

# Euabalong - wheat varietal yield and quality trial

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This trial was part of a series of trials conducted also at Tottenham, Nyngan and Rankins Springs.

## Key Messages

- « Although there was a very late break to the season, cooler conditions through September and October maintained good yields. There was a long period during flowering in October where no significant rainfall fell. This limited yield potential and caused quite variable results. Annuello (at 3.0t/ha) (mid season maturity), Whistler (at 3.0t/ha) (winter wheat) and Ventura (2.9t/ha) (short season maturity) were the highest yielding varieties. While the long season varieties (like Rosella and Arrivato) were the lowest yielding.
- Yield varied from 2.0 - 3.0t/ha.
- The protein levels varied from 8.3% (Clearfield Janz) to 10.5% (Rosella). They were all lower than the Prime Hard receival standards.
- The screenings levels were generally between 5 - 10%, except for H46 (4.4%) and Sunvale (4.8%). Susceptible rust varieties had high screenings values (H45, 13.9%, Whistler, 11.7%, Westonia, 11.2% and Petrie, 11.1%).
- The test weights were generally between 78kg/hl - 81kg/ha, except for the long season wheats (Rosella, 68.7kg/hl, Marombi, 69.3kg/ha, EGA-Wedgetail, 72.2kg/hl, Wylah, 74.8kg/hl, Whistler, 76.7kg/hl Giles, 77.0kg/hl). The season was too short to establish sufficient root and leaf mass significantly reducing the grain fill period.

## Background

The aim of these trials were to provide localised data on the yield and quality response of released and near release wheat lines at Nyngan, Tottenham, Euabalong and Rankins Springs. Under the new national variety testing system (NVT) these sites were no longer covered by trials.

## Methods

Growing season rainfall for Euabalong was 335mm (June - November).

The trial was sown on 15<sup>th</sup> June 2005 into field pea stubble with good soil moisture and harvested on the 8<sup>th</sup> December 2005.

The trial consisted of 32 varieties and was sown on a red loam soil.

The treatments were replicated 3 times. Plot size was 2m X 15m.

Both early and late maturing wheat varieties were used in the trials. With the late break to the season the slower maturing varieties were significantly disadvantaged.

Varieties were sown at a seeding rate of 50kg/ha with 80kg/ha of DAP (18N; 20P).

## Results

Variety	Yield (t/ha)	Protein (%)	Screenings (%)	Test wgt (kg/hL)
ANNUELLO	3.02	8.63	8.51	81.17
WHISTLER	3.00	10.17	11.74	76.67
VENTURA	2.92	8.93	8.02	81.33
MAROMBI	2.90	9.76	6.11	69.33
DRYSDALE	2.89	8.77	9.18	81.33
EGA_GREGORY	2.84	8.7	7.58	80.00
DIAMONDBIRD	2.81	8.6	7.88	80.83
GILES	2.78	8.6	9.39	77.00
GBA_SAPPHIRE	2.77	9.66	6.17	79.83
ELLISON	2.75	9.5	8.67	77.83
WYLAH	2.74	9.03	9.79	74.83
BOWERBIRD	2.73	8.6	9.89	79.17
SW_ODIEL	2.73	8.77	9.69	76.83
H46	2.71	8.93	4.39	81.83
EGA_WEDGETAIL	2.70	10.43	5.27	72.17
WYALKATCHEM	2.70	8.86	7.06	79.33
PETRIE	2.68	9.67	11.05	78.50
STRZELECKI	2.66	8.57	9.18	76.17
SUNSTATE	2.65	9.1	9.68	81.50
SUNVALE	2.60	9.4	4.78	80.17
BABBLER	2.59	9.23	7.28	79.17
LANG	2.58	8.86	6.99	80.00
BAXTER	2.54	8.7	8.98	79.67
CLF_JANZ	2.51	8.33	6.56	78.83
CUNNINGHAM	2.49	8.8	8.09	79.83
HYB MERCURY	2.47	8.73	10.51	79.67
CHARA	2.44	8.77	10.59	76.50
JANZ	2.43	9.1	7.43	79.00
WESTONIA	2.43	8.83	11.18	78.00
H45	2.33	8.37	13.94	79.83
ARRIVATO	2.32	8.83	5.04	80.67
ROSELLA	2.03	10.46	11.3	68.67
Isd (5%)	0.60	n/a	2.59	1.94

Values that vary less than the Isd (5%) are not considered to be different.

## Discussion

Although this is a relatively high growing seasonal rainfall, periods of dry weather, especially during flowering, resulted in variable maturity preferences of the high yielding varieties. Yields are generally good compared to the district average and ranged from 2.0t/ha - 3.0t/ha. Stripe rust was present at this site and did influence yield results. Susceptible varieties, like H45 are at the bottom of the yield table.

Long season varieties like Rosella should not be sown at these very late sowing dates.

The trial will be repeated this year and planted at two sowing dates to optimise the performance of each variety.

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