

Californian Varieties: Nonpareil

Brett Rosenzweig, Almond Board of Australia



Origin

Dates back to 1879 in Suisun, California

Pomological Traits

Tree vigour: Vigorous
Foliage density: Medium
Growth habit: Slightly spreading
Branching density: Medium

Nut location: Spurs and one year old wood Flowering time: Second half of August

S compatibility genotype: S_7S_8

Genetic compatibility to Nonpareil: N/A **Pollination:** Cross-pollination needed

Pollinators: Carmel, Monterey, Butte, Padre, Wood Colony, Livingston, Price,

Peerless, Avalon, Sonora, Independence

Flowering density: Medium
Length of flowering: Medium
Bearing precocity: Precocious
Cropping capacity: Medium/heavy
Cropping regularity: Good
Bacterial spot tolerance: Good
Hull Rot tolerance: Poor
Harvest season: February
Harvest ease: Good

Husking ease: Good, hull is easily separated from shell



Commercial Traits

Classification: Nonpareil Nut shape: Elliptical Kernel size: Medium (1.30g) Crack-out percentage: 30%

Shell texture: Soft Shell seal: Poor

Double kernels: No doubles

Kernel appearance: Light golden skin colour, free from wrinkles, smooth skin

texture and sweet taste



Comments

The main almond industry variety with slightly above 50% planted by area.

CHARACTERISTIC	COMMENTS						SCORE (/10)	(01/		*	(** Yet to be assessed)	e asses	sed)
PROCESSING		Nonpareil	Carmel	Price	Peerless	Butte	Padre	Monterey	Livingston	Wood Colony	Sonora	Avalon	Independence
Flowering Date	Preferable same as Nonparell, -3 to +14 days for sf, -3 to +7 for non-sf	D.	ro	ιn	rv	4	4	LS.	rv.	22	rv	ιΩ	ru
Flowering	Spur bearing, flower to fruit set ratio	9	9	9	9	9	9	9	9	9	9	9	9
S Incompatibility Group	Self-compatible pollen, flower autogamy, bag sf's, bring bees	0	0	0	0	0	0	0	0	0	0	0	10 (sf)
Precoclous	Precocious, first crop year 3, yield to canopy volume ratio	9	7	9	9	9	9	7	9	9	9	9	9
Tree - Vigour	Internediate to high but must be balanced with fruitfulness	7	00	7	7	7	7	00	7	7	7	9	7
Tree - Growth habit	Upright, limbs at 40° from vertical, non-weeping, no blind wood	00	00	6	00	00	6	4	00	6	00	0	00
Tree - Branching density	No blindwood	9	9	7	9	9	7	4	9	7	9	7	9
Tree - Ease of training and pruning	Non-weeping	00	00	00	00	00	6	4	00	00	7	00	00
Disease resistance - Rust		9	9	9	9	9	9	9	9	9	9	9	9
Disease resistance - Hull rot		0	7	7	7	7	7	7	7	7	7	7	:
Disease resistance - Bacterial spot		00	00	9	00	9	9		00	00	00	00	9
Disease resistance - Anthracnose		9	9	9	9	9	9	9	9	9	9	9	:
Disease resistance - Monllinia		7	7	7	7	7	7	7	7	7	7	7	7
Physiological disorders - NIBF		9	0	9	9	9	9	9	9	9	9	9	9
Pest resistance - Carob moth		0	7	7	7	7	7	7	7	7	0	7	9
Pest resistance - Mites		Ŋ	ιΩ	D	Ŋ	Ŋ	D	D	ιΩ	D.	ιΩ	L)	ro.
Pest resistance - Black Peach Aphids		ω	ιΩ	ru	LO.	LO.	ιΩ	LΩ	ιΩ	Ŋ	n	ιΩ	ιΩ
Harvest Time	No later than Nonpareil plus 30 days (i.e. < Monterey)	9	9	9	9	9	ro.	4	9	9	9	9	9
Fruit retention - Minimal windfalls	Minimise food safety risk, facilitate shake and catch	9	9	9	9	9	9	9	9	7	9	9	9
Fruit retention - Minimal mummies	No stick tights	m	m	m	m	m	m	m	m	-	m	m	m
High yielding	2.5 - 3.0 tonnes/ hectare, yield to canopy volume ratio	7	00	D	7	7	7	7	7	7	7	9	:
Regular production	No alternate bearing	7	7	4	9	7	7	7	7	7	Ŋ	7	*
PROCESSING													
Hulling and shelling ease	Thin hull, easily removed with minimal damage to kernel	00	7	7	7	7	7	7	7	7	00	7	00
Shell type	Less than or equal to "hard"	Ŋ	9	D.	00	-	-	Ŋ	D.	-	Ŋ	-	Ŋ
Shellseal	Well sealed to avoid insect damage and mould contamination	0	o	6	6	6	6	о	6	o	0	6	ιΩ
Crackout ratio	Good kernel to waste (hull and shell) ratio	7	7	7	D.	D.	2	7	7	7	7	7	7
Roasting	Good product after roasting in terms of flavour; flesh colour; life	7	:	:	:	N/A	N/A	N/A	A/A	N/A	A/N	A/N	A/A
Blanching	Easily blanched	7	:	:	:	N/A	N/A	N/A	A/A	N/A	A/N	A/N	A/N
PRODUCT QUALITY													
Double kernels	Less than 5%	7	7	7	7	7	7	4	7	7	7	7	7
Kernel size/ weight	Minimum 1.24g; optimum range 18-24 kernel per ounce	7	7	9	7	D.	Ŋ	00	7	7	7	7	00
Kernel shape	Oval, smooth	00	7	7	7	Ŋ	D.	7	7	7	00	7	00
Testa colour	Golden testa; "clean" & "clear"	6	7	9	9	9	9	7	7	9	0	7	00
Testa pubescence	Smooth, "clean", no "dusty" appearance	0	7	7	9	9	9	7	7	9	6	7	6
Kernel meat	White, no brown areas	0	o	6	6	6	6	о	6	б	o	6	0
Staining propensity	Shell and kernel	0	00	00	00	00	00	00	00	00	0	00	00
Oil content	High but not quantified	7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A/A
Flavour	Sweet, strong almond flavour, typical, non-bitter	9	Ω	D	D	D	D.	2	D.	D	Ω	D.	Ŋ
Storage life	Shelf life of processed product	9	9	9	9	9	9	9	9	9	9	9	9

For further information contact Brett Rosenzweig, Industry Development Officer

Published by Almond Board of Australia, PO Box 2246, Berri, South Australia 5343 Telephone (08) 8582 2055 Email admin@australianalmonds.com.au





ACKNOWLEDGEMENTS

This project has been facilitated by Horticulture Innovation Australia Limited (HIA) in partnership with the Almond Board of Australia and has been funded by the Research & Development levy. The Australian Government provides matched funding for all HIA's R&D activities.

©Almond Board of Australia

All rights reserved. No part of this publication can be reproduced or copied without the prior written consent of the Almond Board of Australia unless permitted under the Copyright Act 1968 (Cwlth).

DISCLAIMER

Almond Board of Australia and its employees do not guarantee the use, or results of the use, of the information contained herein as to its correctness, accuracy, reliability, currency or otherwise. The information supplied in the Fact Sheet was the best available at the time of publication. However, the understanding and management of almonds is constantly evolving and recommendations regularly change. As such, the reader should seek professional advice before acting upon any information in this Fact Sheet and should always comply with the relevant processing factory requirements, food safety legislation and the information listed on chemical labels.