

Cereal Varieties Summer 2017 Update: Winter wheat

Winter barley

Spring barley





Winter Wheat North region yield = 9.9 t/ha uT = untreated yield as % of UK treated control (10.7 t/ha)

[] = limited data; *new* = added to the 2017/18 RL;

Varieties suitable for distilling are rated *medium* or *good*.

Bennington North [101] uT 90

A **new** soft Group 4, high-yielding feed variety for the East and West regions. It is classified as a uks soft wheat for export but is rated **poor** for distilling. This variety with medium length straw has produced its best yields in the East region. It yields well on heavier textured soils. It has very high untreated yields, with good resistance to mildew, yellow rust and brown rust.

Bletchley

A high yielding feed variety that didn't make the recommended list for 2017. It has good rust resistance and has OWBM resistance.

Cassidy

A high yielding feed variety which didn't make the recommended list for 2017. It has good yellow rust resistance.

Claire North [97] uT 70

This nabim Group 3 variety has been popular variety for many years, with consistent yields and good marketability. Claire continues to be the benchmark for biscuit making, with its good flour and dough extensibility. It is rated *medium* for distilling. It is now outclassed for yield, but still suits very early sowing. It is susceptible to mildew and can be at risk of sprouting. It is no longer in RL trials.

Cordiale North 94 uT 64

This nabim Group 2 variety is very early maturing and has short, stiff straw. Cordiale has been the Group 2 variety of choice for most millers, with its consistent milling and baking performance. It has above average Hagberg falling number, with good protein levels and specific weight. It is susceptible to brown rust and yellow rust. Often grown as second wheat and may allow entry for oilseed rape.

Costello North 99 uT 85

A hard Group 4 feed variety has a high Hagberg falling number and exceptionally high specific weight. It is short-strawed and has a high untreated yield, with good resistance to mildew and yellow rust. It has performed well in the West region.

Cougar

A soft endosperm feed variety with a high yield, but rated **poor** for distilling. It is no longer on the recommended list. It has stiff straw, but is late maturing.

Crusoe North 93 uT 77

A Group 1 quality bread making wheat, with ukp export potential. It is a popular variety with good and consistent baking performance. It is lower yielding than most other Group 1's, but tends to produce consistently high protein levels. It has a high specific weight. It has short straw and high resistance to mildew, yellow rust and Septoria tritici but is susceptible to eyespot and very susceptible to brown rust.

Dickens North 104 uT 77

A hard Group 4 feed variety that has performed best in the North region and on lighter soils. It has high resistance to mildew and yellow rust but is susceptible to eyespot.

Dunston North [107] uT 92

A **new** hard Group 4 feed variety, with high treated yield and very high untreated yield. It is medium tall, with good standing ability. Limited data suggests it performs well in the North region. Dunston has high resistance to yellow rust and Septoria tritici. This variety is suited to first and second cereal rotations. Limited data suggests it yields very well in when early sown and on lighter textured soils. Dunston provides a strong all round agronomy package.

Elation UK 104 uT 85

This is a *candidate* soft feed variety. It has good yield potential, with high untreated yield. Specific weight and Hagberg falling number are moderate. Its potential for distilling is still being evaluated.

Elicit UK 104 uT 90

A *candidate* variety, with biscuit-making potential. It has high treated and untreated yields, with good resistance to yellow rust and Septoria tritici. Compared with Zulu, it has similar maturity, higher specific weight, but lower Hagbergs. Its potential for distilling is still being evaluated.

Evolution North 104 uT 80

A high yielding feed variety with better disease resistance than many other high yielding feed varieties. Its specific weights tend to be low and it is later maturing than other hard Group 4's. It suits lighter textured soils and performs well in second cereal situations. It has no serious disease weaknesses, with high resistance to yellow rust and brown rust. It has no midge resistance.

Freiston North [106] uT 88

This is a *new* hard Group 4 feed variety with high treated and untreated yields. Frieston has performed well in the North region. It has a good all round disease resistance, with an excellent yellow rust rating; high resistance to mildew, brown rust and Septoria tritici. Limited data suggests it is susceptible to eyespot. It has medium length straw and responds well to a PGR program. It has specific weight just below that of Grafton.

Grafton North [100] uT 74

A hard Group 4 feed variety that suit early drilling. It is early maturing variety, with short very stiff straw. It is becoming outclassed for yield, but suits growers on high fertility situations and heavy soils. Grafton has very good grain quality and moderate disease resistance. It has good eyespot resistance and performs well as a second wheat.

Graham North 100 uT 88

A high-yielding hard Group 4, with high Hagbergs. It underperforms in the North region, but does well in the West region. It is relatively early maturing and has performed best as a first cereal and on heavier soils. Graham has produced high untreated yields and has high resistance to mildew, yellow rust and Septoria tritici. It is susceptible to eyespot.

Hardwicke North [104] uT 86

This **new** soft Group 4 feed variety is a North region recommendation and rated as **medium** for distilling. It has short stiff straw with high resistance to yellow rust. It has similar maturity to Viscount.

JB Diego North 100 uT 77

This hard Group 4 variety has given consistently good yields in many situations and has been one of the most popular varieties in areas that want a hard endosperm feed variety. It has never been a main variety in Scotland, but in popular is the northeast of England. Its yield is becoming outclassed compared to some more recent variety introductions. It has good grain quality, including high Hagberg and specific weight, and intermediate disease resistance. It suits the second wheat slot and has good sprouting resistance.

KWS Barrel North 109 uT 74

A soft Group 3 variety combining very high yield with biscuit and export quality potential. It is classified as a uks soft wheat for export but is rated as **poor** for distilling. This short, stiff-strawed variety has produced very high yields in the North region and has performed particularly well on lighter soils. It has high resistance to yellow rust, combined with resistance to orange wheat blossom midge. It is susceptible to Septoria tritici and eyespot.

KWS Basset North 101 uT 76

This Group 3 biscuit wheat has the uks classification for export. It is rated **poor** for distilling. It is not as high yielding as KWS Barrel, but does well when drilled early. It has high specific weight and has good resistance to yellow rust and orange wheat blossom midge.

KWS Crispin North 98 uT 88

This hard Group 4 feed variety underperforms in the North region. It has intermediate Hagbergs. KWS Crispin has high resistance to mildew and yellow rust, combined with resistance to orange wheat blossom midge. It has moderate resistance to Septoria and is susceptible to eyespot. It is best as a first cereal, with relatively good performance on heavier soils. It is suitable for late sowing.

KWS Gator

A hard Group 4 feed variety, but no longer on the recommended list. It performed well as a second wheat and on lighter land, but overall its yields were down on several of the more widely grown feed varieties. Good straw strength and good yellow rust resistance but susceptible to eyespot and brown rust.

KWS Jackal

Data cannot be published as this *candidate* variety has not completed National List testing.

KWS Kerrin North [110] uT 84

A new hard Group 4 feed variety with very high yields as a first or second wheat. Limited data suggests that it performs very well in the North region, and is suited to lighter textured soils or when late sown. It tends to give low Hagbergs and specific weight. It has high resistance to mildew, yellow rust and brown rust as well as resistance to orange wheat blossom midge. It is later maturing that Grafton and JB Diego.

KWS Lili North 104 uT 75

This is the highest yielding nabim Group 2 variety with a treated yield 10% above Cordiale; it has given very high yields in the North region. It is a later maturing variety with short stiff straw and high resistance to mildew and yellow rust. It has performed particularly well on lighter soils. It is well suited to first wheat situations, but its yield also holds up well as a second wheat. Its tendency to lower protein content will require careful nitrogen management if looking for premium markets.

KWS Luther

Data cannot be published as this *candidate* variety has not completed National List testing.

KWS Santiago North 104 uT 69

A Group 4 variety recommended for the East and West regions as a hard highyielding feed variety. KWS Santiago tends to give low Hagbergs and lowish specific weight. It is relatively late maturing and is susceptible to Septoria tritici and eyespot. It requires a good fungicide and PGR programme to achieve good yields on a range of soil types and rotational positions. It is resistant to orange wheat blossom midge.

KWS Silverstone North 106 uT 81

A high yielding Group 4 feed variety that is currently one of the highest yielding varieties on the recommended list, with good performance in the North region. It has a high Hagberg falling number and specific weights. Its tall straw is rather weak and it suits lighter textured soils, and is best in the first wheat position. It has high resistance to mildew, yellow rust and brown rust, but is susceptible to Septoria and eyespot.

KWS Siskin North101 uT 88

This nabim Group 2 variety has a good UK yield, but underperforms slightly in the North region. It is classified as a ukp bread wheat for export and has high Hagbergs and moderate specific weight. This variety has produced very high untreated yields, with high resistance to Septoria tritici, mildew and yellow rust, but it is susceptible to eyespot. It has moderate resistance to lodging but responds well to plant growth regulators. It has performed particularly well in first cereal situations. It has a relatively low resistance to sprouting.

KWS Trinity North 100 uT 76

Is a high yielding nabim Group 1 variety. It has a very high Hagberg falling number and goodish good specific weight, but low protein content so will require careful nitrogen management to meet specification. It has shown good processing quality and baking performance. It suits all soil types. It has high tillering capacity and produces short stiff straw when treated with PGRs. It yields relatively well when early sown. It has high resistance to mildew, yellow rust and brown rust, but is weak to Septoria. It has good resistance to sprouting and intermediate maturity.

KWS Zyatt North [98] uT 91

This new nabim Group 1 variety has shown high UK yield, but underperforms in the North region. Quality tests indicated good processing and baking performance. It has high Hagbergs and specific weights. It has a very high untreated yield with good resistance to mildew, yellow rust, Septoria and eyespot. It has stiff straw and early maturity. For rotational position, it suits heavier textured soils and is good in the second wheat position.

Leeds North 104 uT 71

A soft Group 4 variety with high yields and a *medium* rating for distilling. Classified as a uks soft wheat for export. It has high specific weight and intermediate Hagberg falling number. It has performed well in the North region, but needs good protection because of high susceptibility to mildew, Septoria and eyespot. It has good resistance to blossom midge and good Fusarium ear blight resistance. It is rather late maturing. Leeds performs best on lighter soils and has yielded well in late sown trials.

LG Bletchley

A soft feed variety with potential for biscuit making that was grown in RL trials in 2016 but not added to the recommended list.

LG Generation

Data cannot be published as this *candidate* variety has not completed National List testing.

LG Motown North [104] uT 89

This new soft Group 4 variety is high-yielding in the North region and is rated as *medium* for distilling. It has intermediate Hagberg falling number and lowish specific weight. It is early maturing variety has given high UK yields in treated and untreated trials. Limited data suggest it is well suited to lighter textured soils. Its short straw has moderate resistance to lodging but responds well to plant growth regulators. It has a high untreated yield, with a good all-round disease resistance profile with high resistance to mildew, yellow rust and brown rust, it also has OWBM resistance. Limited data suggest it is very susceptible to eyespot.

LG Sundance North [102] uT 90

A new soft Group 4 rated *medium* for distilling. It lower yielding that LG Motown and has with lower Hagbergs and specific weight. It does, however, have a high untreated yield with the highest rating for resistance to Septoria tritici on the 2017/18 RL, with high resistance to yellow rust and resistance to OWBM. It has slightly later maturity than Viscount, but us similar in having good straw stiffness. This provides an attractive package. Limited data suggest it is susceptible to eyespot.

Marlowe

A high yielding hard feed variety which didn't make the recommended list for 2017 with good mildew and yellow rust resistance. Tall weak straw so is susceptible to lodging.

Moulton North [104] uT 89

This new soft group 4 feed variety is high yielding with a high specific weight. It is rated as *medium* for distilling and classified as a uks soft feed for export. Moulton has medium length straw and has given high yields in both treated and untreated trials. It has high resistance to mildew, yellow rust, brown rust and septoria tritici but limited data suggest it is susceptible to eyespot.

Myriad North 103 uT 70

Has been a widely-grown soft Group 4 variety, with a recommended for the North region. It is rated as *medium* for distilling and classified as a uks wheat for export. Myriad's yield has been consistent in the North region trials. It has become increasingly susceptible to yellow rust, other its disease resistance is intermediate. It is resistant to orange wheat blossom midge. It has moderate resistance to lodging and responds well to plant growth regulators. It seed area has declined.

Reflection North 104 uT 76

This hard Group 4 has a high treated yield and a good specific weight. It has short stiff straw and performs well as first cereal. Limited data suggests it suits early sowing and lighter textured soils. It is relatively early maturing. Reflection has high resistance to mildew and brown rust but is very susceptible to yellow rust. It is resistant to orange wheat blossom midge.

Revelation North 100 uT 81

A soft Group 4 feed variety rated **good** for distilling. It has stiff straw and good disease resistance, with high resistance to yellow rust, brown rust and eyespot and above average resistance to fusarium head blight. It is not midge resistant. Its slow autumn development could make it a useful candidate for very early drilling. It is later maturing than Leeds and Myriad.

RGT Illustrious North 95 uT 83

This new nabim Group 1 variety tends to underperform in the North region. It has intermediate values for Hagberg falling number, protein and specific weight, though baking performance has been good. It is slightly later maturing than other quality bread wheats but has a good disease package with high ratings for mildew, yellow rust, brown rust and eyespot.

RGT Knightsbridge

This soft Group 4 variety was a candidate in 2016 but not added to recommended list. Limited data indicated a good treated yield in the North region, but its specific weight was very low.

RGT Universe

This is a *candidate* soft feed variety has good yield potential, with intermediate disease resistance and grain quality characteristics. Its potential for distilling is not yet reported. It would need to show good performance in 2017 before recommending for sowing in 2018.

RGT Westminster

This soft Group 4 variety was a candidate in 2016 but not added to recommended list. Limited data indicates a modest treated yield in the North region and its specific weight was low.

Savello North [106] uT 81

A new soft Group 4 variety with a high treated yield in the North region. It rated as *medium* for distilling, though has a low specific weight and intermediate Hagberg falling number. Savello has high resistance to mildew and yellow rust. It is susceptible to brown rust and limited data suggest it is susceptible to eyespot. It has moderate resistance to lodging but responds well to plant growth regulators. It is early maturing and has performed well in second cereal situations.

Shabras North 105 uT 86

This new hard Group 4 is very high yielding and early to mature. Specific weight is and Hagberg falling number are moderate. Very good resistance to yellow rust and mildew, along with goodish resistance to other diseases (apart from brown rust) give Shabras a high untreated yield. It performs well as a second wheat and on lighter textured soils.

Skyfall N 101 uT 82

An established nabim Group 1 variety with high yield and very good milling and baking qualities. It has good Hagberg falling number and specific weight, lower protein content so will require careful nitrogen management to meet specification. It has very stiff straw and intermediate disease resistance, plus resistance to orange blossom midge. It is relatively early maturing and suits all soil types.

Spyder North 97 uT 84

The soft Group 3 underperforms in the North region and is rated 'poor' for distilling. It had moderate resistance to lodging but responds well to plant growth regulators. It has high resistance to mildew and brown rust but is intermediate for yellow rust and susceptible to eyespot. It is relatively early maturing.

Stratosphere

A soft feed variety was grown in RL trials in 2016 but not added to the recommended list. Limited data indicated a good treated yield in the North region, but its specific weight was very low.

Verso UK 105 uT 82

This *candidate* hard feed variety tends to be intermediate for all agronomic features. Its grain quality for Hagberg and specific weight are average at best.

Viscount North 103 uT 71

This long established soft feed variety is recommended for the North region where it achieves a high yield and is considered to be the benchmark variety for distilling, for which it has a *good* rating. It also meets the uks specification for export markets. It has intermediate specific weight. Its lowish Hagberg falling number may contribute to an increased risk of sprouting. It has short stiff straw. And intermediate disease resistance. It has performed well in later sown trials.

Zulu North 102 uT 76

This nabim Group 3 biscuit variety is relatively high yielding and is rated *medium* for distilling. Zulu has been consistent in meeting the soft milling requirements. It had intermediate Hagberg falling number and specific weight. It has orange wheat blossom midge resistance and high resistance to mildew, but is susceptible to yellow rust, brown rust and eyespot. Its moderate straw strength responds well to plant growth regulators.

Winter Barley

North region yield = 8.9 t/ha

uT = untreated yield as % of UK treated control (9.4 t/ha)

new = added to the 2017/18 RL

Bazooka North 109 uT 90

Is a hybrid six-row with a specific weight better than Volume, and with lower screenings. It has tall stiff straw, but can lodge under high pressure situations. It has intermediate disease resistance, with similar Rhynchosporium resistance to Volume, but is weaker for mildew. It is slightly later maturing than Volume. It yields well in all regions and performs well on lighter soils.

Belfry North 107 uT 91

Recommended as a hybrid six-row with an intermediate specific weight, not quite equal to Volume, but fewer screenings. It has stiffer straw with similar length to Volume. Its brown rust and net blotch resistance are better than Volume, mildew and Rhynchosporium resistance are the same. It is earlier that Bazooka. It has performed well on heavier soils.

California North 98 uT 81

Recommended for the West for its tall stiff straw, early maturity and moderately good specific weight. Disease resistance is relatively good. It is well suited to heavier soils.

Cassata

This variety is no longer on the AHDB recommended list and is no longer Approved by the IBD. In previous years it has yielded significantly below SY Venture. It is stiffstrawed, with susceptibility to mildew, yellow rust and net blotch.

Craft North 98 uT 79

Recommended with Provisional IBD Approval for malting and brewing. It has good hot water extract and screenings are much lower than SY Venture. It has stiff straw with good disease resistance, especially brown rust and net blotch. It has average maturity. If it achieves IBD Full Approval, then it could be an alternative to SY Venture.

FunkyNorth 107uT 91

This conventional six-row is a **new** recommendation with a good specific weight, but high screenings. It has short and stiff straw. Maturity is early. It has a good untreated yield with good all round disease resistance. It yields relatively better on lighter soils.

KWS Cassia North 101 uT 82

This variety was widely grown as a successor to Saffron, with good yields in the North region, but seed area had declined. It was appreciated for its very high specific weight high. Resistance to lodging is good. Mildew and Rhynchosporium resistance are weak, but brown rust and net blotch resistance relatively good. It has average maturity.

KWS Creswell North 106 uT 76

A *new* recommendation for the North region, where its yield has been above its UK average. It has an intermediate specific weight, with average straw length and strength. Its low untreated yield reflects weaknesses for mildew and net blotch. It yields much better on lighter soils.

KWS Glacier North 103 uT 80

The variety has been widely grown as a successor to KWS Cassia; its specific weight is very good, though not quite as high. Its straw is both weaker and shorter than Cassia. It is very weak for mildew and Rhynchosporium. Early maturing. It performs well on heavier textured soils.

KWS Infinity North 104 uT 80

A high yielding variety, but with a specific weight below both KWS Cassia and KWS Glacier. It has tall straw with intermediate strength. Maturity is similar to KWS Cassia. Apart from a moderate resistance to Rhynchosporium, disease resistance is weak. Newer varieties may compete with Infinity for market share.

KWS OrwellNorth 104uT 83

This high yielding variety has intermediate specific weight, well below that of KWS Cassia. It has stiff straw. It is very weak for mildew and intermediate for Rhynchosporium. It performs well on lighter textured soils. Its UK market share is expected to increase.

KWS Tower North 103 uT 79

Grown widely as a grown successor to KWS Cassia, this variety has a modest weight. It is taller than KWS Glacier and slightly later maturing. It is weak for Net blotch, and tends to be poor for mildew and Rhynchosporium; it is intermediate brown rust. Better suited to lighter soils. Its market share could be challenged by newer varieties.

Rubenese

This potential malting variety was not added to the recommended list and is no longer supported by IBD Approval; it has a high level of screenings.

Sunningdale North 113 uT 91

This hybrid six-row is a *new* recommendation with excellent yield potential especially in the North where it out-yields Bazooka by 4%. It has moderate straw strength and it relatively early to mature. It has intermediate disease resistance, similar to Volume Bazooka. It yields even better on lighter textured soils.

Surge North 102 uT 88

This variety has a good untreated yield and above average specific weight. Resistance to lodging is moderate and maturity is average. Its disease resistance is good, especially for Rhynchosporium, net blotch and brown rust. Its market share is expected to increase.

SY Venture North 94 uT 72

This malting variety is the current market leader. Note that malting varieties have a significant yield penalty compared to most feed varieties. It has Full Approval by the IBD for malting and brewing. SY Venture has a good hot water extract, but intermediate screenings. Resistance to lodging is average. Resistance to mildew, brown rust and net blotch are intermediate, but it is highly susceptible to Rhynchosporium. Maturity is average.

TalismanNorth 95uT 77

A malting variety that has Full Approval by the IBD for malting and brewing. Its yield is similar to SY Venture, but with a much lower specific weight. Its hot water extract is good, but screenings tend to be higher than other malting varieties. Its straw strength are disease resistance are intermediate. It is relatively early maturing and is best suited to lighter soils.

Volume North 107 uT 84

This hybrid six-row variety is becoming replaced by more recent hybrids, in particular Bazooka. It has an intermediate specific weight and screenings can be high. Resistance to lodging is moderate. Resistance to Rhynchosporium is good, whilst net blotch is intermediate and mildew and brown rust poor. It is relatively early maturing.

Spring Barley

North region yield = 7.2 t/ha

uT = untreated yield as % of UK treated control (7.6 t/ha)

new = added to the 2017/18 RL

Belgravia North 91 uT 79

This is a North region recommendation for the grain distilling market, with its requirement for high nitrogen content and good enzyme activity. Its agronomic yield is now outclassed. It is the only variety with IBD Full Approval for grain distilling. At present, there is no recommended list variety that makes a clear replacement for Belgravia. The other grain distilling options – Fairing and Olympus – are limited in their use at this time. Belgravia is tall and fairly stiff. It is vulnerable to Rhynchosporium with maturity similar to Concerto.

Chanson North 106 uT 88

This **new** recommendation is known as a Null-Lox variety. This means it has a special use in brewing where its lack of a gene for lipoxygenase production increases product quality and storage in some processes. Chanson has high hot water extract, but its specific weight is low. It has relatively low screening losses. It has medium length straw, but is relatively weak. It is weak for Rhynchosporium and brown rust. It is early maturing i.e. similar to Propino.

Concerto North 93 uT 80

Fully Approved by the IBD for both brewing and distilling with 50% of the 2016 UK malting spring tonnage. Concerto is now significantly out-classed for yield. The industry should give growers opportunity to consider the available alternatives. For dual purpose use (i.e. brewing and distilling) the other choices are Odyssey, Octavia and Laureate. Its straw is tall and rather weak, but it has good brackling resistance. It is very vulnerable to Rhynchosporium.

Dioptric North 106 uT 90

A **new** recommendation for the North region, where it is the top yielder. It is currently aimed at the grain distilling market, but further tests are needed. It has a very good untreated yield, with a very high resistance to Ramularia. It should be considered as a feed option. It has average straw length and strength, with maturity similar to Concerto. It is vulnerable to brown rust. Growers should check seed availability as it may be limited for 2018.

Fairing North 96 uT 84

This variety is a special recommendation aimed at the grain distilling market, it currently has IBD Provisional Approval based on micro-malting results. Fairing is not likely to be used malt distilling. It has average straw strength and good resistance to brackling. It has excellent resistance to Rhynchosporium. Its vulnerability to brown rust is less of an issue in the North region. It is the earliest maturing variety on the recommended list.

Hacker North 100 uT 87

Recommended as a feed variety suitable for the West. Straw strength is good and brackling resistance is excellent. It has maturity similar to Propino. Main disease weakness is brown rust.

KWS Irina North 105 uT 88

A high yield brewing variety, that can also be used for feed. It has IBD Full Approval for brewing, with a hot water extract above Propino. It has short and stiff straw with very good brackling resistance. It has good resistance to Ramularia, but is vulnerable to Rhynchosporium and brown rust. Its maturity is similar to Propino.

KWS Sassy North 105 uT 89

This high yielding variety has IBD Full Approval for distilling; its hot water extract is just below that of Concerto. Uptake will depend further commercial testing and seedc supply. Straw strength and brackling resistance are relatively weak in this tall variety. It is vulnerable to Rhynchosporium and brown rust.

Laureate North 105 uT 92

This high yielding variety has recently gained IBD Full Approval for both brewing and distilling; it has a very good hot water extract. Straw strength is good and brackling resistance very good. It has a very high untreated yield and no significant disease weaknesses. Maturity is similar to Concerto.

LG Diablo

Data for this *candidate* variety with potential for brewing and distilling cannot be published as it has not completed National List testing.

LG Figaro

Data for this *candidate* variety with potential for malt distilling cannot be published as it has not completed National List testing.

LG Opera North 104 uT 88

This *new* variety is high yielding and was recommended with potential for both the brewing and distilling but high screenings have hindered its progress through the IBD Approval system. It is early maturing, with short, weakish straw; this may limit its use for feed.

LG Tomahawk

Data for this *candidate* variety with potential for malt distilling cannot be published as it has not completed National List testing.

Octavia North 101 uT 85

This variety is Fully Approved by the IBD for both brewing and distilling; it has a very high hot water extract. It provides a yield improvement over Concerto and Odyssey, but is below Laureate's yield. Its straw is rather weak with mediocre resistance to brackling. It has good resistance to Ramularia, intermediate resistance to Rhynchosporium, but vulnerable to brown rust. Its maturity is similar to Concerto. Malting intake has started to register on MAGB figures, but progress for distilling and brewing will depend on further commercial support and seed availability.

Odyssey North 98 uT 82

This variety has IBD Full Approval for both brewing and distilling variety, but its agronomic yield is out-classed by the other duel-purpose varieties, Octavia and Laureate. Its straw is rather weak, but it has good resistance to brackling. It has intermediate resistance to Rhynchosporium and Ramularia, but is vulnerable to brown rust. Its maturity is similar to Concerto. Its continued malting intake will depend on the progress of newer varieties.

Olympus North 103 uT 86

This high yielding variety was recommended a potential grain distilling replacement for Belgravia. Although it no longer carries IBD Approval for this sector, it may attract small interest for grain distilling until a replacement for Belgravia is identified and supported by the IBD. Its high yield means that crop rotation and nitrogen management need to be considered to meet the requirement for high grain nitrogen concentration. Its straw is of average strength, with mediocre resistance to brackling. It has relatively good resistance to Rhynchosporium and Ramularia, but is vulnerable to brown rust. Maturity is similar to Concerto.

Ovation North 104 uT 84

A feed recommended, but with yields both treated and untreated lower than the highest yielding malting varieties. Its straw strength is average, but shorter than Waggon and Westminster. It has intermediate disease resistance. Maturity is later than Propino, to Scholar and Concerto.

Propino North 101 uT 84

Fully Approved by the IBD for brewing, this variety has been the largest brewing in England. In Scotland, it has been used mainly as a feed variety, with average strength straw and fairly tall straw with good brackling resistance. It is relatively vulnerable to mildew. Maturity is slightly earlier than Concerto. Its relatively low yield means that feed growers could consider other higher yielding brewing varieties e.g. RGT Planet or KWS Irina.

RGT Asteroid

Data for this *candidate* variety with potential for brewing, malt distilling and grain distilling cannot be published as it has not completed National List testing.

RGT Planet North 105 91

This high yielding brewing variety has IBD Fully Approval a hot water extract the same as KWS Irina and better than Propino. Its straw length and strength are average, and it has good resistance to brackling. It has very good resistance to Ramularia, but is vulnerable to brown rust. Maturity is similar to Propino.

Scholar North 105 89

Recommended as a feed variety but consideration should be given to malting varieties as some of these are higher yielding both treated and untreated and have taller straw. It has short straw with average strength, and excellent brackling resistance. It has very good resistance to Ramularia, but is vulnerable to brown rust Maturity is later than Propino.

Sienna North 102 88

This variety has recently gained IBD Full Approval for distilling; its hot water extract is close to Concerto. Its uptake will depend how well it malts in commercial bulks. Another useful grain characteristics is its very high specific weight; this might be an advantage in a batch malting processes. It has average straw strength and is relatively tall. It has fairly good brackling resistance. It has very good resistance to Ramularia, but is vulnerable to brown rust. Maturity is similar to Concerto.