

VARIETY "P" FACTSHEET

BACKGROUND

Variety "P" is a new Macadamia variety released to the industry as a result of the National Macadamia Industry Variety Improvement program. Data has been collected on the new macadamia varieties in Regional Variety Trials (RVT's) across production regions in Queensland and New South Wales. These trials have been measuring kernel, tree, disease and processing qualities for the past 2 years and nut-in-shell yield for 4 years. The data presented below comes from these trial sites.

DESCRIPTION

Variety "P" is a precocious, small to medium, spreading tree with a moderately dense canopy. At the Booyan RVT site in Bundaberg at year 8 variety "P" has a tree volume of 31.4m³, while 816 is 39.2m³, 741 is 49m³ and 344 is 37.7m³. At the Alstonville RVT site variety "P" has a tree volume of 51.4m³, while 816 is 59.9m³, 741 is 61.5 and 344 is 55.5m³ at year 8.

Based on RVT data "P" had a cumulative kernel yield over 4 years from 2013 to 2016 at Booyan of 10.1kg, while 816 was 10.4kg, 741 was 10.2kg and 344 was 7.9kg.

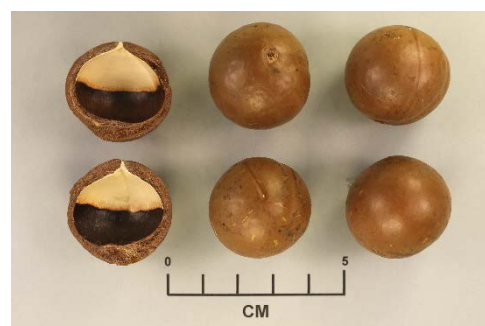
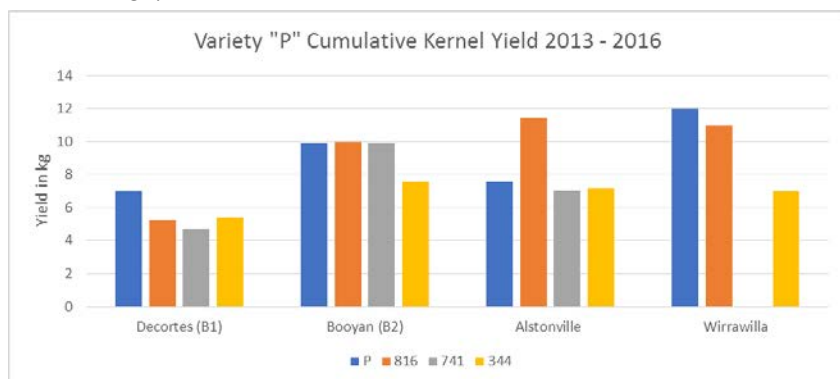
Variety "P" has kernel recovery of 39% at Booyan compared with 816 (45%), 741 at 38% and 344 at 34%.



8 year old variety "P" at Booyan.

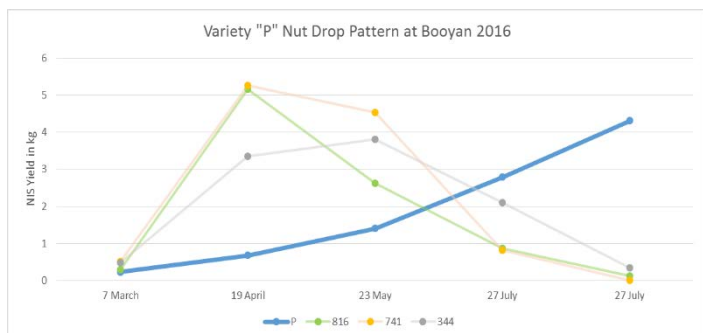


Variety "P" kernel.

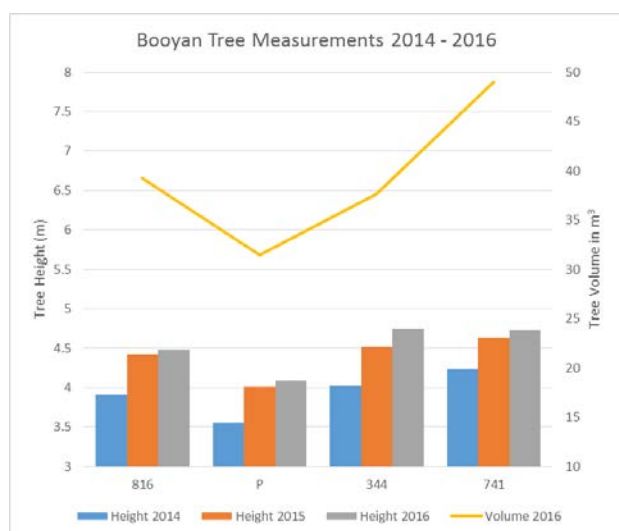


Variety "P" nut and shell.

“P” flowers mid-season with a late nut drop pattern. Most nuts fall from mid-July on. Early indications are “P” is responsive to Ethrel® treatment to assist even nut drop, with minimal leaf loss.



As variety “P” is a small tree, planting density could be increased to 400 trees (or more) per hectare rather than the industry standard of 312 trees per hectare. This could increase productivity at an earlier age.



Trees of “P” have a low rating (1 out of 5) for husk spot and sticktights, even though it drops its nuts late. At the Wirrawilla RVT site “P” had no symptoms of Abnormal Vertical Growth (AVG) and rated 0 out of 2. The standard industry variety 344, rated 1.36 out of 2 for AVG at the same site.

Rapid Hexanal testing, or storage ability, indicated kernel of “P” had an average Hexanal measurement of 24.03ppm while 816 measured 21.35ppm, 741 42.44ppm and 344 with 90.75ppm. Less than 50ppm Hexanal is considered to have a longer shelf life than 100ppm or above.

Growers at field days in Booyan and Wirrawilla, Bundaberg, rated “P” as 6.83 and 7.67 out of 9 respectively for commercial potential. 741 at Booyan was rated 7.21 out of 9 while 344 was rated 6.21 at Wirrawilla. At the NSW Alstonville site growers rated “P” 5.3 out of 9 while 741 was rated 6.85 and 816 6.38 out of 9. Worry about tree density was a common topic of “P” at Alstonville.

Variety "P" Yield and Tree Comparison				
Booyan				
Variety	P	816	741	344
Kernel Recovery (%)	38.9	45.2	38.3	34.2
Cumulative Kernel Yield (kg) 1	9.907	9.976	9.901	7.577
kernel Canopy Efficiency (g/m3) 2	123.1	95	78	83
Tree Volume (m3)	31.4	39.2	49	37.7
Kernel KG per Ha (estimated) 3	1,147	1,172	1,205	976
Kernel KG per Ha (estimated) 4	1,467			
1 - Cumulative Kernel Yield 2013 -				
2 - 2016 (year 8) Kernel Canopy				
3 - Estimated kernel yield (kg/ha) for 312.5 trees per ha or 8m x 4m				
4 - Estimated kernel yield (kg/ha) for 400 trees per ha				

DISCLAIMER

The above information is sourced from the eight Regional Variety Trial (RVT) sites in Queensland and New South Wales. This is the best available information on variety performance with a maximum age of eight years old. Each RVT site is randomised and replicated with yield data collected from 2013 to 2016. The information provided here may not be suitable for all sites or regions as varieties perform differently in different locations. The Queensland Department of Agriculture and Fisheries, and Horticulture Innovation Australia provides the above information as a guide only and take no responsibility for the performance of the varieties on individual farms.