



## VALUABLE LESSONS FROM ORGANIC OSR?

03-Jun-2019

Organic oilseed rape may not have immediate appeal to most UK growers. But the 40ha, Danish manager, Bent Jensen grows annually at Strandegard Estate near Faxe on Zealand are a real eye-opener – not least for the lessons they can offer conventional producers.

Even though his 300 ha of cropping includes high value organic grass and clover seed, wheat, spring barley, vining peas and spring beans, OSR is his single most profitable crop. This is because it loses far less yield than most crops on his organic system while earning three times the price of normal rapeseed (around 1000 euros/tonne) for organic spreadable butter and livestock feed production from local crusher, DLG.

Bent who managed the estate conventionally for 10 years before its organic conversion in 2000, accepts that his crop production is far more challenging these days. But he also finds it far more interesting and rewarding – not least alongside the business' large holiday camping enterprise which brings in visitors from across the country.

His organic winter wheat typically delivers 5t/ha against the 9t/ha he could grow conventionally, while his spring barley averages 4t/ha against a conventional 7t/ha. Remarkably, however, he is currently averaging 4t/ha from his oilseed rape, putting it very much on a par with conventionally-grown crops locally. And his secret ? First class attention to rotational, soil management, variety selection and mechanical weed control detail.

“As organic growers we need to have a wide range of crops and a broad rotation,” Bent points out. “We only grow winter rape every six years and put it in after green peas to take advantage of around 60kg/ha of extra nitrogen from the crop.

“We plough in 100 kg/ha of compost from local green waste ahead of the peas which really helps the soil structure. Since converting, we have seen worm populations increase massively. Our soils are much easier to work too. And they both keep moisture and drain far better.

“Harvesting the peas in June gives us plenty of time to plough the haulm down and disc it twice with our Vaderstad Carrier to keep on top of weeds and prepare the best possible seedbed ahead of early August rape drilling.

“We need to get winter rape in by the middle of the month to give it time to establish strongly before the winter and compete well with weeds. But we don't want the crop to get too big too early in the spring because we can't use any growth regulator and we want to hoe the weeds again before stem extension. So the right varieties, row widths and seed rates are crucial.”

**DK Exception** is currently Bent Jensen's first choice variety for its vigorous establishment and early competitiveness but later spring regrowth than many Dekalb hybrids. It also suits his organic system for its strong disease resistance, stem stiffness and pod shatter resistance.

Alongside it this season, he is evaluating **DK Exclaim** which offers an even better balance of these key traits, as well as DK Exlibris.

He drills in 25cm rows with an 8m Gothia Redskap Cameleon, which has the advantage of very accurate sowing depth control and a low horsepower requirement to minimise pressure on all-important soil-structure. The system has also proved very useful for its adaptability – with a change of tines – into a highly effective inter-row hoe.

“We used to sow in 50cm rows but found this gave far too much opportunity for the weed growth that is our main enemy in organic growing even though we plough every hectare every year,” points out Bent. “Halving the row width has made our crop far more competitive at the 40 seeds/m<sup>2</sup> we use.



“This width also works well with our newly acquired Einbock row crop cultivator. Equipped with a Garford camera guidance system to supplement our GPS, this gives us incredible precision in our autumn and spring hoeing – in our cereals as well as winter rape.

“The next step forward is definitely the robotic weeders that have just come on the market. These should allow us to add organic sugar beet to the rotation. But at the moment they can only cope with 1ha every 12 hours. So we’re waiting until they improve a good bit before going down this route.”

As it comes into the spring, Bent Jensen’s rape receives 100 kg N/ha as pig slurry from a local unit through a dribble bar to bring the crop’s total nitrogen application to around 160 kg/ha. Its slow release nature helps to restrain early spring growth and provide a good supply of nitrogen for pod fill. This is complemented by 200 kg/ha of Calciprills – permitted under licence for organic production – to provide a much-needed 27kg/ha of sulphur.

While no fungicides can be used – obviously – Bent actually finds them unnecessary given the strong disease resistance in his varieties and low levels of immediately available nitrogen which result in far less lush and disease as well as pest-susceptible growth.

Less N overall and no fungicides also mean less delay than might otherwise be the case in the natural ripening essential in the system. Even so, he rarely harvests until the first week of August, relying on varietal pod shatter resistance to capture as much yield and oil as possible with the least weather risk.

“Lower nitrogen levels are useful too in enabling us to maximise our crop value by bringing in up to 56% oil (51% at the UK’s standard 9% moisture),” notes Bent. “With the right rotation, varieties and overall system, we find winter rape suits organic production better than almost any other crop. I can see it being equally valuable for conventional growers keen to make the most of the lowest levels of costly inputs.”