



Agrivice Variety Trials 2008.



Selecting the best varieties of Winter Wheat for you to grow is clearly a critical decision . The following factors are the most important to consider :

- * Market acceptability
- * Grain Yield
- * Potential for premiums
- * Disease Resistance

Varietal descriptions :

Group 1 – Hard Endosperm Breadmaking Quality :

Group 2 – Hard Endosperm Milling Quality :

Group 3 – Soft Endosperm Biscuit and or Distilling Quality Flours

Group 4 : Feed and Export Quality Flours

YR = yellow rust, ST = septoria tritici, M = mildew, BR = brown rust, FEB = fusarium ear blight

Varieties listed in order of drilling : From the East end of the field (far end from Farm)

** = In Top 10 of seed sales

Group 1

Malacca - A hard endosperm bread-making variety now declining in popularity being replaced largely by Solstice whose yield is much higher with a better specific weight. It has short, stiff straw and early maturity with good resistance to yellow and brown rust, and septoria nodorum. It gives grain with high Hagberg Falling Number and high Zeleny values but with moderate protein and specific weight values. Speed of development is medium/fast, optimum-sowing date mid-late September onwards. ST5, M6, YR8, BR6, FEB5, Treated Yield = 93. Breeder CPBT (Riband x (Rendezvous) x Apostle)).

Mascot - Again , lower yielding than Solstice , seed sales have been low to date with Solstice being the preferred option . It has shown in trials consistent high protein levels and specific weights. Although the variety has a low score for yellow rust, it needs to be noted that it is the same race which attacks Napier and Einstein, not the race that attacks Robigus, which could become a problem in the future. Best suited to the main drilling window of mid-September

onwards. The variety offers whiter flour than Malacca, making it a potential good bread making variety. ST5, M6, YR5 BR5. Treated yield = 98. Breeder RAGT, (Reaper x Rialto).

Marksman (Group 2) - On the RL but classified as Group 2 variety , has a high untreated yield , ST5 , M7, YR7 , BR8 , Treated yield = 101 , good for protein but average Hagberg , A very early maturing variety , breeder is RAGT .

**** (3) Solstice** – Currently the preferred Hard endosperm wheat with bread making quality, 7% higher yield than Malacca , Reasonably stiff with moderately long straw (unless you have drilled it early where a good PGR programme will be necessary). Good resistance to yellow rust but susceptible to brown rust **and weak on mildew** . It gives a large grain with a reasonably high specific weight and Hagberg Falling Number. Good for early drilling but could be prone to ergot if drilled very early. Speed of development medium to slow. Optimum time for drilling – mid-September onwards. ST5, M5, YR9, BR4, FEB6, Treated yield 100. Breeder Nickersons. (Vivant x Rialto).

W89 (Qplus) – Candidate RL variety more likely to fall into the Group 2 quality and with yield similar to Solstice it may struggle , however we wait to see where its quality is classified . It has **OWBM resistance** which would make it very interesting if it achieves Group 1 status .

Group 2

**** (9) Cordiale** - Good quality bread making variety, ideal for both home and export markets. Has gained a reasonable market share similar to that of Claire . It offers yield potential of Einstein, together with high specific weight and Hagberg. Quality is not as good as that expected from Solstice. Agronomically, it offers a variety with short and **very stiff straw** with good mildew resistance; however, **it is weak on septoria tritici, brown rust, yellow rust and eyespot**. Early to mature - just a little behind Soissons but in front of Malacca. Can be grown as both first and second year wheat, even looks good in the continuous wheat situation. Has a fairly level yield platform i.e. performs well when drilled early or late. Speed of development is medium to fast. Optimum drilling time late September onwards. ST5, M7, YR6, BR4, FEB6, Treated Yield 102. Breeder CPB Twyford. (Malacca x Cadenza x Reaper).

**** (2) Einstein** - A hard endosperm milling wheat which yields. Has taken a big market share is second to Alchemy in seed sales . Good all-round disease resistance , eyespot 6 . Standing rated at 7, **but may be prone to lodging** . Slow developing but because of standing rating, do not sow too early. The millers like this variety due to its inherent white flour. Alevograph data shows the variety is similar to Charger, which is extremely desirable for export markets. Dilution of protein content due to its high yield potential may require an additional nitrogen application to achieve full specification. Speed of development medium. Optimum time for sowing mid-late September onwards. ST5, M6, YR6, BR5, FEB7, 102. Breeder Nickerson. (NSL92-1670 x NSL90-1282).

Duxford (group 4) – On the RL as a Group 4 variety , good yield potential , good HFN , moderate protein and specific wt , ST5, M6, YR7, BR5 Treated yield = 106 Breeder Syngenta / NFC . **Stands well** , but **not for early drilling** .

Limerick - Another candidate list variety , high yield potential , currently high disease resistance to both yellow and brown rust ST6, M6, YR9, BR8 , 114 . Breeder Syngenta /NFC .

Battalion– RL variety , high yielding, **lodging resistant** hard feed wheat with milling potential. Good all-round foliar disease ratings plus Pch 1 eyespot resistance (not yet verified by RL tests

) . Also resistant to soil-borne mosaic virus. but specific weight borderline. Still being assessed for any bread-making potential, particularly for export. Lodging 7, ST 5 , M7, YR7, BR9 and eyespot 6. Treated yield = 103 Breeder RAGT Seeds. (98ST08 X Aardvark)..

Panorama – RL candidate , Yield 105 , so similar to Duxford but with better potential quality , disease resistance is generally good M7 , YR9, BR8, ST5 .

Group 3

**** (8) Claire** - Still on the recommended list and still quite a popular variety although < 5% share of market now , a soft endosperm variety with good biscuit-making potential and a wide variety of end markets. It performs particularly well in first wheat situations and on heavier soil types. It is slow developing and is particularly suited to **early drilling**. Avoid as a second year wheat. It has good resistance to yellow rust, brown rust, septoria nodorum, septoria tritici and eyespot but is very prone to mildew. Drilled very early you can reduce the NIAB rating for septoria by 1 point. It should have high combining priority in wet harvests due to low sprouting resistance. Speed of development slow. Optimum time for drilling mid-September. ST6, M4, BR5, YR9, FEB7, Treated yield 99. Breeder Nickerson. (Wasp x Flame).

**** (4) Robigus** - This soft-milling wheat currently has the biggest share of the Group 3 market . It is suitable for the UK biscuit and distilling markets and for export for biscuits and blended flour . It suits all soil types sown as a first year wheat. **However, it is not to be sown as a second year wheat.** It has a high tillering capacity and has good resistance to, septoria nodorum and septoria tritici (2nd best resistance available), although when drilled early, its rating for septoria tritici could be reduced by 2 points.. **It is very susceptible to yellow rust** and is attacked by the same race (Oxbow) that attacks Consort, Wizard and Hereward. Seems to offer a high degree of midge tolerance. Speed of development - medium-fast. Optimum time for drilling mid to late September. ST7, M6, BR6 , YR3, FEB 5, Treated yield 102. Breeder CPB Twyford. (Z836 X 1366).

Consort - Still on the recommended list but Consort's **share of the market has declined significantly due to a yield below many modern varieties** and its susceptibility to septoria tritici. This is a soft endosperm variety with several potential market outlets including, feed, biscuit, export and distilling. It has short, stiff straw and does well as a second wheat. It is slow developing and is suitable for early drilling. Very susceptible to septoria tritici. Odd cases of yellow rust been seen in this variety (strain Oxbow). Speed of development slow. Optimum time for drilling early part September. ST4, M6, BR3, YR6, FEB5, Treated yield 98. Breeder PBI. (Riband 'sib' x Fresco x Riband).

Deben – A soft endosperm feed wheat with specific milling uses for cakes and batters. Although a group 3 type, it does not have the same flour characteristics for biscuits as Consort and Claire, so should be stored separately. Less well liked by the distilling and starch industries. It has very high yields but rather weak straw and has given its best performances on lighter, less fertile soils. Seems slightly less sensitive to rotational position than Claire, it performs well as a second wheat. It has good resistance to yellow rust, septoria nodorum and septoria tritici but is somewhat susceptible to mildew and eyespot. Speed of development medium - drill later due to weak straw. May be wise to avoid drilling this on very fertile land. ST6, M6, BR4, YR9, FEB 6, Treated yield = 102. Breeder Nickerson. ((Hunter x Buster) x Wasp).

Zebedee – RL variety , currently has a fairly small share of the market , this is a soft endosperm wheat suited for biscuit production and distilling, with the ability to be stored with other biscuit making varieties as it has very similar milling characteristics. Straw length is

moderately short with a similar standing power to Claire when both are treated with a PGR. It should also be noted that it is very responsive to PGR's. Ideally suited to drilling in mid-September onwards and gives a medium to fast development in trials. Moderate overall disease resistance with good resistance to yellow rust, but need to watch brown rust (previously 8) although it needs monitoring for eyespot. ST5, M6, YR9, BR3, Treated yield = 104. Breeder Nickersons. (Claire x Nelson).

W136 (Viscount) – Although only a RL candidate variety, this variety has been fast tracked through the system and some seed is available but may already have been ordered. **V.high yield 107 and good grain quality with OWBM R**. Reasonably good disease resistance M6, YR9, BR9, ST6, straw strength of 7. **This is a variety that is well worth considering**.

Cassius – RL candidate variety, yield 105 so not as high as Viscount, straw strength the same at 7, good disease resistance M7, YR9, BR9, ST6 but the eyespot only 4.

Scout – Another potentially interesting RL candidate variety Yield of 103 but has very good eyespot resistance 9 which would make it a **good 2nd wheat option**. Also OWBM resistance and a straw strength of 7.

Shepherd – Not going through RL trials, GB seeds are marketing this variety as a solid all round performer, good 1st or 2nd wheat, as a 1st wheat similar yields to Robigus but with higher HFN, good all round disease resistance ST7, M6, BR9, YR7, a cross between Claire/Aardvark – marketed by GB seeds.

Group 4

**** (1) Alchemy** - Currently the most popular variety by a good margin, although Alchemy has been classified on the RL as a Group 4 variety, it is a soft endosperm type. Its main market will be for feed, but with an HGCA UK export classification, there are possibilities for additional overseas markets plus the possibility of the distilling marketing in the North. Alchemy is one of the highest yielding treated and untreated varieties in the Recommended List. The physical grain characteristics of high Hagberg falling number and very high specific weight offer growers very high levels of security for end market use. **Good for early drilling, Brown rust is the main weakness**. ST6, M7, YR9, BR4, Treated yield 103. Breeder Nickersons. (Claire x Consort x Woodstock).

Ambrosia – RL Soft endosperm feed wheat. Currently has a low market share, it is quite high yielding. It is a short stiff variety. Disease ratings not too bad apart from septoria tritici and eyespot. Reasonably fast developer, so not suitable for early sowing. Useful as a second wheat. ST4, M6, YR6, BR7, FEB 3, Treated yield 104. Breeder RAGT. (Cantata x Genesis) x Pinder.)

**** (5) Gladiator** – RL reasonably high yielding hard feed wheat with high specific weight. Has taken a good market share just below Robigus, it has short, stiff straw with a standing power of 7. Overall disease resistance is good, however resistance has declined, its main weakness is septoria tritici. Initial trials indicate it is suited to both the early (2nd week September) and late drilling positions. Speed of development medium. Good first and second year wheat. ST5, M6, BR8, YR8, FEB5, Treated yield = 102. Breeder RAGT. (Falstaff x Shannon).

Glasgow - Soft endosperm feed wheat with a **high yield**. It is a good first year wheat with the possibility of being a good second year variety, **Sprouting may be a problem in a wet**

harvest . Needs to be watched for yellow and brown rust., Same YR race that affects Madrigal. Fast developer **not suitable for early sowing**. ST5, M6, BR5, YR4, FEB6, Treated yield 106. OWBM resistance Breeder Saaten Union. (Ritmo x Saaten union line).

**** (6) Oakley** – RL variety , **has given some very high treated yields 107** , above Glasgow and Alchemy,. Its disease resistance is however now only moderate – **Septoria tritici is a weakness also questionable specific weight** , its straw strength is 7 . Has moderate winter dormancy and is suitable for sowing from mid-September onwards. Also suitable for late sowing. Resistant to OWBM .,ST5, M6, YR6, BR6, , eyespot 5, Breeder CPB Twyford. (Robigus x Aardvark) X (Access).

**** (7) Humber** – RL variety , **Good early driller on heavy land** (after 10th September) , very stiff strawed , good yield and good resistance currently to both yellow and brown rust . ST6, M5 , BR7, YR8 , Treated yield 105 , **Main weakness is no R to OWBM** Breeder CPBT

Hereford – Candidate list variety , Hard endosperm with good yield potential but very susceptible to Brown rust and may be a bit weaker strawed . ST6, M6, BR2 , YR9 . Breeder Syngenta Seeds /NFC

JB Diego – Candidate list variety , hard endosperm , quite high untreated yield but watch susceptibility to mildew , ST6, M3, BR6, YR9 . Treated yield 106 : **Good Yield and stands well** , **main weakness is it is a bit tall** , Breeder Breun /Senova .

Monty – Another candidate feed list variety, soft endosperm , again good yield potential , with overall good disease resistance but brown rust will need watching .Also resistant to OWBM , ST6, M7 , BR5, YR9 . Breeder Syngenta / NFC .

Exsept – Not an RL variety : A potential group 2 quality variety , the breeder believes it to be the best wheat option for early drilling , good all round disease resistance ST7 , M5 , YR9 , BR5 , Eyespot 5 , FEB 6 , The treated yield is about equal to Claire , Breeder Nickersons .

Brompton – Recommended list variety , specific recommendations for the east and for OWBM resistance . Good yield , reasonably stiff straw , ST5, M3, BR7, YR8, FEB5. Breeder Elsoms .

**** (10) Timber** – RL variety , has a specific recommendation for growers wanting **good disease resistance** , ST7 , M8 , BR9 , YR9 , **Treated Yield 103 which is a bit low in comparison to others in this group** , Breeder Saaten Union. Parents(Terrier X Hamac).

Shogun - Candidate list variety , High yielding early maturing wheat , good disease resistance ST5 , M7 , BR8 , YR9 , Breeder RAGT.

Summary.

Of the candidate varieties the main interest seems to be in the varieties **Viscount** , Cassius and Scout , we wait to see how they get on in trials this year .

Varietal Suitability.

Group 1	Solstice : consider Qplus (if quality accepted has OWBM R)
Group 2	Einstein (versatile) , Battalion (stands well) , Cordiale (stands very well)
Group 3	Robigus (stands well) , Claire (v.early drilling) : Consider Viscount (OWBM R , grain quality)
Group 4	Oakley (Yield) , JB Diego (Yield and stands well) , Duxford (Yield and stands well) , Humber (early drilling)

Very early drilling	Claire , Exsept, Alchemy
Early drilling	Claire, Consort, Solstice – (better mid-Sept to avoid possibility of Ergot development) , Exsept, Alchemy , Humber (heavy land)
2nd year	Duxford , Battalion , JB Diego , Oakley , Glasgow
Continuous	Einstein, Gladiator
Light land high yield 1st wheats	Oakley , Istabraq
Heavy land high yield 1st wheats	JB Diego , Duxford , Humber
Late drilling after roots	XI19, Solstice, Oakley , Robigus
Orange blossom midge	Oakley , Glasgow , Robigus , Viscount

Winter Barley variety notes

Flagon is now the main variety for the 2 row malting market , comments are being made that it is time to move on from Pearl . **Cassata** has been added to the recommended list it has the same yield potential as Flagon it **has mosaic virus resistance** and stands well , and is currently under test for IBD malting approval for brewing.

Wintmalt is a new candidate variety with malting potential , currently higher yielding than Flagon or Cassata , good resistance to Brown rust , Rhynchosporium and Net Blotch but need to watch yellow rust (2) and mildew (4) , the breeder is CPBT .

Feed varieties :

, Saffron is the main choice , produces more straw and has a higher yield than Carat , Suzuka has good yield and mosaic virus resistance .

Winter Barley Choice for autumn 2008

2 row malt	2 row feed	6 row feed
Flagon , Cassata BaYMV r	Saffron ,. Suzuka BaYMVr	Sequel , Pelican BaYMV r, Volume candidate list v.high yield.

Winter Oilseed rape

Open Pollinating varieties

Castille and Astrid are again very popular varieties this year but the potential yield has been surpassed by **Catana** of the conventional types and Flash from the Hybrids , **Excalibur** is currently the most popular of the hybrids , not as high yielding as Flash but has lower biomass and good resistance to Phoma .

Choice for 2008

Conventional low biomass : **Castille or Astrid** , consider **ES Alienor** (short , early maturing , good disease R)

Conventional high oil content : **Catana** has good oil and good yield potential but is weak on Phoma .

Hybrids : **Flash or Excalibur** , it is likely that we will see a special category for semi-dwarfs on the RL – **PR45D03** is well worth considering for ease of management , low biomass .

Winter Beans

Wizard continues to be the preferred choice , however **Arthur** is now a provisional year 2 variety with a potential yield of 104 which is 2% higher than Wizard but the standing ability at harvest is only 4 v 8 for Wizard .