

Understanding the benefits of growing HEAR

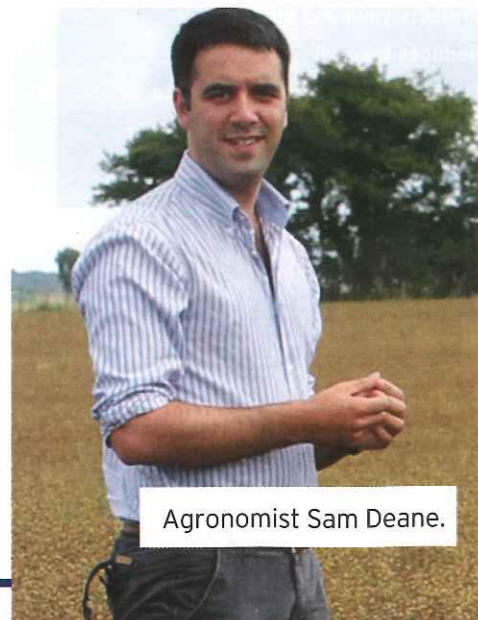
High erucic acid oilseed rape offers a considerable premium over conventional double low varieties - yet many growers remain reluctant to grow it.



If a merchant offered £35/tonne more for your oilseed rape, most farmers would jump at the chance. Yet that is exactly what high erucic acid oilseed rape (HEAR) provides - so why aren't more growers opting for this profitable crop?

According to Nigel Padbury, seeds and marketing manager at Premium Crops, the main reason is that many farmers believe HEAR suffers from poor yields and requires specialist management - but that could not be further from the truth.

"HEAR is the same botanical species as double low (OO) rape, so it has exactly the same growing benefits, faults and requirements of a OO crop," he says.



Agronomist Sam Deane.

Premium Crops is the only company in the UK to host a network of independent HEAR variety trials, from which it draws together a descriptive list similar to the AHDB Recommended List. In fact, the firm screens for a wider range of diseases in its trials, including verticillium wilt and downy mildew.

Five trial sites compare HEAR varieties against a control of the OO varieties DK Cabernet and PR46W21, plus the well-established HEAR variety Palmedor. In over-year results (2012-2016), the gross output of the HEAR varieties was topped by Ergo at 106% of the control, Rocca at 100% and Palmedor at 98%.

"The range of OO varieties on the RL yield between 94% and 110% of the control, with HEAR varieties ranging from 98% to 106%," says Mr Padbury. "It's basically the same crop."

Height, stem stiffness and disease ratings are all very similar, too, so the crop requires the same agronomic management as OO varieties.

Agronomist Sam Deane says: "Seed rates, fertiliser and fungicide programmes are exactly the same; if you can grow OO oilseed rape you can grow HEAR." The neonicotinoid ban means growing any oilseed rape is more challenging than it used to be, particularly in eastern coun-

ties where flea beetle is rife. "The key is to get the rape up out of the ground as early as possible, and choose a variety with good autumn vigour."

Mr Deane recommends drilling rape-seed with minimum tillage to preserve sufficient moisture in the ground, and emphasises the importance of good soil-to-seed contact. "The optimum time to drill is in mid to late August."

Some agronomists recommend drilling at higher seed rates to combat potential damage caused by flea beetles, but Mr Deane disagrees.

"I'm not sure how effective that is - the beetles may take the whole crop anyway, or none of it. Oilseed rape has tremendous branching ability, and it's more important to sow into optimal conditions and get it up and growing quickly."

He suggests placing fertiliser in the root zone and says there may be some benefit to sowing a companion crop like vetch or clover at the same time. "It provides some camouflage, and fills in any gaps in the crop which puts off pigeons - plus you get some nitrogen fixing later on."

When choosing what varieties to drill, Mr Padbury says it is important to consider soil type and fertility. "If you have a strong, fertile soil go for a shorter variety



It's still oilseed rape, it's just worth more

Andrew Probert

to reduce the risk of lodging - on lighter soil you can safely have a taller variety."

Palmedor has long been the go-to HEAR variety, as it is about average for height, disease resistance, and maturity, explains Mr Padbury. "It's a good reliable variety to start off with in all locations and all circumstances."

Bred by the same breeder in Germany is the newer variety Ergo. "This is a shorter variety which grows well on strong land - and with a gross output of 106% it has the potential to exploit more fertile soils."

Rocca is bred by the only other HEAR breeder in Europe, based in France. "It

is a bit taller and therefore better suited to medium to lighter soils," says Mr Padbury. The candidate variety PH402 is from the same stable, but is much shorter, with good vigour.

It is good to know that there are candidates in the pipeline, he adds. "There are about 25,000ha of HEAR planted and growers tend to stick with it because of the premium - about 80% exclusively grow HEAR with about 20% growing other OO and HOLL varieties."

When it comes to harvest, farmers should treat HEAR the same as other varieties; it can be sprayed off, swathed, or left to ripen naturally, says Mr Deane.

"HEAR doesn't have pod shatter resistance so if you are growing on exposed or windy sites it may be beneficial to use a pod sealant."

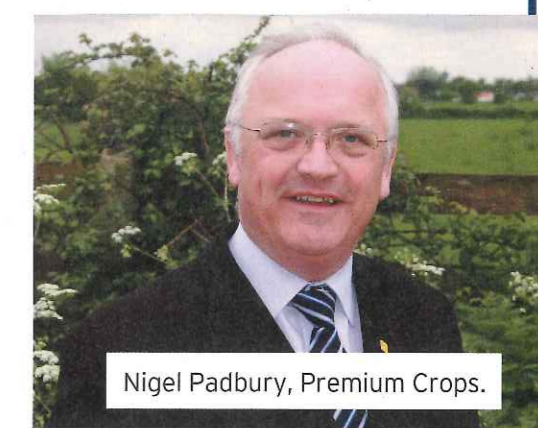
However, it is vital to keep the crop separate from non-HEAR varieties after harvest, to ensure both crops meet the specified contract, warns Mr Padbury. "Recent stories about elevated erucic acid levels in OO crops have caused some people to erroneously blame HEAR crops for the contamination." Of course, contamination can happen in store if crops aren't kept separate, but if managed correctly it shouldn't happen in the field.

"Elevated erucic acid levels in OO crops can occur from a multitude of sources - not least charlock and wild radish," says Mr Padbury. "In over 20 years of HEAR contract production we are not aware of any grower moving from HEAR to OO who has then had an issue with the quality of his OO when presented to the crushers."

Of course, volunteers can occur in any crop, so it is important to manage these, he warns. "To support our growers we commissioned the University of Hertfordshire to review all of the science on managing oilseed rape volunteers, which has just been published."

The review, by Dr Doug Warner and Prof Kathy Lewis, reveals that by follow-

ing good agricultural practice; managing weeds and not growing crops in too tight a rotation, it is possible to consistently maintain less than 1% impurities.



Nigel Padbury, Premium Crops.

"HEAR crops should be followed by wheat and the subsequent rotation should ideally contain a row crop such as potatoes or sugar beet, and/or a spring sown crop," says Mr Padbury.

When it comes to marketing HEAR, it is important to have a contract before drilling it. "The supply of speciality crops involves a carefully managed balance between supply and demand to ensure that growers can consistently receive a good price and end users are assured of a regular supply," says Andrew Probert, managing director of Premium Crops.

"All of our contracts are 'produce of an area' so there are no minimum tonnages or risk of default. We are committed to take everything the grower produces."

Farmers can of course choose when they want the crop to be moved, and receive a £35/t premium over the standard rapeseed price; which can be fixed at any time or set through a pool, as well as the usual FOSFA premiums and deductions for oil content and admixture.

"When comparing contracts make sure you're including these FOSFA premiums - they are important and every extra percentage point of oil is valuable," says Mr Probert. "It's clear many growers are blissfully ignorant of HEAR and what it offers. It's still oilseed rape, it's just worth more."

About HEAR

- Mainly used as industrial slip agent in plastics
- Global demand increasing by c.5% per annum
- UK HEAR is crushed at Hull, so well suited to northern growers
- All UK oil is exported, mainly to Germany

For more information, visit www.premiumcrops.com or call 02392 632 883

