

A high yielding winter wheat for early sowing

REFLECTION is a high yielding feed wheat, bred by Syngenta in the UK and developed in New Zealand in conjunction with Cropmark seeds as head licensee. It has a very high yield potential, having previously held the world record wheat yield of 16.5 t/ha. It's also robust enough to have the highest untreated yields in New Zealand.

REFLECTION is a short, moderate tillering winter wheat, suitable for sowing from early March to May. It has an excellent disease profile with good tolerance to rust and *Septoria*. It is also early maturing, offering an early harvest option for Southern growers.

It is slow developing which suits the early sowing window, then it rapidly moves through its growth stages. The high yields come from its erect growth after stem extension, allowing it to carry a high per square metre ear population at the correct sowing rate.

The other unique advantage of REFLECTION is its untreated yields, having the highest average untreated yields in 2015/16 and 2016/17 FAR CPT2 trials, which indicate it is a robust, low risk variety to grow.

Late March sown FAR CPT trials 2016/17

Variety	Yield (t/ha)	LSD	Relative yield (% of mean)
Reflection	14.0	a	113
Ruapuna	13.5	ab	108
Ignite	12.8	bc	103
Richmond	12.8	bc	102
Empress	12.7	bc	102
Inferno	12.6	bc	101
Resolution	12.5	bc	100
Gator	12.4	bd	100
Conqueror	12.3	cd	99
Torch	12.2	cd	98
Wakanui	12.1	cd	97
Starfire	11.3	de	91
Mean yield	12.4		
Significance	P<0.001		
CV%	6.4		
LSD	1.1		

Source: FAR booklet 2016/17

Grain quality

REFLECTION produces a medium size grain with good test weight and moderate to low screenings.

Nitrogen

A standard nitrogen programme for a feed variety should be applied to REFLECTION.

Plant Growth Regulators

REFLECTION is a short variety with stiff straw, so is able to carry a high yield with low risk, but it will benefit from a moderate PGR program.

Agronomic information

REFLECTION is a short variety with stiff straw so is able to carry a high yield with low lodging risk, but will benefit from a moderate PGR program. It has an excellent disease profile with stiff straw, low sprouting risk and early maturity, and can be sown from late March through till early May.

Given its moderate tillering and erect nature, ideal plant populations are slightly higher than normal. For early March to April sowing - target 150 plants/m². For late April to May sowing - target 175 Plants/m². Don't be tempted to reduce sowing rates for early sowings.

For more information contact Advance Agriculture on: 0800 227 226

or email: admin@advance-agriculture.co.nz

Disease and agronomic profile - REFLECTION wheat (FAR booklet 2017)

Septoria tritici	Moderately resistant
Stripe rust	Moderately resistant - Moderately susceptible
Leaf rust	Moderately resistant
Powdery mildew	Moderately resistant
Fusarium head blight	Moderately resistant
Straw strength	Stiff
Crop height	Short
Maturity	Early
Sprouting susceptibility	Low - Moderate

Effect of sowing date on yield (t/ha)

Variety	Sowing date		
	8 March 2016	31 March 2016	18 April 2016
Reflection	13.8	15.5	14.9
Wakanui	13.4	12.8	14.3
Inferno	11.1	13.4	13.6
Mean			13.3
CV%			3.9%

Source: FAR time of sowing trial, Temuka 2016/17. Note: Trial design does not allow direct statistical comparison, although results are from the same trial.