

A true winter barley with high yield potential

Introducing SURGE

SURGE is a high yielding feed barley, bred by Syngenta in the UK and developed in NZ in conjunction with Cropmark seeds as head licensee. SURGE is a TRUE winter barley, which means it needs to be sown early in the autumn and requires vernalisation. The advantage of SURGE is that it is very tolerant of scald and leaf rust, reducing the need for winter fungicides.

Yield potential

SURGE yields consistently well from a late March to early May sowing in Canterbury; and mid March to end April in Southland. It can be sown later than this, although yields will be reduced slightly due to reduced tiller production and a shorter grain fill period. However, management benefits may still warrant sowing at the later stage.

Chertsey Dryland FAR 2015/16 time of sowing trial (t/ha)

Cultivar	Barley type	Sowing date (TOS)			
		Early March	Mid April	Early May	Mean
Surge	Winter	9.0	8.0	7.0	8.0
Cassia	Winter	8.8	8.1	6.5	7.8
Tavern	Spring	9.0	8.5	6.7	8.0
LSD 0.05 (TOS x Cultivar)		1.2			
CV %		4.0			

Chertsey irrigated FAR 2015/16 time of sowing trial (t/ha)

Cultivar	Barley type	Sowing date (TOS)			
		Early March	Mid April	Early May	Mean
Surge	Winter	12.31	11.74	12.27	12.1
Cassia	Winter	11.78	11.68	11.57	11.68
Tavern	Spring	10.15	11.11	11.01	10.75
LSD 0.05 (TOS x Cultivar)		0.75			
CV %		4.60			

Temuka irrigated FAR 2015/16 time of sowing trial (t/ha)

Cultivar	Barley type	Sowing date (TOS)			
		Early March	Mid April	Early May	Mean
Surge	Winter	12.3	12.7	11.6	12.2
Cassia	Winter	11.8	11.5	11.1	11.5
Tavern	Spring	11.2	11.9	10.7	11.3
LSD 0.05 (TOS x Cultivar)		0.64			
CV %		3.77			

When to sow

SURGE is a true winter barley, and therefore requires early sowing and vernalisation. The ideal sowing time for SURGE is late March and April. High yields are also possible from early May plantings on early irrigated or high rainfall country.

Sowing rate

The target plant population for SURGE is 150 plants/m² from late March sowing; and 175 plants/m² for April and early May sowing.

Nitrogen timing

SURGE produces many tillers, therefore nitrogen management is aimed to maintain a healthy crop up till GS31 but not encourage over tillering, then after GS31 to promote tiller survival and yield.

Plant growth regulators

Compared to other winter barley varieties SURGE is relatively short and has stiff straw, but has a tendency to brackle. Due to its very high yield potential, a robust PGR program is recommended to reduce the risk of lodging and brackling.

Fungicides

SURGE has excellent resistance to leaf rust, net blotch and scald. The fungicide program should target green leaf retention and the prevention of *Ramularia*.

For more information contact Advance Agriculture on: 0800 227 226

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