

Variety Guide 2023 - 24

Innovation for your growth



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www.dsv-uk.co.uk



As a breeding and seed company with 100 years of experience, we offer our customers innovative varieties through a range of cultivation methods. Deutsche Saatveredelung AG (DSV) is an internationally operating full-service provider for the entire agricultural crop rotation as well as turf grasses.

We are a successful breeder of oilseed rape and cereals, as well as grasses and small-seeded forage legumes. Furthermore, we are specialists in cover crops and offer a wide-ranging maize portfolio as well as sorghum.

Our activities encompass not only the breeding and production of new varieties with the properties and combinations of features desired by our customers, but also expert advice, high-quality service and extensive marketing through a global distribution network. Working on the 'one-stop shop' principle, we are a full-service supplier in the seed sector.



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DSV UK

DSV has been established in the UK for over 40 years and has an exemplary track record of providing the best seed for many popular agricultural crops including oilseed rape, grasses, winter wheat, barley, maize, cover crops, lupins and linseed.

DSV UK is a wholly-owned subsidiary of Deutsche Saatveredelung AG in Germany. It operates from its breeding and trials centre at Wardington in Oxfordshire, which comprises c.50ha of land used to breed winter wheat and forage crops and for National List trials of wheat and grass.

Although DSV is predominantly known for its oilseed rape varieties with their signature high gross outputs combined with low growing costs alongside important agronomic features such as protection from TuYV and phoma stem canker, it has recently scored several major firsts in the cereals sector. Not least, it's wheats – THEODORE, which has the distinction of being the UK's cleanest wheat; list-topping hard feed winter wheat CHAMPION and, from the same stable, OXFORD – new this year to the Recommended List.

In-bred resistance to disease is a key feature of the DSV approach – for example, DSV SENSATION offers protection against both Barley Yellow Dwarf Virus (BYDV) and Barley Yellow Mosaic Virus (BaYMV) type 1 and type 2, which is increasingly important as seed treatments have no influence on these types of infections.



CEREALS

The cereals breeding programme at DSV is designed to produce varieties for all market segments. With a number of scientific tools at DSV's disposal and sophisticated infrastructure, including a state-of-the-art molecular laboratory, the company is able to select lines which combine high quality with a good disease resistance package without sacrificing yield.

Our wheat programme is based in the UK whilst our barley programme is run from our breeding station in Germany.

BARLEY

Our winter barley programme has been successfully developing varieties over a number of years. The screening nursery for diseases such as the rusts, rhynchosporium and net blotch is vast and includes a wide genetic base to allow novel sources of resistance to be identified. The barley is also rigorously tested in our virus nurseries. Once a breeding line has passed these selections, the line is targeted towards a specific end-use and is put into a yield trial network that includes the UK.

BYDV and BaYMV PROTECTION

BYDV is spread by two major aphids – the bird cherry oat aphid (*Rhopalosiphum padi*) and the grain aphid (*Sitobion avenae*). The former is easy to control using pyrethroid sprays but pyrethroid resistance has been confirmed in UK grain aphids by Rothamsted.



SENSATION carries the BYDV protection gene (YD2), which means plants may get infected but will tolerate the virus and grow normally. Although YD2 was first identified in the 1960s, the availability of neonicotinoid seed treatments has, until now, obscured its potential to cause significant yield loss.

Whilst SENSATION does give protection against BYDV, an insecticide spray may still be necessary to ensure that the aphid population is controlled.



Type 1 BaYMV protection is now standard across most varieties. However, SENSATION is unique in the UK for carrying additional genetic protection against the threat of Type 2 BaYMV, which is now common across Europe.

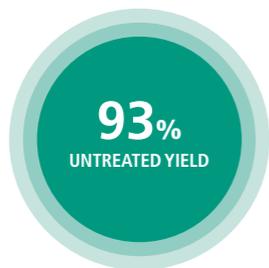
SENSATION

Six Row, Conventional Barley

Status: National List Trials

SENSATION is a high yielding variety with good straw strength and high specific weight that has performed well in both treated and untreated trials. It contains two essential traits – Barley Yellow Dwarf Virus (BYDV) and Barley Yellow Mosaic Virus (BaYMV) Type 1 and Type 2 protection, where seed treatment has no influence.

- SENSATION carries unique additional genetic protection against the threat of Type 2 BaYMV – now common in other areas of Europe.
- Speed of growth in the spring could make it particularly strong against black-grass, where it quickly outgrows the weed.
- In recent DSV and independent trials, SENSATION has performed very well especially in untreated trials.



Treated Yield	104% (UK)
Untreated Yield	93%
Specific Weight	68.6kg/hl
Lodging	7
Height Untreated	104cm
Maturity	-3
Mildew	6
Yellow Rust	8
Brown Rust	5
Rhynchosporium	6
Net Blotch	5

Data Source:
DSV and National List trials

“It is my second year of growing SENSATION, I’m currently growing 38ha. It yielded 9t/ha last year on my sandy soils. It is early to mature and is always my first barley to come into ear and to harvest. It has great early vigorous growth to compete with weeds and it has a great all round disease package. It’s specific weight is also sensational!”

Toby Hogsbjerg, Norfolk



WHEAT

DSV UK prides itself in attention to detail with each breeding line receiving a tailored analysis package and trial network. Our conventional breeding programme allows potential varieties to be adjusted by selection of the best-performing sub-lines. Our laboratory carries out analyses of our breeding lines for trait-related markers such as disease resistance, breadmaking potential and yield components. In addition, disease observation nurseries are positioned around the UK and abroad to capture any susceptibility to major diseases such as *Septoria tritici* and the rusts, producing some of the best *Septoria tritici* resistance on offer.

Our replicated yield trials are situated throughout the UK as well as in neighbouring countries to give a strong indicator of yield potential on-farm across different soil types and management practices.

Rheological tests are run to allow predictions to be made on the end-use of a breeding line and those destined for the bakery are test-baked.

NEW! **CHAMPION**
Group 4 Feed Wheat – Hard

Status: AHDB Recommended List 2023/24

CHAMPION – ‘the wheat to beat’ – is the ultimate barn buster, topping the 2022/23 Recommended List with the highest yield available overall. CHAMPION has a robust package for agronomics, disease resistance and grain quality. It boasts some of the best RL scores for yellow rust and Septoria, plus resistance to orange wheat blossom midge.

- The top variety drilled on heavy soils and second on light soils confirming its versatility and suitability to a wide range of sites.
- A successful option for later planting with one of the highest scores on the list for a late drilled situation.
- The second highest yielding wheat on the Recommended List when grown as either a first or second cereal.



Highest wheat yield 17.95t/ha was harvested from 8.2920ha by Tim Lamyman in Louth, Lincolnshire on 10 Aug 2022.

Data Source:
Guinness World Records

“CHAMPION has elevated levels of inherent disease resistance to reduce our dependence on chemicals. We will grow more CHAMPION next season and the variety looks to have good potential as a second wheat.”

Stuart Kirkwood,
Driffield, E. Yorkshire



Treated Yield	106% (UK) 107% (E) 106% (W) 102% (N)
Untreated Yield	93%
Protein	11.2%
Hagberg Falling No	251
Specific Weight	75.5
Ripening	0
Yellow Rust	8
Brown Rust	5
Septoria tritici	8.1
Mildew	7
Orange Wheat Blossom Midge	R

Data Source:
AHDB Recommended List 2023/24
* Untreated Yield – % of treated controls.
1st cereal % control: 106%. 2nd cereal % control: 107%.



NEW! **OXFORD**
Group 4 Feed Wheat – Hard

Status: AHDB Recommended List 2023/24

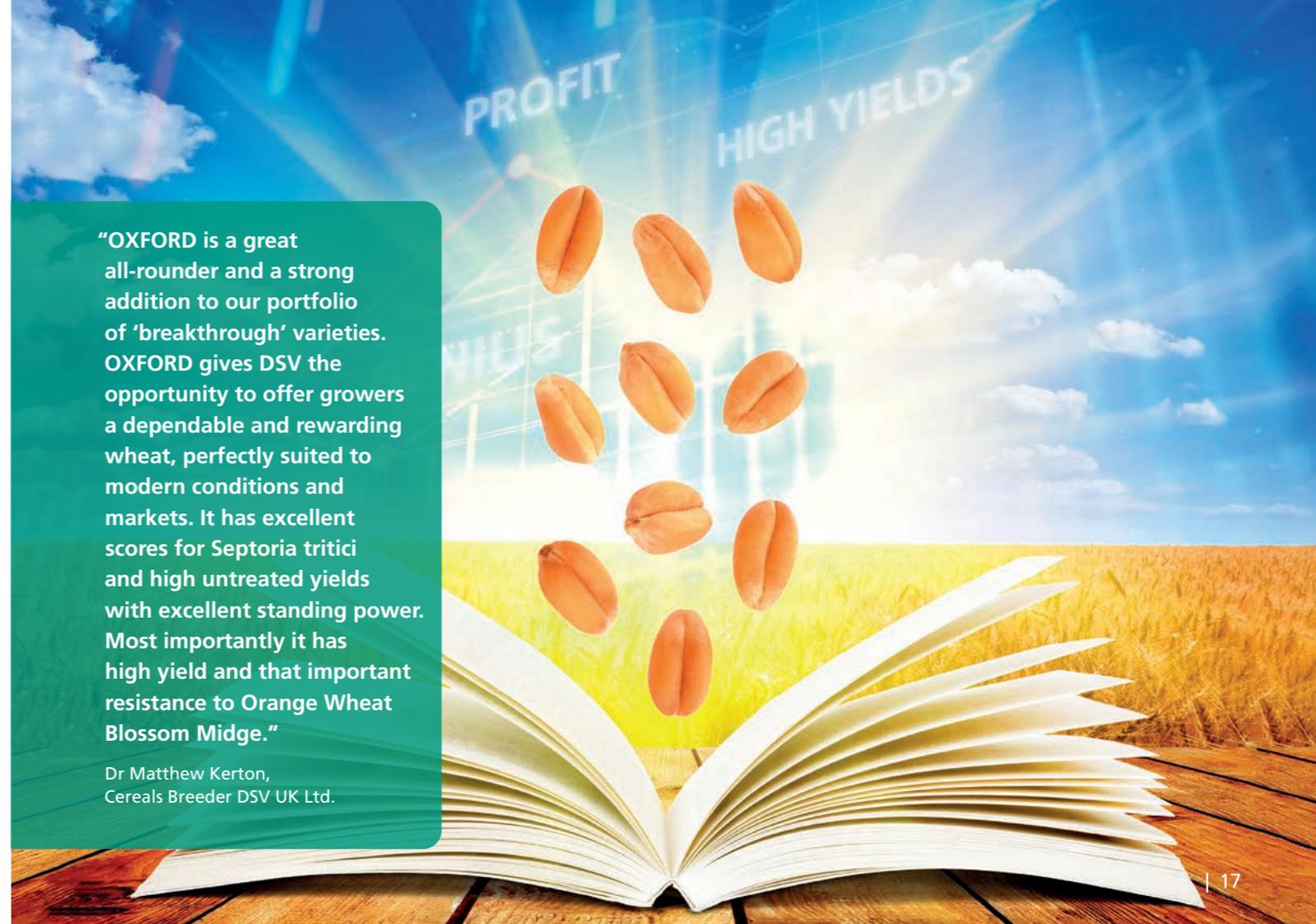
OXFORD – ‘the grain with brains’ – offers high yields, a strong disease resistance package and a high protein content. In the West of the UK it achieved yields of 105% with a strong untreated yield at 89%. Its parentage is from the same lines as previous Recommended List topping variety CHAMPION.

- Robust agronomic package with orange wheat blossom midge resistance and DSV’s unique genetics offering resistance to Septoria tritici, Mildew and, in particular, Yellow Rust (9).
- High yielding with a strong untreated yield
- High protein content with proven genetics from the same line as list-topping CHAMPION



Treated Yield	104% (UK) 104% (E) 105% (W) [100%] (N)
Untreated Yield	89%
Protein	11.3%
Hagberg Falling No	218
Specific Weight	76.0
Ripening	+2
Yellow Rust	9
Brown Rust	6
Septoria tritici	6.4
Mildew	6
Orange Wheat Blossom Midge	R

Data Source:
AHDB Recommended List 2023/24



“OXFORD is a great all-rounder and a strong addition to our portfolio of ‘breakthrough’ varieties. OXFORD gives DSV the opportunity to offer growers a dependable and rewarding wheat, perfectly suited to modern conditions and markets. It has excellent scores for Septoria tritici and high untreated yields with excellent standing power. Most importantly it has high yield and that important resistance to Orange Wheat Blossom Midge.”

Dr Matthew Kerton,
Cereals Breeder DSV UK Ltd.

THEODORE

Group 4 Feed Wheat – Hard

Status: AHDB Recommended List 2023/24 – West

THEODORE is the UK's cleanest wheat with the highest scores for disease resistance available. It has high performing Untreated Yield in trials (93% of treated controls) and good resistance to lodging, making it a farmer-friendly variety to grow in the future with the ever-increasing problem of reductions in available chemistry.

- List-topping disease resistance with the highest scores for Septoria tritici and Yellow Rust (both 9) plus a Brown Rust score of 8.
- One of the highest Hagberg Falling Numbers and the highest protein content of the Group 4 Varieties (11.8%).
- Good resistance to lodging in both treated and untreated plots, with no lodging seen in breeders' plots throughout its time in trials.



Treated Yield	101% (w)
Untreated Yield	93%
Protein	11.8%
Hagberg Falling No	303
Specific Weight	74.9
Ripening	0
Yellow Rust	9
Brown Rust	8
Septoria tritici	9.1
Mildew	7

Data Source:
AHDB Recommended List 2023/24 – West

“THEODORE has been a very consistent variety for us for some years and, with its outstanding disease resistance package and very high untreated yield, it makes it an ideal choice for growing in high Septoria pressure areas. That’s why THEODORE has become a key management tool for many of our growers. Whether due to adverse weather conditions or workload one field is always the last one sprayed – having a variety that can look after itself until you get there is important.”

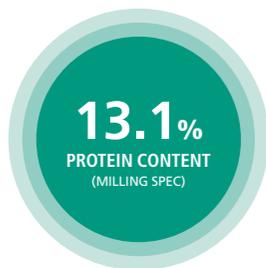
Clive Tuffin, Pearce Seeds

NEW! **LOXTON**
High Quality Milling Wheat

Status: National List

LOXTON is DSV's newest proven, top class milling wheat. It has performed extremely well in National List trials and is undergoing a commercial trial with Warburtons, for potential inclusion as one of their preferred breadmaking varieties.

- One of the only bread makers to offer resistance to Orange Wheat Blossom Midge.
- Impressive scores for Yellow Rust (9) and Septoria tritici (7).
- High yielding with robust protein content producing a bright, white soft crumb with fine texture.



Treated Yield	97% (W) 95% (E)
Untreated Yield	81%
Protein	12.3%
Protein (MILLING SPEC)	13.1%
Hagberg Falling No	298
Specific Weight	77.3
Ripening	-1
Yellow Rust	9
Brown Rust	6
Septoria tritici	7
Mildew	8
Orange Wheat Blossom Midge	R

Data Source:
National List trials 2018/19 and 2019/20

Candidates to watch

DSV 321117
(MAVERICK)

Group 4 Feed Wheat – Hard



DSV 321117 (MAVERICK) is a very high yielding group 4 feed wheat. It has a high spec weight of 78.3kg/hl, a strong disease resistance package with a 7 for yellow rust, 7 for septoria tritici and 8 for mildew. DSV 321117 (MAVERICK) also has resistance to orange wheat blossom midge and early to medium ripening scores.

Data Source:
National List trials 2022/23

DSV 321121
(CASELY)

Group 4 Feed Wheat – Hard



DSV 321121 (CASELY) is an ultra-clean group 4 feed variety destined for the regenerative grower where disease resistance is a priority. It has excellent disease resistance scores – 8 for septoria tritici and yellow rust and 8 for mildew, making it a good low input / high output variety.

Data Source:
National List trials 2022/23

DSV 321113
(DIAMOND)

Group 2 Milling Wheat



DSV 321113 (DIAMOND) is a new baking-quality wheat with good grain characteristics, high protein and good HFN coupled with a comprehensive agronomic package with an 8 for mildew and yellow rust and a 7 for septoria, setting new standards for a quality wheat. It also has resistance to OWBM and Pch1 for improved eyespot resistance

Data Source:
National List trials 2022/23

LUPINS

For a long time the white lupin disappeared from mainstream cultivation: the reason – the fungal disease anthracnose (*Colletotrichum lupini*). It appeared in the 1990s and the practical cultivation of grain legumes all but disappeared. With low alkaloid and anthracnose-tolerant varieties, the ‘protein queen’ now returns to our fields.

As an alternative indigenous protein crop, lupins can be used as a replacement for soya. Apart from their excellent intrinsic values, lupins have a very good position in crop rotations due to their nitrogen binding properties, soil loosening and phosphate mobilisation, delivering a very high ‘previous crop’ value. The white lupin is characterised by its high protein content and delivers the highest gross protein yield per unit area.

Certified Seed is available for sowing. Ask your merchant!



WHITE LUPINS

FRIEDA and CELINA are real protein wonders. In contrast to soya bean, they have much better climate adaptation, a lower heat requirement, and can therefore be grown over a wider area. Due to their anthracnose tolerance, these two white lupins provide farmers with a high degree of yield security. Their pronounced taproot makes them much less sensitive to summer drought.

Depending on the location, the yield potential is between 2 and 6t/ha whilst its average crude protein content is 32% at 86% dry matter. Inoculation with a rhizobia preparation is recommended.

FRIEDA

A true protein bomb

- High yields of high-quality protein
- Very high yield security, as anthracnose tolerant
- Insensitive to summer drought due to pronounced taproot

Breeder: LLA Triesdorf

CELINA

The protein queen

- TOP Earnings level
- High yields of high-quality protein, preferably for animal feed
- Domestic GMO-free protein source

Breeder: LLA Triesdorf

BLUE LUPINS

CARABOR combines high yield levels with outstanding agronomic properties. Excellent drought tolerance, high resistance to pod shattering and reliable standing ability make this blue lupin a great choice in uncertain weather conditions.

CARABOR

A “Blue-blood” for yield

- Top yields in pan-European variety trials
- Superior drought tolerance
- Excellent branching plus reliable standing with uniform grain and straw maturity.

Breeder: Saatzucht Steinach

OILSEED RAPE

DSV has been a leader in the breeding and development of oilseed rape for over 50 years. Our high performing hybrid varieties, produced using both MSL and Ogura systems to give a wide range of beneficial characteristics and traits, have been some of the UK's most successful oilseed rapes over the years. Features such as our unique trait layering approach, PNN (post neonicotinoid) breeding initiative and features including TuYV resistance, HOLL, Clearfield®, high N-Efficiency, optimum vigour, high oil content and resistance to pod shatter, have continued to keep us at the forefront of our field.

KEY TO OILSEED RAPE VARIETY TRAITS

We have developed a series of simple icons to help growers identify, at a glance, the different key characteristics of our winter oilseed rape varieties.



Phoma Blocker

Combines two complex phoma resistance packages LepR1 and RLM7 or RLM7 and RLMS offering the best phoma protection package on the market for UK growers.

NEW



Sclerotinia Stem Rot Protection

Varieties which have been given this trait have been tested in the highest pressure sclerotinia trials in Europe and have performed exceptionally well. In combination with the usual fungicide sprays the lower susceptibility of these varieties offers additional protection against Sclerotinia infestations.

NEW



A PNN Variety

Bred to include specific growth characteristics that deliver reliable establishment and consistent high performance year after year.



A Triple Layer PNN Variety

Unique three-way disease resistance and yield protection against Phoma Stem Canker, Light Leaf Spot, Turnip Yellow Virus and Pod Shatter providing new levels of security in OSR production.



A Quad Layer PNN Variety

Builds on our Triple Layer package of agronomic features by adding a further layer of management benefits in the shape of Verticillium wilt tolerance, clubroot protection or Clearfield® technology.



N-Efficiency

DSV's new N-Efficiency feature combines several key plant characteristics, including root structure, plant architecture and drought tolerance, to ensure varieties are able to make as much use of every kg of nitrogen applied as possible.



A Clearfield® Variety

Resistant to Imazamox-based herbicides allowing you to safely control the majority of broadleaf weeds and volunteer cereals commonly found in UK crops.



RLM7+ Disease Resistance

Multi-gene resistance to phoma stem canker plus light leaf spot – the most common diseases of oilseed rape in the UK.



High Oil Content

High oil content ensuring growers receive the maximum potential oil bonus at harvest.



Superior Primary Response

Outstanding vigour in the first 45 days combined with deep tap root development to provide the best foundation for yield and protection against pest and disease threat.



Pod Shatter Resistance

Minimises seed shed and loss in later stages of growth and at harvesting making it particularly useful when weather conditions are poor or in late seasons.



Suitable for Min-till or No-till

Optimised for strong establishment, exceptional performance and consistent gross output delivery in reduced cultivation systems.



HarvestMax

HarvestMax yield protection gives a new level of defence against harvest challenges. DSV's longest and largest pods to date, combined with a short, compact canopy structure, allow quick and efficient harvesting, minimum seed loss and quick, even dry down of the plant.



Turnip Yellows Virus Protection

Resistance to the growing threat of TuYV now endemic across the UK and potentially reducing oil content and yields by up to 20%.



Verticillium wilt Tolerance

Protection against yield loss from this Europe-wide disease that is difficult to identify, has no effective agronomic option and causes premature plant death.



Clubroot Protection

Effective protection to all common forms of clubroot, safeguarding yield in affected areas.

WINTER OILSEED RAPE

	Variety	Status	Yield						Seed Quality		Agronomic Characteristics										Disease Resistance					
			(UK)	Gross Output (%) (EW)	(N)	(UK)	Seed Yield (%) (EW)	(N)			Oil Content (%)	Winter Hardiness	Autum Vigour	Spring Vigour	Plant Height (cm)	Earliness of Flowering	Earliness to Maturity	Resistance to Lodging	Stem Stiffness	Resistance to Pod Shatter	HarvestMax	Light Leaf Spot	Stem Canker	RLM7+	Verticillium wilt	TuYV
Hybrid	DART	AHDB Recommended List trials 2023/24	102	103	95	102	103	95	45.2		High	High	High	145	7	5	[8]	8		✓	7	6	✓	✓	✓	
	DOLPHIN	AHDB Candidate List trials 2023/24		105			103		46.7		High	High	High	144	5	5	9	8		✓	6	8	✓	✓	✓	
	DUKE	DSV UK Internal trials + EU official trials	105			105			45.6		High	High	High	168	6	5	8	8	✓		5	8	✓		✓	
	DUPLO	AHDB trials + DSV UK Internal trials		109			107		46.8		High	High	High	170	5	6	8	8	✓		5	9	✓	✓	✓	
Clubroot	CROCODILE CR	AHDB Recommended List trials 2023/24	100	101	96	101	102	97	44.7		Medium	Medium	Medium	143	6	6	[8]	8			6	4			✓	
Clearfield®	BEATRIX CL	AHDB Recommended List trials 2023/24	97	97	[94]	96	96	[94]	45.9		High	High	High	146	7	5	[8]	8	✓		6	7	✓		✓	
	MATRIX CL	AHDB Recommended List trials 2023/24	98	99	95	97	98	95	45.6		High	High	High	152	7	6	[8]	8	✓		6	8	✓		✓	
	MIRACULIX CL	AHDB Candidate List trials 2023/24	97	97	98	96	96	97	45.7		High	High	High	153	6	7	8	8	✓		6	8	✓		✓	
	PLURAX CL	DSV UK Internal trials + National trials	104			103			45.6		Medium	Medium	Medium	134	7	7	9	9			7	6				

Data Source: AHDB and DSV Internal Trials

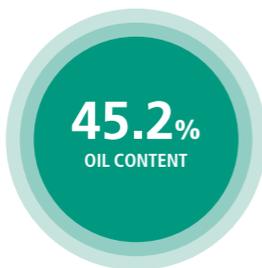
DART

Hybrid oilseed rape

Status: AHDB Recommended List trials 2023/24

DART marks another significant step forward in DSV's production of reliable, simple to grow, high output oilseed rape varieties especially developed for the current economic and environmental climate. It combines high oil content with a strong agronomic package and is the first DSV variety to carry the new Harvest Max protection traits, offering maximum threshing potential.

- In trials, DART has proved to be very resilient to cabbage stem flea beetle (CSFB) damage at both adult and larval stage.
- DART offers TuYV protection with good tolerance to Verticillium wilt plus HarvestMax technology to minimise pre harvest seed losses.
- Low biomass means early maturity and easy harvest.



Gross Output	102% (UK) 103% (E/W) 95% (N)
Seed Yield	102% (UK) 103% (E/W) 95% (N)
Oil Content	45.2%
Winter Hardiness	High
Autumn Vigour	High
Spring Vigour	High
Plant Height	145cm
Flowering	7
Maturity	5
Lodging	[8]
Stem Stiffness	8
Light Leaf Spot	7
Stem Canker	6

Data Source:
AHDB Recommended List trials 2023/24

“Our new variety DART should be on everyone’s list this autumn, a reliable variety to grow. DART has a high Gross Output of 106% in the East/West region courtesy of its long pods and an Oil Content of 45.5%. The variety shows excellent vigour in both autumn and spring which helps add to the resilience shown in trials to CSFB pressure from both the adult and the larval stage”

Andrew Hartley,
DSV Technical Manager

DOLPHIN

Hybrid Oilseed Rape



Status: AHDB Candidate List trials 2023/24

DOLPHIN has the ability to produce high yields with **Gross Output (105%)**, **Seed Yield (103%)** and very high **Oil Content (46.7%)**. It has **standout disease resistance**, offering protection against **TuYV**, plus **RLM7+** and multi-gene resistance to stem canker. **DOLPHIN** shows rapid early development (with some of the largest seed pods bred by DSV!) and **HarvestMax** seed retention, making it a **flexible, reliable option**.

- New on the AHDB Candidate List for 2023/24
- The ability to produce high yields, performing particularly well in the East and West regions.
- Strong tolerance to Verticillium wilt together with some of the best protection to Sclerotinia in DSV's portfolio.



Gross Output	105% (E/W)
Seed Yield	103% (E/W)
Oil Content	46.7%
Winter Hardiness	High
Autumn Vigour	High
Spring Vigour	High
Plant Height	144cm
Flowering	5
Maturity	5
Lodging	9
Stem Stiffness	8
Light Leaf Spot	6
Stem Canker	8

Data Source:
AHDB Candidate List trials 2023/24

DUKE

Hybrid Oilseed Rape



Status: DSV UK internal trials + EU official trials

DUKE is in the top drawer for performance. A high yielding variety with outstanding **Oil Content (45.6%)**, it boasts three sought-after traits – **TuYV** protection, **pod-shatter** resistance and the **RLM7** gene for stem canker resistance which, added to its powerful autumn vigour, makes it a **must for growers planting into higher risk situations**.

- A DSV Triple Layer variety with TuYV protection, pod shatter resistance and RLM7+ resistance to phoma stem canker.
- Powerful Autumn and Spring Vigour for a secure, fast start and a quick flowering period offering far higher potential for optimum grain-fill.
- DUKE, our new N-Efficiency variety, held the ADAS YEN top score for establishment in 2022.



Gross Output	105% (UK)
Seed Yield	105% (UK)
Oil Content	45.6%
Winter Hardiness	High
Autumn Vigour	High
Spring Vigour	High
Plant Height	168cm
Flowering	6
Maturity	5
Lodging	8
Stem Stiffness	8
Light Leaf Spot	5
Stem Canker	8



Data Source:
DSV UK Internal trials + EU official trials

DUPLO

Hybrid Oilseed Rape



Status: AHDB trials + DSV UK internal trials

DUPLO stands out from the crowd combining outstanding disease protection with top yields. It was the first DSV variety to launch with improved N-Efficiency, bred to ensure growers get the highest possible response to Nitrogen fertilisers so every kg applied works as hard as possible to produce yield with minimum waste.

- Triple Layer protection against Turnip Yellows Virus (TuYV), pod shatter and RLM7+ resistance to phoma stem canker.
- Outstanding Autumn Vigour and strong establishment – ideal for reduced cultivation systems.
- Exceptional performance across the board with Gross Output (109% E/W), Seed Yield (107%) and Oil Content (46.8%).



Gross Output	109% (E/W)
Seed Yield	107% (E/W)
Oil Content	46.8%
Winter Hardiness	High
Autumn Vigour	High
Spring Vigour	High
Plant Height	170cm
Flowering	5
Maturity	6
Lodging	8
Stem Stiffness	8
Light Leaf Spot	5
Stem Canker	9

Data Source:
AHDB trials + DSV UK internal trials

Candidates to watch

WRH 637 (COGNAC)

Hybrid Oilseed Rape



WRH 637 (COGNAC) is one DSV's first varieties to offer the new Phoma blocker trait, which combines two complex phoma resistance mechanisms LepR1 and RLM7 offering the best phoma protection package on the market for UK growers. WRH 637 (COGNAC) has an extremely high yield, TuYV protection and an impressive agronomic package.

- Best phoma protection available to UK OSR growers
- Impressive agronomic package
- Extremely high yield

Data Source:
National List trials

WRH 651 (LUDWIG)

Hybrid Oilseed Rape



WRH 651 (LUDWIG) is the second variety which DSV are releasing with phoma blocker. Like WRH 637 (COGNAC) it offers TuYV protection, high yield and impressive scores for light leaf spot. DSV feel that both these varieties offer some of the best disease resistance packages available to UK growers.

- Best phoma protection plus outstanding overall disease resistance
- TuYV and light leaf spot protection
- High yielding

Data Source:
National List trials

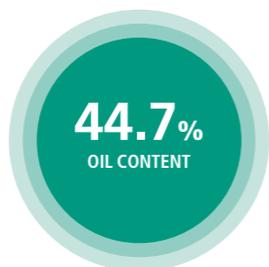
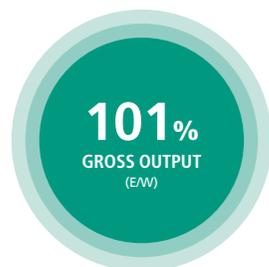
CROCODILE CR

Hybrid Oilseed Rape

Status: AHDB Recommended List trials 2023/24

CROCODILE CR has closed the gap between clubroot resistant varieties and 'normal' varieties – in many cases out-yielding them. CROCODILE CR is recommended for use on clubroot infected land offering growers a valuable, high yielding option as part of their crop rotation where common strains of clubroot are known to be an issue.

- CROCODILE CR is one of the highest yielding varieties across the AHDB List.
- Superior primary response offers the rapid crop establishment essential to promote yield and combat pest and disease attack.
- CROCODILE CR adds value with a high score for Oil Content (44.7%)



Gross Output	100% (UK) 101% (E/W) 96% (N)
Seed Yield	101% (E/W) 102% (E/W) 97% (E/W)
Oil Content	44.7%
Winter Hardiness	Medium
Autumn Vigour	Medium
Spring Vigour	Medium
Plant Height	143cm
Flowering	6
Maturity	6
Lodging	[8]
Stem Stiffness	8
Light Leaf Spot	6
Stem Canker	4

Data Source:
AHDB Recommended List trials 2023/24



“CROCODILE remains the highest yielding AHDB recommended variety with clubroot resistance, and has been a consistent performer over the past four crop years and in all regions.

With increasing clubroot pressure being seen throughout the UK, CROCODILE is the go-to variety for growers wanting to manage clubroot within their OSR rotation.”

Jim Knight,
Frontier Agriculture

1. Clubroot varieties should not be drilled in rotations where oilseed rape has featured in the last five years.
2. Clubroot varieties should not be drilled before the third week of August.
3. This clubroot variety is resistant to the common strains of clubroot, however, it may be infected by certain other strains.
4. If the soil is below pH7 lime must be added to rectify the level.



CLEARFIELD® OILSEED RAPE

The Clearfield® Production System was designed as a risk management tool for oilseed rape that combines hybrid seed varieties and high-quality BASF herbicides to combat many of the key issues OSR growers face.

The system allows you to adopt a 'wait and see' approach. The post emergence timings for the Clearfield® product range (Cleravo® and Cleranda®) allow you to wait and see if you have a healthy established crop before applying your herbicide programme, enabling you to manage cabbage stem flea beetle risk.

Crucially, Clearfield® is highly effective at controlling those difficult weeds shown to contain erucic acid such as charlock, runch and hedge mustard, as well as volunteer OSR, allowing you to remove a potential source of erucic acid contamination from your crop.

Clearfield, Cleravo and Cleranda are registered trademarks of BASF. Cleravo contains imazamox and quinmerac. Cleranda contains imazamox, quinmerac and metazachlor. Use plant protection products safely. Always read the label and product information before use. For further product information including warning phrases and symbols, refer to agricentre.basf.co.uk.



BEATRIX CL

Clearfield® Hybrid Oilseed Rape



Turnip Yellows
Virus Protection



RLM7+ Disease
Resistance



High Oil Content



Pod Shatter
Resistance



A Clearfield®
Variety

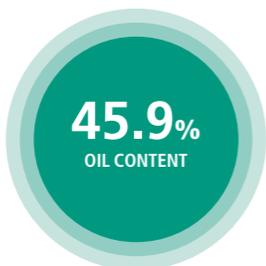
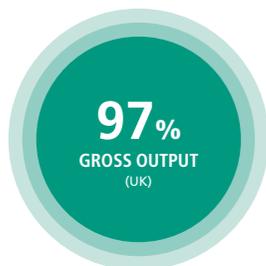


A Quad Layer
PNN Variety

Status: AHDB Recommended List trials 2023/24

BEATRIX CL is one of only a few varieties to offer TuYV in the Clearfield® segment. Allied to one of the best agronomic packages, this powerful yield enhancing trait, possessed by the highest yielding recommended varieties, is an essential feature in the post neonic era of growing oilseed rape.

- DSV Quad Layer traits provide RLM7+ stem canker resistance; TuYV Protection; Pod Shatter Resistance and Clearfield® Technology.
- No compromise on yield or high oil content.
- Robust Resistance to Lodging; strong Stem Stiffness; Early Flowering and Maturity make BEATRIX CL a well-balanced choice.



Gross Output	97% (UK) 97% (EMW) [94%] (N)
Seed Yield	96% (UK) 96% (EMW) [94%] (N)
Oil Content	45.9%
Winter Hardiness	High
Autumn Vigour	High
Spring Vigour	High
Plant Height	146cm
Flowering	7
Maturity	5
Lodging	[8]
Stem Stiffness	8
Light Leaf Spot	6
Stem Canker	7

Data Source:
AHDB Recommended List trials 2023/24

“Clearfield® hybrids are an important part of the Agrovista oilseed rape portfolio and the 2022/23 Candidate variety BEATRIX CL is an exciting new addition to our range. BEATRIX CL is leading the race to close the yield gap between standard hybrids and the Clearfield® types making it the premium offering in the Clearfield® marketplace with an enviable combination of class-leading yield with the very latest in breeding technology.”

Nigel Walley, National Seeds Manager,
Agrovista UK Ltd

MATRIX CL

Clearfield® Hybrid Oilseed Rape



Status: AHDB Recommended List trials 2023/24

MATRIX CL is the first Quad Layer variety from DSV and marks a significant advance in breeding innovation stacking four complex crop protection traits together without compromising yield. MATRIX CL is the highest yielding Clearfield® variety in the UK enabling growers to choose this powerful post emergence chemistry without a potential drop in performance.

- Impressive Seed Yields (99%) and Oil Content (45.8%)
- With DSV Quad Layer protection MATRIX CL offers the best agronomic package seen in any Clearfield® variety to date.
- Strong early vigour is a defence against flea beetle with top standing scores (8) for Lodging and Stem Stiffness.



Gross Output	98% (UK) 99% (E/W) 95% (N)
Seed Yield	97% (UK) 98% (E/W) 95% (N)
Oil Content	45.6%
Winter Hardiness	High
Autumn Vigour	High
Spring Vigour	High
Plant Height	152cm
Flowering	7
Maturity	6
Lodging	[8]
Stem Stiffness	8
Light Leaf Spot	6
Stem Canker	8

Data Source:
AHDB Recommended List trials 2023/24

“As well as driving forward yields for the Clearfield® varieties, MATRIX CL gives growers security, with the unique combination of stacking four key traits together, including TuYV protection. With less area of Clearfield® now grown, MATRIX CL should be the default choice for all Clearfield® growers going forward.”

Bethany Moses,
Seed Trader, ADM Agriculture Ltd

MATRIX CL



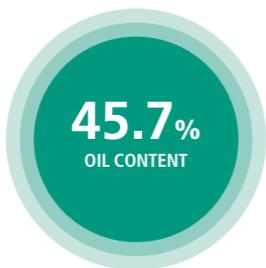
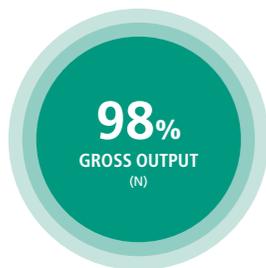
NEW! **MIRACULIX CL**
Hybrid Oilseed Rape



Status: AHDB Candidate List trials 2023/24

MIRACULIX CL is the only Clearfield® candidate available to UK growers, stacking four complex traits together – TuYV protection, RLM7+ disease resistance, pod shatter resistance, and Clearfield® technology. MIRACULIX CL has demonstrated a high, consistent Yield (97%) and Oil Content (45.7%) and heads the pack with top scores of 8 for Lodging and Stem Stiffness.

- New Quad Layered variety from DSV – marking a huge step forward in breeding.
- The only Clearfield® Candidate and the highest yielding Clearfield® variety available to UK growers.
- Offers the best agronomic package seen in any Clearfield® variety to date.



Gross Output	97% (UK) 97% (EMW) 98% (N)
Seed Yield	96% (UK) 96% (EMW) 97% (N)
Oil Content	45.7%
Winter Hardiness	High
Autumn Vigour	High
Spring Vigour	High
Plant Height	153cm
Flowering	6
Maturity	7
Lodging	8
Stem Stiffness	8
Light Leaf Spot	6
Stem Canker	8

Data Source:
AHDB Candidate List trials 2023/24

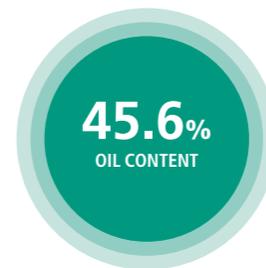
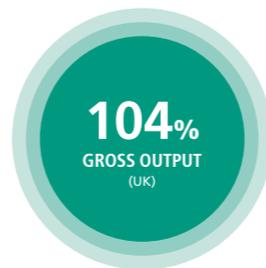
PLURAX CL
Clearfield® Hybrid Oilseed Rape



Status: DSV UK internal trials + National trials

PLURAX CL marks a step forward in Clearfield® genetics as it has been specifically bred to have a strong tolerance to Verticillium wilt with proven performance in ADAS trials. It is a new generation hybrid with high yields and outstanding levels of oil content evidenced by the highest oil content (46.2%) in NIAB trials 2017.

- PLURAX CL has a strong agronomic package scoring well for Light Leaf Spot (7) and Stem Canker (6).
- Quick to establish in the autumn with a robust rooting system. Stem stiffness and resistance to lodging are two key strengths.
- Bred to have high tolerance to Verticillium wilt.



Gross Output	104% (UK)
Seed Yield	103% (UK)
Oil Content	45.6%
Winter Hardiness	Medium
Autumn Vigour	Medium
Spring Vigour	Medium
Plant Height	134cm
Flowering	7
Maturity	7
Lodging	9
Stem Stiffness	9
Light Leaf Spot	7
Stem Canker	6

Data Source:
DSV UK internal trials + National trials

SPRING OILSEED RAPE

In recent years there has been a dramatic rise in the area of spring rape being drilled. Spring oilseed rape crops deliver excellent gross margin opportunities allowing flexibility in the rotation following a late harvest – which often means poor weather conditions and, in general, allows growers an excellent opportunity to sort out pernicious weed problems, such as black-grass, while fields lie fallow through the winter. This is a key benefit compared to winter oilseed rape crops, which offer few cultural control measures to reduce grass weed numbers and rely heavily on agro-chemistry.

Drilling spring oilseed rape at the end of March/early April means less pressure is put on both man and machine. Spring oilseed rape generally only requires around 150 days to grow; therefore, phoma isn't a problem due to its short vegetative stage and specific temperature requirements. The occurrence of fungal diseases is much less than in winter rape, so disease control is rarely necessary. However, although DSV Spring varieties demonstrate strong disease protection, it is possible a Sclerotinia spray may be required.

	Variety	Status	Yield		Seed Quality	Agronomic Characteristics				
			Gross Output (%)	Seed Yield (%)	Oil Content (%)	Spring Vigour	Shortness of Stem	Earliness of Flowering	Earliness to Maturity	Clubroot Resistance
Hybrid	LAGONDA	AHDB Descriptive List 2023/24	[101]	[99]	[44.7]	High	7	7	5	—
	LAKRITZ	AHDB Descriptive List 2023/24	[103]	[104]	[44.0]	High	7	[7]	5	—
	LAVINA	AHDB Descriptive List 2023/24	[101]	[101]	[44.3]	High	[7]	[7]	[5]	—
	LUMEN	AHDB Descriptive List 2023/24	[99]	[99]	[44.7]	High	6	7	6	—
Clubroot	MENTHAL CR	AHDB Descriptive List 2023/24	[95]	[96]	[44.0]	High	6	[7]	[5]	Y
Clearfield®	CONTRA CL	AHDB Descriptive List 2023/24	[93]	[90]	[45.5]	High	[6]	[6]	[6]	—

Data Source:
AHDB Descriptive List 2023/24

MAIZE

DSV is a leading breeder of a range of different maize hybrids from several gene pools specially selected through its stringent internal testing systems.

The focus is on quality and high-yielding varieties and those listed below have been specially selected to enable UK growers to balance maximum agronomic flexibility with proven performance.

Data Source:
NIAB Forage Maize
Descriptive List

Variety	Site Type	Suitability	FAO	Dry Matter % at Harvest	DM Yield (t/ha)	DM Yield % (4/5 Yr)	ME at Harvest (MJ/kg DM)	ME Yield at Harvest (000s MJ/ha)	Starch % at Harvest	Starch Yield (t/ha)	Digestibility (%)	Early Vigour	Lodging	Leaf Senescence	Eyespot
LIKEIT	Favourable	Forage, AD, Grain	190	32.8	18.4	100	11.6	212	32.9	6.05	57.7	7.2	8.1	6.8	4.4
	Less Favourable	Forage, AD, Grain	190	32.7	17.7	100	11.5	203	33.1	5.84	57.2	6.9	8	7	4.4
LIROYAL	Favourable	Forage, AD, Grain	180	34	18	98	11.8	213	35.5	6.38	59.2	6.6	7.8	6.3	6.1
	Less Favourable	Forage, AD, Grain	190	34	17.7	100	11.8	208	35.6	6.29	58.7	6.7	7.6	6.6	6.1
FARMUNOX	Favourable	Forage, AD	210	31.9	19.3	105	11.7	226	33.3	6.41	58.3	6.7	6.7	7.6	7.4
	Less Favourable	Forage, AD	210	31.7	18.7	106	11.60	218	32.8	6.13	58	6.6	6	7.7	7.4
MOVANNA	Very Favourable	Forage, AD	210	32.8	19.5	99	11.5	224	33.8	6.53	57	7.1	7.5	4.2	5.9
PETROSHKA	Very Favourable	Forage, AD	230-Late	32.3	19.7	103	11.3	222	31	6.11	55.8	6.6	7.4	5.8	5.6

Early maturity

LIKEiT

Maturity Class: S180/K180



LIKEiT offers high dry matter yields with excellent standing power and high disease resistance. It prefers cooler climates, making it suitable for a wide range of sites. Rapid early vigour allied to a strong disease package with tolerance to fusarium and eyespot mean LIKEiT has huge potential as an early maturing variety.

- Rapid youth development
- Highest starch yields and contents
- Very good dry matter yield

LiROYAL

Maturity Class: FAO 190



LiROYAL is a high performing all-rounder with the top yield in its class, meaning all growers, especially dairy farmers, profit from a variety that is agronomically complete. LiROYAL is a very early forage maize well suited to both Favourable and Less Favourable sites. Its well-formed cob provides high starch content, great digestibility and strong yields.

- Top yield in its class
- High starch content
- High performing all-rounder

Long-chop maize silage – Top for balanced rations

Unlike grass silage, which is harvested in several cuts during the season, the quality of maize silage is consistent throughout the entire year, and this has a positive impact on milk yields. The use of maize silage with 15-30 mm chop lengths is beneficial to the rumen of dairy cows, and bulls too, and makes it possible to reduce the use of feed straw. Newly calved cows in particular clearly benefit, showing improved levels of fitness.

The key aspect in the production of coarser chop is to ensure that the kernels are optimally conditioned. Modern corn crackers are able to do this, although it is very important to discuss requirements with the contractor to ensure that the ground speed, cracker settings and compression are correct.

This type of silage is stable and provides a good foundation for a balanced forage based diet.

Uwe Dewenter – Extract from the German magazine "Innovation"

Read the full article



Intermediate maturity

FARMUNOX

Maturity Class: FAO 219



FARMUNOX is the earliest intermediate offered by DSV in the UK, with good fusarium and outstanding eyespot resistance the best yields in this maturity bracket. Huge ME and dry matter yields in combination with high starch content make it ideal for both forage and AD plants on both Favourable and Less Favourable sites.

- Very high yields
- Excellent quality with good fusarium and outstanding eyespot resistance
- Excellent quality for both forage and AD plants

FORTTUNO

Maturity Class: FAO 200

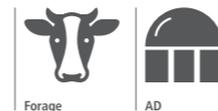


FORTTUNO is an early / main crop silage and grain variety. It is a tall hybrid which produces a big biomass but with excellent lodging resistance. FORTTUNO has good cell wall digestibility coupled with a high starch content and excellent energy values. FORTTUNO has a heavy yield potential and good early vigour.

- Top quality forage with high yield potential
- Excellent starch content
- Good early vigour

MOVANNA

Maturity Class: FAO 220/210



MOVANNA is DSV UK's most consistent forage and AD variety. A vigorous, mid-harvest performer, MOVANNA has a very robust agronomic package with excellent standing power and resistance to fusarium and eyespot, all of which mean a healthy plant, even if harvest is delayed. Excellent early vigour (7.1) culminates in high dry matter yields at harvest (19.5t/ha).

- High starch yields
- Good cold tolerance
- Proven for organic farming systems

Late maturity

PETROSHKA

Maturity Class: FAO 230



PETROSHKA is a high-quality AD variety ideal for the best sites. What's more, this mixed flint/dent maize can be used as a quality input for dairy cows and bull fattening. PETROSHKA can stretch harvest or drilling windows with rapid early growth, good eyespot tolerance and the ability to stay green until harvest.

- Very high starch yield
- High DM yield
- Very dense foliage



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All data is sourced from the UK AHDB Lists, National List trials for cereals and oilseeds and DSV internal trials. On the 1 – 9 scales, high figures indicate that a variety shows the character to a high degree.

Note: Whilst every effort has been made to ensure that the information in this variety guide is accurate and complete, some of the information is supplied to us by third parties and we are not able to check the accuracy and completeness of that information. No guarantee is given, that the listed information represents all aspects of agricultural practice. We do not accept any liability arising from any inaccuracy or omission in any of the information provided in this guide. Cover photo and photo on p23 'flowering blue lupin' from the breeder (Saatzucht Steinach).