

Bogong & Canobolas[®] Triticale – SA/VIC/NSW

Seed Fact Sheet



Key Features

- ✓ Very high yield potential across a wide range of environments
- ✓ High level of acid soil tolerance
- ✓ Moderate-high resistance to current field strains of rust
- ✓ Strong straw, good resistance to lodging
- ✓ Plump grain, low screenings and dustings
- ✓ High test weight

Yearly Rainfall:

	Low <380	Med '380-480	High >480
	Bogong	Bogong	Bogong
Time of sowing	Mid-late May	Mid-Late May	Late May- Early June

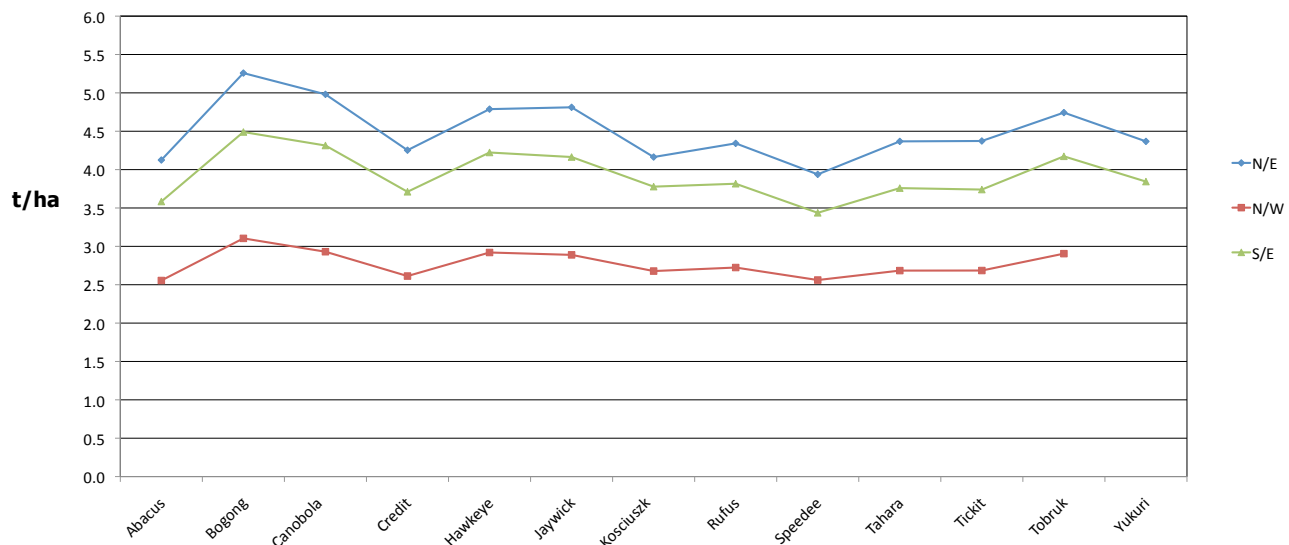
Plant Profile

Variety	Flowering / grain maturity	Height	Head Type	Straw Strength	Acid Soils - Sensitivity to Aluminium
Grain Types					
Bogong	Early-Mid	M-T	A	Very Good	HT
Canobolas	Early-Mid	M-T	A	Good	VT
Tahara	Mid Season	T	A	Moderate	HT
Hawkeye	Mid Season	M-T	A	Good	T
Jaywick	Early-Mid	M-T	A	Good	T
Tickit	Mid Season	M	A	Good	T
Speedee	Very Early	M-T	A	Mod-Good	T
Forage Types					
Rufus	Mid Season	T	RA	Good	T
Tobruk	Early	-	RA	Very Good	T

(Height: M = Medium; T = Tall) (Acid Soils: T = Tolerant; HT = Highly Tolerant; VT = Very Tolerant) (Head Type: A = Awned; RA = Reduced Awns) (Source: NVT/SARDI/VIC DPI/NSW DPI)

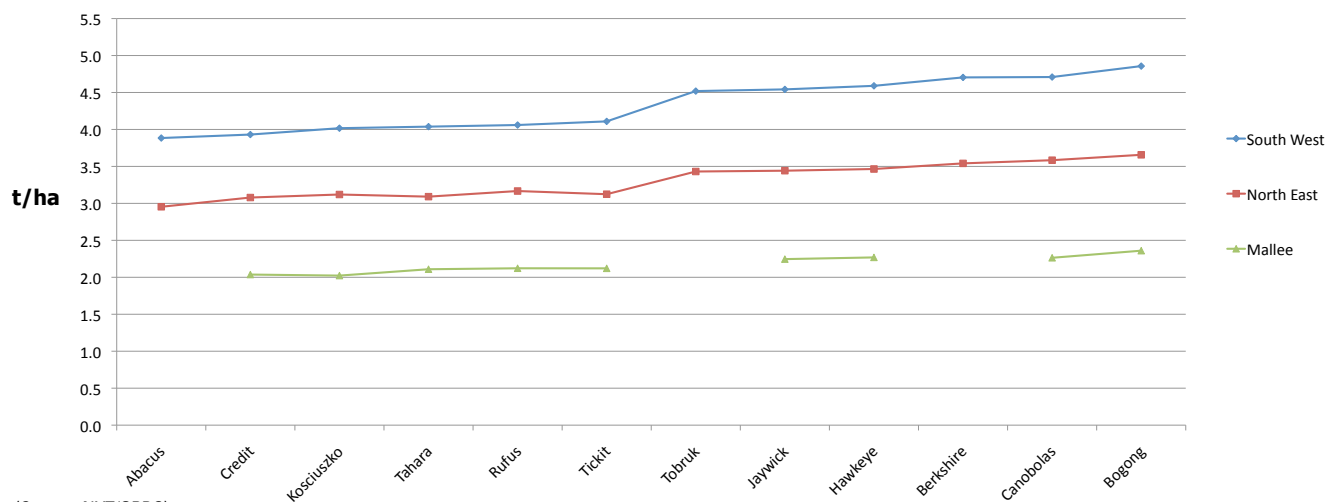
Variety Specific Agronomic Information

NSW Long term (2000-2009) Mean Regional Grain Yield - t/ha



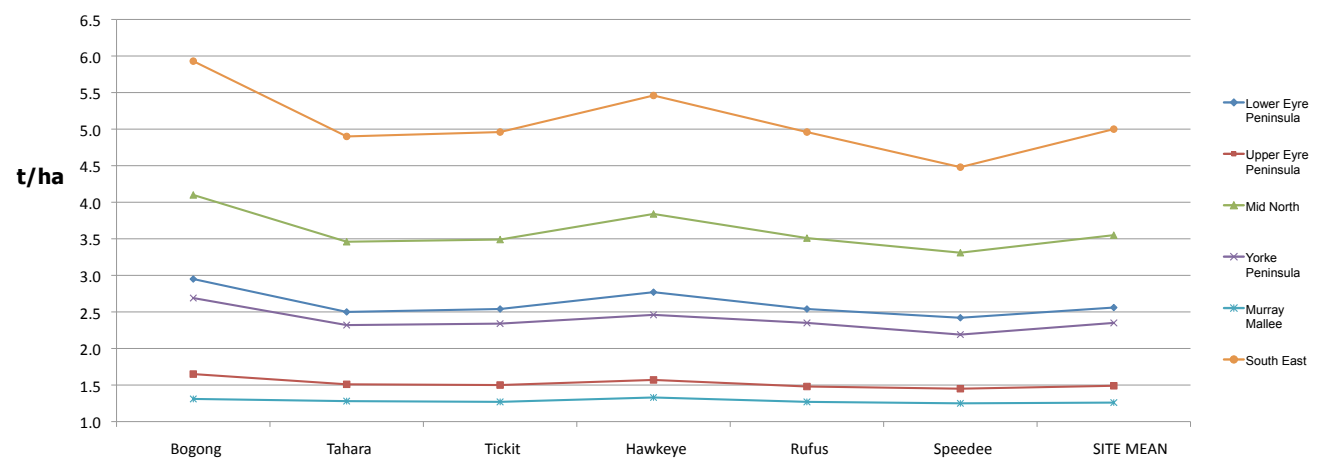
(Source: NVT/GRDC)

VIC Long Term (2000-2009) Mean Regional Grain Yield - t/ha



(Source: NVT/GRDC)

SA Long Term (2000-2009) Mean Regional Grain Yield - t/ha



NVT & SARDI Sites Across Years: Sth East - Frances, Moyhall; Murray Mallee - Pinnaroo; Mid North - Turretfield; YP - Bute; Lower EP - Wharminda, Green Patch; Upper EP - Minnipa, Piednippie, Streaky Bay. (Source: NVT/SARDI/GRDC)

Disease Profile

Variety	Resistances and Tolerances						
	Stem Rust	Leaf Rust	Stripe Rust		CCN		RLN (P. Neglectus)
			Jackie Pathotype	WA YR17 Pathotype	Resistance	Tolerance	

Grain Types

Bogong	R	R	MR-MS	MR	MS-S	T	-
Canobolas	R	MR	MS-S	MR	-	-	-
Tahara	R-MR	R	MS	MR	R	T	R-MR/MT
Hawkeye	R-MR	R	MR (MS) b	MR	R	T	-
Jaywick	MR-MS	R	MR (MS) b	MR	R	T	-
Tickit	R-MR	R	MS	MR	R	T	MR/MT
Speedee	R	R	S-VS	MR	S	T	R-MR/MT

Forage Types

Rufus	MR	R	MR-MS	MR	R	T	R-MR/MT
Tobruk	R	R	MR-MS a	MR	-	-	-

R = Resistant; MR = Moderately Resistant; MS = Moderately Susceptible; S = Susceptible; VS = Very Susceptible; MT = Moderately Tolerant; T = Tolerant. (a = susceptible to head infection; b = some plants express a higher response). (Source: NVT/SARDI/VIC DPI/NSW DPI)

SA - Lower South East Regional Grain Yield (t/ha) & Quality

2009 season	Bogong	Tahara	Hawkeye	Rain (mm) (Apr-Oct)
Frances	6.01	5.48	6.00	392
Conmurra	5.59	4.39	5.07	580
Millicent	7.18	-	-	690
screenings (% <2mm)	2.0	1.6	2.1	
test weight (kg/hl)	72.0	64.0	66.1	
1000 grain weight (g)	40.6	37.8	39.3	

Composite Mean value for screenings, test weight & grain weight.
(Source: MacKillop Farm Management Group)

Grain Quality - Spring Ridge NSW

Variety	1000 grain weight	Test Weight	Protein	Screenings %
Bogong	42.2	78.7	11.7	2.9
Canobolas	44.2	78.0	12.5	6.3
Tahara	43.6	76.1	12.9	3.4
Hawkeye	42.4	78.1	12.2	2.3
Jaywick	40.8	76.5	12.1	3.9
Speedee	46.8	75.0	11.8	4.4
Rufus	45.8	78.3	12.0	4.7
Yukuri	32.4	76.2	14.0	6.1

(Source: NVT Spring Ridge main season triticale trial 2009)

Paddock Selection

As a general rule, Triticale's are suited to all soil types, but typically have a yield advantage over wheat and Barley on light acidic soils higher in exchangeable Aluminium. In these acidic soils higher in Aluminium, Canobolas and Bogong would be the two most preferred varieties of choice.

Variety Specific Agronomic Information

SA Screenings Profile (% <2.2mm)

	2007	2008	2009	Long Term Mean
Bogong	2.1	6.8	1.7	3.5
Tahara	1.4	6.3	1.5	3.1
Hawkeye	1.5	7.4	1.7	3.5
Tickit	1.8	6.3	1.2	3.1

Composite Mean screenings performance. 2009/10 GTA TRIT maximum receival standard 10%. (Source: NVT/SARDI/GRDC)

SA Test Weight Profile (kg/hl)

	2007	2008	2009	Long Term Mean
Bogong	76.9	74.4	77.3	76.2
Tahara	72.7	70.0	71.3	71.3
Hawkeye	75.6	72.3	75.0	74.3
Tickit	72.4	70.2	71.4	71.3

Composite Mean test weight performance. 2009/10 GTA TRIT minimum receival standard 65kg/hl. (Source: NVT/SARDI/GRDC)

Triticale for Livestock

A key physical feature of triticale is that it is a soft grain with a hardness index almost half that observed for wheat and barley. This is an advantage as less mechanical energy is required to mill triticale compared to wheat and barley prior to inclusion in livestock diets. On farm, triticale can be fed to livestock in the same way wheat or barley would be fed. In livestock diets, triticale has a similar role to other cereals. It is primarily an energy source having moderate protein content with high starch and other carbohydrates, giving it a high energy content. The major uses for triticale grain are as a feed supplement in the dairy industry, as a component ingredient in beef feedlots and as a constituent of compound rations for intensive livestock (pigs and poultry) rations.

Graze and Grain

Early sown, well managed varieties like Bogong and Canobolas provide a good opportunity for early grazing to help with increased tiller number development, followed by a sufficient rest period to allow for grain recovery at the end of the season. Under intensive early grazing pressure, triticale can deliver high early biomass and feed quality when compared to most wheat varieties. Sowing on time into good levels of soil moisture and nutrients will help increase early root growth so plants can be well anchored for grazing. According to seasonal moisture and temperature, rotational grazing is recommended no later than mid tillering to allow sufficient time for grain recovery. A post grazing nitrogen application can help to optimise grain yield.

Plant Breeding Rights & Royalties

Bogong and Canobolas are protected by Plant Breeder's Rights (PBR). Any unauthorised commercial propagation or any sale, conditioning, export, import or stocking of propagating material of these varieties is an infringement under the Plant Breeder's Rights Act 1994. Growers are allowed to retain seed from production of this variety for their own use as seed only. (Grower to Grower Seed sales are NOT permitted). Bogong and Canobolas are subject to an EPR of \$2.20/mt (GST excl.), payable on all production excluding farm saved seed.

Viterra manages the collection of End Point Royalties (EPR) as part of the Plant Breeders Rights variety licencing agreement. The royalties are collected for investing back to the plant breeder for research and development of improved varieties for Australian farmers.

Contact & Seed Purchasing

Bogong and Canobolas Triticale are sold through your local rural seed retail agent. Check with your local store for seed availability and seek advice from your agronomist on optimum sowing time and crop management. Wholesale distribution by Viterra Seeds.

CONTACT – Viterra Seeds on Toll Free Number

1800 018 205 Website Seeds section - www.viterra.com.au/agriproducts/seed

Craig John - Seeds Manager for SA & WA mobile 0437 011 907 craig.john@viterra.com

Jason Scott - Seeds Manager for VIC & Sth NSW mobile 0458 009 804 jason.scott@viterra.com

Chris Farlow - Seeds Manager for Nth NSW & Sth QLD mobile 0439 277 122 chris.farlow@viterra.com

Breeding

Bogong was selected by Dr. Robin Jessop, Mr. Mike Fittler and the triticale breeding team at the University of New England, Armidale, NSW