

Danish Preferred

KWS Maltbyg

KWS CURTIS

KWS Cereals | 10/3- 2023

SEEDING
THE FUTURE
SINCE 1856

KWS



KWS CURTIS

- Dansk EU registrering 2023
- UK registrering 2022, optaget på UK “Recommended List 2022”

- Danish Preferred
 - Stress-test, February 2023

- Afprøvet 2 års dansk værdiafprøvning
- Afprøvet i Landsforsøg

KWS CURTIS

Udbytte og kvalitet



| | Landsforsøg Relativt udbytte | | | Råprotein (%) | | Sortering >2,5 mm (%) | | Sortering >2,8 mm (%) | | Rumvægt (kg/hl) | |
|-------------------|---------------------------------|---------------|----------------|------------------|-------|--------------------------|------|--------------------------|------|-----------------|-------|
| | Mean 21-22 (n=17) | 2022 (n=7) | 2021 (n=10) | 2022 | 2021 | 2022 | 2021 | 2022 | 2021 | 2022 | 2021 |
| KWS CURTIS | 103 (n=12) | 105 | 101 (n=5)* | 9,7 | 10,3* | 96 | 96* | 87 | 83* | 68,3 | 65,0* |
| Laureate | 104 | 103 | 104 | 9,7 | 10,4 | 97 | 98 | 90 | 91 | 68,0 | 66,8 |
| RGT Planet | 99 | 100 | 98 | 9,8 | 10,3 | 97 | 97 | 91 | 86 | 69,9 | 67,8 |
| Blanding | 100 | 100 | 100 (n=5)* | 9,8 | 10,5 | 95 | 96 | 83 | 79 | 68,8 | 65,7 |

*VCU (n=5) i 2021

| | Fungicide respons (hkg/ha) | | | Nematod resistens | | Bygrust (%) | | Skoldplet (%) | | Bladplet (%) | | Ramularia (%) | |
|-------------------|----------------------------|------|--|-------------------|---------|-------------|------|---------------|------|--------------|------|---------------|------|
| | 2022 | 2021 | | Race I | Race II | 2022 | 2021 | 2022 | 2021 | 2022 | 2021 | 2022 | 2021 |
| KWS CURTIS | 8,9 | - | | S | S | 19 | 8,0 | 1,6 | 3,5 | 0 | 0 | 6,0 | 3,8 |
| Laureate | 6,1 | 8,8 | | S | S | 16 | 5,0 | 3,0 | 2,6 | 0,2 | 0,09 | 6,0 | 8,0 |
| RGT Planet | 7,0 | 9,8 | | R | R | 20 | 12 | 13 | 2,2 | 16 | 18 | 8,0 | 13 |
| Blanding | 5,2 | 7,8 | | - | - | 24 | 11 | 1,0 | 3,7 | 1,2 | 6,0 | 13 | 14 |

KWS CURTIS

Dyrkningsegenskaber



| | Modning (dato) | | Strållængde (cm) | | Lejesæd, OBS (0 - 10) | | Aksnedknækning (0 - 10) | | Strånedknækning (0 - 10) | |
|-------------------|----------------|------|------------------|------|-----------------------|------|-------------------------|------|--------------------------|------|
| | 2022 | 2021 | 2022 | 2021 | 2022 | 2021 | 2022 | 2021 | 2022 | 2021 |
| KWS CURTIS | 2/8 | 26/7 | 69 | 66 | 0 | 0 | 0,8 | 0,7 | 0,8 | 1,8 |
| Laureate | 29/7 | 26/7 | 66 | 70 | 0 | 0 | 1,0 | 0,7 | 0,8 | 3,5 |
| RGT Planet | 29/7 | 26/7 | 74 | 70 | 0 | 0 | 0,8 | 0,3 | 2,2 | 2,8 |
| Blanding | 30/7 | 25/7 | 69 | 66 | 0,8 | 0,8 | 2,8 | 0,3 | 2,6 | 2,2 |

Spring barley 2023

Market options, yield and grain quality



| | Florence | SY Tennyson | Skyway | Sun King | Diviner | SY Signet | KWS Curtis | Firefox | Laureate | LG Diablo | RGT Planet | KWS Sassy | Fairing |
|--|-------------------|-------------|--------|----------|---------|-----------|------------|---------|----------|-----------|------------|-----------|---------|
| End-use group | Malting varieties | | | | | | | | | | | | |
| Scope of recommendation | UK | UK | UK | UK | UK | UK | UK | UK | UK | UK | UK | UK | Sp |
| Variety status | NEW | NEW | | NEW | NEW | NEW | NEW | | C | C | C | | |
| Fungicide-treated grain yield (% treated control) | | | | | | | | | | | | | |
| United Kingdom (7.5 t/ha) | 105 | 105 | 105 | 104 | 104 | 104 | 104 | 103 | 103 | 101 | 98 | 97 | 93 |
| East region (7.5 t/ha) | 106 | 107 | 106 | 104 | 104 | 105 | 105 | 103 | 103 | 102 | 99 | 96 | 93 |
| West region (7.3 t/ha) | [106] | [104] | 106 | [107] | [104] | [103] | [103] | 104 | 104 | 101 | 98 | 98 | 94 |
| North region (7.8 t/ha) | 104 | 106 | 102 | 103 | 105 | 105 | 103 | 103 | 102 | 102 | 99 | 98 | 92 |
| Main market options | | | | | | | | | | | | | |
| MBC malting approval for brewing use | T | T | P | T | N | T | T | - | F | F | F | N | - |
| MBC malting approval for malt distilling use | - | T | - | - | T | - | T | F | F | F | N | F | - |
| MBC malting approval for grain distilling use | - | - | - | - | - | - | - | - | - | - | N | - | F |
| Grain quality | | | | | | | | | | | | | |
| Specific weight (kg/hl) | 68.2 | 66.6 | 69.4 | 67.7 | 67.7 | 67.4 | 67.5 | 67.1 | 67.2 | 67.8 | 68.8 | 69.1 | 68.9 |
| Screenings (% through 2.25 mm) | 1.0 | 1.3 | 0.9 | 1.1 | 1.6 | 1.4 | 1.9 | 1.4 | 1.2 | 1.3 | 1.2 | 0.9 | 1.0 |
| Screenings (% through 2.5 mm) | 2.7 | 2.6 | 2.4 | 2.5 | 4.0 | 3.1 | 5.2 | 3.6 | 3.0 | 3.2 | 3.2 | 2.2 | 2.6 |
| Nitrogen content (%) | 1.51 | 1.47 | 1.54 | 1.51 | 1.51 | 1.48 | 1.50 | 1.51 | 1.52 | 1.49 | 1.54 | - | - |
| Status in RL system | | | | | | | | | | | | | |
| Year first listed | 23 | 23 | 21 | 23 | 23 | 23 | 23 | 20 | 16 | 18 | 15 | 16 | 16 |

Varieties no longer listed: Fairway, Jensen, Spinner, SY Bronte, SY Tungsten and SY Splendor.

Null-Lox spring barley varieties are described. Data is provided for information only and does not constitute a recommendation.

Growers are strongly advised to check with their buyer before committing to a malting variety without full MBC approval.

Comparisons of variety performance across regions are not valid.

All yields on this table are taken from treated trials receiving a full fungicide programme.

UK = Recommended for the UK

E = Recommended for the East region

W = Recommended for the West region

Sp = Specific recommendation. Fairing is suitable for the production of malt for grain distilling

C = Yield control. For this table, Propino and SY Tungsten were also control varieties but are no longer listed

* = Variety no longer under test in RL trials

~ = Variety lacking a gene for lipogenase production (a Null-Lox variety)

MBC = Malting Barley Committee

F = Full MBC approval in this segment

N = Not approved by MBC in this segment

P = Provisional MBC approval in this segment

T = Under test for MBC approval in this segment

KWS CURTUS

Stress test



| Index Result | | | | | | | | | |
|-------------------------------------|-------------|-------------|-------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | Laureate_45 | Laureate_43 | Laureate_41 | RGT Planet_45 | RGT Planet_43 | RGT Planet_41 | KWS Curtis_45 | KWS Curtis_43 | KWS Curtis_41 |
| Extract | 3 | 3 | 4 | 1 | 3 | 5 | 3 | 2 | 3 |
| Friability | 1 | 1 | 3 | 1 | 2 | 4 | 1 | 1 | 3 |
| Beta-Glucan | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 2 |
| Viscosity | 1 | 1 | 3 | 1 | 2 | 4 | 1 | 1 | 3 |
| FAN | 1 | 3 | 4 | 2 | 3 | 3 | 3 | 4 | 5 |
| Soluble N | 2 | 3 | 4 | 1 | 2 | 3 | 3 | 4 | 5 |
| Kolback | 2 | 3 | 4 | 1 | 2 | 4 | 2 | 4 | 5 |
| FAN dev.* | 3% | -1% | 1% | -1% | -2% | 10% | -9% | -10% | -17% |
| Soluble N dev.* | 1% | 0% | 1% | 4% | 5% | 6% | -7% | -8% | -13% |
| Kolback dev.* | -1% | -1% | 1% | 1% | 3% | 3% | -2% | -6% | -12% |
| Proteolyse compared to modification | As expected | | | 3 % higher | | | 9 % lower | | |
| Alpha-Amylase | 1 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 4 |
| Beta-Amylase | 1 | 2 | 3 | 2 | 2 | 1 | 1 | 2 | 3 |
| Limit Dextrinase | 2 | 3 | 4 | 3 | 3 | 3 | 2 | 3 | 4 |
| Attenuation | 3 | 4 | 5 | 2 | 4 | 5 | 1 | 3 | 4 |
| Turbidity | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| Index ** | 12 | 14 | 20 | 8 | 15 | 21 | 10 | 11 | 17 |
| Index mean *** | 29 | | | 26 | | | 24 | | |

Explanation to the color indications: The best of the standards is for each parameter and steeping degree assigned. Red is used for values being two points higher than best standard, the higher value the more intense red.

* = deviation from the calculated value (calculated from the degree of modification).

** = 2*Extract + Mean(Friability, Beta-glucan, Viscosity) + Mean(Alpha, Beta-amylase, Limit Dextrinase) + Attenuation

*** = Index_45 + Mean(Index_43, Index_41)

KWS CURTIS



Performance

- ✓ KWS Curtis er non-GN – til brygning og destillering
- ✓ Meget stærkt strå
- ✓ Høj sygdom-tolerance – specielt stærk på bladplet og ramularia
- ✓ Recommended list 2023 - kvalitet for øl og whiskey I UK



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