

Empero

- *Very high yielding, slow maturing feed triticale*
- *Consistent second year cereal performance due to excellent take-all tolerance*
- *Good dryland yield performance*
- *Semi-dwarf variety with good standing power*
- *Market leading disease resistance for triticale*



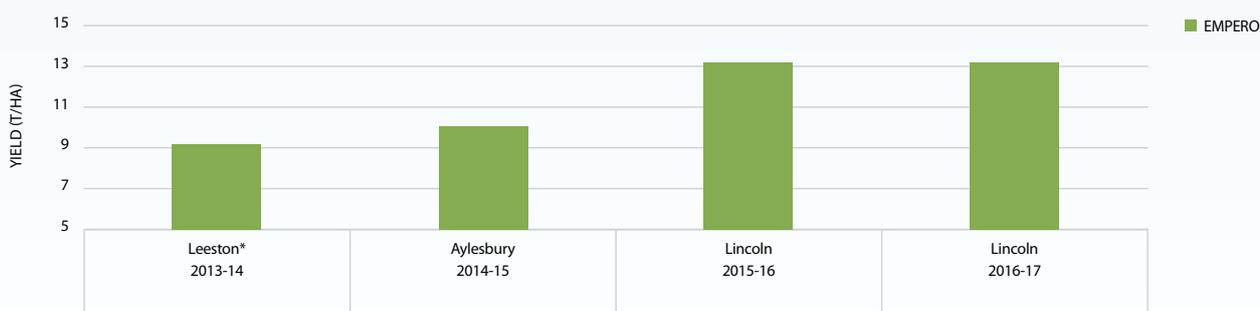
Description

EMPERO was bred by Lantmännen SW Seed AB in Sweden and further developed in New Zealand by PGG Wrightson Grain (PGW Grain). Triticale is a cross between wheat (*triticum*) and rye (*secale*) that combines the robustness and hardiness of rye with the yielding ability of wheat.

Yield

In PGW Grain trials, EMPERO has shown consistently very high yields as a first and second year cereal in both irrigated trials and dryland commercial crops. In previous PGW Grain/FAR second year wheat trials, EMPERO has been the stand out performer. The EMPERO average yields were 7.5 t/ha versus wheat between 5 – 5.7 t/ha depending on the cultivar.

PGW TRITICALE TRIALS 2013-2017



*The Leeston site experienced severe water-logging through June and July resulting in reduced plant populations.

| PGW EMPERO Grain Autumn grain quality (2016-17 season) | Canterbury |
|--|------------|
| Test weight (kg/hl) | 73 |
| Screenings (%) | 1.93 |
| Kernel weight (1000 seed weight) | 54 |
| Protein | 10.7 |

EMPERO, is more susceptible to sprouting than wheat. Therefore EMPERO should be prioritised over other cereals at harvest.

Market

EMPERO is a feed triticale which mainly supplies the pig feed market within New Zealand. Protein levels tend to sit between 9% and 11%. Contracts are advised when growing feed triticale in order to guarantee a market for the crop.

Time of drilling

EMPERO has an optimum drilling window between mid April to late May, but has the ability to be drilled through to the end of June. EMPERO can be planted earlier, but this can result in excessively bulky crops.

Speed of development

| Month planted | Typical heading dates for EMPERO in Canterbury |
|---------------|--|
| Mid May | Late November |

EMPERO is a long season grain cultivar with intermediate to late maturity.

Seed rate and tillering characteristics

EMPERO tillers profusely so seed rates need to be reduced especially when sowing early. Please refer to the triticale seed rate guidelines provided by PGW Grain (pg 5).

Soil type, rotation and geography

EMPERO is suitable for all New Zealand winter cereal growing regions including dryland and irrigated sites. EMPERO has a very high yield potential and often outperforms feed wheat, especially as a second year cereal. This is due to its disease resistance genes from the rye parentage.

Disease resistance

EMPERO has a good disease resistance profile, being mostly resistant to foliar diseases with the exception of seedling stripe rust. Considering this disease profile, EMPERO can be grown with a reduced fungicide programme as long as the crop is monitored regularly for disease race changes. Please contact your local PGW Representative for site specific recommendations.

Disease resistance results:

| Disease | PGW disease nursery ratings (9 highly resistant, 1 highly susceptible) |
|----------------------|---|
| Stripe rust | 9/7* |
| Leaf rust | 9 |
| Septoria leaf blotch | 9 |
| Powdery mildew | 9 |

Note: * 9 is resistance as an adult; 7 seedling rating

Straw strength and height

EMPERO is a medium height cultivar with strong standing power. However a plant growth regulator (PGR) is generally recommended. The actual programme is determined by a combination of local conditions, management 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.