

AHDB Recommended List - Table 9

Spring barley 2019

Market options, yield and grain quality



| | Cosmopolitan | LG Diablo | RGT Planet | Laureate | RGT Asteroid | Chanson ~ | KWS Iriina | Olympus | KWS Sassy | Sienna | Propino | Fairing | Concerto | LG Tomahawk | Scholar | Ovation | Hacker |
|--|-------------------|-----------|------------|----------|--------------|-----------|------------|---------|-----------|--------|---------|---------|----------|----------------|---------|---------|--------|
| End-use group | Malting varieties | | | | | | | | | | | | | Feed varieties | | | |
| Scope of recommendation | UK | UK | UK | UK | UK | UK | UK | UK | UK | UK | UK | Sp | UK | UK | Nr | UK | W |
| | NEW | | C | C | | | *C | | | | C | | C | * | * | * | * |
| Fungicide-treated grain yield (% treated control) | | | | | | | | | | | | | | | | | |
| United Kingdom (7.6 t/ha) | 106 | 105 | 103 | 103 | 102 | 102 | 102 | 102 | 101 | 100 | 98 | 96 | 94 | 104 | 103 | 102 | 99 |
| East region (7.8 t/ha) | 106 | 106 | 104 | 104 | 103 | 102 | 102 | 100 | 99 | 98 | 96 | 96 | 93 | 105 | 103 | 104 | [96] |
| West region (7.6 t/ha) | [105] | 103 | 104 | 103 | 102 | 100 | 100 | 101 | 99 | 100 | 98 | 97 | 95 | 102 | 101 | 101 | 101 |
| North region (7.5 t/ha) | 106 | 107 | 103 | 104 | 102 | 104 | 102 | 103 | 103 | 102 | 99 | 95 | 92 | 105 | 104 | 102 | 99 |
| Main market options | | | | | | | | | | | | | | | | | |
| MBC malting approval for brewing use | T | P | F | F | P | P | O | - | N | - | F | - | F | - | - | - | - |
| MBC malting approval for malt distilling use | - | P | N | F | P | - | N | - | F | F | N | - | F | N | - | - | - |
| MBC malting approval for grain distilling use | - | - | N | - | P | - | N | F | - | N | N | F | N | - | - | - | - |
| Grain quality | | | | | | | | | | | | | | | | | |
| Specific weight (kg/hl) | 66.8 | 67.6 | 68.3 | 66.8 | 68.7 | 66.3 | 66.4 | 67.1 | 68.8 | 70.9 | 68.7 | 68.8 | 69.3 | 66.4 | 69.0 | 66.8 | 70.0 |
| Screenings (% through 2.25 mm) | 1.2 | 1.2 | 1.1 | 1.3 | 0.9 | 1.0 | 1.6 | 1.8 | 0.9 | 1.4 | 0.8 | 0.8 | 1.1 | 1.5 | 1.8 | 1.6 | 1.1 |
| Screenings (% through 2.5 mm) | 3.0 | 2.8 | 3.1 | 3.0 | 2.4 | 2.7 | 4.0 | 4.7 | 2.1 | 3.2 | 1.7 | 2.2 | 2.6 | 3.5 | 5.2 | 4.3 | 3.0 |
| Nitrogen content (%) | 1.43 | 1.43 | 1.45 | 1.47 | 1.47 | 1.44 | - | 1.51 | 1.49 | 1.49 | 1.54 | 1.58 | 1.51 | 1.42 | - | 1.45 | - |
| Status in RL system | | | | | | | | | | | | | | | | | |
| Year first listed | 19 | 18 | 15 | 16 | 18 | 17 | 14 | 15 | 16 | 15 | 10 | 16 | 09 | 18 | 15 | 16 | 14 |

Average LSD (5%)

2.3

3.3

3.4

2.9

0.7

0.3

0.8

0.05

| Not added to Recommended List | | | |
|-------------------------------|-----------------|------------|---------|
| LG Goddess | SY Contour | SY Kailash | Embrace |
| Malting varieties | Feed varieties | | |
| Not added to RL | Not added to RL | | |
| - | - | - | - |
| 104 | 104 | 105 | 104 |
| 102 | 106 | 104 | 105 |
| [104] | [101] | [104] | [105] |
| 105 | 104 | 105 | 104 |
| T | T | - | - |
| T | - | - | - |
| - | - | - | - |
| 67.2 | 65.4 | 66.2 | 67.5 |
| 1.6 | [1.8] | 1.4 | 1.5 |
| 4.9 | [4.3] | 3.3 | 3.5 |
| 1.41 | 1.41 | [1.43] | [1.46] |
| - | - | - | - |

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
 Nr = Recommended for the North region
 W = Recommended for the West region
 Sp = Fairing is suitable for the production of malt for grain distilling

C = Yield control (for current table)
 * = Variety no longer in trials
 ~ = Variety lacking a gene for lipoxygenase production
 [] = Limited data

F = Full MBC approval
 N = Not approved by MBC for this segment
 P = Provisional MBC approval
 T = Under test for MBC approval in this segment
 O = No longer approved by MBC

LSD = Least significant difference
 Average LSD (5%): Varieties that are more than one LSD apart are significantly different at the 95% confidence level.

AHDB Recommended List - Table 9

Spring barley 2019

Yield, agronomy and disease resistance



| | Cosmopolitan | LG Diablo | RGT Planet | Laureate | RGT Asteroid | Chanson ~ | KWS Irina | Olympus | KWS Sassy | Sienna | Propino | Fairing | Concerto | LG Tomahawk | Scholar | Ovation | Hacker | Average LSD (5%) |
|--|-------------------|-----------|------------|----------|--------------|-----------|-----------|---------|-----------|--------|---------|---------|----------|----------------|---------|---------|--------|------------------|
| End-use group | Malting varieties | | | | | | | | | | | | | Feed varieties | | | | |
| Scope of recommendation | UK | UK | UK | UK | UK | UK | UK | UK | UK | UK | UK | Sp | UK | UK | Nr | UK | W | |
| | NEW | | C | C | | | *C | | | | | | C | * | * | * | * | |
| Fungicide-treated grain yield (% treated control) | | | | | | | | | | | | | | | | | | |
| United Kingdom (7.6 t/ha) | 106 | 105 | 103 | 103 | 102 | 102 | 102 | 102 | 101 | 100 | 98 | 96 | 94 | 104 | 103 | 102 | 99 | 2.3 |
| East region (7.8 t/ha) | 106 | 106 | 104 | 104 | 103 | 102 | 102 | 100 | 99 | 98 | 96 | 96 | 93 | 105 | 103 | 104 | [96] | 3.3 |
| West region (7.6 t/ha) | [105] | 103 | 104 | 103 | 102 | 100 | 100 | 101 | 99 | 100 | 98 | 97 | 95 | 102 | 101 | 101 | 101 | 3.4 |
| North region (7.5 t/ha) | 106 | 107 | 103 | 104 | 102 | 104 | 102 | 103 | 103 | 102 | 99 | 95 | 92 | 105 | 104 | 102 | 99 | 2.9 |
| Untreated grain yield (% treated control) | | | | | | | | | | | | | | | | | | |
| United Kingdom (7.6 t/ha) | 94 | 94 | 93 | 94 | 93 | 90 | 89 | 89 | 91 | 91 | 84 | 86 | 84 | 92 | 92 | 87 | 88 | 3.0 |
| Agronomic features | | | | | | | | | | | | | | | | | | |
| Resistance to lodging (no PGR) (1–9) | [7] | 7 | 7 | 7 | 7 | 6 | 8 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 0.5 |
| Straw height (cm) | 69 | 73 | 73 | 71 | 74 | 74 | 69 | 73 | 79 | 77 | 75 | 73 | 78 | 70 | 68 | 72 | 73 | 1.3 |
| Ripening (+/-Concerto, -ve = earlier) | +1 | +2 | 0 | +1 | +1 | 0 | 0 | +1 | +1 | +1 | 0 | -1 | 0 | +1 | +1 | +1 | 0 | 0.7 |
| Resistance to brackling (1–9) | 7 | 8 | 8 | 8 | 8 | 7 | 9 | 7 | 7 | 7 | 8 | 7 | 8 | 7 | 9 | 7 | 9 | 0.7 |
| Disease resistance | | | | | | | | | | | | | | | | | | |
| Mildew (1–9) | - | [9] | [9] | [8] | [9] | [8] | [9] | [9] | [8] | [9] | 6 | [8] | 8 | [9] | [9] | [9] | [9] | 1.5 |
| Yellow rust (1–9) | - | [5] | [5] | [6] | [8] | [6] | [6] | [7] | [5] | [6] | [3] | [8] | [8] | [8] | [8] | [6] | [6] | 2.3 |
| Brown rust (1–9) | [5] | 5 | 4 | 5 | 6 | 4 | 5 | 4 | 5 | 6 | 4 | 4 | 5 | 4 | 5 | 4 | 5 | 1.7 |
| Rhynchosporium (1–9) | [6] | 5 | 5 | 6 | 5 | 5 | 5 | 6 | 6 | 6 | 5 | 6 | 4 | 6 | 5 | 6 | [5] | 1.8 |

On the 1–9 scales, high figures indicate that a variety shows the character to a high degree (e.g. high resistance). Comparisons of variety performance across regions are not valid.

UK = Recommended for the UK
 Nr = Recommended for the North region
 W = Recommended for the West region
 Sp = Fairing is suitable for the production of malt for grain distilling

C = Yield control (for current table)
 * = Variety no longer in trials
 ~ = Variety lacking a gene for lipoxygenase production
 [] = Limited data

LSD = Least significant difference
 Average LSD (5%): Varieties that are more than one LSD apart are significantly different at the 95% confidence level.

| Not added to Recommended List | | | | |
|-------------------------------|-------------------|------------|-----------------|---------|
| | LG Goddess | SY Contour | SY Kailash | Embrace |
| | Malting varieties | | Feed varieties | |
| | Not added to RL | | Not added to RL | |
| | - | - | - | - |
| | 104 | 104 | 105 | 104 |
| | 102 | 106 | 104 | 105 |
| | [104] | [101] | [104] | [105] |
| | 105 | 104 | 105 | 104 |
| | 93 | 94 | 94 | 95 |
| | [7] | [7] | [7] | [7] |
| | 70 | 70 | 71 | 71 |
| | +1 | +2 | +2 | +1 |
| | 7 | 8 | 9 | 8 |
| | - | - | - | - |
| | - | - | - | - |
| | [5] | [5] | [4] | [5] |
| | [6] | [6] | [5] | [5] |

AHDB Recommended List - Table 9

Spring barley 2019

Supplementary data



| | Cosmopolitan | LG Diablo | RGT Planet | Laureate | RGT Asteroid | Chanson ~ | KWS Irima | Olympus | KWS Sassy | Sienna | Propino | Fairing | Concerto | LG Tomahawk | Scholar | Ovation | Hacker |
|----------------------------------|-------------------|-----------|------------|----------|--------------|-----------|-----------|---------|-----------|--------|---------|---------|----------|----------------|---------|---------|---------|
| | Malting varieties | | | | | | | | | | | | | Feed varieties | | | |
| End-use group | | | | | | | | | | | | | | | | | |
| Scope of recommendation | UK | UK | UK | UK | UK | UK | UK | UK | UK | UK | UK | Sp | UK | UK | Nr | UK | W |
| Breeder/UK contact | NEW | | C | C | | | *C | | | | C | | C | * | * | * | * |
| Breeder | Sej | LimEur | RAGT | SyP | R2n | - | KWS | LimEur | KWS | LimEur | SyP | SyP | Lim | LimEur | SyP | LimEur | Sec |
| UK contact | Sen | Lim | RAGT | Syn | RAGT | SU | KWS | Lim | KWS | Lim | Syn | Syn | Lim | Lim | Syn | Lim | Agr |
| Annual treated yield (% control) | | | | | | | | | | | | | | | | | |
| 2014 (8.2 t/ha) | - | - | 104 | 103 | - | 102 | 103 | 103 | 100 | 100 | 98 | 97 | 92 | - | 103 | 103 | 98 |
| 2015 (8.6 t/ha) | - | [105] | 103 | 104 | [101] | [103] | 102 | 101 | 101 | 99 | 97 | 95 | 94 | [104] | 102 | 104 | 98 |
| 2016 (7.6 t/ha) | 105 | 104 | 104 | 103 | 103 | 100 | 102 | 100 | 101 | 100 | 99 | 97 | 93 | 104 | 102 | 100 | 99 |
| 2017 (7.2 t/ha) | 106 | 106 | 103 | 103 | 103 | 102 | 101 | 101 | 100 | 101 | 98 | 95 | 95 | 103 | 102 | 101 | 99 |
| 2018 (6.5 t/ha) | 107 | 106 | 102 | 105 | 103 | 102 | 100 | 102 | 100 | 99 | 97 | 97 | 95 | 105 | 105 | 103 | 98 |
| Malting quality | | | | | | | | | | | | | | | | | |
| Hot water extract (l deg/kg) | 313.9 | 315.2 | 314.9 | 315.1 | 314.7 | 313.1 | [313.9] | 311.8 | 315.6 | 315.6 | 312.3 | 310.7 | 315.6 | 312.8 | - | 312.6 | [313.9] |
| Status in RL system | | | | | | | | | | | | | | | | | |
| Year first listed | 19 | 18 | 15 | 16 | 18 | 17 | 14 | 15 | 16 | 15 | 10 | 16 | 09 | 18 | 15 | 16 | 14 |
| RL Status | P1 | P2 | - | - | P2 | - | * | - | - | - | - | - | - | * | * | * | * |

Average LSD (5%)

1.7

Not added to Recommended List

| | LG Goddess | Sy Contour | Sy Kailash | Embrace |
|---|-------------------|------------|-----------------|---------|
| | Malting varieties | | Feed varieties | |
| | Not added to RL | | Not added to RL | |
| | - | - | - | - |
| | LimEur | SyP | SyP | Sej |
| | Lim | Syn | Syn | Sen |
| - | - | - | - | - |
| - | - | - | - | - |
| - | 103 | 102 | 105 | 104 |
| - | 103 | 105 | 104 | 104 |
| - | 105 | 105 | 105 | 106 |
| - | 313.9 | 315.3 | 313.1 | 312.5 |
| - | - | - | - | - |
| - | - | - | - | - |

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

UK = Recommended for the UK
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 W = Recommended for the West region
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 * = Variety no longer in trials

~ = Variety lacking a gene for lipoxygenase production
 [] = Limited data
 P1 = First year of recommendation
 P2 = Second year of recommendation

Agr = Agrii (www.agrii.co.uk)
 KWS = KWS UK (www.kws-uk.com)
 Lim = Limagrain UK (www.lgseeds.co.uk)
 LimEur = Limagrain Europe SA (www.lgseeds.co.uk)
 R2n = RAGT, France (www.ragt.co.uk)
 RAGT = RAGT Seeds (www.ragt.co.uk)

Sec = Secobra, France (www.secobra.com)
 Sej = Sejet, Denmark (www.sejet.com)
 Sen = Senova (www.senova.uk.com)
 SU = Saaten Union UK (www.saaten-union.co.uk)
 Syn = Syngenta UK Ltd (www.syngenta.co.uk)
 SyP = Syngenta Participations AG (www.syngenta.co.uk)

LSD = Least significant difference
 Average LSD (5%): Varieties that are more than one LSD apart are significantly different at the 95% confidence level.