



Cereal Varieties
Summer 2018 Update:
Winter wheat
Winter barley
Spring barley



Winter Wheat

North region yield = 10.7 t/ha

uT = untreated yield as % of UK treated control (11.0 t/ha)

[] = limited data; *new* = added to the 2018/19 RL.

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

Comment

Winter wheat varieties with soft endosperm remain the most important choices for Scottish growers in meeting the demands of the grain distilling sector. This summer's list of soft Group 4 varieties for distilling and feed includes established varieties such as Viscount, Leeds, Myriad and Revelation, as well as more recent introductions with LG Motown and LG Sundance, and *new* varieties KWS Jackal and Elation. The Group 3 biscuit making variety Zulu also suits distilling. For hard feed wheat, newer varieties including Dunston, Freiston and Shabras offer high yield potential. When making variety decisions check for the best balance of disease resistance, maturity, straw stiffness and specific weight.

Bennington North 101 uT 87

A soft Group 4 variety with recommendation for the East and West regions, but it underperforms in the North region. It is classified as a uks soft wheat for export, but is rated *poor* for distilling. This variety with tall but stiff straw has given good yields on heavier soils. It has a high untreated yield, with has high resistance to mildew and Septoria and is intermediate for yellow rust.

Costello North 100 uT 83

A hard-milling feed variety with high Hagberg figures and very high specific weight. It is short-strawed and has good resistance to mildew and yellow rust. Has given its best relative performance in the West region. It has high resistance to mildew and yellow rust.

Crusoe North 94 uT 76

A Group 1 quality bread making wheat with ukp export potential. It is a popular UK milling variety, but is not grown in Scotland. It has good and consistent baking performance producing good bread crumb structure. 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.

Dunston North 103 uT 89

A high yielding feed variety with good untreated yields. It's medium to tall straw has good standing ability. Dunston has good resistance to yellow rust and Septoria tritici. This variety is suited to first and second cereal rotations. Limited data suggests it gives very high yields in both early sowing and light land situations. A good all round package.

Elation North [103] uT 82

This is a *new* soft feed variety rated *good* for distilling. It has a good yield potential, with moderate untreated yield. Specific weight is good and Hagberg falling number moderate.

Elicit North [104] uT 86

A *new* biscuit-making variety, but rated *poor* for distilling. 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 Hagberg figures.

Evolution North 104 uT 81

A very high yielding feed variety with no serious disease weaknesses; it has high resistance to yellow rust and brown rust. Tends to give low specific weights and lowish Hagberg figures. This variety has given high yields in trials on light soils and performs well in second cereal situations. Evolution has good resistance to yellow rust and brown rust and no serious disease weaknesses. It has tall moderately stiff straw. It is rather late maturing. It has no midge resistance.

Freiston North 103 uT 86

A high yielding feed variety with high treated and untreated yields. It has specific weight below that of Grafton. This variety has performed extremely well in the north, it has a good all round disease resistance package, with a particularly good yellow rust rating of 9; with high resistance to mildew, brown rust and Septoria tritici. It is susceptible to eyespot. It has tall straw with medium strength.

Gleam North [105] uT 88

A *new* hard feed variety. It is high yielding with very good untreated yield. It is relatively early maturing and has no severe disease weaknesses.

Graham North 101 uT 88

A high-yielding feed variety with high Hagbergs. This variety has given its best relative performance in the West region, where it has produced very high yields. It is a relatively early maturing variety that has performed best in a first cereal situation and on heavier soils. Graham has given high untreated UK yields in trials and has good resistance to mildew, yellow rust and septoria tritici. It is susceptible to eyespot.

Hardwicke North 103 uT 84

This 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 101 uT 74

This hard feed variety has given consistently good yields in many situations and has become one of the most popular varieties grown in the north of England. It has good Hagbergs and specific weights. It has only moderate disease resistance and is susceptible to brown rust. A good second wheat. Early maturity with good sprouting resistance. At a slight yield disadvantage now compared to some more recent variety introductions but feed growers still value its consistency.

KWS Barrel North 107 uT 74

A very high yielding Group 3 variety with biscuit and export quality potential, but is rated *poor* for distilling. It is classified as a uks soft wheat for export. 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 99 uT 75

This Group 3 biscuit wheat has moderate yield. It meets the quality criteria for biscuit wheat, but is rated *poor* for distilling. It has the uks classification for export. It yields relatively well when drilled early, achieves high specific weight and has good resistance to yellow rust and orange wheat blossom midge.

KWS Crispin North 98 uT 86

A hard-milling feed variety with high Hagbergs, but underperforms in the North region. It performs best in first cereal situations. It has high resistance to mildew and yellow rust, combined with resistance to orange wheat blossom midge. It is susceptible to eyespot. Moderate resistance to Septoria. Prone to lodging so a robust PGR program is required. Suitable for late sowing.

KWS Extase UK 101 uT 90

This *candidate* variety has potential for bread making. It had good levels of protein, Hagberg falling number and specific weight. With the exception of eyespot, it good disease resistance, and is early maturing.

KWS Firefly UK 103 uT 81

This *candidate* variety has potential for biscuit making. Early data indicates that it has good agronomic features and grain quality comparable to current Group 3 varieties.

KWS Jackal North [105] uT 79

This *new* variety in soft Group 4 variety has a North region recommendation and is rated *medium* for distilling. It has high yield potential, with good resistance to mildew and yellow rust. It is earlier maturing than Leeds and Myriad and has stiffish straw.

KWS Kerrin North 107 uT 83

This short strawed hard feed variety has an East and West recommendation, with very high yields in both the 1st and 2nd wheat position. Has shown high yields when late sown and sown in light soils. It tends to give low Hagbergs. It has good resistance to mildew, yellow rust and brown rust as well as resistance to orange wheat blossom midge.

KWS Lili North 103 uT 74

This Group 2 milling variety has a treated UK yield potential 6% above Cordiale and has given very high yields in the North region. It has ukp export potential. It has a high Hagberg falling number. 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 and seems best suited to first wheat situations. It has low protein content so will require careful nitrogen management if looking for premium markets.

KWS Santiago North 104 uT 69

Recommended for the East and West regions as a high-yielding hard feed variety. It has performed well on a range of soil types and rotational positions and is resistant to orange wheat blossom midge. It has only moderate grain quality. It is relatively late maturing and is susceptible to Septoria tritici and eyespot. and only moderate straw strength. It requires a good fungicide and PGR programme to get the best from it.

KWS Siskin North 100 uT 86

Recommended as a high yielding Group 2 milling variety, but it underperforms in the North. It is classified as a ukp bread wheat for export. It has high Hagbergs and specific weights. This short-strawed variety has produced high treated yields in the East and West regions and has also given high untreated UK yields in trials. It has high resistance to Septoria tritici, mildew and yellow rust but is susceptible to eyespot. Siskin It has performed particularly well in first cereal situations. It has moderate resistance to lodging but responds well to plant growth regulators.

KWS Trinity North 99 uT 77

This Group 1 milling variety is suited to all growing regions, though has no quality market in Scotland. It performs on both light and heavy land. It has a high tillering capacity and produces short stiff straw with a standard PGR program. Has the highest Hagberg falling number of the group 1 varieties and good specific weight, but low protein content so will require careful nitrogen management to meet specification. It has high resistance to mildew, yellow rust and brown rust.

KWS Zyatt North 100 uT 89

This 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 102 uT 71

A high yielding soft Group 4 variety rated *medium* for distilling. It has performed very well in the North. It has high specific weight and is classified as a uks soft wheat for export. It has moderate levels of disease resistance and susceptible to mildew and eyespot, but has 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 Detroit UK 101 uT 71

This *candidate* variety has potential for bread making. It has high protein levels and good specific weight. It has intermediate disease resistance, but with good resistance to yellow rust. It is relatively late maturing.

LG Interstellar UK 106 uT 67

This is a *candidate* soft feed variety and is under test for distilling. Its agronomic features are intermediate, though untreated yield is low. It has similar maturity to Leeds and Myriad.

LG Jigsaw UK 104 uT 76

This *candidate* hard feed variety is intermediate for agronomic features and grain quality.

LG Motown North 102 uT 88

This soft feed variety is rated *medium* for distilling. It is relatively early maturing and has given good yields in treated and untreated trials. It has yielded very well on light soils. This short-strawed variety has moderate resistance to lodging. It has good all-round disease resistance with high resistance to mildew, yellow rust and brown rust, it also has OWBM resistance, but is susceptible to eyespot.

LG Rhythm UK 102 uT 70

This *candidate* biscuit making variety is also under test for distilling. It has good agronomic features, though its Hagberg and specific weight seem to be below the Group average.

LG Sabertooth UK 106 uT 71

This **candidate** soft feed variety and is under test for distilling. It has high yield and above average disease resistance. It's Hagberg is good, but specific weight is low. Maturity is similar to Leeds.

LG Spotlight UK 106 uT 75

This **candidate** soft feed variety and is under test for distilling. It has high yield and above average disease resistance. It's Hagberg and specific weight are very good. Maturity is similar to Leeds.

LG Sundance North 102 uT 87

This soft Group 4 variety is rated **medium** for distilling. This variety has given high UK yields in treated and untreated trials, but tends to give low specific weights. It has the highest rating for resistance to *Septoria tritici* on the 2018/19 Recommended List, combined with high resistance to yellow rust and resistance to OWBM. However, it is susceptible to eyespot. It has slightly later maturity than Viscount, but has similar in straw stiffness.

LG Skyscraper UK 109 uT 77

This **candidate** soft feed variety and is under test for distilling. It has very high yield and above average disease resistance. Its Hagberg and specific weight are intermediate. It is early maturing.

Moulton North 101 uT 88

This soft-milling feed variety is rated as **poor** for distilling. It has a high specific weight, and is classified as a uks soft feed for export. This variety with medium-long straw has given high UK yields in untreated trials. It has high resistance to mildew, yellow rust, brown rust and *Septoria tritici* but it is susceptible to eyespot. It has relatively early maturity.

Myriad North 101 uT 67

This variety is now becoming outclassed. It is a recommendation for the North region as a soft milling feed wheat, rated as **medium** for distilling and classified as a uks wheat for export. Its low untreated reflects poor disease resistance; it is susceptible to mildew and yellow rust. It is resistant to orange wheat blossom midge. Myriad has moderate resistance to lodging but responds well to plant growth regulators.

Revelation North 99 uT 80

A soft endosperm feed variety rated as **good** for distilling and classified as a uks wheat for export. This variety has a good overall disease package with high resistance to yellow rust, brown rust and eyespot (Pch1) and above average resistance to *Fusarium* head blight. It is later maturing than Leeds and Myriad. Revelation has slow primordial development suits very early drilling. It is not midge resistant.

RGT Gravity North [108] uT 83

A **new** hard feed variety with very high yield potential. Its Hagberg and specific are below average and other agronomic features are intermediate.

RGT Illustrious North 94 uT 83

This Group 1 quality bread wheat underperforms in the North region and is not likely to attract a market in Scotland.. It has similar maturity to other quality bread wheats and a relatively good disease package with high ratings for mildew, yellow rust, brown rust and eyespot.

RGT Universe North [105] uT 75

This variety was a soft feed candidate in 2017, but not added to the 2018/19 Recommended List. It has below average grain quality characteristics and agronomic features.

Savello North 104 uT 78

This soft feed variety is rated as *medium* for distilling, though has a low specific weight and intermediate Hagberg falling number. It was removed from the Scottish List in 2018. 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 83

This hard feed variety is relatively early maturing and has given very high yields, particularly in trials on lighter soils and in second cereal situations. Its specific weight is below that of Grafton and JB Diego. It has moderate resistance to lodging but responds well to plant growth regulators. It has very good resistance to yellow rust and mildew but is susceptible to brown rust.

Skyfall North 100 uT 82

An established bread-making variety, but with limited use in Scotland. Further south it is favoured by many millers because it shows good milling and baking qualities. Good straw strength and no disease weaknesses plus resistance to orange blossom midge. It has good Hagberg falling number and specific weight, but lower protein content so will require careful nitrogen management to meet specification. It is also relatively early ripening and has above average sprouting risk.

Spyder North 96 uT 82

A Group 3 biscuit making variety, but is rated *poor* for distilling. It is recommended for East and West regions and underperforms in the North. It has good mildew, yellow rust and Septoria resistance.

SY Loki UK 105 uT 75

This *candidate* soft feed variety and is under test for distilling. Most of its agronomic features look good, including early maturity, but its straw may be weaker than average. Its specific weight seems to be relatively low.

SY Medea UK 98 uT 73

This is a *candidate* bread-making variety. Its yield is relatively low, but protein is high. Most other grain quality characteristics and agronomic features seem good.

Viscount North 101 uT 74

A long established soft feed variety recommended for the North region where it achieves a high yield and is considered as the benchmark variety for distilling; with its *good* rating. It also meets the UK specification for export markets. Agronomically it is a short stiff-strawed variety and its disease resistance is intermediate, but it is susceptible to sprouting and tends to give low Hagberg figures.

Zulu**North 102 uT 74**

A widely known nabim Group 3 soft biscuit wheat with uks export potential and a **medium** rating for distilling. nabim reports that Zulu is slightly softer than Scout or Claire but that it consistently meets the quality requirements of a group 3 wheat. Zulu has been consistent in meeting the requirements for soft milling. It has intermediate Hagberg falling number and specific weight. Zulu has orange wheat blossom midge resistance and high resistance to mildew and yellow rust but it is susceptible to brown rust and eyespot. It has given good yields in the north and although it has moderate resistance to lodging it responds well to plant growth regulators.

Winter Barley

North region yield = 9.4 t/ha

uT = untreated yield as % of UK treated control (9.6 t/ha)

new = added to the 2018/19 RL

Comment

In the two-row feed varieties small improvements in yields are found in KWS Creswell and KWS Orwell, though specific weights tend to intermediate, rather than good. Most two-varieties have weakness to one or more of the major diseases e.g. mildew, Rhynchosporium or net blotch. Disease resistance along with variation in maturity and straw stiffness should be considered when making sowing decisions. The list for six-row varieties is dominated by hybrids; for 2018/18 there are two new hybrids, Belmont and Libra, and one new conventional six-row, KWS Astaire. Note that winter malting varieties have a significant yield penalty compared to most feed varieties. All the varieties listed below have resistance to BaYMV.

Two-row feed

California **North 98** **uT 82**

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.

KWS Cassia **North 99** **uT 83**

This variety was widely grown as a successor to Saffron, with good yields in the North region. It has been appreciated for its very high specific weight high, and it remains on the Scottish List as a specific use variety. 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 104** **uT 76**

A 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 101** **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. It is early maturing and performs well on heavier textured soils.

KWS Infinity **North 103** **uT 81**

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.

KWS Orwell **North 103** **uT 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.

KWS Tower North 102 uT 78

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.

Surge North 99 uT 89

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.

Six-row feed

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, and lower screenings than Volume. 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 than Bazooka. It has performed well on heavier soils.

Funky North 107 uT 91

This *conventional* six-row is a new recommendation with a good specific weight, but with relatively 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 Astaire North 104 uT 93

This is a *new conventional* high-yielding six-row feed variety. Grain yield in the North region 103. It has good lodging resistance with high to moderate disease resistance, and stiff straw. It has a low specific weight.

Libra North 103 uT 87

This *new* six-row *hybrid* feed variety has a modest yield, but high specific weight. It has high lodging resistance, with generally high to moderate disease resistance. It performs more successfully on heavier land but is suitable across all soils. Resistance to BaYMV.

Sunningdale North 110 uT 90

This *hybrid* six-row has excellent yield potential especially in the North where it out-yields Bazooka by 3%. 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.

Spring Barley

North region yield = 7.4 t/ha

uT = untreated yield as % of UK treated control (7.7 t/ha)

new = added to the 2018/19 RL

Accurance UK ____ uT ____

A *candidate* variety under test for malting, but unlikely to be supported. This variety has not completed National Listing.

Chanson North 106 uT 94

This provisional 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 85

Fully Approved by the MBC for both *brewing* and *distilling* with 73% of the 2017 Scottish malting spring tonnage (or nearly half of the UK 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 main choice is Laureate. Its straw is tall and rather weak, but it has good brackling resistance. It is very vulnerable to Rhynchosporium.

Cosmopolitan UK 107 uT 95

A malting *candidate* with potential for *brewing* use. It has a very high yield, but seems late maturing.

Embrace UK 105 uT 96

A *candidate* with potential for *feed* use. Specific weight is intermediate.

Fairing North 96 uT 88

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 91

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 104 uT 93

MBC Fully Approved for *brewing* with a hot water extract superior to Propino and Odyssey but not as good as Concerto. It has short and stiff straw with very good brackling resistance. It has intermediate resistance to Ramularia, but is vulnerable to Rhynchosporium and brown rust. Its maturity is similar to Propino.

KWS Sassy North 105 uT 94

This variety has MBC Full Approval for malt *distilling*; it has a hot water extract nearly equal to Concerto. 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 seed 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 96

This very high yielding malting variety has MBC Full Approval for both *brewing* and *distilling*; its hot water extract is better than KWS Irina and RGT Planet, and close to Concerto. 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. The seed area looks very encouraging.

LG Diablo North 109 uT 98

A *new* malting variety that has recently progressed to MBC Provisional Approval for malt *distilling* and *brewing* use. It is very high yielding, with similar maturity to Laureate. It has good straw stiffness and high brackling resistance. Screenings are relatively low.

LG Goddess UK ____ uT ____

This malting *candidate* has potential for malt *distilling* and *brewing* use. It has not completed National List testing.

LG Tomahawk North 107 uT 95

A *new* malting variety that has been under test for malt *distilling*, but based on recent micro-malting results is unlikely to be supported. If it fails to make progress as a malting variety, then its options may be limited as its short straw and low specific weight could limit its feed value.

Olympus North 103 uT 91

Has recently been given Full MBC Approval for *grain distilling*. Its 12% yield advantage over Belgravia, and 7% over Fairing, in the North is significant, especially as it may be a year or more before further replacements for Belgravia are identified and supported by the MBC. 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, but is vulnerable to brown rust. Maturity is similar to Concerto.

Ovation North 104 uT 88

Recommended as a *feed* variety 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 88

Fully Approved by the MBC for *brewing*. In Scotland, it has been used mainly as a feed variety, with average strength straw and fairly tall straw with good brackling resistance. For brewing, given its relatively low yield, growers should consider whether to replace it with another brewing only variety eg RGT Planet or KWS Irina or whether to move to a dual-purpose variety with distilling potential. It is relatively vulnerable to mildew. Maturity is slightly earlier than Concerto.

RGT Asteroid North 102 uT 97

A **new** malting variety that has Provisional Approval for malt **distilling**, **brewing** use and **grain distilling**. Although not as high yielding as LG Diablo, this variety has good agronomic features. Including a very high untreated yield, as well as high specific weight and low screenings.

RGT Orbiter UK 103 uT 93

This malting **candidate** has potential for **grain distilling**. It seems to have stiff straw, low brackling risk and good specific weight.

RGT Planet North 104 uT 96

This **brewing** variety has MBC Full Approval. It has a hot water extract the same as KWS Irina, and better than Propino and Odyssey. 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 uT 94

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 103 uT 93

This variety has MBC Approval but only for **distilling**; its hot water extract is close to Concerto. Its uptake will depend how well it malts in commercial bulks. Another useful grain characteristic 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 intermediate resistance to Ramularia, but is vulnerable to brown rust. Maturity is similar to Concerto.

SY Contour UK 105 uT 94

This malting **candidate** has potential for **brewing** use. It seems very late maturing and has a low specific weight.

SY Dolomite UK 105 uT 95

This malting **candidate** variety is unlikely to gain industry support.

SY Kailash UK 106 uT 96

This **candidate** has potential for **feed** use. It is very late maturing and specific weight looks low.

SY Stanza UK 103 uT 93

A **candidate** with potential for **malt distilling**. Its straw seems stiff and brackling resistance is good.

