

Caparoi

Durum Wheat

VARIETY SUMMARY

- High yielding medium maturing durum wheat
- Excellent disease resistance
- Excellent lodging and shedding resistance, erect semi-dwarf plant type.
- Grain quality is similar to Jandaroi and superior to Wollaroi. Consistently good protein with low screenings.
- Grain yield generally greater than EGA Bellaroi, Yallaroi and Wollaroi across all regions, with comparative yields to Jandaroi. Outstanding yields under irrigation.
- Genetically diverse from EGA Bellaroi and Jandaroi.
- ADR1 classification in all durum production zones of QLD, NSW, SA and WA.



BREEDING

Caparoi (formerly TD 20F) was bred by the NSW DPI Tamworth Durum breeding team as part of the National Program. It continues the tradition of naming the varieties to help with the target market. 'Capo' being derived from the Italian word for 'Leader' or 'Boss' and "aroi" continuing the tradition for naming durum varieties bred by NSW DPI.



MATURITY

Caparoi is a mid season durum, with similar maturity to Wollaroi. It is earlier than EGA Bellaroi and approximately 5 - 7 days later than Jandaroi. The suggested planting window for Caparoi is from mid May to late June.



GRAIN QUALITY

Caparoi has large grain size, achieving good protein and hectolitre weights with low screenings.

- Caparoi has a high yellow pigment content. Higher than Wollaroi and slightly lower than EGA Bellaroi.
- Caparoi makes pasta of equivalent quality to EGA Bellaroi.



AREA OF ADAPTATION

Caparoi was bred for all the main durum producing areas in QLD, NSW, SA and WA.

Caparoi has demonstrated outstanding yield advantages in irrigation trials, and is recommended for dryland and irrigation situations.

Caparoi also possesses boron tolerance, making it particularly adaptable in SA.



PLANT CHARACTERISTICS

Caparoi has a desirable list of plant characteristics including

- Strong seedling vigour.
- Excellent lodging and shedding resistance, with strong straw strength.
- Semi dwarf plant type, with erect plant growth and attains a harvestable height of approximately 80cm.



DISEASE RESISTANCE

Caparoi exhibits an excellent foliar disease resistance package, similar to current durum varieties.

Caparoi also has been observed to be genetically diverse from EGA Bellaroi and Jandaroi. This broadening of the genetic base of durum varieties is important for long-term sustainable crop production. Like all durum varieties, Caparoi is susceptible to Crown rot and Fusarium head blight. Crown rot is best managed by appropriate crop rotations and stubble management.

Table 1. 2010 Disease profile (I&I NSW)

| Stem rust | Stripe rust | Leaf rust | Yellow leaf spot | Septoria tritici | Crown rot | Prat thornei | Sprouting resistance |
|-----------|-------------|-----------|------------------|------------------|-----------|--------------|----------------------|
| R-MR | R-MR | R | MR | R* | VS | MR | MR |

*SA 2010 rating

 **YIELD**

- Caparoi is a high yielding durum with trial results supporting yields similar to or superior to EGA Bellaroi and Wollaroi in northern NSW. Caparoi yields are comparable to Jandaroi in NSW.
- Caparoi will be most suitable for comparison with Wollaroi due to its similar maturity. In South Australia Caparoi has performed 4-10% better than Wollaroi in 2005-7 trials.
- Performance in central and southern Qld has also been impressive, yielding up to 37% better than Wollaroi in Southern Qld and up to 10% better in central Qld.
- Caparoi has been outstanding in irrigated trials, both for yield and for lodging resistance. (NSW DPI trials, 2007/2008)

Table 1. Long term yield performance (2000-09) in QLD (NVT 2010) and Northern NSW (I&I NSW 2010 Sowing Guide)

| Variety | Central QLD | SE QLD | SW QLD | NE NSW | NW NSW |
|--------------|----------------|--------|--------|--------|--------|
| | % EGA Bellaroi | | | | |
| Caparoi | 103 | 105 | 104 | 103 | 103 |
| Wollaroi | 100 | 104 | 102 | 101 | 101 |
| Jandaroi | 101 | 106 | 105 | 104 | 104 |
| EGA Bellaroi | 100 | 100 | 100 | 100 | 100 |

Table 3. Long term yield performance (2000-09) in SA (SARDI 2010 Harvest Report)

| Variety | Mid Nth | Lower EP | Yorke Pen |
|---------|-------------|----------|-----------|
| | % Site mean | | |
| Caparoi | 99 | 100 | 102 |
| Tamaroi | 101 | 101 | 101 |
| Kalka | 99 | 101 | 99 |

 **AGRONOMIC GUIDELINES**

- Caparoi is adapted to neutral to alkaline soils but not saline or acid soils.
- Sow high quality seed at rates calculated to account for the large grain size. Caparoi has strong seedling vigour but should not be sown below a soil depth of 10cm.
- Caparoi is comparable to other current durum varieties in that it has no known sensitivities to registered herbicides.

Table 2. Southern NSW irrigation trial data 2007-08

| Variety | Average Yield t/ha | Average Lodging score (1=low lodging) |
|--------------|--------------------|---------------------------------------|
| Caparoi | 9.75 | 4.8 |
| Wollaroi | 8.33 | 5.4 |
| Arrivato | 9.56 | 3.3 |
| EGA Bellaroi | 9.42 | 4.2 |
| Yallaroi | 8.75 | 6.1 |
| Tamaroi | 8.06 | 4.4 |

Data source: NSW DPI (5 trials)

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Caparoi is protected by Plant Breeder Rights, any unauthorised commercial propagation or any sale, conditioning, export, import or stocking of propagating material of this variety 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.

An End Point Royalty of \$2.86 per tonne (GST inclusive), which includes breeder royalties, applies to this variety.

ACKNOWLEDGEMENTS

Caparoi was bred by the NSW Department of Primary Industries with support from growers through the GRDC



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