

Tanzanite

- A new purple wheat with up to 10% yield advantage over Tyrian from an autumn sowing and up to 15% over Amethyst from later plantings
- Niche market wheat with appreciably higher value than other wheat types
- A facultative wheat cultivar with a wide sowing window, May through to August



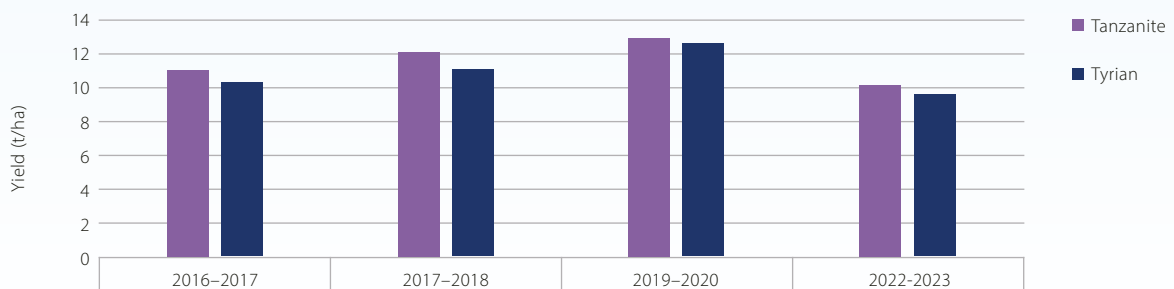
Description

TANZANITE is a high yielding purple winter wheat, bred in New Zealand by Plant & Food Research and assessed for release by PGG Wrightson Grain (PGW Grain). TANZANITE has higher yield potential than Tyrian and Amethyst and better disease resistance. TANZANITE is accepted by flour mills, due to its consistent purple colour and uniform grain size, making it suitable for use in kibbling. Purple wheat is a niche market for which contracts are strongly advised.

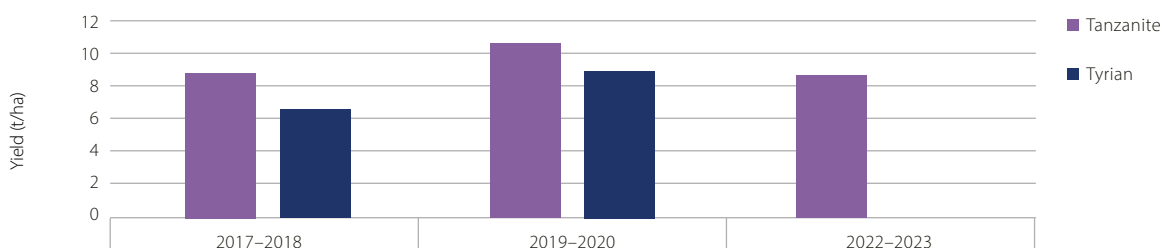
Yield

TANZANITE is a facultative wheat giving it a much wider sowing window than Tyrian. May sowings will generally yield the greatest, but good yields have been achieved from sowings as late as early September. In PGW trials, TANZANITE has given up to 10% higher yields than Tyrian from autumn sowings. From late winter to spring plantings, it yielded up to 15% above Amethyst with the advantage reducing if sown later than early September.

Purple Wheat Autumn Trials at Lincoln 2017-2023



Purple Wheat Spring Trials at Lincoln 2018-2023



New Zealand Flour Millers Association, Plant and Food Research and PGG Wrightson Grain collaborative trials.

TANZANITE grain quality (4 year mean)	Autumn	Spring
Kernel weight (1000 seed weight)	48	52
Test weight (kg/hl)	76	77
Protein content (%) (N% x 6.25)	11.0	10.4
Screenings (%)	1.0	1.7
Falling number (sec)	363	383

TANZANITE should be given priority at harvest to preserve the colour intensity and to protect falling number.

Time of drilling

TANZANITE is a facultative wheat that can be sown from May through to early September. Earlier sowing dates (May - August) will achieve maximum yield potential. PGW trials have shown TANZANITE can still achieve high yields when sown in early September. Well prepared seedbeds will result in even emergence and sets up the crop to achieve high yields.

Speed of development

TANZANITE is quicker to develop than Tyrian and typically heads out a week earlier when planted between May and mid-July. TANZANITE has a weak temperature response making it suitable for planting through to mid-September.

Month planted	Typical heading dates for TANZANITE in Canterbury
May	Mid November
Early September	Mid – Late December

TANZANITE is a medium maturing cultivar at harvest, similar to most of the current bread wheats.

Seed rate and tillering characteristics

TANZANITE tillers well (similar to most bread wheats). Care needs to be taken with plant populations when sowing mid-winter/spring. Seeding rates may need to be increased to achieve maximum yields (see PGW Grain wheat sowing guidelines on pg 4).

Soil type, rotation and geography

TANZANITE is suitable for all New Zealand wheat growing regions where good grain quality, especially high kernel weight, can be achieved. It is not recommended as a second-year cereal option. As well as the usual risks from take-all, contamination from non-purple wheat volunteers could compromise end-user quality.

Disease resistance

TANZANITE has a good general disease resistance profile but is moderately susceptible to *Septoria* leaf blotch. Considering this disease profile, fungicide programmes should be tailored to target *Septoria* leaf blotch early, especially at T0 and T1 timings for autumn sown crops. 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
Leaf rust	7
<i>Septoria</i> leaf blotch	5
Powdery mildew	9

Straw strength and height

TANZANITE is a medium height cultivar with moderate standing power. In most situations, it will require a robust plant growth regulator (PGR) programme to prevent lodging. 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.