giving us a better OSR entry than we ever had with wheat. We now have the flexibility to sow as early as the second week in Aug if conditions are right. Even where we incorporate chicken muck from a local broiler we generally have time for a stale seedbed ahead of sowing."

While blackgrass isn't a problem on most of the partnership's ground, pre-planting glyphosate ahead of the OSR is important in tackling the barley volunteers that are so competitive.

"Success with OSR is all about getting the crop away rapidly and reliably," stresses Andy Murr.

"This has become noticeably more challenging since the loss of neonics. As part of our recipe for the most consistent establishment, ensuring barley volunteers don't suck-up all the N and out-compete our OSR is vital."

Barley stubbles ahead of the OSR are typically worked to 125-150mm with a Väderstad TopDown to create enough loose

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Technical OSR improvement

Improving oilseed rape performance isn't necessarily about rapid or radical change. Indeed, as *CPM* finds out from two growers at opposite ends of the country, sustained progress is more about steadily doing things even better.

By Rob Jones

The Scholes family on the Yorks Wolds and Richard Budd on the Weald of Kent grow oilseed rape in very different situations, on very different soils and with very different systems. But their approaches to improvement are remarkably similar.

Both have focussed their efforts over the past 10 years on better understanding the crop and its needs; exploring what works and doesn't work in making the most of it under their own circumstances; and continually developing their regimes to build on the former while minimising the latter.

Across the 100-120 ha of OSR grown annually at Fimber Nab Farm near Driffield and on a variety of local contracts, five-year average yields are running at 4.25t/ha. What's more, manager Andy Murr and Rachel Scholes — who runs the 870ha business with her mother, Maureen — have



Andy Murr and Rachel Scholes (pictured above) have brought in over-the-weighbridge yields as high as 6.5t/ha from their silty loam with chalk ground.

soil for the best early taproot development. Then vigorous, fast-developing hybrids are sown at 45 seeds/m² with a standard coultter Väderstad Rapid as soon after the first week in Aug there's sufficient moisture.

"DK Extrovert has been central to our OSR progress," Rachel explains. "We've grown it from the day the variety first became available and it's never let us down. We really appreciate its vigour in the spring as well as the autumn."

"The 6.5t/ha we harvested in 2011 underlined its potential on our ground when the conditions are right. We try a new variety alongside it every year and until the arrival of DK Expedient we couldn't find anything to match the Extrovert. We're growing 34ha of the new variety this season and it's really impressing us with its even greater get-up-and-go."

"We haven't seen any yield reduction following the loss of neonics," adds Andy. "We routinely need two or three sprays to keep on top of the flea beetle though. And we've increased our seed rate from the 35 seeds/m² we used to sow."

"Previously we sowed in bands too, but we've found we get higher yields from conventional sowing here. Drilling into soil previously set up with the Topdown followed by a single rolling gives us a nice even sowing depth and first class seed-to-soil contact."

"It also means the best conditions for pre-emergence herbicide activity to tackle the broadleaf weeds that always seem to be a problem," he points out. "We spray as soon as we can after rolling, including



DK Expedient is the first variety they've found to match DK Extrovert, and impresses with its even greater get-up-and-go.



Wheat and potatoes are the main earners at Fimber Nab Farm, but break crops need to pay their way with the least possible risk.

30kg/ha of liquid N in the tank wherever crops haven't had any chicken muck.

"We follow up with a graminicide for the barley volunteers, then go back in with a dose of prothioconazole in early Nov to tidy up any phoma and give a head start to our light leaf spot programme. We include extra trace elements — mainly boron — at this stage, together with Nutri-Phite PGA as an extra growth boost."

Spring priority

Little and often feeding is the priority in the spring. While Andy and Rachel never want to starve their crops, they don't want to lose nutrients through their free-draining ground either. With an average pH of 8.0, they also need to guard against mineral lock-up.

They use an N Sensor to target their main two liquid applications carefully to crop need on the Absolute N regime, having applied a blanket first split of 40kgN/ha balanced with sulphur as soon as spring temperatures begin to build.

With little local threat from LLS and a specialist PGR only used with 'monster crops', tebuconazole is generally employed to steady the crop at stem extension, with extra trace elements — especially boron — and Nutri-Phite PGA. A single flowering spray of boscalid is the norm with a close eye kept out for seed weevil in what is a local hotspot for the pest and a specialist pyrethroid included wherever any are detected.

"We hold off as late as we dare with our desiccation to give as much time for pod fill as we can, taking advantage of the extra insurance Dekalb pod shatter resistance gives us," Rachel concludes. "It's another thing we've learnt through experience, and all part of doing everything we can to allow the crop to fulfil the potential we know it has."

Better understanding of the crop has enabled Richard Budd to markedly improve

the reliability as well as the performance level of 100-120ha of OSR he also grows as part of his 1100ha combinable cropping business on and around the High Weald near Hawkhurst in Kent.

Stevens Farm yields have long been on the high side of 4.5t/ha from ground that has grown little OSR in the past. But he's been able to push them to an even healthier and far more consistent 5t/ha in recent years. At the same time, he's ensured they deliver first class blackgrass control as a crucial break in his 6-7 year winter cereal-based rotation.

Serious cruciferous weed problems haven't stood in the way of this either. Indeed, last year the 60ha of Clearfield OSR he grew delivered exactly the same 5t/ha average as his 40ha of conventional OSR. And at 5.7t/ha, the 5.5ha ADAS YEN crop of his preferred Clearfield variety, DK Imperial CL, was the fifth highest yielding in the whole 2018 competition.

"Resistant blackgrass and the verticillium wilt threat make a wide rotation essential for us," he explains. "We keep things flexible on a field-by-field basis but we won't grow OSR more frequently than every five years."

"We sow well into Sept at 70 seeds/m² — even with hybrids — and in 33cm bands through a Sumo DTS strip-till drill. This gives us the time to glyphosate off a good stale seedbed flush of cereal volunteers even if ▶



Little and often feeding throughout the spring at Fimber Nab ensures an even crop of Extrovert at flowering.



Richard Budd finds the cross-cutter discs on his Carrier just the job for stale seedbed preparation ahead of OSR.

► the OSR follows second wheat rather than barley. It also gives us the least seedbed blackgrass germination and the most competitive crop.

"It's taken us time to get things right with the DTS. But we've sorted out the best settings for our ground to get the consistently even depth of sowing we want. Working to 150-200mm, the loosening legs provide a good link to the drainage, and the Dutch coulters we use sweep away then replace the chopped straw we find such a valuable surface mulch."

Strip-till drilling for the past six years has improved the resilience of Richard's soils no end, he says, while always running in the same tramlines with a 30m CTF approach means he rarely has much in the way of compaction to deal with these days.

Having tried various straw rakes over the years, he's found the ideal solution in a Väderstad Carrier with cross-cutter discs. Operating at just 10-15mm, it scuffs the entire soil surface to encourage the best volunteer growth for spraying-off the day before drilling.

Contour rolling with slug pelleting



At 5.7t/ha, the Clearfield variety DK Imperial CL was the fifth highest yielding in the whole ADAS YEN 2018 competition.

immediately after drilling completes the establishment regime. DAP is applied at 30kg/ha at the cotyledon stage — only once Richard knows he has a crop. For the same reason pre-em herbicides are firmly off the agenda.

"We set our OSR up as well as we can at drilling and give it everything it needs to fulfil its potential," he insists. "But we're only prepared to spend on inputs when we have a crop that deserves them."

Right track

"People think we're nuts not starting to drill until the second week of Sept, sowing a hybrid at 70 seeds/m² in bands and holding-off on early inputs. However, last year's Clearfield YEN crop proved to us that we're on the right track. It wasn't sown until 22 Sept and it still out-performed all but four of the other crops in the competition."

"Later sowing has also enabled us to avoid any problems with flea beetle at a time when so many growers round here have been having serious issues. For us, it's all about dealing with volunteers and setting up the ground well enough beforehand, then drilling thickly once the conditions are right. Vigorous varieties take off like a rocket, get their feet down well and compete aggressively with both weeds and pests."

"Cleranda (imazamox+ metazachlor) in early Oct does a great job in cleaning out the charlock, runch and hedge mustard that would otherwise make it impossible to grow OSR on much of our ground and limit us to winter beans as a cereal break. Wherever we see a good flush of blackgrass coming through Centurion Max (clethodim) in late Oct is very valuable in keeping on top of it until we go in with the Kerb (propyzamide) in mid-Dec when it has the best residuality."

With rather large, thick crops coming out of the winter, Richard Budd also takes a little and often approach to fertiliser, applying two splits of sulphur-N followed by a final application of urea at yellow bud. Unlike the Scholes Partnership, though, he routinely employs Caryx (mepiquat chloride+ metconazole) for growth regulation at early stem extension to avoid the 2m+ tall crops that would otherwise lose yield through leaning in the summer winds, even if they didn't lodge.

Trace element nutrition is an important part of his programme too, but only to meet actual need identified through regular tissue testing. Naturally acidic soils mean regular liming is essential and he's well aware of the extent to which this can cause availability issues.

"Continual improvement is essential for

us," insists Richard. "The YEN competition is really valuable in benchmarking what we do and highlighting areas like rooting depth, sulphur and magnesium nutrition we may be able to further fine-tune."

"Another thing it's confirmed is the importance we've always attached to late desiccation. We didn't go in with the glyphosate until 5 July last season by which time the top of the crops had been brown a good while and most others around us had been sprayed for at least a week. By waiting until the stems underneath are beginning to senesce we give ourselves valuable extra days of grain fill which certainly show through in the yields we achieve." ■



Holding off as late as they dare at Fimber Nab with the desiccation, allows plenty of time for pod fill.

OSR Improvement

In this latest series, Dekalb is once again working with CPM to share the widest possible experience of growers and their agronomists across the country in improving winter oilseed rape performance.

This is part of Dekalb's role in providing trusted support to OSR growers and their agronomists that goes well beyond the most robust and dependable varieties that have always been the company's trademark.

We very much hope you'll find this series valuable in fine-tuning your OSR improvement efforts to secure the most consistent returns from the crop both financially and rotationally.

