

# ALL ABOUT ALMONDS

## ESTABLISHMENT



## AUSTRALIAN ALMOND VARIETY - VELA

Vela is a highly spur bearing tree that is suited to planting in traditional or higher density orchards. The kernel has a similar appearance and taste profile to Nonpareil and may be suited to markets where Nonpareil is preferred over other varieties.

### KEY POINTS

- ▶ Self-fertile variety
- ▶ Spur bearing
- ▶ No alternate bearing
- ▶ High cropping capacity



### POMOLOGICAL TRAITS

- Growth habit** Upright to spreading
- Branching density** Medium
- Nut location** Spurs and one year old wood
- Flowering time** Early - mid, full bloom 3 days earlier than Nonpareil
- S compatibility genotype** S7Sf
- Pollination** Self-fertile variety. Cross pollination unnecessary. Good level of autogamy
- Compatible Pollinators** Nonpareil, Carmel, Padre, Butte, Carina, Capella, Maxima, Rhea
- Flowering density** High
- Length of flowering** Medium, approx. 3 weeks
- Bearing precocity** Precocious
- Cropping capacity** High
- Cropping regularity** Good. No alternate bearing
- Bacterial spot tolerance** Very good
- Harvest season** Mid to late
- Harvest ease** Good
- Husking ease** Good. Hull is easily separated from shell

### COMMERCIAL TRAITS

- Nut shape** Cordate
- Kernel size** Large (1.8 g)
- Crackout percentage** 31%
- Shell texture** Soft shell
- Double kernels** Less than 5%
- Kernel appearance** Attractive, skin colour medium to light
- Kernel composition** Oil 51.3%; oleic acid 64.2%; Vitamin E 41.03 mg/100g oil

### GLOBAL ASSESSMENT

Vela is a soft shelled variety that has consistently out yielded Nonpareil by 12% over five years of yield assessments. It has superior fruit characteristics with a soft shell, full seal and large, sweet tasting, lightly coloured kernel. Vela's main outstanding quality is its early precocity to crop on spur wood for its canopy size (12% more yield with 12% less canopy volume compared to the same age Nonpareil). The fully enclosed shell seal provides protection against insect and bird damage, whilst the hull detaches easily at harvest. Growth habit is slightly more upright to spreading compared to Nonpareil and has excellent spur growth for cropping. Vela flowers at the same time as Nonpareil and accordingly, can be used as a pollinator for Nonpareil or any of the other Californian or Australian varieties used in the Australian almond industry. Vela is self-fertile and doesn't need cross pollination to successfully bear fruit, however cross pollination may still be beneficial.

TRAIT	ASSESSMENT CRITERIA	RATING (/10)	
		NON PAREIL	VELA
<b>PRODUCTION</b>			
Flowering date	Preferable same as Nonpareil, -3 to +14 days for sf, -3 to +7 for non-sf	5	8
Flowering	Spur bearing, flower to fruit set ratio	6	8
S Incompatibility group	Self-compatible pollen, flower autogamy, bag sf's, bring bees	0	10 (Sf)
Precocious	Precocious, first crop year 3, yield to canopy volume ratio	6	8
Vigour	Intermediate to high but must be balanced with fruitfulness	7	7
Growth habit	Upright, limbs at 40° from vertical, non-weeping, no blind wood	8	8
Branching density	No blind wood	6	6
Ease of training and pruning	Non-weeping	8	9
Harvest Time	No later than Nonpareil plus 30 days (i.e. < Monterey)	6	6
Fruit retention - Minimal windfalls	Minimise food safety risk, facilitate shake and catch	6	6
Fruit retention - Minimal mummies	No stick tights	3	3
High yielding	2.5 - 3.0 Tonnes / Hectare, yield to canopy volume ratio	7	9
Regular production	No alternate bearing	7	NA
<b>PEST &amp; DISEASE RESISTANCE</b>			
Rust		6	6
Hull rot		0	10
Bacterial spot		8	8
Anthracoese		6	6
Monilinia		7	7
NIBF		6	**
Carob moth		0	7
Mites		5	5
Black Peach Aphids		5	5
<b>PROCESSING</b>			
Hulling and shelling ease	Thin hull, easily removed with minimal damage to kernel	8	8
Shell type	Less than or equal to "hard"	5	7
Shell seal	Well sealed to avoid insect damage and mould contamination	0	8
Crackout ratio	Good kernel to waste (hull & shell) ratio	7	8
Roasting	Good product after roasting in terms of flavour; flesh colour; life	7	**
Blanching	Easily blanched	7	**
<b>PRODUCT QUALITY</b>			
Double kernels	Less than 5%	7	8
Kernel size/ weight	Minimum 1.24g; optimum range 18-24 kernel per ounce	7	9
Kernel shape	Oval, smooth	8	8
Testa colour	Golden testa; "clean" & "clear"	9	9
Testa pubescence	Smooth, "clean", no "dusty" appearance	9	9
Kernel meat	White, no brown areas	9	9
Staining propensity	Shell and kernel	0	7
Oil content	High but not quantified	7	?
Flavour	Sweet, strong almond flavour, typical, non-bitter	6	6
Storage life	Shelf life of processed product	6	**

\*\* Yet to be assessed.

## MORE INFORMATION

### Almond Board of Australia

PO Box 1507  
Loxton SA 5333  
growing.australionalmonds.com.au  
communications@australionalmonds.com.au  
P +61 8 8584 7053

## PROJECT CODE

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E.Australian Almond Varieties Vela

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