

Surge

- ✓ Average yielding winter barley
- ✓ Medium height, stiff-strawed
- ✓ Excellent disease resistance
- ✓ Earlier harvest benefits

SURGE is a true winter barley bred in the UK by Syngenta. It requires vernalisation and time for tiller development, therefore is only suitable for autumn sowings. It performs best from earlier sowings in late March and April to take advantage of its high tillering habit and disease resistance, especially to scald.



YIELD

In previous PGW Grain and FAR trials, SURGE was competitive against other commercially available varieties but is now surpassed by LG Caprice.

TIME OF DRILLING

The optimum drilling time for SURGE is late March to late April. There may be some reduction in yield in early May, more so on dryland, lighter country and higher altitude areas. From early May sowings, yields will tend to decrease but will be similar to spring barley planted at this time. However, its superior disease resistance makes it an alternative to spring barley for early May planting. By mid-May, the grower should switch to a spring barley like SY Transformer or Belter. On drier country where summer moisture stress is expected, this cut off can come in late April or the first week of May.

SEED RATE AND TILLERING CHARACTERISTICS

SURGE winter barley is able to produce a large number of tillers. It will produce around 25 tillers per plant by the end of tillering but reduce to 7-10 per plant at harvest. In comparison to other varieties, it will produce more tillers than Cassia and Padura, but less than Sanette or Tavern. Based on limited trial data, the optimal sowing rates are as shown on the page to the right.

SOIL TYPE, ROTATION AND GEOGRAPHY

SURGE can be planted on all soil types where barley is already grown and can be grown as a first or second-year cereal. As a second-year cereal, barley is generally more take-all tolerant than wheat, however, yield will be lower than a first-year barley crop.

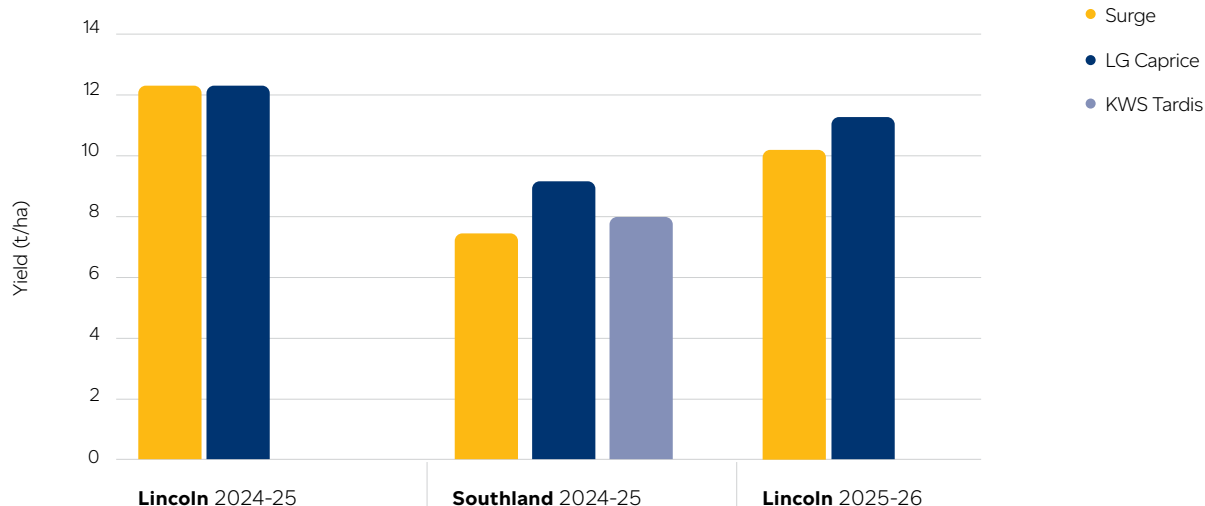
DISEASE RESISTANCE

SURGE has an excellent disease resistance profile and is mostly resistant to scald, net blotch and powdery mildew. It is moderately resistant to leaf rust. Some diseases may be present in late winter on older leaves, but this will disappear with new spring growth. Considering this disease profile, fungicide programmes should be tailored for the control of *Ramularia*. Please contact your PGW Representative for site specific recommendations.

STRAW STRENGTH AND HEIGHT

SURGE is a medium to tall cultivar with good straw strength and stand-ability, however, it can brackle on ripening. Due to its yield potential, it will require a moderate plant growth regulator programme, focussing on early season stem strength and late season height reduction to prevent lodging or brackling. The actual programme is determined by a combination of sowing date, seed rate, nitrogen use, crop thickness and yield potential. As with any cultivar, do not apply if the crop is under any form of stress. Please contact your local PGW Representative for site specific recommendations.

PGW Grain and FAR Winter Barley Trials 2024-26



GRAIN QUALITY

SURGE (2025-26)

Kernel weight (1000 seed weight)

Lincoln

54

Test Weight (kg/hl)

61

Screenings (%)

7

SURGE produces a medium size grain of good test weight with low to moderate screenings.

PGW GRAIN DISEASE NURSERY RATINGS

(9 highly resistant, 1 highly susceptible)

Scald

9

Net blotch

7

Leaf rust

6

Powdery mildew

8

PLANT POPULATIONS

Typical plant populations for SURGE in Canterbury:

Months Planted Plants/m²

March – Early April 125-150

Mid April 150

Late April – Mid May 175

SPEED OF DEVELOPMENT

Typical heading dates for SURGE in Canterbury:

Month Planted

Late March Late October

Mid-April Early November

Early May Mid-November

SURGE is a cultivar with early to mid-maturity at harvest.