



AUSTRALIAN CITRUS  
**TREE**  
**CENSUS**  
**2023**

## ACKNOWLEDGEMENTS

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# INTRODUCTION

**The Australian citrus industry is one of Australia's largest horticultural industries with commercial production in five states and one territory.**

The citrus industry supplies the domestic, export and processing industries and is proudly one of Australia's largest fresh produce exporters. Volumes exported have increased from 158 000 tonnes in 2014 to over 290 000 tonnes in 2019 and over 255 000 tonnes in 2023. While the size and output is significant for Australia it comprises less than 3 per cent of global production and is one of the highest cost producers in the world. The success of the industry has been the consistent supply of quality safe product domestically and to over 50 overseas markets.

The annual Citrus Tree Census (CTC) is conducted via an online database developed by Citrus Australia to capture statistics on hectares planted by variety, rootstock and tree age.

This information is essential for:

- informing industry on national and regional plantings
- guiding growers when choosing which varieties to plant
- assisting the citrus supply chain with packing, logistics and investment decisions
- directing market development research needs

The following pages provide an overview and key findings of the CTC data collected at the end of 2023, published in April 2024. For any further information please contact:

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## Survey Scope 31,226

**hectares in 2023 CTC\***

It is estimated that an additional 3,000 hectares are not represented in this report.

## 834

**business/trading names  
captured**

## Method

Citrus growers across Australia were contacted by phone or email to complete an online tree survey.

The canopy hectares were calculated using the tree, row spacing and number of trees. Previous industry surveys have used mapping or grower derived estimates to determine production hectares. We point out here that canopy hectares account for the hectares under production, and do not include headlands, laneways and other farm land.

### **There are limits to the data collection including:**

- new entrants to the industry unknown to Citrus Australia
- the voluntary nature of the survey and
- for privacy reasons, some growers did not contribute or may have under reported

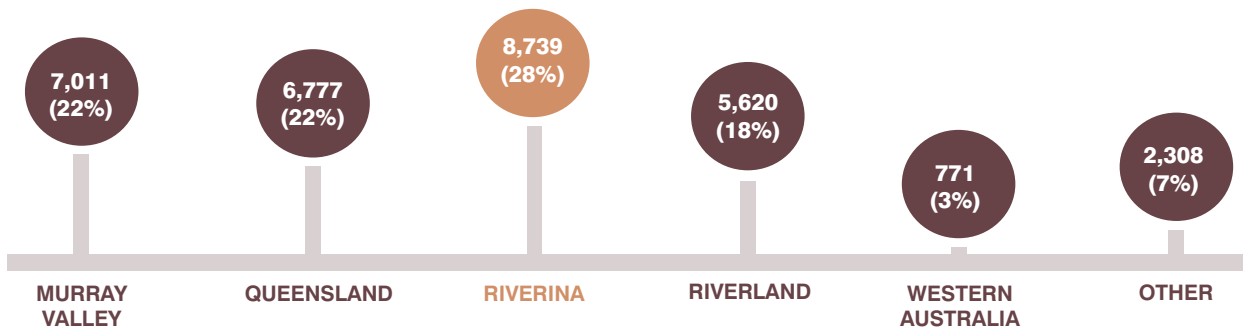
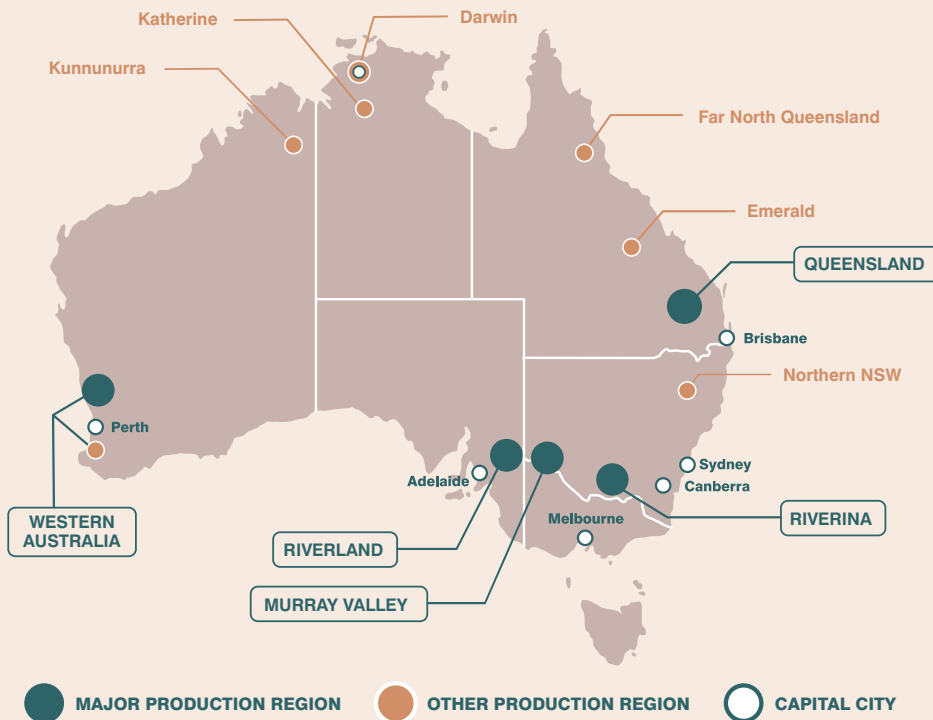
# NATIONAL OVERVIEW

## INDUSTRY SIZE



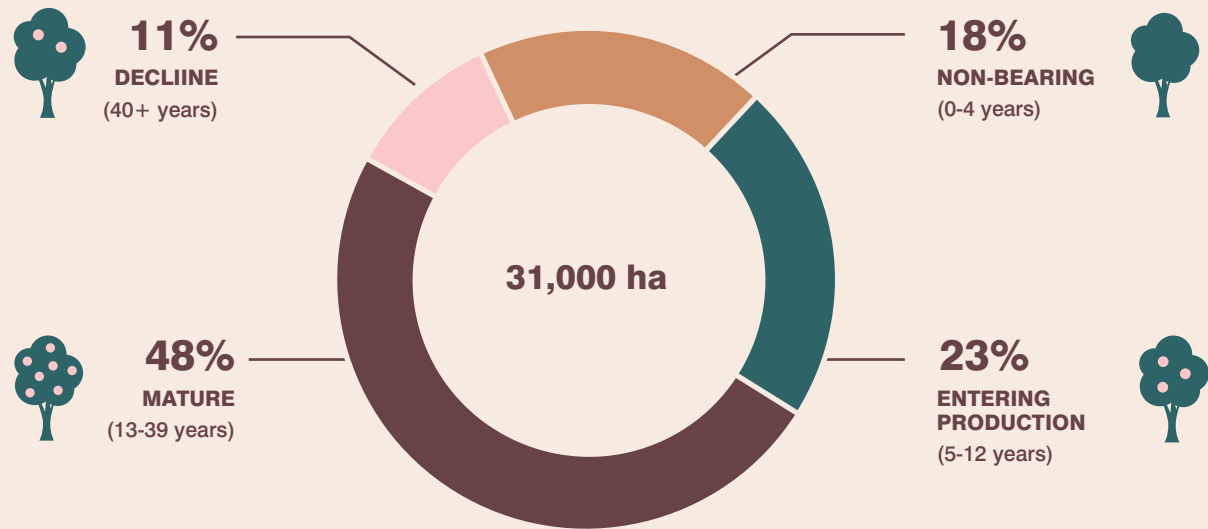
**31,000 ha**  
**HECTARES**  
**PLANTED**

From the 2014 Citrus Tree  
Census the area planted  
captured has increased  
by 40%



**NATIONAL AREA (ha) AND PERCENTAGE BY REGION 2023**

NATIONAL TREE AGE DISTRIBUTION



BEARING AND NON-BEARING HECTARES PER REGION

	MURRAY VALLEY	QUEENSLAND	RIVERINA	RIVERLAND	WESTERN AUSTRALIA	OTHER
BEARING (5+ years)						
TOTAL: 25,516 ha	5,214 ha	5,024 ha	7,967 ha	5,044 ha	742 ha	1,525 ha
NON-BEARING (0-4 Years)						
TOTAL: 5,710 ha	1,797 ha	1,753 ha	772 ha	576 ha	29 ha	783 ha

## CITRUS CATEGORIES



### ORANGES\*

**61%**

OF NATIONAL  
HECTARES

**19,004 ha**

2014 - 69% (15,307 ha)



### MANDARIN & TANGELO

**29%**

OF NATIONAL  
HECTARES

**8,948 ha**

2014 - 24% (5,451 ha)



### LEMON & LIME

**9%**

OF NATIONAL  
HECTARES

**2,832 ha**

2014 - 6% (1,268 ha)



### GRAPEFRUIT & PUMMELO

**1%**

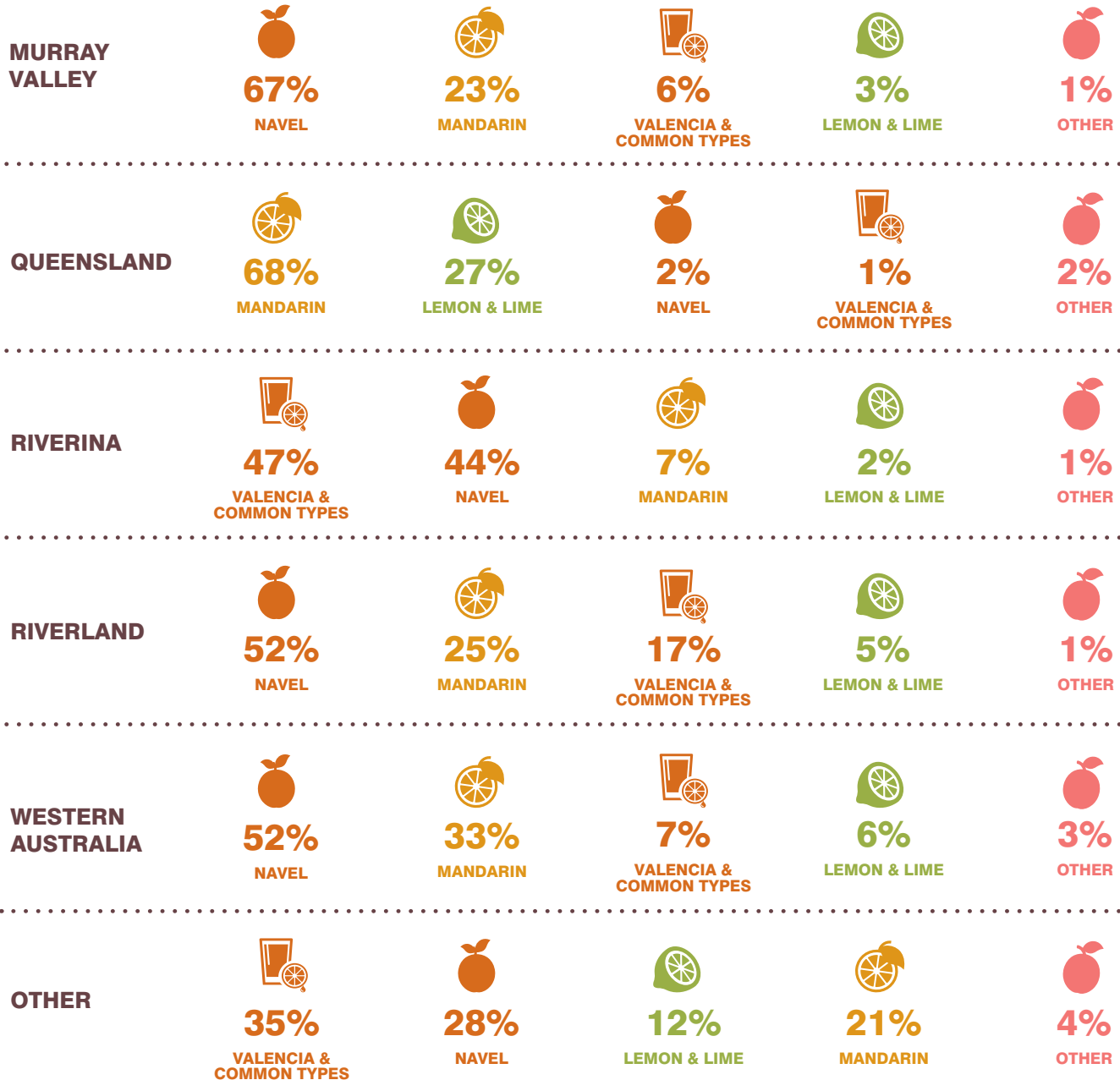
OF NATIONAL  
HECTARES

**441 ha**

2014 - 1% (268 ha)

\*Orange category is made up of 66% Navel oranges and 34% Valencia and Common types

## CATEGORIES PRODUCED BY REGION





## TOTAL PLANTED NATIONALLY

### NAVELS

**12,625 ha**

2014 - 8,697 ha

### VALENCIA & COMMON TYPES

**6,379 ha**

2014 - 6,610 ha

## LARGEST GROWING REGIONS



OF NAVELS GROWN IN  
MURRAY VALLEY,  
RIVERLAND & RIVERINA  
2014 - 91%



OF VALENCIA & COMMON  
TYPE ORANGES GROWN  
IN RIVERINA  
2014 - 61%

## TREE AGE DISTRIBUTION (%)\*

\*Includes both navel and juicing oranges



(0-4 years)

**15%**

**Non-bearing**



(5-12 years)

**14%**

**Entering Production**



(13-39 years)

**54%**

**Mature**



(40+ years)

**17%**

**Decline**

## AUSTRALIA'S ORANGE VARIETIES PLANTED AREA (%)

8% EARLY SEASON NAVEL

21% MID SEASON NAVEL

28% LATE NAVEL

8% RED FLESH NAVEL

1% NAVEL UNSPECIFIED

**19,004 ha**  
TOTAL  
HECTARES  
PLANTED



## LARGEST ORANGE CATEGORY:

**34% VALENCIA & COMMON TYPES**

**6,379 ha**





IN 2023

**63% (3,989 ha)**

OF VALENCIA & COMMON TYPES  
WERE OLDER THAN 21 YEARS

## ORANGE CATEGORY HECTARES BY REGION

	EARLY SEASON NAVEL (ha)	MID SEASON NAVEL (ha)	LATE SEASON NAVEL (ha)	RED FLESH NAVEL (ha)	NAVEL UNSPECIFIED (ha)	VALENCIA & COMMON TYPES (ha)	NAVEL TOTAL	REGIONAL TOTAL
MURRAY VALLEY	612	1,270	2,138	686	16	390	4,721	5,111
QUEENSLAND	31	75	11	23	2	44	142	186
RIVERINA	278	1,419	1,570	441	102	4,218	3,810	8,028
RIVERLAND	443	865	1,310	263	34	959	2,916	3,875
WESTERN AUSTRALIA	93	125	158	25	0	51	401	452
OTHER	86	170	206	169	4	771	635	1,352
NATIONAL TOTAL	1,543	3,924	5,393	1,607	158	6,379	12,625	19,004



# MANDARIN



## TOTAL PLANTED NATIONALLY

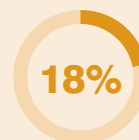
**8,948 ha**

2014 - 5,451 ha

## LARGEST GROWING REGIONS



OF MANDARINS  
GROWN IN  
**QUEENSLAND**  
56% - 2014



OF MANDARINS  
GROWN IN  
**MURRAY VALLEY**  
12% - 2014

## TREE AGE DISTRIBUTION (%)



(0-4 years)

**26%**

**Non-bearing**



(5-12 years)

**35%**

**Entering Production**



(13-39 years)

**38%**

**Mature**



(40+ years)

**2%**

**Decline**

## AUSTRALIA'S MANDARIN VARIETIES PLANTED AREA (%)

18% IMPERIAL<sup>2</sup>

LARGEST MANDARIN  
CATEGORY:

**36% W.MURCOTT<sup>1</sup>**

23% OTHER<sup>4</sup>

**23% MURCOTT<sup>3</sup>**  
(low seeded contributes 4%)

**8,948 ha**  
TOTAL  
HECTARES  
PLANTED

<sup>1</sup>W.Murcott includes Seeded & Seedless. <sup>2</sup>Imperial includes Goldup & Avana.

<sup>3</sup>Murcott includes low-seeded, Honey Bee and Royal Honey. <sup>4</sup>Other is 35 varieties including Tangelo.



**IN 2023 36%**  
of the national mandarin plantings are  
**W.MURCOTT<sup>1</sup> MANDARINS**

### MANDARIN CATEGORY HECTARES BY REGION

	W.MURCOT <sup>1</sup> (ha)	IMPERIAL <sup>2</sup> (ha)	MURCOTT <sup>3</sup> (ha)	OTHER <sup>4</sup> (ha)	REGIONAL TOTAL
MURRAY VALLEY	1,047	278	3	270	1,598
QUEENSLAND	731	954	1,990	960	4,635
RIVERINA	364	74	7	131	576
RIVERLAND	674	261	87	370	1,392
WESTERN AUSTRALIA	132	57	0	65	254
OTHER	254	7	2	230	493
NATIONAL TOTAL	3,202	1,631	2,089	2,026	8,948

<sup>1</sup>W.Murcott includes Seeded & Seedless. <sup>2</sup>Imperial includes Goldup & Avana.

<sup>3</sup>Murcott includes low-seeded, Honey Bee and Royal Honey. <sup>4</sup>Other is 35 varieties including Tangelo.



# LEMON & LIME



## TOTAL PLANTED NATIONALLY

### LEMONS

**1,863 ha**

2014 - 1,011 ha

### LIMES

**969 ha**

2014 - 257 ha

## LARGEST GROWING REGIONS



OF LEMONS AND LIMES GROWN IN **QUEENSLAND**  
53% - 2014



OF LEMONS AND LIMES GROWN IN **MURRAY VALLEY & RIVERLAND**  
26% - 2014

## TREE AGE DISTRIBUTION (%)



(0-4 years)

**16%**

**Non-bearing**



(5-12 years)

**46%**

**Entering Production**



(13-39 years)

**36%**

**Mature**

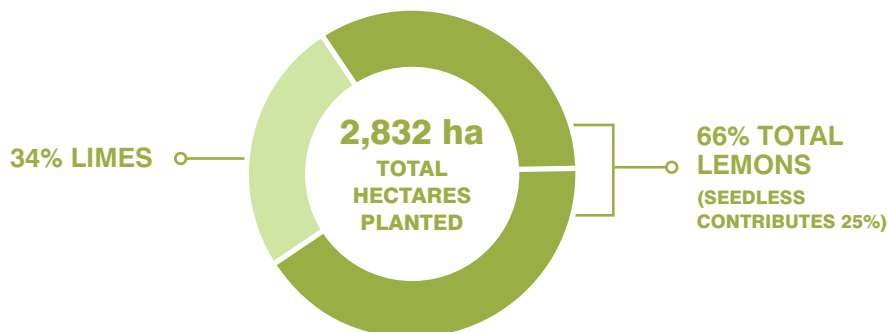


(40+ years)

**2%**

**Decline**

## AUSTRALIA'S LEMON AND LIME PLANTED AREA (%)



**57%**

**1,054 ha OF LEMON  
PLANTINGS IN 2023**

were 10 years old or less compared  
to 430 ha in 2014



From the 2014 Citrus Tree Census the planted area of lemons and limes captured has **MORE THAN DOUBLED FROM 1,268 ha to 2,832 ha**

LEMON & LIME CATEGORY HECTARES BY REGION

	LEMONS (ha)	SEEDLESS LEMONS (ha)	LIMES (ha)	LEMON TOTAL (ha)	REGIONAL TOTAL (ha)
MURRAY VALLEY	141	88	5	229	234
QUEENSLAND	541	368	910	909	1,819
RIVERINA	139	30	1	169	170
RIVERLAND	141	113	34	254	288
WESTERN AUSTRALIA	14	20	9	34	43
OTHER	181	87	10	268	278
NATIONAL TOTAL	1,157	706	969	1,863	2,832



# GRAPEFRUIT, PUMMELO & CITRON

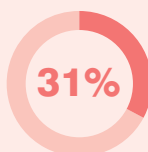


## TOTAL PLANTED NATIONALLY

**441 ha**

2014 - 268 ha

## LARGEST GROWING REGIONS



OF GRAPEFRUIT,  
PUMELLO & CITRON  
GROWN IN  
**QUEENSLAND**  
12% - 2014



OF GRAPEFRUIT,  
PUMELLO & CITRON  
GROWN IN  
**RIVERLAND**  
20% - 2014

## TREE AGE DISTRIBUTION (%)



(0-4 years)

**14%**

**Non-bearing**



(5-12 years)

**27%**

**Entering Production**



(13-39 years)

**51%**

**Mature**



(40+ years)

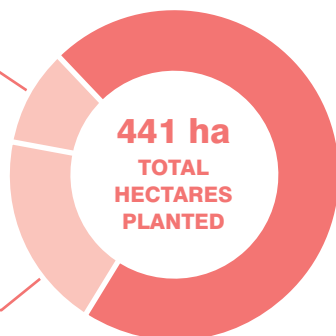
**8%**

**Decline**

## AUSTRALIA'S GRAPEFRUIT, PUMMELO AND CITRON PLANTED AREA (%)

10% PUMMELO

25% WHITE  
GRAPEFRUIT



65% RED  
GRAPEFRUIT



**49%**

**140 ha OF RED GRAPEFRUIT  
PLANTINGS IN 2023**

were 10 years old or less compared  
to 100 ha in 2014

# GRAPEFRUIT, PUMMELO & CITRON CATEGORY HECTARES BY REGION

	RED GRAPEFRUIT (ha)	WHITE GRAPEFRUIT (ha)	PUMMELO (ha)	CITRON (ha)	REGIONAL TOTAL (ha)
MURRAY VALLEY	52	8	7	<1	67
QUEENSLAND	96	10	31	0	137
RIVERINA	37	14	3	0	54
RIVERLAND	56	6	2	<1	65
WESTERN AUSTRALIA	22	<1	0	<1	22
OTHER	24	71	1	0	96
NATIONAL TOTAL	286	110	44	1	441

NATIONAL VARIETY LIST

CATEGORY	SUB CATEGORY	VARIETY	NON-BEARING	BEARING	TOTAL	%
NAVEL	NAVEL EARLY SEASON	Early Navel Unspecified	-	15	15	0%
		FJ Navel	54	1	55	0%
		Golden Nugget	-	1	1	0%
		Hammet	-	1	1	0%
		M7 Navel	154	328	481	2%
		Navelina	69	718	787	3%
		Newhall	2	49	51	0%
		Pasin	-	10	10	0%
		Pollock Early	-	5	5	0%
		Rusty	72	1	73	0%
		Ryan	2	50	52	0%
		Whitely	-	3	3	0%
		Winter Navel	-	9	9	0%
			352	1,191	1,543	5%
NAVEL	NAVEL MID SEASON	Atwood	75	95	170	1%
		Bellamy	-	1	1	0%
		Dolci	3	32	35	0%
		Fisher	142	88	230	1%
		Fukumoto	-	3	3	0%
		Fukumoto (off-type)	-	15	15	0%
		Hockney	37	10	47	0%
		Langdon	30	3	33	0%
		Leng	16	384	401	1%
		Mid Season Navel Unspecified	1	0	1	0%
		Navelate	-	3	3	0%
		Nucellar Leng (Lloyd Leng)	-	11	11	0%
		Palmer	4	4	8	0%
		Palmer (off-type)	-	1	1	0%
		Sun Smooth	-	1	1	0%
		Thomson	-	29	29	0%
		Washington	479	2,455	2,934	9%
			788	3,136	3,924	13%
NAVEL	NAVEL LATE SEASON	Autumn Gold (Pollock Late)	-	128	128	0%
		Barnfield	13	346	359	1%
		Chislett	98	604	702	2%
		Clark (Doug Clark)	-	49	49	0%
		Hutton	-	50	50	0%
		Late Lane	255	2,786	3,041	10%
		Late Navel Unspecified	15	112	127	0%
		Powell	26	189	216	1%
		Rohde	101	104	205	1%
		Scopelliti	-	2	2	0%
		Summer Gold (Marrows)	-	194	194	1%
		Summer Navel Unspecified	-	281	281	1%
		Toc	-	12	12	0%
		Toomey	-	3	3	0%



CATEGORY	SUB CATEGORY	VARIETY	NON-BEARING	BEARING	TOTAL	%
		Wiffen	-	5	5	0%
		Wilson	-	18	18	0%
			508	4,885	5,393	17%
NAVEL	NAVEL RED FLESH	Cara Cara (Red Navel)	559	742	1,300	4%
		Kirkwood Red	168	50	217	1%
		Rosey Red	-	16	16	0%
		Villa 11	74	-	74	0%
			800	807	1,607	5%
NAVEL	NAVEL	Navel Unspecified	19	139	158	1%
			19	139	158	1%
ORANGE MISC.	BLOOD ORANGE	Arnold (Moro)	5	85	90	0%
		Blood Orange Unspecified	31	105	136	0%
		Maltese	-	0	0	0%
		Tarocco	23	33	57	0%
			59	224	283	1%
ORANGE MISC.	SWEET ORANGE	Bintangcheng No. 2	-	2	2	0%
		Common Orange	-	24	24	0%
		Hamlin	57	190	246	1%
		Honey Ball	-	11	11	0%
		Joppa	-	1	1	0%
		Lima acidless	-	7	7	0%
		Parson Brown	-	28	28	0%
		Pera (Bianchi, Limeira)	-	13	13	0%
		Pineapple	-	12	12	0%
		Salustiana	1	301	302	1%
		Seleta (Siletta)	-	0	0	0%
			58	589	646	2%
ORANGE MISC.	SOUR	Seville	-	6	6	0%
			-	6	6	0%
ORANGE MISC.	ORANGE	Orange Unspecified	5	6	11	0%
			5	6	11	0%
VALENCIA		Benyenda	80	63	143	0%
		Berri	-	5	5	0%
		Casey	-	0	0	0%
		DV Valencia	24	5	29	0%
		Keenan	2	179	181	1%
		Newton	-	8	8	0%
		Smith Red	-	4	4	0%
		Turkey (Turkish Delight™)	24	-	24	0%
		Valencia	57	4,187	4,245	14%
		Valencia Late	5	33	37	0%
			192	4,485	4,676	15%

CATEGORY	SUB CATEGORY	VARIETY	NON-BEARING	BEARING	TOTAL	%
VALENCIA	SEEDLESS VALENCIA	Delta	21	119	140	0%
		McMahon	18	173	191	1%
		Midknight	55	109	164	1%
		Valencia Seedless	27	236	263	1%
			120	638	758	2%
MANDARIN	MANDARIN EARLY SEASON	Amigo	11	60	71	0%
		Clementine	0	5	6	0%
		Clementine (Nules, de Nules)	-	64	64	0%
		Clementine Caffin	1	4	6	0%
		Fewtrell (Feutrell)	-	0	0	0%
		Fremont	18	33	52	0%
		Goldup Imperial	-	13	13	0%
		Imperial	32	1,537	1,568	5%
		MoJo Mandarin™	-	9	9	0%
		Nova (Suntina)	-	20	20	0%
		Satsuma	1	11	12	0%
		Satsuma Miho Wase	-	9	9	0%
		Satsuma Okitsu Wase	-	39	39	0%
		Satsuma Silverhill	-	2	2	0%
			63	1,807	1,870	6%
MANDARIN	MANDARIN MID SEASON	Avana late (Tardivo)	7	43	49	0%
		Daisy	30	169	199	1%
		Daisy Low Seeded	164	14	178	1%
		Dancy Tangerine	-	0	0	0%
		Early Sicily (C1867)	13	-	13	0%
		Ellendale	-	8	8	0%
		Empress	46	34	80	0%
		Gold Nugget	-	41	41	0%
		Hickson	0	47	47	0%
		Honey Bee Murcott™	13	9	22	0%
		Nectar	-	5	5	0%
		Orri	-	35	35	0%
		Phoenix	262	337	599	2%
		Royal Honey Murcott™	79	127	206	1%
		Shiranui (Dekopon, Sumo Citru TM)	205	113	318	1%
		Taylor Lee	-	6	6	0%
		W.Murcott	869	1,924	2,793	9%
		W.Murcott Seedless	161	249	409	1%
			1,847	3,160	5,007	16%
MANDARIN	MANDARIN LATE SEASON	Emperor	0	0	1	0%
		Kinnow	3	-	3	0%
		Murcott	198	915	1,113	4%
		Murcott Honey	85	307	392	1%
		Murcott Low Seeded	63	293	356	1%
		Mystique Ortanique	-	6	6	0%
		Summerina	9	30	39	0%
		Topaz Ortanique	-	14	14	0%
			358	1,566	1,924	6%

CATEGORY	SUB CATEGORY	VARIETY	NON-BEARING	BEARING	TOTAL	%
MANDARIN	MANDARIN	Mandarin Unspecified	20	31	51	0%
			20	31	51	0%
TANGELO		Minneola	1	83	84	0%
		Orlando	-	0	0	0%
		Seminole	-	0	0	0%
		Tangelo Unspecified	-	11	11	0%
			1	94	95	0%
LEMON		Eureka	145	689	834	3%
		Eureka Seedless	218	414	633	2%
		Fino	-	6	6	0%
		Lambert Eureka	-	3	3	0%
		Lemon Unspecified	-	75	75	0%
		Lemonade	-	1	1	0%
		Limoniera	2	3	5	0%
		Lisbon	8	212	220	1%
		Meyer	-	0	0	0%
		Seedless Lemon	3	71	74	0%
		Verna	-	13	13	0%
		Villafranca (Francovielo)	-	0	0	0%
			376	1,487	1,863	6%
LIME		Finger	-	4	4	0%
		Kaffir	-	6	6	0%
		Lime Unspecified	-	16	16	0%
		Tahitian (Persian)	85	858	943	3%
		West Indian (Mexican)	-	0	0	0%
			85	884	969	3%
GRAPEFRUIT	GRAPEFRUIT RED FLESH	Flame	-	16	16	0%
		Ray Ruby	-	7	7	0%
		Rio Red (Rio Star)	7	39	46	0%
		Ruby (Red,Pink,Redblush)	0	35	35	0%
		Star Ruby (Sunrise)	36	146	182	1%
			44	243	286	1%
GRAPEFRUIT	GRAPEFRUIT WHITE FLESH	Eagle	-	2	2	0%
		Grapefruit White Unspecified	-	9	9	0%
		Jackson	4	-	4	0%
		Marsh	-	66	66	0%
		Oroblanco	-	0	0	0%
		Poorman	-	0	0	0%
		Thompson	-	29	29	0%
			4	106	110	0%
PUMMELO		Pomelit (Pomelette)	-	3	3	0%
		Pummelo Unspecified	14	27	41	0%
			14	30	44	0%
CITRON		Buddha's Hand	-	1	1	0%
			-	1	1	0%
TOTAL			5,710	25,516	31,226	100%

