WHEELER







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

1. Type

 Wheeler is a high oleic Virginia type peanut developed by the Queensland Department of Employment, Economic Development and Innovation (DEEDI), Kingaroy and the Grains Research and Development Corporation (GRDC). Wheeler produces a high percentage of quality jumbo grade kernels.

2. Growth Habit

- The growth habit of Wheeler is regarded as a bunch type being more upright and structured than Middleton.
- The canopy of Wheeler has a greater density than Middleton.
- Wheeler is determinant with regards to flowering and pod setting.

3. Seed / Pod Characteristics

- Pods are large and robust in their integrity making it suitable for the nut in shell market.
- Wheeler produces pink skinned kernels, which are similar in size and shape to Middleton.
- Under dry conditions Wheeler pods can be susceptible to splitting, and hence prone to higher aflatoxin risk.

4. General Agronomy

a) Yield

Wheeler yields can be excellent when grown under irrigation.

b) Planning to Grow Wheeler

Wheeler generally produces more large kernels on average than Middleton.

c) Planting Rate

These rates are based on using Enhanced Seed with a Precision Planter

| | Dryland (Sth Qld) Irrigated (Sth Qld | | |
|---------------------|--------------------------------------|---------------------------|--|
| Seeds / ha | 80,000 | 130,000 – 150,000 Max. | |
| Seeds / metre | | | |
| ⇒ 92 cm rows (36") | 7.3 | 12 – 14 | |
| ⇒ 101 cm rows (40") | 8.1 | 13 – 15 | |
| Seed spacing | | | |
| ⇒ 92 cm rows (36") | 13.7cm (5.4") | 8.3 – 7.1cm (3.3" – 2.8") | |
| ⇒ 101 cm rows (40") | 12.3cm (4.8") | 7.7 – 6.7cm (3.0" – 2.6") | |

d) Nutrition

- The nutritional requirement of Wheeler is similar to other current commercial varieties.
- Requirements for Calcium and Boron are high. Marginal levels of available Calcium and Boron in the podding zone will result in an increase in the number of pops, splits and also increase the amount of hollow hearts.
- PCA recommends soil testing and consultation with peanut agronomists to determine both the timing and application rates of Calcium and Boron.

e) Disease Susceptibility

- Wheeler is more susceptible to Net Blotch than other commercial varieties. A regular fungicide program will help to ensure Net Blotch is not a limiting factor in terms of yield or quality.
- Wheeler displays a moderate tolerance to CBR.

f) Maturity and Harvesting

- Time to maturity is approximately 140 days.
- Assessing maturity should be undertaken using both the hull scrape and shell out method.

5. Marketing

- Wheeler is well suited to the in-shell and snack food markets
- Taste profile is similar to other varieties.

6. Grades

| Grade (%) | Wheeler | Middleton | Fisher |
|------------|---------|-----------|--------|
| J | 14 | 10 | 32 |
| 1 | 21 | 23 | 15 |
| 2 | 18 | 20 | 11 |
| Splits (5) | 12 | 12 | 12 |
| MFG (7) | 3 | 4 | 1 |
| Oil | 8 | 8 | 6 |
| Shell | 24 | 23 | 23 |

The table above illustrates comparative grades (%) against Middleton. Results can vary considerably with management and seasonal conditions.

For more information regarding PBR please contact PCA on 07 4162 6311.

PEANUT COMPANY OF AUSTRALIA

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^{*} These data averages are based on commercial production.