



**Australian Horticulture Statistics Handbook
2018/19**

NUTS

Disclaimer

Any views contained in this publication do not necessarily represent the views of Horticulture Innovation Australia Limited (Hort Innovation) or its commitment to a particular course of action. Hort Innovation makes no representations and expressly disclaims all warranties (to the extent permitted by law) about the accuracy, completeness, or currency of information in the Australian Horticulture Statistics Handbook 2018/19 (“the Handbook”).

Reliance on any information provided by Hort Innovation is entirely at your own risk. Hort Innovation is not responsible for, and will not be liable for, any loss, damage, claim, expense, cost (including legal costs) or other liability arising in any way, including from any Hort Innovation or other person’s negligence or otherwise from your use or non-use of the Handbook, or from reliance on information contained in the material or that Hort Innovation provides to you by any other means.

Copyright © Horticulture Innovation Australian Limited 2020

Copyright subsists in the Handbook. Hort Innovation owns the copyright, other than as permitted under the Copyright ACT 1968 (Cth). The Handbook (in part or as a whole) cannot be reproduced, published, communicated or adapted without the prior written consent of Hort Innovation. Any request or enquiry to use the Handbook should be addressed to:

Communications Manager

Horticulture Innovation Australia Limited

Level 7, 141 Walker Street

Sydney NSW 2000

Australia

Email: communications@horticulture.com.au

Phone: 02 8295 2300

The Australian Horticulture Statistics Handbook 2018/19 has been funded by Horticulture Innovation Australia Limited using the across industry levy and funds from the Australian Government.

This Handbook is an analysis that combines all available data on production, international trade, processing volumes and fresh market distribution in order to produce statistics on 75 horticultural categories over the year ending 30 June 2019.

Summary of Approach

The Handbook adopts a modelling approach that centres on determining the fresh market value and volume for each category, that reconciles production with local and international distribution channel throughputs. Fresh market supply volume is determined as follows:

$$\text{Fresh Supply} = \text{Production} - \text{Fresh Exports} - \text{Processing} + \text{Fresh Imports}$$

- Farm gate production quantity has been informed through a number of sources, including Hort Innovation funded data projects, horticultural government levy data where available, and refined through consultation with informed industry bodies. The corresponding value of production is calculated from wholesale pricing information, before removing known logistical, marketing and wholesale costs to reflect product value at the farm gate.
- Export and import trade volume and value is based on Australian Customs data as reported in IHS Global Trade Atlas data.
- Processing data has been obtained through consultation with industry processors¹.

See pages 10 to 12 under 'research method' for a detailed description on this Handbook's methodology.

¹Note that the \$ value of processing volumes has not been included in the analysis.

This publication covers the year ending 30 June 2019 and examines the production and distribution of horticulture products. Some of the key influences on horticultural production and distribution over this period are summarised below.

Production conditions reflected fuller supply of selected fruit and berry crops as expanded plantings matured. A prolonged period of summer heat made it difficult for southern state vegetable production and increased the pressure on the all crops dependent on irrigation water. In these conditions the wholesale value per kg of fresh fruit and vegetables supplied to the local market increased by 7% to \$2.59 per kg.

The domestic food market reflects the signals of a mature market at full supply where signals of supply pressure lead to pricing responses.

Total fresh horticulture exports were valued at **\$2.64 billion** in 2018/19, 27% higher than the previous year. The increase in export value was driven predominately by Almonds & Table Grapes

The export market success of recent years has created firmer priorities that business growth is now enabled by access to these export markets.

Introduction.....	7	Mangoes.....	138	Leafy Asian Vegetables.....	352
Abbreviations.....	8	Melons Overview.....	144	Leafy Salad Vegetables.....	356
Definitions.....	9	Muskmelons	146	Leeks.....	362
Research Method	10	Watermelons.....	152	Mushrooms.....	368
How to use this book.....	14	Nashi.....	158	Onions.....	374
Data Sharing—List of Projects .	20	Passionfruit.....	164	Parsnips.....	380
International Trade		Papaya/Pawpaw.....	168	Peas	384
Total Imports.....	24	Pears.....	174	Potatoes.....	390
Total Exports.....	25	Persimmons	180	Pumpkins.....	396
Fresh Imports by region	26	Pineapples.....	186	Sweet Corn.....	402
Fresh Exports by region.....	28	Summerfruit Overview	190	Sweetpotatoes	406
Fresh Imports by state.....	30	Apricots.....	192	Tomatoes.....	412
Fresh Exports by state	32	Nectarines/Peaches	198	Zucchini.....	418
		Plums.....	204		
Data Tables		Table Grapes.....	210	Nuts	
Production.....	34	Dried Grapes.....	216	Category Overview	422
Value of Production	36	Prunes	220	Almonds.....	424
Volume of Fresh Exports	38	Other Dried Tree Fruit	224	Chestnuts.....	430
Value of Fresh Exports	40	Canning Fruit	228	Hazelnuts.....	434
Volume of Fresh Imports	42	Olives.....	232	Macadamias.....	440
Value of Fresh Imports	44			Pecans	446
Fresh Supply	46	Vegetables		Pistachios.....	452
Wholesale Value.....	48	Category Overview	236	Walnuts.....	458
		Artichokes	238		
All Horticulture		Asparagus.....	244	Other Categories	
Horticulture Overview.....	50	Beans.....	250	Category Overview	464
Fruit		Beetroot.....	256	Cut Flowers	466
Category Overview	54	Broccoli/Baby Broccoli	262	Nursery	472
Apples	56	Brussels Sprouts.....	268	Turf	478
Avocados.....	62	Cabbages	274		
Bananas	68	Capsicums.....	280		
Berries Overview	72	Carrots.....	286		
Blueberries.....	74	Cauliflowers	292		
Rubus Berries	80	Celery	296		
Strawberries	86	Chilies	300		
Cherries.....	92	Cucumbers	306		
Citrus Fruit Overview	98	Eggplants	312		
Grapefruit	100	Eng,Spinach/Silverbeet/Kale .	318		
Lemons/Limes.....	106	Fresh Herbs Overview	324		
Mandarins.....	112	Fennel.....	326		
Oranges.....	118	Parsley and other Herbs.....	330		
Custard Apples.....	124	Garlic	334		
Kiwifruit.....	128	Ginger.....	340		
Lychees	134	Head Lettuces	346		

Availability of valid statistical information is a key enabler across horticulture. The Australian Horticulture Statistics Handbook for the year ending 30 June 2019 is presented by Horticulture Innovation Australia for the purpose of consolidating horticulture statistical information for use by horticulture industry members and other stakeholders.

The information sources for this publication have drawn on data available from the Australian Bureau of Statistics, Hort Innovation funded projects, international trade sources and horticulture industry representative bodies (IRBs) where available. In this publication these sources have been expanded to include and draw on household consumption and local market distribution channel information, as assessed by Freshlogic, to provide a reconciled profile of each supply chain.

Note that ‘Imports by state destination’ refers to the final destination of the product. ‘Exports by state of production origin’ refers to the state of origin where that product was produced.

Where additional information has led to a change in the previously quoted value from the 2017/18 edition for a category, this has been noted on the page of the relevant category.

Any comments regarding the Handbook should be forwarded to Hort Innovation at: feedback@horticulture.com.au

The 2018/19 Handbook has been compiled by Freshlogic.

Abbreviations

% YoY	% increase/decrease this year compared to last year
\$	Australian Dollars
\$b	Billion Australian Dollars
\$m	Million Australian Dollars
2018/19	Year ending 30 June 2019
ABS	Australian Bureau of Statistics
CIF	Cost of Insurance and Freight (a measure of import value)
FOB	Free On Board (a measure of export value)
g	Grams
GTA	Global Trade Atlas
kg	Kilograms
KWE	Kernel Weight Equivalent
ha	Hectares
ISWE	In-Shell Weight Equivalent
L	Litres
m ²	Metres squared (a measure of area)
m m ²	Million metres squared (a measure of area)
ML	Mega Litres (1 million litres)
N/A	Not Available
t	Tonnes (1 thousand kilograms)

States

NSW	New South Wales
NT	Northern Territory
VIC	Victoria
QLD	Queensland
SA	South Australia
TAS	Tasmania
WA	Western Australia

Countries

PNG	Papua New Guinea
UAE	United Arab Emirates
UK	United Kingdom
US	United States of America

Definitions

Category—A particular horticultural commodity (e.g. bananas), or in some cases a combination of like commodities (e.g. the category ‘rubus berries’ covers raspberries and blackberries and other rubus).

Production—The volume in tonnes of the category that was grown in Australia over the year. This refers to production which was sold by the producer, either to the Australian fresh or processing markets, or to international trade markets. This does not cover any production that was not harvested, nor does it refer to any other forms of production of the category that do not enter these markets.

Value of Production—Sometimes referred to as ‘Farm Gate Value,’ this is the value of the production received by the producer.

Processing Volume—The volume in tonnes of the category that was sent to be processed, such as juicing, freezing or preserving.

Fresh Exports—The volume in tonnes of the production that was exported in a fresh form to other countries. Due to the way trade information is recorded, this may include some dried products, and will be marked as such where appropriate.

Value of Fresh Exports—The value in million dollars of the category’s fresh exports. This is recorded in FOB (Free on Board) dollars.

Fresh Imports—The volume in tonnes of the category that was imported into Australia from another country in a fresh form.

Value of Fresh Imports—The value in million dollars of the category’s fresh imports. This is recorded in CIF (Cost of Insurance and Freight) dollars.

Fresh Supply—The volume in tonnes of the category that was available to the Australian market in a fresh form. Volume supplied to the fresh market is typically either sold at retail or supplied to food service outlets. The Hort

Wholesale Value—The value in million dollars of the fresh supply at a wholesale market level, inclusive of net international trade flows. Wholesale values have been *Note that the Wholesale value is distinct from the Gross Value of Production tracked by the ABS, as that measure includes value of processing and exported product, and does not include imported product.*

In-Shell (Nut categories) —A measure of volume that includes the weight of the inedible shell around the kernel.

Kernel (Nut categories) —A measure of volume that only includes the edible kernel.

Crack Out Yield (Nut categories) —The percentage of edible kernel obtained from the in-shell volume during the cracking process.

Retail— The retailers who on sell fruit and vegetables to consumers. This encompasses all forms of retailing including; supermarkets, greengrocers, farmers markets, specialty food stores and online offers.

Food Service— The enterprises who use fruit and vegetables as an ingredient in assembling meals. This encompasses all forms of meal provision including; restaurants, cafes, fast food, hotels, travel and event providers, hospitals, schools and other similar institutions.

Research Method

Overview

This publication has gathered all available horticultural information and aligned it into supply chain profiles for each of the horticultural categories covered. The approach for each horticultural category has been to quantify available production, volumes processed, volumes exported and imported, and to then confirm that the resulting fresh volume supplied aligns with the Australian market distribution channels (primarily the retail and foodservice channels). This volume of fresh supply available to the Australian fresh marketplace is defined using the equation:

$$\text{Fresh Supply} = \text{Production} - \text{Fresh Exports} - \text{Processing} + \text{Fresh Imports}$$

The distribution channel modelling has drawn upon Freshlogic's THRUChain modelling system to ensure that fresh supply accommodates the sum volumes distributed by retail and food service channels. In the process of this modelling, information has been gathered from a number of supply chain sources and aligned with household consumer purchase metrics. The primary outputs are designed around aligned supply chains that map the distribution of total production. This design was used to deliver the most informed and accurate profiles and the outputs have been further confirmed by conferring with Industry Representative Bodies. The larger Industry Representative Bodies have advanced supply chain information systems in place and the outputs from these systems have been accessed to provide data inputs and validate findings.

In calculating the **production** and **volume processed**, a number of data sources have been relied upon. Where available and in most instances, this has been

guided by information from Australian government horticultural levies, and refined through consultation with the Industry Representative Bodies and major trading stakeholders (such as processors, wholesalers and distributors) for the particular category.

Information on Australia's **imports and exports** of fresh and processed horticultural commodities has been compiled using the Global Trade Atlas®, an online global trade information database owned and operated by IHS Markit. Information on Australian trade in the Global Trade Atlas® has been compiled from information provided to the Australian Customs and Border Protection Service. The Import and Export analysis tables for each category identify the import source country under "Imports by country" and the export destination country under "Export by country".

Information on **wholesale value** has been modelled using wholesale pricing information from *Ausmarket Consultants* and the *Chamber of Fruit and Vegetable Industries in Western Australia*. This information has been used to define the **Value of Production** by removing known logistical, marketing and wholesale costs to calculate the value of categories to producers at farm gate.

Information on the **retail and food service channels** is defined by separating the fresh market total volume arrived at by the Freshlogic's THRUchain modelling system, into two channels. Retail volumes are defined to accommodate the total volume of household purchases of fruit and vegetables. The resulting food service volumes are then validated with a network of food service providers. The values of product sold for both channels is based on the wholesale prices.

Consumer information including percent of households purchasing a category, and average purchase quantities, has been sourced from Freshlogic's *Mealpulse™* consumer survey and *DocketData™* systems. Supply per capita has been calculated as total volume of fresh supply divided by population for the year ending June 2019 according to the ABS. The number of occupied households is assumed at 9.06 million and the population at 25.2 million for the 2018/19 year*.

Research Method cont'

Data on **production area** and **number of trees** has been gathered from Industry Representative Bodies and the ABS Agricultural Commodities publications**. *This information has been included for indicative purposes only, and should be viewed as such.*

Information on **major growing regions** has been sourced both from the ABS Agricultural statistics, and through consultation with the major Industry Representative Bodies. These sources have also been used to profile seasonality and production volumes by state and by main variety of the category. *Note the information on volume by state and main variety has been included for illustrative purposes, and actual volumes may be within 10-25% of the listed volume.*

Throughout the document when data sources have been relied upon, this has been noted. Some of the more common sources have been abbreviated. The full list of sources has been provided on pages 20 and 21.

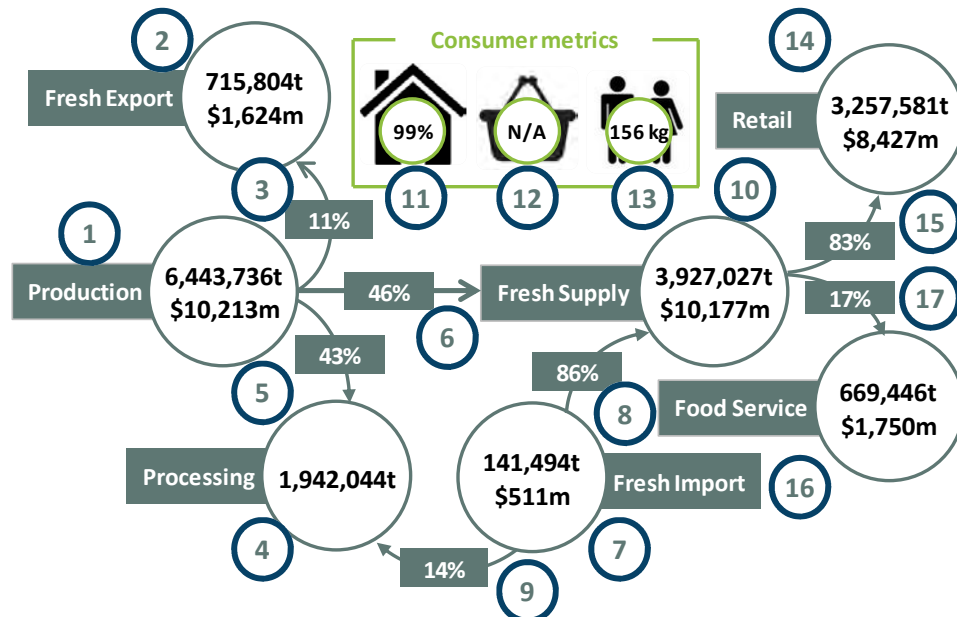
*ABS, Australian Demographic Statistics cat. no. 3101.0

**ABS, Agricultural Commodities cat. no. 7121.0

This section outlines how to interpret the various graphs, tables and supply chain models used to profile each of the horticultural commodities covered in this handbook.

Fresh supply chain—Fruit and Vegetables

This example supply chain outlines the flow of a fruit or vegetable category over the year ending June 2019. It contains the following elements:

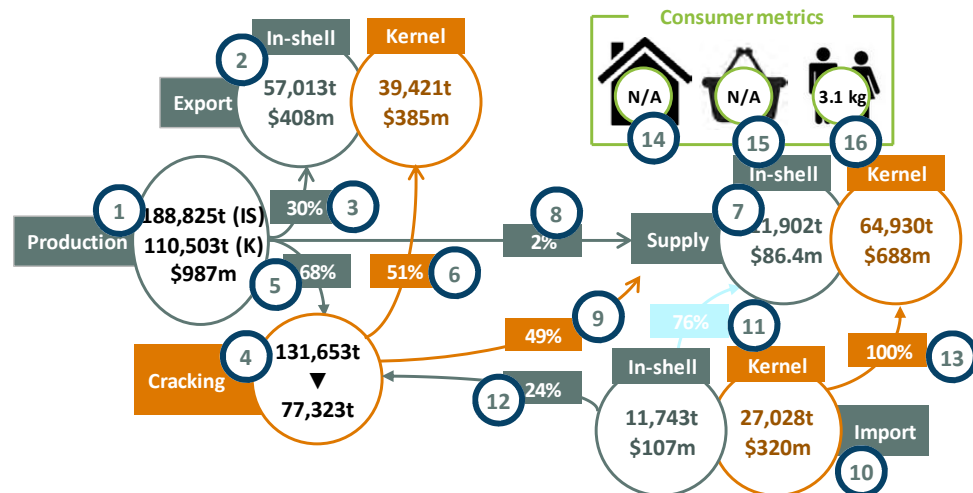


- 1. Production.** This is the volume of the category grown in Australia over the year ending June 2019. This profiles the **Production** (volume in tonnes), as well as the value in million dollars obtained by the producers i.e. the **Value of Production**, sometimes known as the farm gate value.
- 2. Fresh Exports.** The volume in tonnes of the production that was exported in a fresh form, and the value in million dollars received.
- 3. Export Share.** The percentage share of production that was exported.
- 4. Processing.** The volume in tonnes of the production that was sent to be processed (such as juicing, freezing or preserving etc).
- 5. Processing Share.** The percentage share of production that was processed.

- 6. Fresh Supply Share.** The percentage share of production that was sent to the Australian fresh market.
- 7. Fresh Imports.** The volume in tonnes of the category that was imported in a fresh format from another country, and the value in million dollars paid to import.
- 8. Import Fresh Supply Share.** The percentage share of fresh imports that was sent to the Australian fresh market.
- 9. Import Processing Share.** The percentage share of fresh imports that was sent to be processed.
- 10. Fresh Supply.** The volume of the category available to the Australian fresh market. It includes both Production that was sold into the fresh market, as well as Fresh Imports that were sold into the fresh market. This profiles the **Fresh Supply** (volume in tonnes), and the **Wholesale Value** in million dollars, which is the value of the Fresh Supply at a wholesale market level.
- 11. Household Penetration.** The percentage of Australian households who bought the category at least once at retail, to be consumed either in or out of the home, over the year ending June 2019. 'Out of home' consumption is food prepared away from the home typically via food service channels and not prepared from ingredients purchased via retail.
- 12. Average Purchase Quantity.** The average quantity purchased at retail per shopping trip by Australian households over the year ending June 2019. A shopping trip refers to a trip where this category is purchased.
- 13. Fresh Supply per Capita.** The volume of fresh supply available to the Australian population, on a per capita basis.
- 14. Retail.** The volume of the category that went into the Australian retail market. This profiles the **Retail Volume** (volume in tonnes), and the **Retail Wholesale Value** in million dollars, which is the value of the Retail at a wholesale market level.
- 15. Retail Share.** The percentage of fresh supply that was sent to the Australian fresh Retail market.
- 16. Food Service.** The volume of the category that went into the Australian food service market. This profiles the **Food Service Volume** (volume in tonnes), and the **Food Service Wholesale Value** in million dollars, which is the value of Food Service at a wholesale market level.
- 17. Food Service Share.** The percentage of fresh supply that was sent to the Australian fresh Food Service market.

Supply chain—Nuts & Olives

This example supply chain outlines the flow of a nut category over the year ending June 2019. Because nuts are sold both in an *In-Shell* and *Kernel* format, the nut supply chain profiles both elements, indicated by *green* for *In-Shell* and *orange* for *Kernel*. The chain contains the following elements:



- 1. Production.** This is the volume of the category grown in Australia over the year ending June 2019. This profiles the **Production** (volume in tonnes), in both *In-Shell* (written in *green* and denoted by *IS*) and the *Kernel* equivalent of this volume after cracking (written in *orange* and denoted by *K*), as well as the value in million dollars obtained by the producers i.e. the **Value of Production**.
- 2. Exports.** The volume in tonnes of the production that was exported, and the value in million dollars received. This profiles both *In-Shell* exports and *Kernel* exports.
- 3. In-Shell Export Share.** The percentage share of *In-Shell* production that was exported.
- 4. Cracking.** The volume in tonnes of the *In-Shell* production and imported *In-Shell* product that was sent to be cracked so as to produce kernel. This profiles both the *In-Shell* volume in, and the *Kernel* volume out.
- 5. Cracking Share.** The percentage share of *In-Shell* production that was cracked.

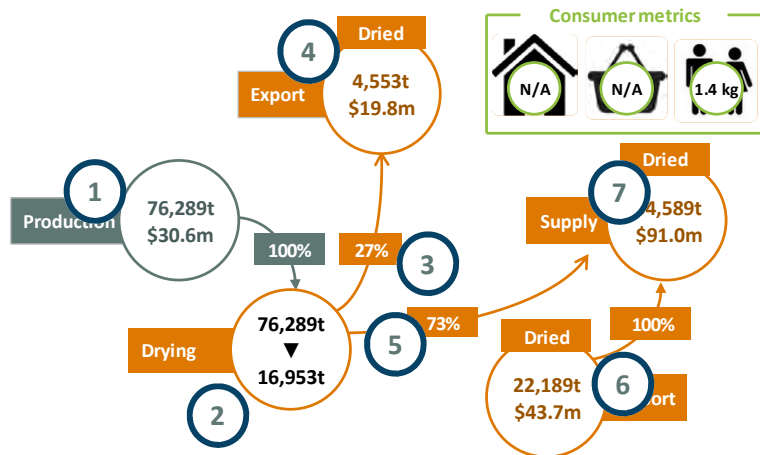
- 6. Kernel Export Share.** The percentage share of cracked *Kernel* that was exported.
- 7. Supply.** This is the volume of the category available to the Australian market. It includes both Production that was sold into the market, as well as Imports that were sold into the market. This profiles the **Supply** (volume in tonnes), and the **Wholesale Value** in million dollars, which is the value of the Supply at a wholesale market level. It covers both *In-Shell* and *Kernel* supply.
- 8. In-Shell Supply Share.** The volume in tonnes of the *In-Shell* Production that was supplied to the market.
- 9. Kernel Supply Share.** The volume in tonnes of cracked *Kernel* that was supplied to the market.
- 10. Imports.** The volume in tonnes of the category that was imported from another country, and the value in million dollars paid to import. Profiles both *In-Shell* and *Kernel* imports.
- 11. In-Shell Import Supply Share.** The percentage share of *In-Shell* imports that was sent to the Australian market.
- 12. In-Shell Import Cracking Share.** The percentage share of *In-Shell* imports that was sent to be cracked.
- 13. Kernel Import Supply Share.** The percentage share of *Kernel* imports that was sent to the Australian market.
- 14. Household Penetration.** The percentage of Australian households who bought the category at least once at retail, to be consumed either in or out of the home, over the year ending June 2019. See page 15 for full definition.
- 15. Average Purchase Quantity.** The average quantity purchased at retail per shopping trip by Australian households over the year ending June 2019. A shopping trip refers to a trip where this category is purchased.
- 16. Fresh Supply per capita.** The volume of fresh supply available to the Australian population.

Note: Supply into retail and food service are not reported for Nuts & Olives.

Note: Olives (fruit) uses the same supply chain format as nuts. However, instead of an in-shell form, the supply chain refers to table olives, and instead of a kernel form, the supply chain refers to olive oil. The term “Cracking” is also replaced with “Oil Production”.

Processed supply chain—Dried/Canned Fruit

This example supply chain outlines the flow of the three dried/canned fruit categories over the year ending June 2019. It contains the following elements:



- 1. Production.** The volume of the category grown in Australia over the year ending June 2019. This profiles the **Fresh Production** (written in **green**) and as well as the value in million dollars obtained by the producers i.e. the **Value of Production**.
- 2. Drying/Canning.** The volume in tonnes of the **Fresh** production that was sent to be processed. This profiles both the **Fresh** volume in, and the **Processed** volume out (written in **orange**).
- 3. Export Share.** The percentage share of **Processing** that was exported.
- 4. Dried/Canned Exports.** The volume in tonnes of the **Processing** that was exported in a **Processed** form, and the value in million dollars received.
- 5. Supply Share.** The percentage share of **Processing** that was sold locally.
- 6. Dried/Canned Imports.** The volume in tonnes of imported **Processed** product, and the value in million dollars paid to import.
- 7. Supply.** This profiles the **Supply** (volume in tonnes), and the **Wholesale Value** in million dollars, which is the value of the Supply at a wholesale market level. It includes both **Processed** production that was sold into the market, as well as **Processed** Imports that were sold into the market.

Note: Supply into retail and food service are not reported for Dried & Canned Fruit.

Data Tables

These tables are provided for each category. They profile key elements over the last three years (for the years ending June 2017, June 2018 and June 2019), as well as the percentage change in value year on year. They contain:

Year Ending June	2017		2018		2019	
	Value	Value	% YoY	Value	% YoY	
Production (t)	318,198	330,652	+4%	332,598	<1%	
Production (\$m)	\$ 231.3	\$ 215.7	-7%	\$ 219.3	+2%	
Production area (Ha)	5,785	5,628	-3%	-	-	
Fresh Export Volume (t)	102,937	108,172	+5%	110,213	+2%	
Fresh Export Value (\$m)	\$ 90.8	\$ 94.6	+4%	\$ 96.6	+2%	
Fresh Import Volume (t)	10	-	-100%	-	-	
Fresh Import Value (\$m)	< \$0.1	\$ -	-100%	\$ -	-	
Fresh Supply (t)	195,710	202,153	+3%	201,939	>-1%	
Fresh Supply Wholesale Value (\$m)	\$ 179.8	\$ 157.8	-12%	\$ 160.0	+1%	
Supply per Capita (kg)	7.98	8.11	+2%	8.01	-1%	

- Production.** The volume of the category grown in Australia.
- Value of Production.** The value of the production over the year.
- Production Area/Number of Trees/Vines.** A measure of the growing area of the category (in hectares), or the number of trees/vines used to grow the category over the year. This data has been gathered from the Australian Bureau of Statistics Agricultural Statistics information, the largest survey of growers available. *This information has been included for indicative purposes only, and should be viewed as such.*
- Export Volume and Value.** The volume in tonnes and the value in million dollars of the category exported in a fresh form over the year.
- Import Volume and Value.** The volume in tonnes and the value in million dollars of the category imported in a fresh form over the year.
- Supply.** The volume in tonnes of the category made available to the local Australian fresh market, including locally grown product and imported fresh product.
- Wholesale Value.** The value in million dollars of the supply at a wholesale market level.
- Supply per capita.** The volume available to the Australian public. Calculated as the volume supply divided by the population for the year.

Common Data Sources

<u>Abbreviation</u>	<u>Data Source</u>	<u>Further information</u>
ABS	Agricultural Commodities, Australian Bureau of Statistics	Information from <i>Agricultural Commodities cat. no. 7121.0, 2017-18, 2016-17, 2015-16, 2014-15 and 2013-14 editions has been compiled.</i> <i>Australian Demographic Statistics cat. no. 3101.0 June 2019 edition.</i> <i>2016 Census of Population and Housing</i>
AC	Ausmarket Consultants	Wholesale pricing information from the Adelaide, Brisbane, Melbourne and Sydney wholesale markets.
CFVIWA	Chamber of Fruit and Vegetable Industries of Western Australia	Wholesale pricing information from the Perth wholesale market.
Freshlogic Analysis	THRUChain analysis— Freshlogic	Supply chain modelling system that aligns the volumes of production and international trade with the volumes distributed through processing and all domestic market channels.
GTA	IHS —Global Trade Atlas®	www.gtis.com/gta

<u>Abbreviation</u>	<u>Data Source</u>	<u>Further information</u>
IRB	Industry Representative Bodies	Consultation with informed bodies to ensure information reconciles. The abbreviation 'IRB' is listed where multiple industry bodies were contacted for a category/group. Where one industry body was contacted for an individual category, the relevant name is listed.
MP & DD	Mealpulse™ panel and DocketData™	Freshlogic operated information gathering tools that provide the detail of household purchasing behaviours and a basis to reconcile supply with Australian market distribution channels.

Data sharing-List of projects

List of projects

In addition to common data sources, a number of Hort Innovation funded projects have provided data outputs which have informed the information provided in this handbook. These are outlined in the table below. Hort Innovation would like to acknowledge their input.

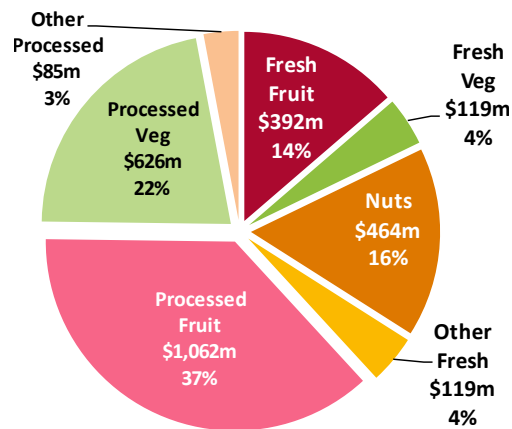
<u>Project Code</u>	<u>Project Title</u>
AL16003 (Almonds)	<i>Australian Almond Industry Statistics</i>
AP16002 (Apple/Pear)	<i>Apple and Pear Crop Estimates</i>
AP16006 (Avocado)	<i>June 2019 Infocado Report</i>
BA16009	<i>Banana Enterprise Comparison 2016/17</i>
CT18002 (Citrus)	<i>Citrus Market Development; Market Access and Quality Program</i>
CU15002 (Custard Apples)	<i>Custard Apple Dispatch System 2</i>
MC15009 (Macadamias)	<i>Macadamia Crop Forecasting 2015 - 2018</i>
MG17000 (Mangoes)	<i>Building best management practice capacity for the Australian mango industry</i>
MT15031 (Dried Grapes)	<i>Australian Dried Fruit Communications Program</i>
NY17008 (Nursery)	<i>Nursery industry statistics and research 2017/18</i>
OL16001 (Olives)	<i>Australian Olive Industry Benchmarking Program</i>

Data sharing-List of projects

<u>Project Code</u>	<u>Project Title</u>
PI17001 (Pineapples)	<i>Study groups enabling industry adaption to pineapple market changes</i>
TU17005 (Turf)	<i>Turf industry statistics 2017-18 to 2019-2020</i>
TM17000 (Tomatoes)	<i>Tomato Industry Capacity Building</i>
VG15077 (Vegetables)	<i>Financial Performance of Australian Vegetable Farms 2016-2017 to 2018-2019</i>

Total Imports

For the year ending June 2019, Australia imported **\$2.87 billion** worth of horticultural products. *The values below do not include wine grapes.* Processed fruit was the largest value import grouping. The value of imports by group is profiled in the chart and table below. The table below also includes the **top 3** import categories by value within each group. The value for nuts includes some processed nut products.

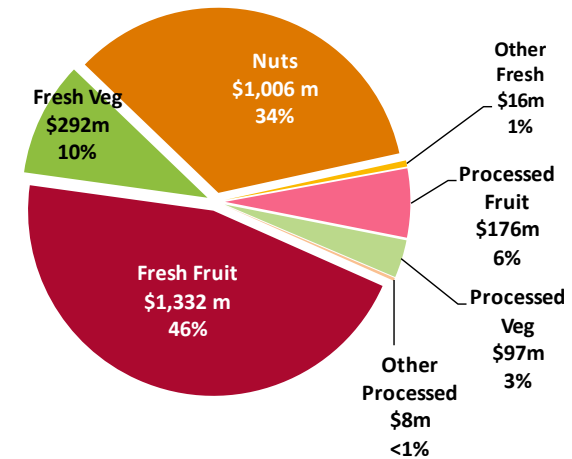


Sources: GTA; (Freshlogic Analysis)

Fresh Fruit	\$392.2m	Other Fresh Horticulture	\$119.2m
Grapes	\$81.3m	Cut Flowers	\$77.3m
Avocados	\$73.3m	Bulbs	\$20.9m
Kiwifruit	\$60.3m	Live Plants	\$20.9m
Fresh Vegetables	\$118.9m	Processed Fruit	\$1,062.2m
Garlic	\$28.3m	Olives and Olive Oil	\$254.9m
Asparagus	\$25.0m	Orange Juice	\$55.1m
Mushrooms	\$13.2m	Dried Tree Fruits	\$44.1m
Nuts	\$467.4m	Processed Vegetables	\$625.8m
Cashews	\$172.6m	Potatoes	\$203.2m
Almonds	\$42.8m	Tomatoes.....	\$128.1m
Walnuts	\$37.4m	Beans.....	\$63.7m

Total Exports

For the year ending June 2019, Australia exported **\$2.92 billion** worth of horticultural products. Fresh fruit was the largest value export grouping. The value of exports by group is profiled in the chart and table below. The table below also includes the top 3 export categories within each group. *These values do not include wine grapes.*

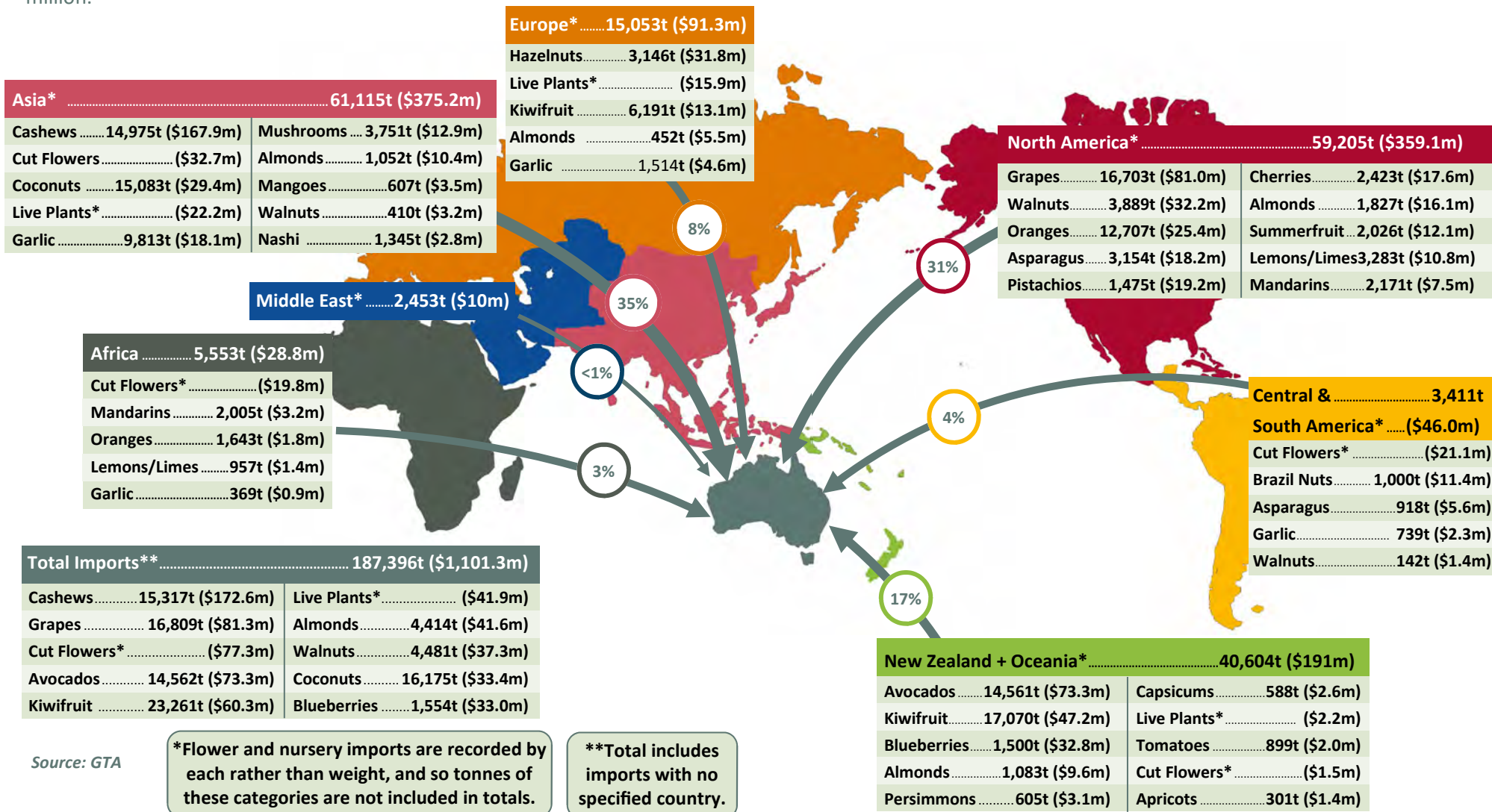


Sources: GTA; (Freshlogic Analysis)

Fresh Fruit	\$1,332.0m	Other Fresh Horticulture	\$15.6m
Table Grapes	\$555.2m	Cut Flowers.....	\$10.1m
Oranges.....	\$308.1m	Live Plants	\$5.2m
Mandarins.....	\$139.4m	Bulbs.....	\$0.3m
Fresh Vegetables	\$292.2m	Processed Fruit	\$175.6m
Carrots	\$96.6m	Dried Grapes and Grape Juice.....	\$42.9m
Onions.....	\$39.2m	Dried Mangoes.....	\$30.7m
Potatoes	\$30.7m	Olives and Olive Oil.....	\$16.6m
Nuts	\$1,005.9m	Processed Vegetables	\$96.7m
Almonds.....	\$675.0m	Potatoes.....	\$18.5m
Macadamias	\$257.2m	Tomatoes.....	\$16.1m
Walnuts.....	\$17.9m	Ginger.....	\$5.5m

Imports of fresh horticultural products by region

These pages profile total imports of **fresh** horticultural products by 7 world regions. For each region, the total imports of fresh products is profiled, as well as up to the top 10 products **by value**, on products where imports exceed \$1 million.



The relative share of the **value** of imports from each of the 7 regions is also profiled in the circle associated with each region. Note that the total value and volume for all regions (located at the bottom left of the page) includes import information with no specified country, and therefore may exceed the sum of the individual regions.

Exports of fresh horticultural products by region

These pages profile total exports of **fresh** horticultural products by 6 world regions. For each region, the total exports of fresh product is profiled, as well as up to the top 10 products **by value**, on products where exports exceed \$1 million.

The relative share of the **value** of exports to each of the 6 regions is also profiled in the circle associated with each region. Note that the total value and volume for all regions (located at the bottom left of the page) includes export information with no specified country, and therefore may exceed the sum of the individual regions.

Asia* 661,849t (\$2,113.2)	
Grapes..... 138,524t (\$527.2m)	Cherries 4,567t (\$74.8m)
Almonds..... 64,990t (\$505.7m)	Summerfruit 10,374t (\$45.8m)
Oranges..... 164,680t (\$274.3m)	Carrots..... 37,590t (\$33.1m)
Macadamias.. 18,909t (\$223.4m)	Asparagus..... 3,771t (\$29.6m)
Mandarins..... 44,121t (\$109.8m)	Potatoes..... 35,709t (\$26.7m)

Europe 38,521t (\$205.9m)	
Almonds..... 19,008t (\$144.4m)	Apples..... 1,262t (\$2.6m)
Macadamias..... 1,263t (\$34.7m)	Kiwifruit 421t (\$1.0m)
Onions 16,873t (\$15.1m)	
Walnuts..... 2,766t (\$14.0m)	
Mushrooms 5t (\$3.1m)	

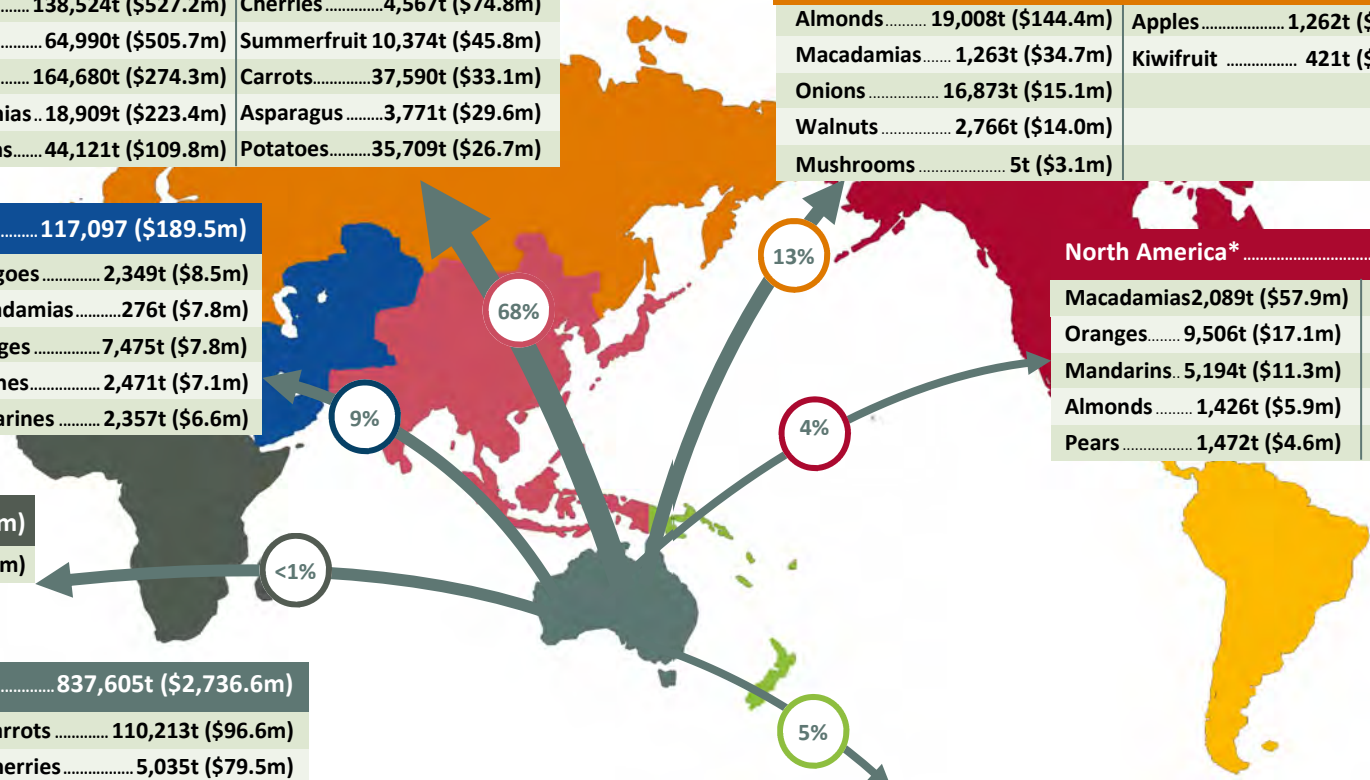
Middle East 117,097 (\$189.5m)	
Carrots..... 69,395t (\$60.5m)	Mangoes..... 2,349t (\$8.5m)
Almonds..... 1,436t (\$12.4m)	Macadamias..... 276t (\$7.8m)
Grapes..... 3,188t (\$11.18m)	Oranges..... 7,475t (\$7.8m)
Mandarins..... 5,871t (\$10.1m)	Peaches..... 2,471t (\$7.1m)
Watermelons.... 4,891t (\$9.4m)	Nectarines 2,357t (\$6.6m)

North America* 21,858t (\$113.1m)	
Macadamias 2,089t (\$57.9m)	Cherries 103t (\$1.6m)
Oranges..... 9,506t (\$17.1m)	Mushrooms..... 2t (\$1.6m)
Mandarins.. 5,194t (\$11.3m)	Lemons/Limes..... 801t (\$1.4m)
Almonds..... 1,426t (\$5.9m)	Peaches..... 216t (\$1.3m)
Pears..... 1,472t (\$4.6m)	Mangoes..... 242t (\$1.2m)

Africa 3,289t (\$11.5m)
Almonds..... 991t (\$7.4m)

Total Exports** 837,605t (\$2,736.6m)	
Almonds..... 86,451t (\$675.0m)	Carrots 110,213t (\$96.6m)
Grapes..... 146,093t (\$555.2m)	Cherries..... 5,035t (\$79.5m)
Macadamias... 22,653t (\$326.1m)	Onions..... 47,478t (\$39.2m)
Oranges..... 188,056t (\$308.1m)	Nectarines 9,119t (\$35.0m)
Mandarins..... 59,471t (\$139.4m)	Mangoes..... 8,221t (\$30.7m)

New Zealand + Oceania 41,288t (\$118.4m)	
Almonds..... 2,202t (\$21.5m)	Pears..... 4,119t (\$5.8m)
Grapes..... 4,377t (\$16.8m)	Muskmelons 3,226t (\$5.4m)
Oranges 6,262t (\$8.5m)	Mangoes..... 1,180t (\$3.9m)
Mandarins 4,079t (\$7.7m)	Strawberries..... 560t (\$3.8m)
Beans..... 1,699t (\$7.0m)	Watermelons... 2,356t (\$3.2m)



Source: GTA

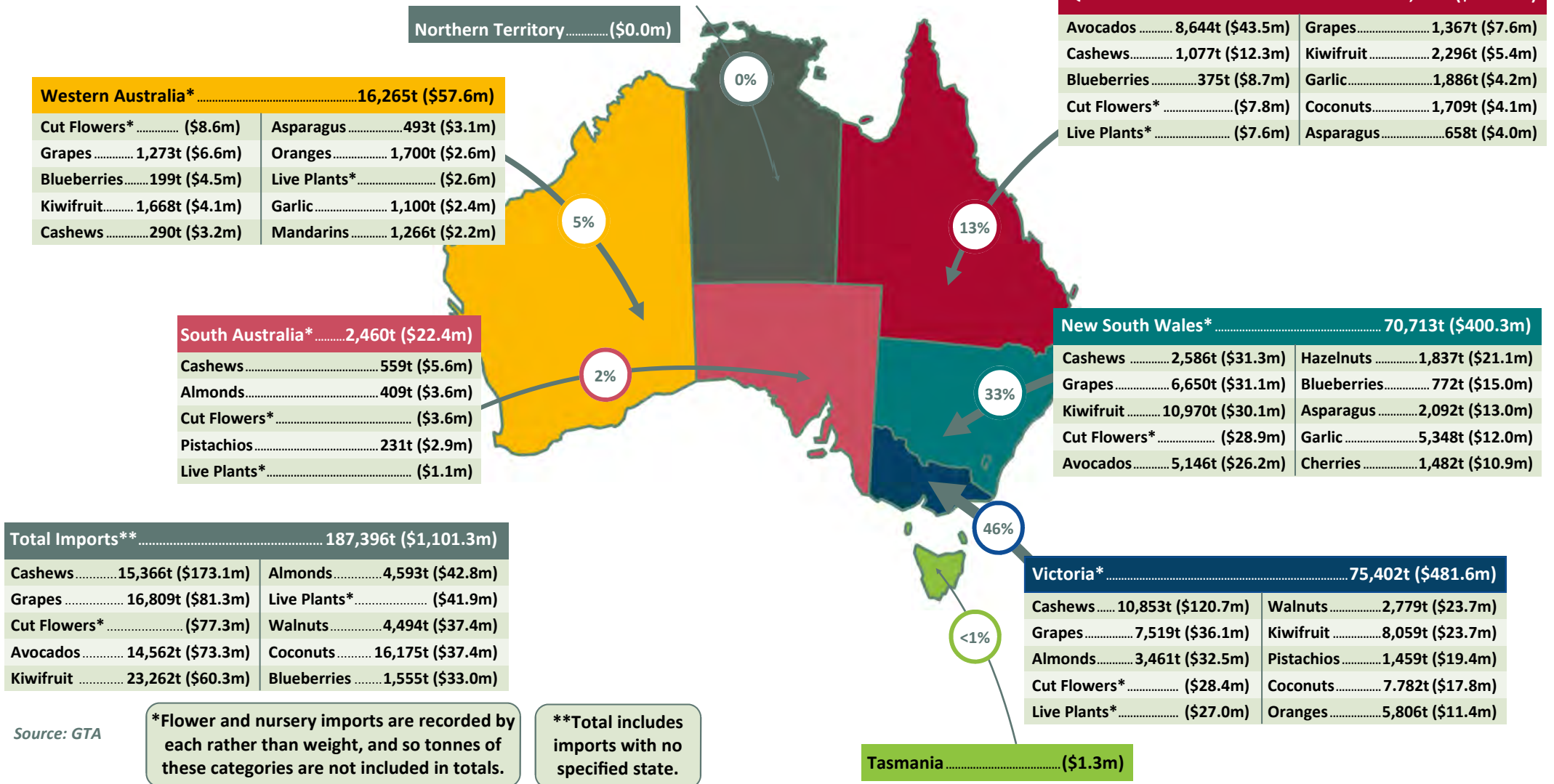
*Flower and nursery exports are recorded by each rather than weight, and so tonnes of these categories are not included in totals.

**Total includes exports with no specified country.

Imports of fresh horticultural products by state

These pages profile total imports of **fresh** horticultural products by Australian state or territory. The total imports of fresh products is profiled for each state. And the text box at the bottom left of the page depicts the top 10 products by **value**, for products where imports exceed \$1million.

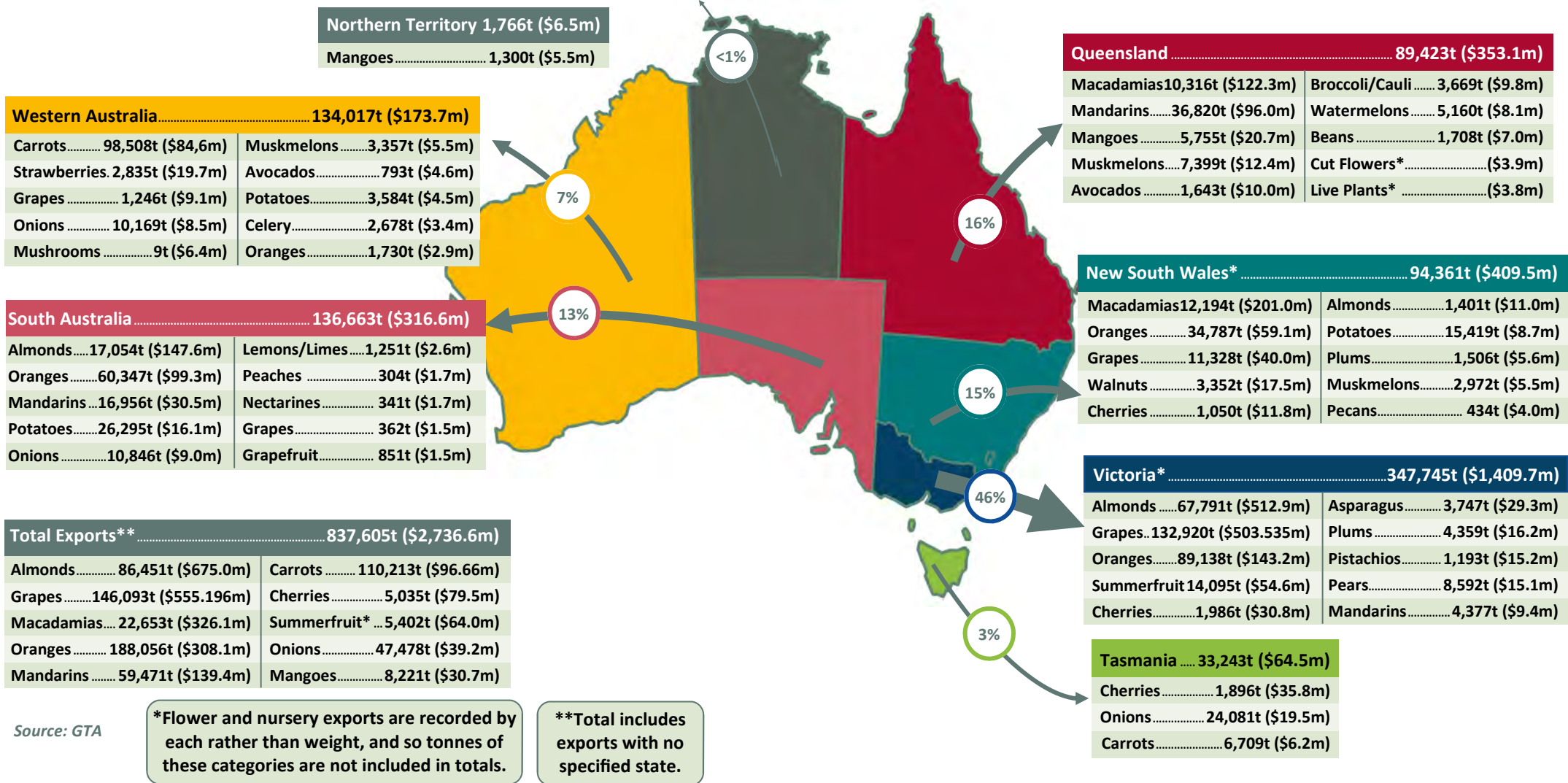
The relative share of the **value** of imports to each of the states is also profiled in the circle associated with each region. Note that the total value and volume for all states (located at the bottom left of the page) includes import information with no specified state, and therefore may exceed the sum of the individual states.





Exports of fresh horticultural products by state

These pages profile total exports of **fresh** horticultural products by Australian state or territory of production. The total exports of fresh products is profiled for each state. And the text box at the bottom left of the page depicts the top 10 products **by value**, for products where exports exceed \$1million.



The relative share of the **value** of exports from each of the states is also profiled in the circle associated with each region. Note that the total value and volume for all states (located at the bottom left of the page) includes export information with no specified state, and therefore may exceed the sum of the individual states.



Production Volume

The table below summarises the **Production** in **tonnes** of all products profiled in this statistics handbook, where appropriate, for the year ending June 2019.

Year Ending June 2019	Production (t)	Year Ending June 2019	Production (t)
All Horticultural Products	6,731,638	Passionfruit	4,469
All Fruit	2,793,432	Papaya/Pawpaw	14,921
Apples	310,875	Persimmons	2,600
Avocados	85,546	Pears	114,496
Bananas	372,204	Pineapples	70,538
Berries - Combined	105,090	Summerfruit - Combined	161,044
Blueberries	19,008	Apricots	9,027
Rubus Berries	9,478	Nectarines/Peaches	119,775
Strawberries	76,604	Plums	32,241
Cherries	20,148	Table Grapes	208,276
Citrus - Combined	744,374	Processing Fruit Combined*	259,167
Grapefruit	11,132	Dried Grapes	68,616
Lemons/Limes	48,232	Prunes*	6,983
Mandarins	156,914	Other Dried Tree Fruit*	1,722
Oranges	528,095	Canned Fruit*	56,845
Custard Apples	1,836	Olives	125,000
Kiwifruit	7,134	Other Fruit	6,138
Lychees	2,733	All Vegetables	3,722,378
Mangoes	74,920	Artichokes	449
Melons - Combined	291,089	Asparagus	10,237
Muskmelons	61,280	Beans	38,012
Watermelons	229,809	Beetroot	14,262
Nashi	1,384	Broccoli/Baby Broccoli	75,957

Sources: ABS; GTA; IRB; MP & DD (Freshlogic Analysis)



**Note: The processed fruit lines marked with an asterisk (*) do not contribute to total fruit production, as they have been counted towards the total in their respective categories (eg production of canning pineapples are already counted in the pineapple category). The exceptions are dried grapes, which is not a part of the table grapes category, and olives, which is not part of another fruit category.*

Year Ending June 2019	Production (t)	Year Ending June 2019	Production (t)
Brussels Sprouts	5,733	Potatoes	1,380,385
Cabbage	77,422	Pumpkins	117,790
Capsicums	77,030	Sweet Corn	71,794
Carrots	332,598	Sweetpotatoes	101,196
Cauliflower	75,647	Tomatoes	469,199
Celery	61,245	Zucchini	43,671
Chillies	2,255	Other Vegetables	24,797
Cucumbers	93,768	All Nuts	215,828
Eggplant	9,509	Almonds (Inshell)**	148,571
Eng.Spinach/Silverbeet/Kale	7,061	Chestnuts (Inshell)	1,050
Fresh Herbs - Combined	11,749	Hazelnuts (Inshell)**	1,000
Fennel	1,449	Macadamias (Inshell)	42,900
Parsley and Other Herbs	10,301	Pecans (Inshell)	3,100
Garlic	2,812	Pistachios (Inshell)	1,850
Ginger	6,992	Walnuts (Inshell)	12,300
Leafy Asian Vegetables	29,229	Other Nuts (Inshell)	5,057
Leafy Salad Vegetables	67,039	Other Horticulture	N/A
Leeks	10,809	Cut Flowers	N/A
Head Lettuce	136,937	Nursery	N/A
Mushrooms	72,007	Turf	N/A
Onions	258,195		
Parsnips	3,315		
Peas	33,278		

***Note: Total in-shell nut production includes the volumes of almonds and hazelnuts (marked with **) in an in-shell equivalent weight.*



Production Value

The table below summarises the **Value of Production** in **million dollars** of all products profiled in this statistics handbook, where appropriate, for the year ending June 2019.

Year Ending June 2019	Production (\$m)	Year Ending June 2019	Production (\$m)
All Horticultural Products	\$14,366.9	Passionfruit	\$19.4
All Fruit	\$5,525.3	Papaya/Pawpaw	\$27.5
Apples	\$512.8	Persimmons	\$9.6
Avocados	\$444.0	Pears	\$115.4
Bananas	\$594.6	Pineapples	\$49.7
Berries - Combined	\$938.6	Summerfruit - Combined	\$461.0
Blueberries	\$338.7	Apricots	\$35.1
Rubus Berries	\$207.5	Nectarines/Peaches	\$350.3
Strawberries	\$392.4	Plums	\$75.7
Cherries	\$189.3	Table Grapes	\$693.2
Citrus - Combined	\$829.3	Processing Fruit Combined*	\$210.4
Grapefruit	\$16.1	Dried Grapes	\$29.2
Lemons/Limes	\$115.7	Prunes*	\$6.3
Mandarins	\$298.6	Other Dried Tree Fruit*	\$0.6
Oranges	\$398.8	Canned Fruit*	\$19.3
Custard Apples	\$6.9	Olives	\$155.0
Kiwifruit	\$19.0	Other Fruit	\$12.1
Lychees	\$34.4	All Vegetables	\$4,722.1
Mangoes	\$198.6	Artichokes	\$0.9
Melons - Combined	\$181.4	Asparagus	\$86.6
Muskmelons	\$74.5	Beans	\$110.7
Watermelons	\$106.9	Beetroot	\$12.6
Nashi	\$4.2	Broccoli/Baby Broccoli	\$255.7

Sources: ABS; AC; CFVIWA; GTA; IRB; MP & DD (Freshlogic Analysis)



**Note: The processed fruit lines marked with an asterisk (*) do not contribute to total fruit value, as they have been counted towards the total in their respective categories (eg value of canning pineapples are already counted in the pineapple category). The exceptions are dried grapes, which is not a part of the table grapes category, and olives, which is not part of another fruit category.*

Year Ending June 2019	Production (\$m)	Year Ending June 2019	Production (\$m)
Brussels Sprouts	\$19.0	Potatoes	\$752.6
Cabbage	\$44.1	Pumpkins	\$82.0
Capsicums	\$171.1	Sweet Corn	\$76.9
Carrots	\$219.3	Sweetpotatoes	\$72.3
Cauliflower	\$54.1	Tomatoes	\$674.2
Celery	\$74.9	Zucchini	\$92.3
Chillies	\$8.9	Other Vegetables	\$89.1
Cucumbers	\$180.3	All Nuts	\$1,156.7
Eggplant	\$19.6	Almonds	\$835.1
Eng.Spinach/Silverbeet/Kale	\$16.6	Chestnuts	\$7.8
Fresh Herbs - Combined	\$197.9	Hazelnuts	\$3.0
Fennel	\$2.9	Macadamias	\$193.9
Parsley and Other Herbs	\$195.0	Pecans	\$21.8
Garlic	\$19.3	Pistachios	\$23.5
Ginger	\$26.8	Walnuts	\$43.7
Leafy Asian Vegetables	\$65.9	Other Nuts	\$27.9
Leafy Salad Vegetables	\$396.3	Other Horticulture	\$2,962.7
Leeks	\$25.7	Cut Flowers	\$281.3
Head Lettuce	\$172.8	Nursery†	\$2,437.6
Mushrooms	\$437.7	Turf	\$243.9
Onions	\$191.2		
Parsnips	\$11.8		
Peas	\$62.7		

†Note: The nursery production value has been reported for indication only. This value has been provided outside of THRUchain methodology and is based directly on project output from NY17008. See pages 472 to 477.



Volume of Fresh Exports

The table below summarises the **Volume of Fresh Exports** in **tonnes** of all products profiled in this statistics handbook, where appropriate, for the year ending June 2019.

Year Ending June 2019	Fresh Export Volume (t)
All Horticultural Products	827,775
All Fruit	478,274
Apples	4,416
Avocados	3,202
Bananas	
Berries - Combined	3,894
Blueberries	201
Rubus Berries	8
Strawberries	3,685
Cherries	5,035
Citrus - Combined	252,250
Grapefruit	1,203
Lemons/Limes	3,394
Mandarins	59,471
Oranges	188,056
Custard Apples	92
Kiwifruit	660
Lychees	484
Mangoes	8,221
Melons - Combined	21,455
Muskmelons	14,143
Watermelons	7,312
Nashi	

Year Ending June 2019	Fresh Export Volume (t)
Passionfruit	
Papaya/Pawpaw	45
Persimmons	125
Pears	9,190
Pineapples	
Summerfruit - Combined	23,045
Apricots	561
Nectarines/Peaches	15,645
Plums	6,839
Table Grapes	146,093
Processing Fruit Combined	
Dried Grapes	
Prunes	
Other Dried Tree Fruit	
Canned Fruit	
Olives	
Other Fruit	68
All Vegetables	237,530
Artichokes	6
Asparagus	3,799
Beans	1,741
Beetroot	351
Broccoli/Baby Broccoli	6,633

Sources: GTA; IRB; (Freshlogic Analysis)

Year Ending June 2019	Fresh Export Volume (t)
Brussels Sprouts	365
Cabbage	1,739
Capsicums	352
Carrots	110,213
Cauliflower	904
Celery	5,310
Chillies	4
Cucumbers	93
Eggplant	7
Eng.Spinach/Silverbeet/Kale	266
Fresh Herbs - Combined	
Fennel	
Parsley and Other Herbs	
Garlic	
Ginger	16
Leafy Asian Vegetables	
Leafy Salad Vegetables	1,518
Leeks	156
Head Lettuce	565
Mushrooms	71
Onions	47,490
Parsnips	
Peas	10

Year Ending June 2019	Fresh Export Volume (t)
Potatoes	45,912
Pumpkins	2,653
Sweet Corn	
Sweetpotatoes	1,479
Tomatoes	1,000
Zucchini	
Other Vegetables	4,876
All Nuts*	111,971
Almonds*	86,451
Chestnuts*	
Hazelnuts*	16
Macadamias*	17,705
Pecans*	539
Pistachios*	1,324
Walnuts*	3,389
Other Nuts*	2,548
Other Horticulture	N/A
Cut Flowers	N/A
Nursery	N/A
Turf	N/A

*Note: Nut exports includes both the kernel and in-shell form. Further information on volumes of each type is provided on pages 424 to 458.



Value of Fresh Exports

The table below summarises the **Value of Fresh Exports** in **million dollars** of all products profiled in this statistics handbook, where appropriate, for the year ending June 2019.

Year Ending June 2019	Fresh Export Value (\$m)
All Horticultural Products	\$2,645.7
All Fruit	\$1,332.0
Apples	\$10.6
Avocados	\$19.7
Bananas	
Berries - Combined	\$29.3
Blueberries	\$4.8
Rubus Berries	\$0.1
Strawberries	\$24.4
Cherries	\$79.5
Citrus - Combined	\$457.1
Grapefruit	\$2.1
Lemons/Limes	\$7.2
Mandarins	\$139.4
Oranges	\$308.1
Custard Apples	\$0.4
Kiwifruit	\$2.1
Lychees	\$7.4
Mangoes	\$30.7
Melons - Combined	\$37.0
Muskmelons	\$24.3
Watermelons	\$12.7
Nashi	

Year Ending June 2019	Fresh Export Value (\$m)
Passionfruit	
Papaya/Pawpaw	\$0.2
Persimmons	\$0.8
Pears	\$16.4
Pineapples	
Summerfruit - Combined	\$89.0
Apricots	\$2.4
Nectarines/Peaches	\$61.6
Plums	\$25.0
Table Grapes	\$555.2
Processing Fruit Combined	
Dried Grapes	
Prunes	
Other Dried Tree Fruit	
Canned Fruit	
Olives	
Other Fruit	<\$0.1
All Vegetables	\$292.2
Artichokes	<\$0.1
Asparagus	\$29.8
Beans	\$7.3
Beetroot	\$1.1
Broccoli/Baby Broccoli	\$19.5

Sources: GTA; IRB; (Freshlogic Analysis)

Year Ending June 2019	Fresh Export Value (\$m)
Brussels Sprouts	\$2.1
Cabbage	\$3.1
Capsicums	\$1.3
Carrots	\$96.6
Cauliflower	\$2.2
Celery	\$9.1
Chillies	<\$0.1
Cucumbers	\$0.3
Eggplant	<\$0.1
Eng.Spinach/Silverbeet/Kale	\$2.3
Fresh Herbs - Combined	
Fennel	
Parsley and Other Herbs	
Garlic	
Ginger	\$0.2
Leafy Asian Vegetables	
Leafy Salad Vegetables	\$11.0
Leeks	\$0.6
Head Lettuce	\$1.8
Mushrooms	\$7.5
Onions	\$39.2
Parsnips	
Peas	\$0.1

Year Ending June 2019	Fresh Export Value (\$m)
Potatoes	\$30.7
Pumpkins	\$4.2
Sweet Corn	
Sweetpotatoes	\$2.4
Tomatoes	\$3.7
Zucchini	
Other Vegetables	\$16.2
All Nuts*	\$1,005.9
Almonds*	\$675.0
Chestnuts*	
Hazelnuts*	\$0.1
Macadamias*	\$257.2
Pecans*	\$5.7
Pistachios*	\$16.6
Walnuts*	\$17.9
Other Nuts*	\$33.3
Other Horticulture	\$15.6
Cut Flowers	\$10.1
Nursery	\$5.5
Turf	

*Note: Nut exports includes both the kernel and in-shell form. Further information on volumes of each type is provided on pages 424 to 458.



Volume of Fresh Imports

The table below summarises the **Volume of Fresh Imports** in **tonnes** of all products profiled in this statistics handbook, where appropriate, for the year ending June 2019.

Year Ending June 2019	Fresh Import Volume (t)
All Horticultural Products	186,308
All Fruit	108,529
Apples	732
Avocados	14,562
Bananas	
Berries - Combined	1,557
Blueberries	1,555
Rubus Berries	
Strawberries	2
Cherries	2,425
Citrus - Combined	24,760
Grapefruit	1,221
Lemons/Limes	4,403
Mandarins	4,612
Oranges	14,523
Custard Apples	
Kiwifruit	23,262
Lychees	
Mangoes	826
Melons - Combined	97
Muskmelons	21
Watermelons	77
Nashi	1,345

Year Ending June 2019	Fresh Import Volume (t)
Passionfruit	
Papaya/Pawpaw	40
Persimmons	635
Pears	
Pineapples	
Summerfruit - Combined	2,704
Apricots	339
Nectarines/Peaches	2,027
Plums	339
Table Grapes	16,809
Processing Fruit Combined	
Dried Grapes	
Prunes	
Other Dried Tree Fruit	
Canned Fruit	
Olives	
Other Fruit	18,776
All Vegetables	32,964
Artichokes	
Asparagus	4,092
Beans	431
Beetroot	8
Broccoli/Baby Broccoli	

Sources: GTA; IRB; (Freshlogic Analysis)

Year Ending June 2019	Fresh Import Volume (t)
Brussels Sprouts	
Cabbage	1
Capsicums	672
Carrots	
Cauliflower	
Celery	
Chillies	7
Cucumbers	
Eggplant	1
Eng.Spinach/Silverbeet/Kale	65
Fresh Herbs - Combined	
Fennel	
Parsley and Other Herbs	
Garlic	13,060
Ginger	216
Leafy Asian Vegetables	
Leafy Salad Vegetables	18
Leeks	
Head Lettuce	
Mushrooms	3,839
Onions	4,983
Parsnips	
Peas	773

Year Ending June 2019	Fresh Import Volume (t)
Potatoes	
Pumpkins	
Sweet Corn	
Sweetpotatoes	640
Tomatoes	899
Zucchini	
Other Vegetables	3,259
All Nuts*	44,815
Almonds*	4,593
Chestnuts*	
Hazelnuts*	3,242
Macadamias*	466
Pecans*	
Pistachios*	2,114
Walnuts*	4,494
Other Nuts*	29,906
Other Horticulture	N/A
Cut Flowers	N/A
<i>Nursery</i>	<i>N/A</i>
Turf	N/A

*Note: Nut imports includes both the kernel and in-shell form. Further information on volumes of each type is provided on pages 424 to 458.



Value of Fresh Imports

The table below summarises the **Value of Fresh Imports** in **million dollars** of all products profiled in this statistics handbook, where appropriate, for the year ending June 2019.

Year Ending June 2019	Fresh Import Value (\$m)	Year Ending June 2019	Fresh Import Value (\$m)
All Horticultural Products	\$1,094.5	Passionfruit	
All Fruit	\$392.2	Papaya/Pawpaw	\$0.2
Apples	\$1.9	Persimmons	\$3.2
Avocados	\$73.3	Pears	
Bananas		Pineapples	
Berries - Combined	\$33.0	Summerfruit - Combined	\$15.6
Blueberries	\$33.0	Apricots	\$1.6
Rubus Berries		Nectarines/Peaches	\$12.1
Strawberries	<\$0.1	Plums	\$2.0
Cherries	\$17.6	Table Grapes	\$81.3
Citrus - Combined	\$54.1	Processing Fruit Combined	
Grapefruit	\$2.4	Dried Grapes	
Lemons/Limes	\$12.5	Prunes	
Mandarins	\$11.7	Other Dried Tree Fruit	
Oranges	\$27.5	Canned Fruit	
Custard Apples		Olives	
Kiwifruit	\$60.3	<i>Other Fruit</i>	\$44.6
Lychees		All Vegetables	\$118.9
Mangoes	\$4.2	Artichokes	<\$0.1
Melons - Combined	\$0.2	Asparagus	\$25.0
Muskmelons	<\$0.1	Beans	\$0.5
Watermelons	\$0.1	Beetroot	<\$0.1
Nashi	\$2.8	Broccoli/Baby Broccoli	

Sources: GTA; IRB; (Freshlogic Analysis)

Year Ending June 2019	Fresh Import Value (\$m)	Year Ending June 2019	Fresh Import Value (\$m)
Brussels Sprouts		Potatoes	
Cabbage	<\$0.1	Pumpkins	
Capsicums	\$2.7	Sweet Corn	
Carrots		Sweetpotatoes	\$0.9
Cauliflower		Tomatoes	\$2.0
Celery		Zucchini	
Chillies	\$0.1	<i>Other Vegetables</i>	\$38.2
Cucumbers		All Nuts*	\$464.3
Eggplant	<\$0.1	Almonds*	\$42.8
Eng.Spinach/Silverbeet/Kale	\$0.1	Chestnuts*	
Fresh Herbs - Combined		Hazelnuts*	\$32.8
Fennel		Macadamias*	\$0.7
Parsley and Other Herbs		Pecans*	
Garlic	\$28.3	Pistachios*	\$29.7
Ginger	\$0.9	Walnuts*	\$37.4
Leafy Asian Vegetables		<i>Other Nuts*</i>	\$320.9
Leafy Salad Vegetables	\$0.1	Other Horticulture	\$119.2
Leeks		Cut Flowers	\$77.3
Head Lettuce		<i>Nursery</i>	<i>\$41.9</i>
Mushrooms	\$13.2	Turf	
Onions	\$4.6		
Parsnips			
Peas	\$2.1		

*Note: Nut imports includes both the kernel and in-shell form. Further information on volumes of each type is provided on pages 424 to 458.



Fresh Supply Volume

The table below summarises the **Volume of Fresh Supply** in tonnes of all products profiled in this statistics handbook, where appropriate, for the year ending June 2019.

Year Ending June 2019	Fresh Supply (t)	Year Ending June 2019	Fresh Supply (t)
All Horticultural Products	4,085,859	Passionfruit	4,216
All Fruit	1,771,712	Papaya/Pawpaw	14,710
Apples	213,711	Persimmons	3,105
Avocados	91,516	Pears	66,136
Bananas	371,091	Pineapples	45,370
Berries - Combined	95,115	Summerfruit - Combined	108,278
Blueberries	18,713	Apricots	7,223
Rubus Berries	8,825	Nectarines/Peaches	84,689
Strawberries	67,577	Plums	16,366
Cherries	15,379	Table Grapes	78,992
Citrus - Combined	294,585	Processing Fruit Combined*	
Grapefruit	10,680	Dried Grapes*	
Lemons/Limes	45,050	Prunes*	
Mandarins	98,978	Other Dried Tree Fruit*	
Oranges	139,877	Canned Fruit*	
Custard Apples	1,744	Olives*	
Kiwifruit	29,736	Other Fruit	9,548
Lychees	2,249	All Vegetables	2,220,245
Mangoes	63,957	Artichokes	443
Melons - Combined	259,544	Asparagus	10,530
Muskmelons	45,013	Beans	36,702
Watermelons	214,531	Beetroot	5,337
Nashi	2,729	Broccoli/Baby Broccoli	65,603

Sources: ABS; GTA; IRB; MP & DD (Freshlogic Analysis)



Note: The processed fruit lines marked with an asterisk (*) do not contribute to total fresh fruit supply volume because they are sold in a processed form.

Year Ending June 2019	Fresh Supply (t)	Year Ending June 2019	Fresh Supply (t)
Brussels Sprouts	4,353	Potatoes	435,058
Cabbage	63,874	Pumpkins	111,485
Capsicums	72,819	Sweet Corn	32,330
Carrots	201,939	Sweetpotatoes	96,465
Cauliflower	68,496	Tomatoes	250,807
Celery	55,030	Zucchini	42,898
Chillies	1,738	Other Vegetables	22,541
Cucumbers	88,786	All Nuts	93,902
Eggplant	8,893	Almonds**	38,722
Eng.Spinach/Silverbeet/Kale	6,343	Chestnuts**	1,050
Fresh Herbs - Combined	11,311	Hazelnuts**	3,993
Fennel	1,407	Macadamias**	4,004
Parsley and Other Herbs	9,905	Pecans**	1,514
Garlic	10,175	Pistachios**	4,188
Ginger	3,721	Walnuts**	9,258
Leafy Asian Vegetables	29,229	Other Nuts**	31,173
Leafy Salad Vegetables	54,134	Other Horticulture	N/A
Leeks	10,653	Cut Flowers	N/A
Head Lettuce	136,373	Nursery	N/A
Mushrooms	73,949	Turf	N/A
Onions	197,674		
Parsnips	3,219		
Peas	7,335		

**Note: Nut supply volume includes both the kernel and in-shell form. Further information on volumes of each type is provided on pages 424 to 458.



Fresh Supply Wholesale Value

The table below summarises the **Wholesale Value** of the Fresh Supply in **million dollars** of all products profiled in this statistics handbook, where appropriate, for the year ending June 2019.

Year Ending June 2019	Wholesale Value (\$m)	Year Ending June 2019	Wholesale Value (\$m)
All Horticultural Products	\$14,407.7	Passionfruit	\$22.8
All Fruit	\$5,208.3	Papaya/Pawpaw	\$32.3
Apples	\$572.6	Persimmons	\$13.2
Avocados	\$512.2	Pears	\$121.1
Bananas	\$720.5	Pineapples	\$46.0
Berries - Combined	\$1,113.5	Summerfruit - Combined	\$449.0
Blueberries	\$436.1	Apricots	\$40.0
Rubus Berries	\$243.2	Nectarines/Peaches	\$351.2
Strawberries	\$434.2	Plums	\$57.8
Cherries	\$167.6	Table Grapes	\$330.8
Citrus - Combined	\$539.0	Processing Fruit Combined*	
Grapefruit	\$19.0	Dried Grapes*	
Lemons/Limes	\$142.2	Prunes*	
Mandarins	\$221.7	Other Dried Tree Fruit*	
Oranges	\$156.2	Canned Fruit*	
Custard Apples	\$7.7	Olives*	
Kiwifruit	\$93.0	Other Fruit	\$47.0
Lychees	\$33.0	All Vegetables	\$5,010.0
Mangoes	\$201.5	Artichokes	\$1.0
Melons - Combined	\$175.8	Asparagus	\$118.0
Muskmelons	\$63.2	Beans	\$124.4
Watermelons	\$112.6	Beetroot	\$12.1
Nashi	\$9.9	Broccoli/Baby Broccoli	\$280.2

Sources: ABS; AC; CFVIWA; GTA; IRB; MP & DD (Freshlogic Analysis)



Note: The processed fruit lines marked with an asterisk (*) do not contribute to total fresh fruit wholesale value because they are sold in a processed form.

Year Ending June 2019	Wholesale Value (\$m)	Year Ending June 2019	Wholesale Value (\$m)
Brussels Sprouts	\$19.8	Potatoes	\$521.7
Cabbage	\$47.9	Pumpkins	\$91.9
Capsicums	\$200.7	Sweet Corn	\$81.7
Carrots	\$160.0	Sweetpotatoes	\$83.0
Cauliflower	\$61.0	Tomatoes	\$760.5
Celery	\$78.9	Zucchini	\$108.4
Chillies	\$10.2	Other Vegetables	\$67.3
Cucumbers	\$211.0	All Nuts	\$1,006.9
Eggplant	\$22.9	Almonds	\$383.7
Eng.Spinach/Silverbeet/Kale	\$17.3	Chestnuts	\$9.2
Fresh Herbs - Combined	\$232.0	Hazelnuts	\$40.5
Fennel	\$3.4	Macadamias	\$113.3
Parsley and Other Herbs	\$228.6	Pecans	\$23.5
Garlic	\$86.4	Pistachios	\$62.5
Ginger	\$29.2	Walnuts	\$97.2
Leafy Asian Vegetables	\$77.5	Other Nuts	\$276.8
Leafy Salad Vegetables	\$447.1	Other Horticulture	\$3,182.5
Leeks	\$29.7	Cut Flowers	\$378.1
Head Lettuce	\$201.5	Nursery†	\$2,560.5
Mushrooms	\$534.1	Turf	\$243.9
Onions	\$189.0		
Parsnips	\$13.9		
Peas	\$60.6		

†Note: The nursery wholesale value has been reported for indication only. This value has been provided outside of THRUchain methodology and is based directly on project output from NY17008. See pages 472 to 477.



All Fresh Horticulture Overview

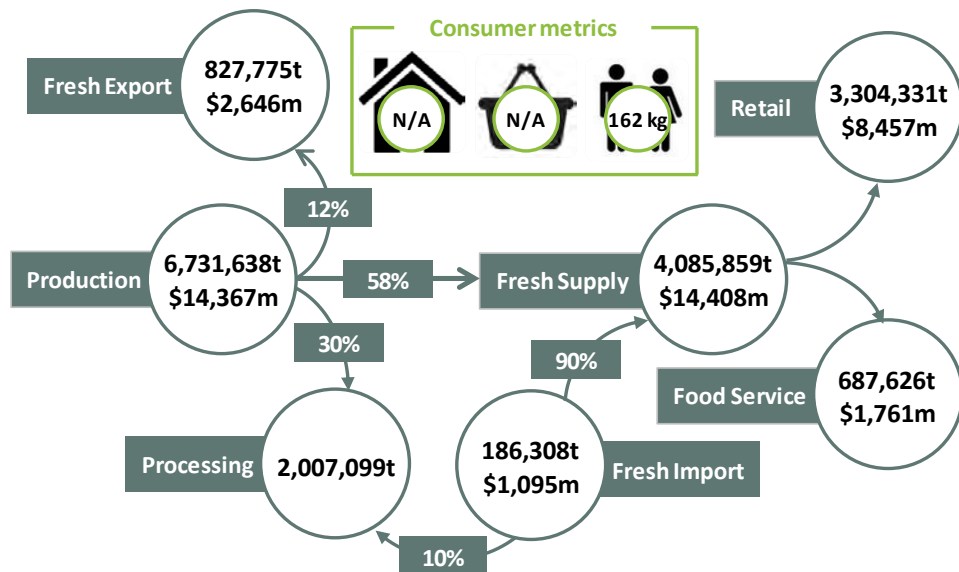
Pages 50-53 profile total horticultural production and trade. It combines information on fruit, vegetables, nuts and other horticultural categories (cut flowers, nursery and turf).

For the year ending June 2019:

- **6.73 million tonnes** of horticultural products (not including cut flowers, nursery and turf products) was produced in Australia and the value for all categories was **\$14.4 billion**.
- The wholesale value of the fresh supply was **\$14.4 billion** for all categories, with **\$8.5 billion** into retail and **\$1.8 billion** into food service (not including cut flowers, nursery, turf and nut products).
- The supply per capita was **162 kg**, based on the volume supplied.



All Fresh Horticulture Supply Chain—Year Ending June 2019



Sources: ABS; AC; CFVIWA; GTA; IRB; MP & DD (Freshlogic Analysis)



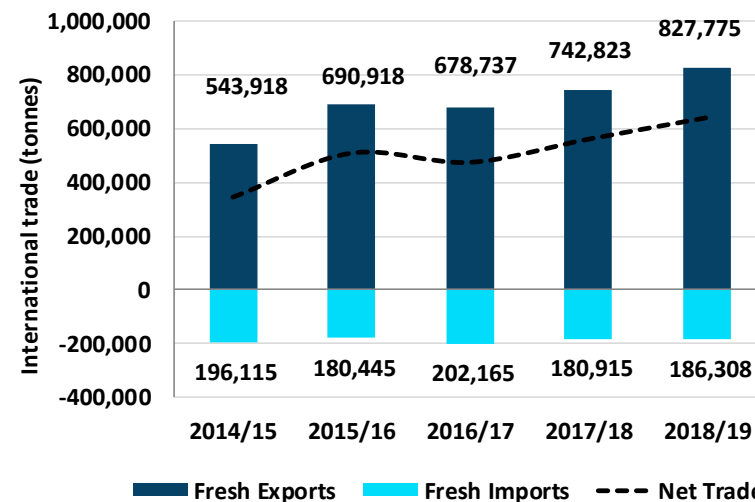
Year Ending June	2017	2018		2019	
	Value	Value	% YoY	Value	% YoY
Production (t)	6,459,157	6,639,824	+3%	6,731,638	+1%
Production (\$m)	\$13,000.0	\$13,258.5	+2%	\$14,366.9	+8%
Production area (Ha)	-	-	-	-	-
Fresh Export Volume (t)	678,737	742,823	+9%	827,775	+11%
Fresh Export Value (\$m)	\$ 2,035.1	\$ 2,079.8	+2%	\$ 2,645.7	+27%
Fresh Import Volume (t)	202,165	180,915	-11%	186,308	+3%
Fresh Import Value (\$m)	\$ 1,082.0	\$ 1,012.2	-6%	\$ 1,094.5	+8%
Fresh Supply (t)	4,039,677	4,102,309	+2%	4,085,859	>-1%
Fresh Supply Wholesale Value (\$m)	\$13,408.8	\$13,535.1	<-1%	\$14,407.7	+6%
Supply per Capita (kg)	164.81	164.54	>-1%	162.11	-1%

Sources: ABS; AC; CFVIWA; GTA; IRB; MP & DD (Freshlogic Analysis)

*Note: Figures have been modified from those published in the previous edition of the handbook (2017/18 edition).

All Fresh Horticulture International Trade

Australia is a net exporter of fresh horticultural products. For the year ending June 2019, Australia exported **826,669 tonnes** of fresh horticultural products (not including nursery, turf and flower categories), as profiled in the graph below, where imports are counted as negative tonnes.



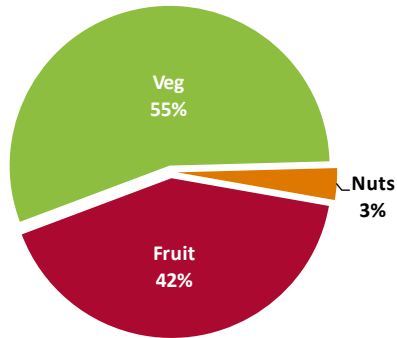
Source: GTA



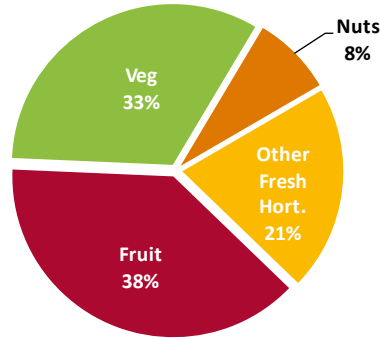
Production

The charts below profile the share of total Australian production of all horticultural categories during the year ending June 2019. For the below charts, only the **value** of the **Other Fresh Horticulture** grouping has been recorded, due to inconsistencies in the units used to measure volumes for this group.

Production - 6,731,638 t



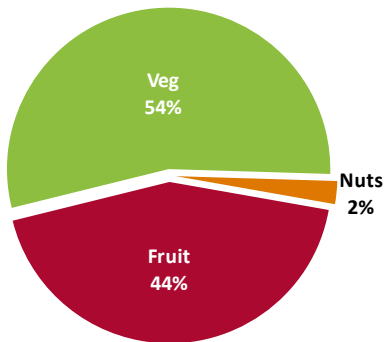
Value of Production - \$14,365.3 m



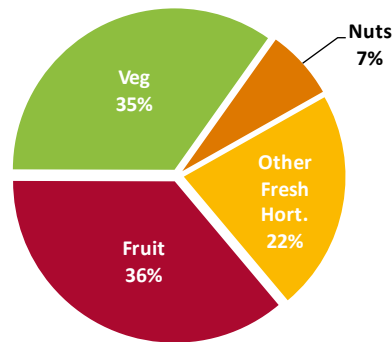
Fresh supply

The charts below profile the share of the total fresh supply of all horticultural categories during the year ending June 2019.

Fresh Supply Volume - 4,085,859 t



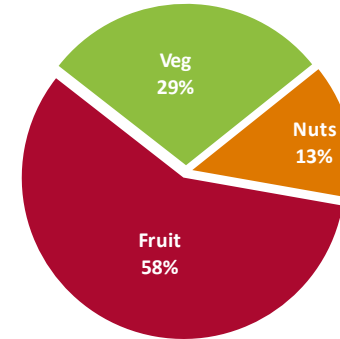
Wholesale Value - \$14,406.0 m



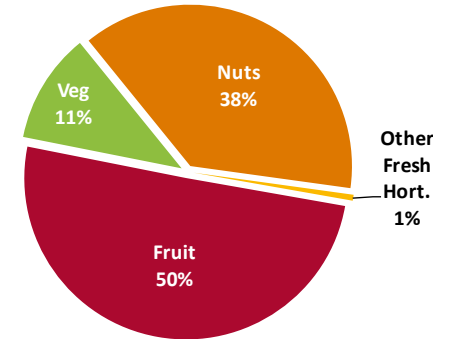
Fresh exports

The charts below profile the share of total Australian fresh exports of all horticultural categories during the year ending June 2019.

Fresh Export Volume - 827,775 t



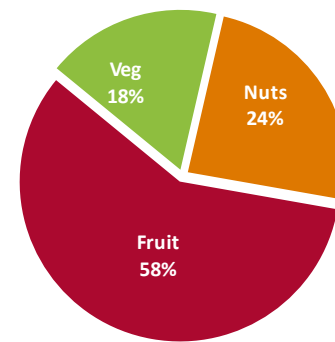
Fresh Export Value - \$2,645.7 m



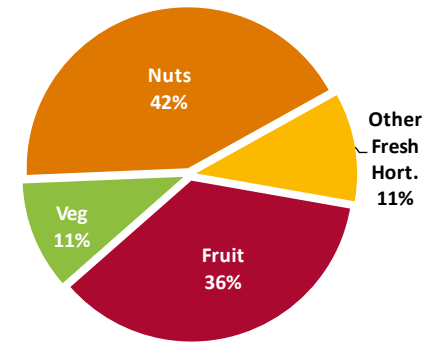
Fresh imports

The charts below profile the share of total Australian fresh imports of all horticultural categories during the year ending June 2019.

Fresh Import Volume - 186,589 t



Fresh Import Value - \$1,097.6 m



All Nuts — Overview

Pages 422-423 profile total nut production and trade. It combines information on all nut categories covered in this handbook*.

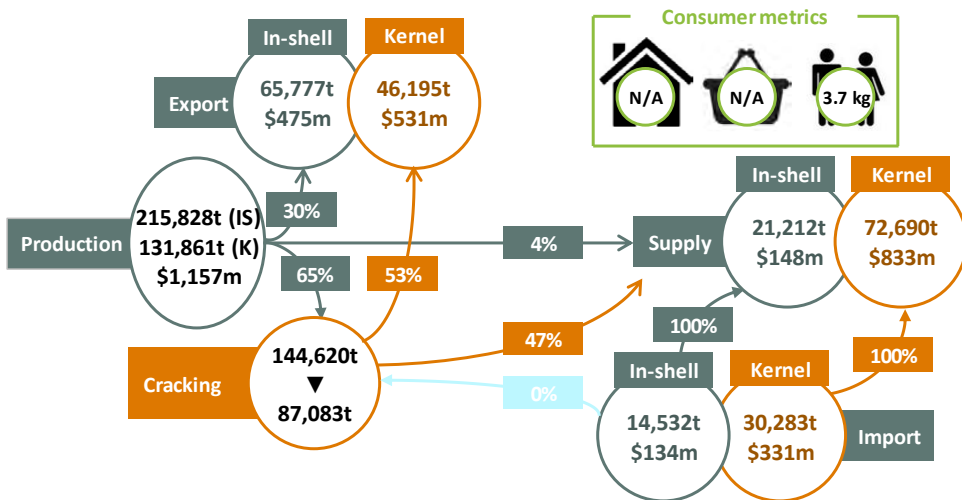
For the year ending June 2019:

- **215,828 t** of nuts (in-shell weight) was produced with a kernel weight equivalent of **131,861 t**.
- The value of production was worth **\$1,156.7 million** while the wholesale value of nuts in-shell and kernel supply was **\$1,006.9 million**.
- **53%** of Australian households purchased nuts.
- The supply per capita was **3.7 kg**, based on the volume supplied.

*'Other Nuts' are included in the calculation of the category overview totals but have not been profiled separately.



All Nuts Supply Chain—Year Ending June 2019



Sources: ABS; AC; CFVIWA; GTA; IRB; MP & DD (Freshlogic Analysis)

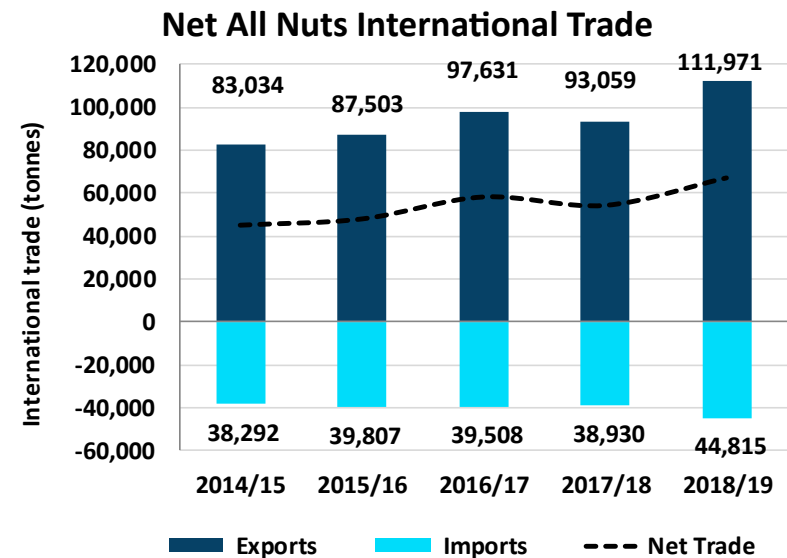
Year Ending June	2017		2018		2019	
	Value	Value	% YoY	Value	% YoY	
Production (ISWE t)	186,311	189,454	+2%	215,828	+14%	
Production (\$m)	\$ 923.6	\$ 900.4	-3%	\$ 1,156.7	+28%	
Production area (Ha)	63,196	69,732	+10%	75,409	+8%	
Export Volume (t)	97,631	93,059	-5%	111,971	+20%	
Export Value (\$m)	\$ 818.5	\$ 724.0	-12%	\$ 1,005.9	+39%	
Import Volume (t)	39,508	38,930	-1%	44,815	+15%	
Import Value (\$m)	\$ 427.7	\$ 429.2	<1%	\$ 464.3	+8%	
Supply (t)	73,022	76,653	+5%	93,902	+23%	
Supply Wholesale Value (\$m)	\$ 712.8	\$ 771.0	+8%	\$ 1,006.9	+31%	
Supply per Capita (kg)	2.98	3.07	+3%	3.73	+21%	

Sources: ABS; AC; CFVIWA; GTA; IRB; MP & DD (Freshlogic Analysis)

*Note: Figures have been modified from those published in the previous edition of the handbook (2017/18 edition).

All Nuts International Trade

Australia is a net exporter of nuts. For the year ending June 2019, Australia exported **111,971 tonnes** of nuts, as profiled in the graph below, where imports are counted as negative tonnes.



Source: GTA; IRB



Almond Overview

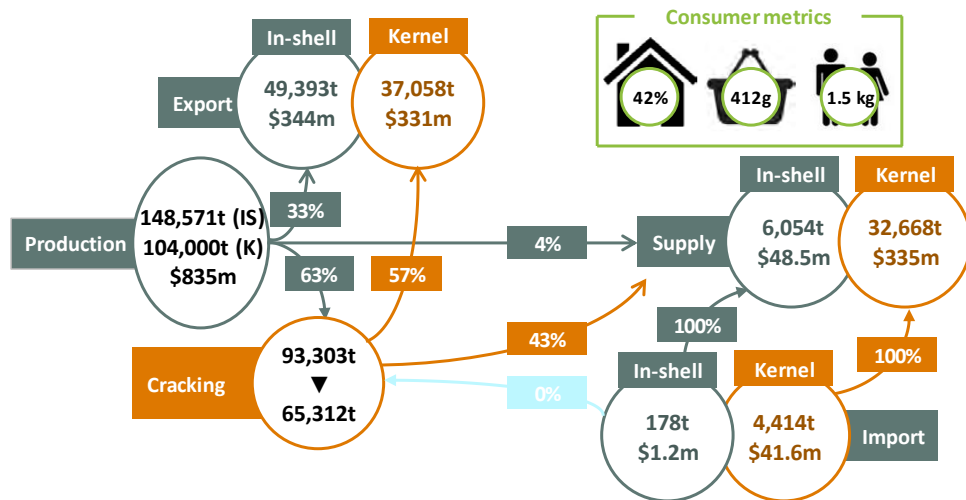
Almonds are grown in the south of Australia, with the majority of production occurring along the Murray River downstream of Swan Hill. The industry has a strong export market focus, with **1.9 tonnes** sold overseas for every tonne sold domestically. The majority of almonds are cracked and sold in kernel form.



For the year ending June 2019:

- **148,571 t** of almonds (in-shell weight) was produced, with a kernel weight equivalent of **104,000 t**.
- The value of production was worth **\$835.1 m** while the wholesale value of almonds in-shell and kernel supply was **\$383.7 m**.
- **42%** of Australian households purchased packaged almonds, buying an average of **412 g** per shopping trip.
- The supply per capita of in-shell and kernel almonds was **1.46 kg**, based on the volume supplied.

Almond Supply Chain —Year Ending June 2019



Sources: Almond Board of Australia (ABA); ABS; AC; CFVIWA; GTA; MP & DD (Freshlogic Analysis)



Year Ending June	2017	2018		2019	
	Value	Value	% YoY	Value	% YoY
Production (KWE t)	80,800	79,901	-1%	104,000	+30%
Production (\$m)	\$ 553.6	\$ 553.1	>-1%	\$ 835.1	+51%
Production area (Ha)	35,866	39,662	+11%	45,089	+14%
Export Volume (KWE t)	58,957	53,921	-9%	71,633	+33%
Export Value (\$m)	\$ 461.2	\$ 440.3	-5%	\$ 675.0	+53%
Import Volume (KWE t)	2,892	2,839	-2%	4,539	+60%
Import Value (\$m)	\$ 29.0	\$ 22.8	-22%	\$ 42.8	+88%
Supply (KWE t)	24,735	28,819	+17%	36,906	+28%
Supply Wholesale Value (\$m)	\$ 216.6	\$ 255.1	+18%	\$ 383.7	+50%
Supply per Capita (kg)	1.00	1.09	+8%	1.46	+34%

Sources: ABA; ABS; AC; CFVIWA; GTA; MP & DD (Freshlogic Analysis)

*Note: all volumes quoted in the table above are in Kernel Weight Equivalent (KWE).

**Note: Figures have been modified from those published in the previous edition of the handbook (2017/18 edition).

Major Almond Production Areas

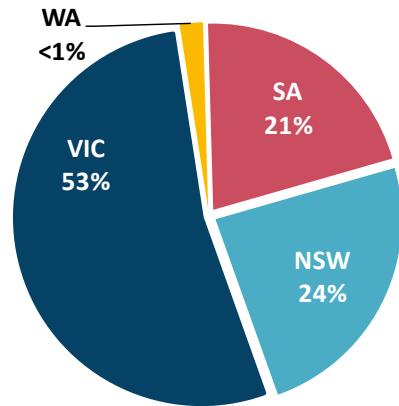
Almonds are produced in the southern states of Australia, predominantly in the Victorian region of **Sunraysia**. Other major production regions include **Adelaide** and the **Riverland region** of South Australia, the **Riverina** in New South Wales and in **Swan Region** in Western Australia.



Source: ABA



2018/19 Almond Production by State (Kernel)



Source: ABA

Almond Harvest Season by State (Kernel)

State	18/19 Tonnes	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
New South Wales	24,960								Harvest	Harvest	Harvest	Harvest	
Victoria	55,120								Harvest	Harvest	Harvest	Harvest	
South Australia	21,840								Harvest	Harvest	Harvest	Harvest	
Western Australia	2,080								Harvest	Harvest	Harvest	Harvest	
Harvest legend		Harvest		End of Harvest		None							

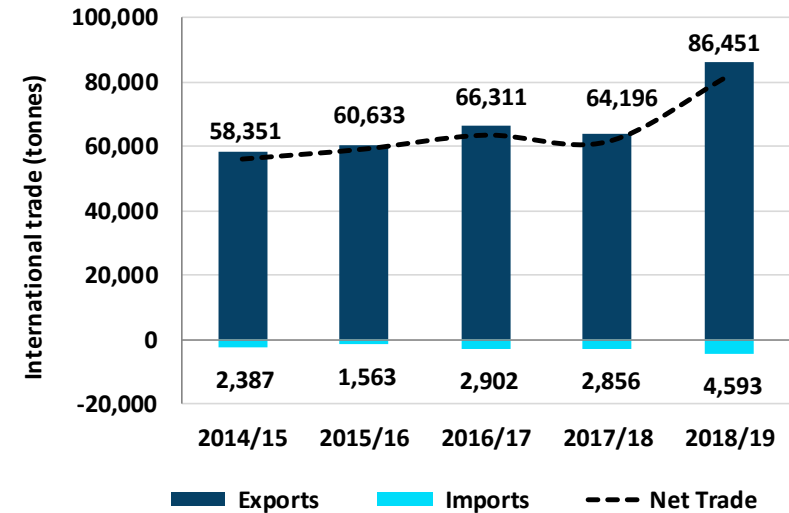
Source: ABA

Almond International Trade (In-shell and Kernel)

Almond exports are a mix of both in-shell and kernel, while the majority of imports are in kernel form. For the year ending June 2019, Australia exported **49,393 tonnes** of in-shell almonds (**58%** of combined exports) and **37,058 tonnes** of kernel almonds (**42%** of combined exports). This equates to **86,451 tonnes** exported in 2018/19, or **71,633 tonnes in kernel weight equivalent (KWE)**. Australia imported **178 tonnes** of in-shell almonds (**<1%** of almond imports) and **4,414 tonnes** of kernel almonds (**99%** of imports). The exports and imports over the last 5 financial years is profiled in the graph to the right, where imports are counted as negative tonnes, and all information is provided in total volume, rather than KWE.



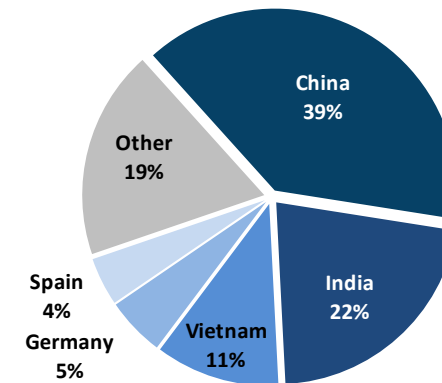
Net Almond International Trade



Source: GTA

For the year ending June 2019, **39%** of exported almonds (*both in-shell and kernel*) were sent to China, as profiled in the chart below.

2018/19 Almond Export by Country



Source: GTA



Almond Imports by State and Exports by State (Both In-Shell and Kernel)

Imports by state destination (Tonnes)				Exports by state of production origin (Tonnes)			
Year Ending June	2017	2018	2019	Year Ending June	2017	2018	2019
Victoria	2,421	2,049	3,461	Victoria	49,336	48,345	67,791
New South Wales	296	324	623	South Australia	16,190	15,405	17,054
South Australia	172	304	409	New South Wales	24	378	1,401
Queensland	14	168	83	Queensland	40	27	159
Western Australia	< 0.5	10	16	Tasmania	-	37	22
Other	< 0.5	0	-	Other	721	4	24
TOTAL	2,902	2,856	4,593	TOTAL	66,311	64,196	86,451

Almond Imports and Exports by Country (Both In-Shell and Kernel)

Imports by country (Tonnes)				Exports by country (Tonnes)			
Year Ending June	2017	2018	2019	Year Ending June	2017	2018	2019
US	1,375	1,259	2,000	China	451	1,366	33,850
Vietnam	24	208	1,026	India	23,673	23,505	18,760
Spain	480	264	407	Vietnam	2,844	7,653	9,554
Italy	60	78	45	Germany	4,545	3,715	4,512
China	4	2	21	Spain	11,759	5,335	3,707
Other	958	1,044	1,092	Other	23,040	22,623	16,067
TOTAL	2,902	2,856	4,593	TOTAL	66,311	64,196	86,451

Source: GTA





Chestnut Overview

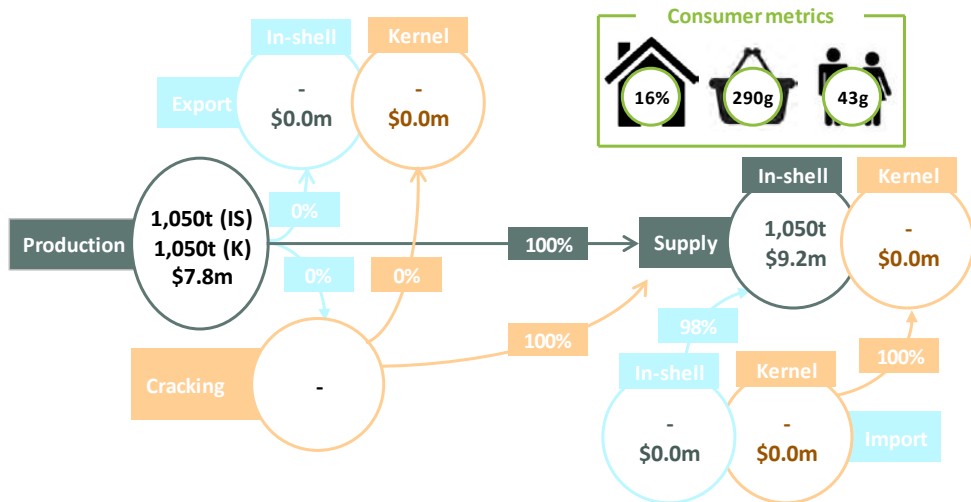
Chestnuts are grown in the south of Australia, with the majority of production occurring in Victoria. Chestnut production has a strong domestic market focus. Chestnuts are all sold in a fresh in-shell form.



For the year ending June 2019:

- **1,050 t** was produced.
- The value of production was **\$7.8 m** while the wholesale value of the supply was **\$9.2 m**.
- **16%** of Australian households purchased chestnuts, buying an average of **290 g** per shopping trip.
- The supply per capita was **43 g**, based on the volume supplied.

Chestnut Supply Chain — Year ending June 2019



Sources: AC; Chestnuts Australia Inc. (CAI); CFVIWA; GTA; MP & DD (Freshlogic Analysis)



Year Ending June	2017		2018		2019	
	Value	Value	% YoY	Value	% YoY	
Production (KWE t)	1,300	1,100	-15%	1,050	-5%	
Production (\$m)	\$ 12.8	\$ 7.9	-38%	\$ 7.8	-2%	
Production area (Ha)	1,480	1,480	-	1,480	-	
Export Volume (KWE t)	-	-	-	-	-	
Export Value (\$m)	\$ -	\$ -	-	\$ -	-	
Import Volume (KWE t)	-	-	-	-	-	
Import Value (\$m)	\$ -	\$ -	-	\$ -	-	
Supply (KWE t)	1,300	1,100	-15%	1,050	-5%	
Supply Wholesale Value (\$m)	\$ 15.0	\$ 9.4	-38%	\$ 9.2	-2%	
Supply per Capita (kg)	0.05	0.04	-15%	0.04	-5%	

Sources: AC; CAI; CFVIWA; GTA; MP & DD (Freshlogic Analysis)

Major Chestnut Production Areas

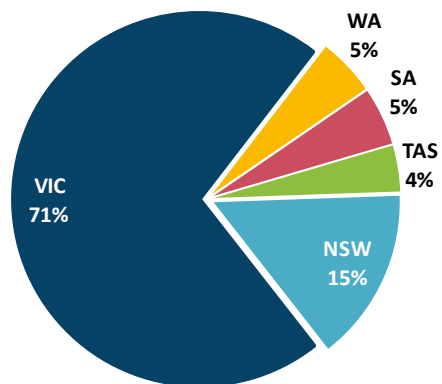
Chestnuts are produced in the southern states of Australia, requiring a cooler climate. The major production region is in the **north east of Victoria**.



Source: CAI



2018/19 Chestnut Production by State



Source: CAI

Chestnut Harvest Season by State (In Shell)

State	18/19 Tonnes	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
New South Wales	158												
Victoria	735												
Western Australia	42												
South Australia	53												
Tasmania	53												
Harvest legend			Harvest		End of Harvest						None		

Source: CAI



Images on pages 426 to 429 supplied courtesy of Chestnuts Australia Inc.



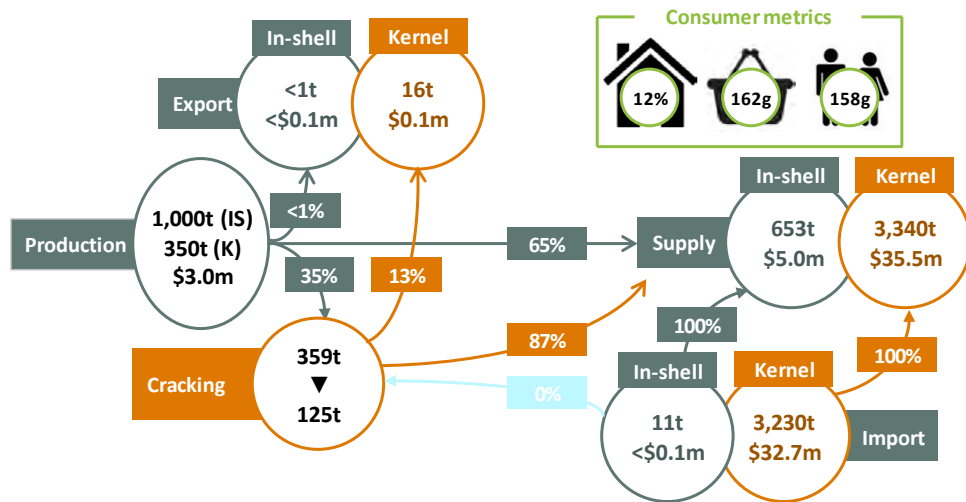
Hazelnut Overview

Hazelnuts are grown in the south of Australia, with production occurring in Victoria and New South Wales. The majority of hazelnuts are cracked and sold in kernel form. For the year ending June 2019:



- **1000 t** of hazelnuts (in-shell weight) was produced with a kernel weight equivalent (KWE) of **350 t**.
- The value of production was worth **\$3 m** while the wholesale value of hazelnuts in-shell and kernel supply was **\$40.5 m**, which combines local and imported product.
- **12%** of Australian households purchased hazelnuts, buying an average of **162 g** per shopping trip.
- The supply per capita of in-shell and kernel hazelnuts was **163 g**, based on the volume supplied.

Hazelnut Supply Chain—Year Ending June 2019



Sources: AC; CFVIWA; GTA; Hazelnut Growers of Australia (HGA); MP & DD (Freshlogic Analysis)



Year Ending June	2017		2018		2019	
	Value	Value	% YoY	Value	% YoY	
Production (KWE t)	210	250	+19%	350	+40%	
Production (\$m)	\$ 2.0	\$ 2.0	<1%	\$ 3.0	+49%	
Production area (Ha)	210	2,200	>100%	2,200	-	
Export Volume (KWE t)	23	58	>100%	16	-73%	
Export Value (\$m)	\$ 0.3	\$ 0.8	>100%	\$ 0.1	-82%	
Import Volume (KWE t)	3,277	2,862	-13%	3,234	+13%	
Import Value (\$m)	\$ 38.0	\$ 29.4	-23%	\$ 32.8	+11%	
Supply (KWE t)	3,465	3,055	-12%	3,568	+17%	
Supply Wholesale Value (\$m)	\$ 43.7	\$ 32.6	-25%	\$ 40.5	+24%	
Supply per Capita (kg)	0.15	0.14	-11%	0.16	+20%	

Sources: AC; CFVIWA; GTA; HGA; MP & DD (Freshlogic Analysis)

*Note: all volumes quoted in the table above are in KWE.

Major Hazelnut Production Areas

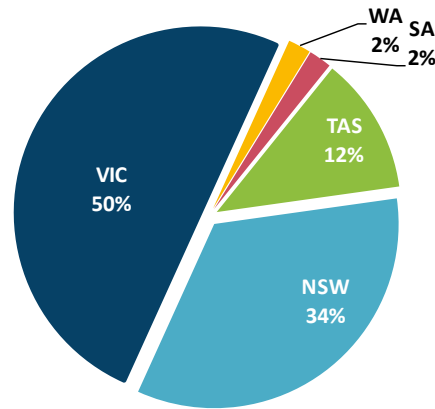
Hazelnuts are produced in the southern states of Australia, requiring a cooler climate. The major production regions are in **Myrtleford** in Victoria and **Orange** and the **Riverina** region in New South Wales



Source: HGA



2018/19 Hazelnut Production by State



Source: HGA

Hazelnut Harvest Season by State (Kernel)

State	18/19 Tonnes	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
New South Wales	119												
Victoria	175												
Western Australia	7												
South Australia	7												
Tasmania	42												
Harvest legend		Harvest	Harvest	End of Harvest									None

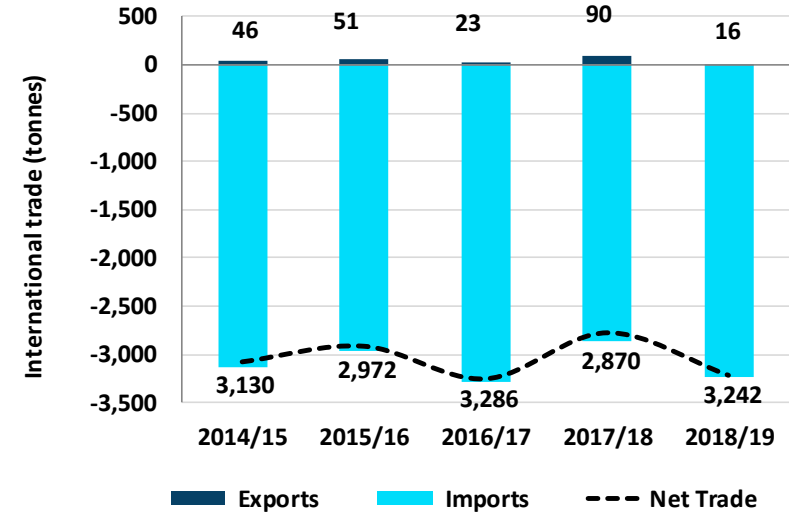
Source: HGA

Hazelnut International Trade

Australia is a net importer of hazelnuts, with the majority of imports being in kernel form. For the year ending June 2019, Australia exported **16 tonnes** of kernel hazelnuts, while importing **11 tonnes** of in-shell hazelnuts (<1% of hazelnut imports) and **3,230 tonnes** of kernel hazelnuts (**99%** of imports). The exports and imports over the last 5 financial years is profiled in the graph to the right, where imports are counted as negative tonnes. The majority of imports are classified as to which country they are sourced from.



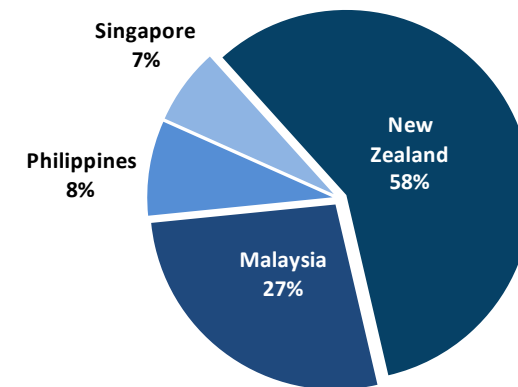
Net Hazelnut International Trade



Source: GTA

For the year ending June 2019, **58%** of exported hazelnuts were sent to Vietnam, as profiled in the chart below.

2018/19 Hazelnut Exports by Country



Source: GTA



Hazelnut Imports and Exports by State (both In-shell and Kernel)

Imports by state destination (Tonnes)				Exports by state of production origin (Tonnes)			
Year Ending June	2017	2018	2019	Year Ending June	2017	2018	2019
New South Wales	2,044	1,510	1,837	Victoria	22	29	8
Victoria	1,052	1,106	1,195	Queensland	-	-	< 0.5
Queensland	168	250	206	New South Wales	< 0.5	46	< 0.5
Western Australia	22	4	3	South Australia	-	-	< 0.5
South Australia	-	-	< 0.5	Tasmania	-	< 0.5	-
Other	-	-	< 0.5	Other	1	15	8
TOTAL	3,286	2,870	3,242	TOTAL	23	90	16

Hazelnut Imports and Exports by Country (both In-shell and Kernel)

Imports by country (Tonnes)				Exports by country (Tonnes)			
Year Ending June	2017	2018	2019	Year Ending June	2017	2018	2019
Turkey	2,740	2,803	3,146	New Zealand	22	44	9
US	72	64	76	Malaysia	-	-	4
India	-	-	20	Philippines	-	-	1
Italy	334	2	< 0.5	Singapore	-	-	1
Azerbaijan	< 0.5	1	-	PNG	-	-	< 0.5
Other	140	-	< 0.5	Other	1	46	< 0.5
TOTAL	3,286	2,870	3,242	TOTAL	23	90	16

Source: GTA





Macadamia Overview

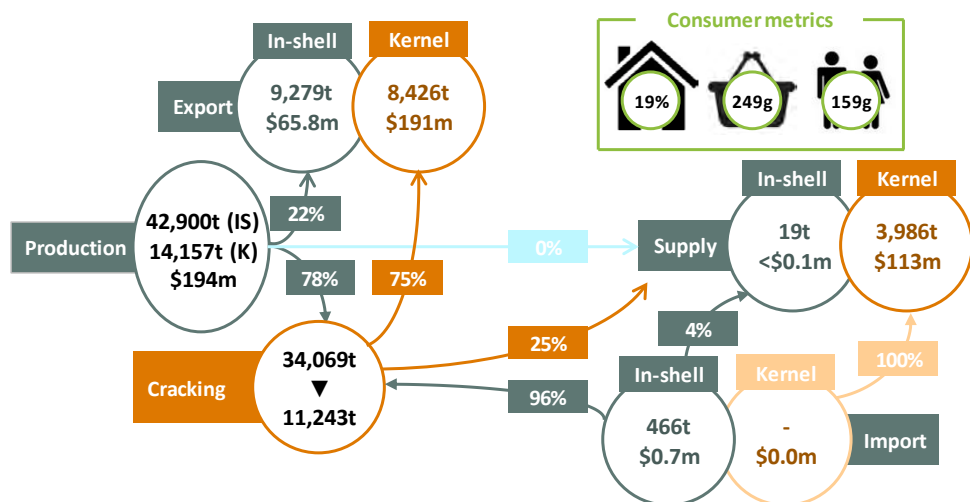
The macadamia industry has benefited from a sound export focused growth agenda and exports **81%** of total production. Macadamia production occurs predominantly in northern NSW and Bundaberg. Majority are sold in kernel form, however there are also some export markets that prefer the in-shell form.



For the year ending June 2019:

- **42,900 t** of macadamias (*in-shell weight at 3.5% moisture*) was produced with a kernel equivalent yield of **14,157 t**.
- The value of production was worth **\$193.9 m** while the wholesale value of macadamias in-shell and kernel supply was **\$113.3 m**.
- **19%** of Australian households purchased macadamias, buying an average of **249 g** per shopping trip.
- The supply per capita of in-shell and kernel macadamias was **159 g**, based on the volume supplied.

Macadamia Supply Chain — Year Ending June 2019



Sources: ABS; AC; Australia Macadamia Society (AMS); CFVIWA; GTA; MP & DD (Freshlogic Analysis)



Year Ending June	2017		2018		2019	
	Value	Value	% YoY	Value	% YoY	
Production (KWE t)	15,329	16,269	+6%	14,157	-13%	
Production (\$m)	\$ 255.5	\$ 207.8	-19%	\$ 193.9	-7%	
Production area (Ha)	19,000	19,750	+4%	19,750	-	
Export Volume (KWE t)	12,174	9,664	-21%	11,488	+19%	
Export Value (\$m)	\$ 291.0	\$ 190.1	-35%	\$ 257.2	+35%	
Import Volume (KWE t)	27	37	+37%	154	>100%	
Import Value (\$m)	\$ 0.4	\$ 0.1	-69%	\$ 0.7	>100%	
Supply (KWE t)	3,181	3,690	+16%	3,992	+8%	
Supply Wholesale Value (\$m)	\$ 77.4	\$ 89.7	+16%	\$ 113.3	+26%	
Supply per Capita (kg)	0.13	0.15	+13%	0.16	+7%	

Sources: ABS; AC; AMS; CFVIWA; GTA; MP & DD (Freshlogic Analysis)

*Note: Export volume, supply volume and supply wholesale value have been modified from those published in the previous edition of the handbook (2017/18 version).

**Note: Supply chain volume and values for Macadamia have been compiled outside of THRUChain methodology, based directly on best information input from Industry sources

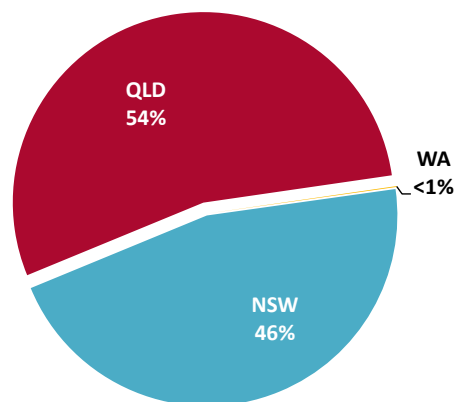
Major Macadamia Production Areas

Macadamias are produced in the northern states of Australia, with production predominantly occurring in the coastal region of northern New South Wales and south east Queensland. Major production areas include the **Northern Rivers region** of New South Wales and the **Bundaberg region** of Queensland.





2018/19 Macadamia Production by State



Source: AMS

Macadamia Harvest Season by State (Kernel)

State	18/19 Tonnes	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
New South Wales	6,512	■	■	■						■	■	■	■
Queensland	7,635	■	■						■	■	■	■	■
Western Australia	10	■						■	■	■	■	■	■
Harvest legend		■ Harvest	■ Harvest	■ End of Harvest									None

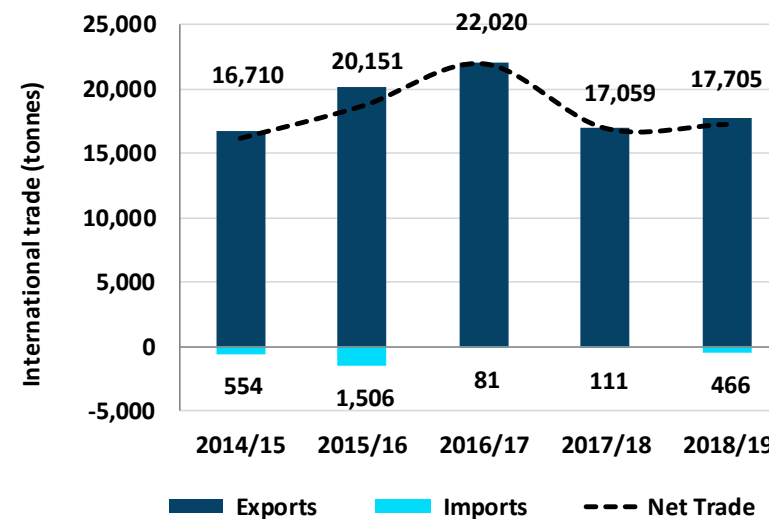
Source: AMS

Macadamia International Trade

Australia is a net exporter of macadamias, with a small volume of imports, predominantly in-shell. For the year ending June 2019, Australia exported **9,279 tonnes** of macadamias in-shell and **8,426 tonnes** of macadamia kernels, and imported **466 tonnes** of macadamias in-shell. When exports are assessed on a kernel equivalent yield (accounting for the heavier individual weight of in-shell macadamias), **74%** of exported macadamias were in a kernel form. The exports and imports over the last 5 financial years is profiled in the graph to the right, where imports are counted as negative tonnes. A large proportion of imports and exports are classified by their country of origin.



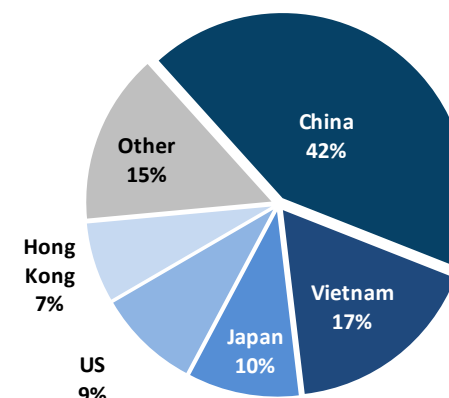
Net Macadamia International Trade



Sources: AMS; GTA

For the year ending June 2019, **42%** of exported macadamia nuts were sent to China, as profiled in the chart below.

2018/19 Macadamia Exports by Country



Sources: AMS; GTA



Macadamia Imports and Exports by State (both In-shell and Kernel)

Imports by state destination (Tonnes)				Exports by state of production origin (Tonnes)			
Year Ending June	2017	2018	2019	Year Ending June	2017	2018	2019
Queensland	81	111	365	New South Wales	10,776	13,099	12,194
Victoria	-	-	102	Queensland	16,291	12,554	10,316
Other	2,200	1,827	- 0	Victoria	69	22	139
TOTAL	2,281	1,938	466	South Australia	-	< 0.5	-
				Western Australia	69	-	-
				Other	1,174	< 0.5	3
				TOTAL	28,378	25,675	22,653

Macadamia Imports and Exports by Country (both In-shell and Kernel)

Imports by state destination (Tonnes)				Exports by state of production origin (Tonnes)			
Year Ending June	2017	2018	2019	Year Ending June	2017	2018	2019
Mozambique	-	-	25	China	8,278	10,666	9,660
Vietnam	-	-	14	Vietnam	9,604	7,230	3,883
Unidentified	2,067	1,693	-	Japan	1,434	1,336	2,187
Hong Kong	46	82	-	US	716	943	2,001
Malawi	17	52	-	Hong Kong	5,777	2,968	1,569
Other	151	112	428	Other	2,569	2,533	3,353
TOTAL	2,281	1,938	466	TOTAL	28,378	25,675	22,653

Source: GTA





Pecan Overview

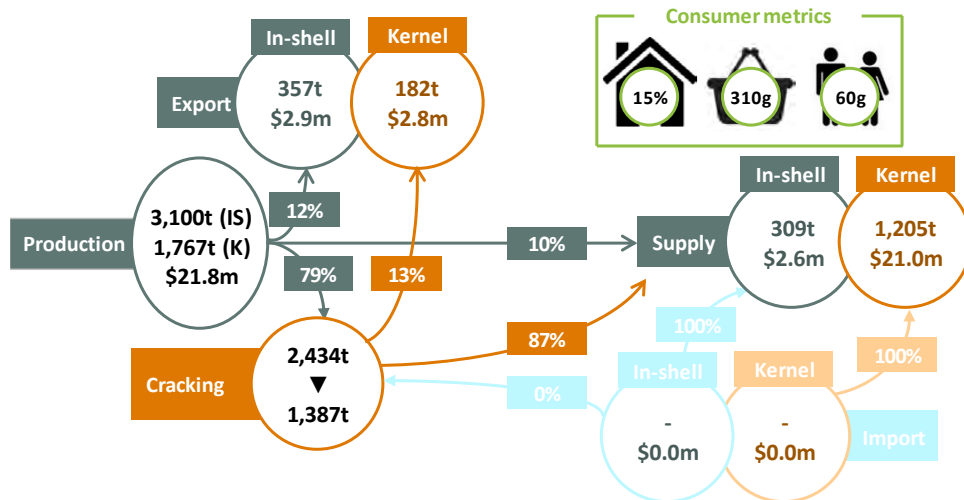
Pecan production is centred in northern New South Wales and south-eastern Queensland. The majority of pecans are sold domestically in kernel form, however there is a small export market.



For the year ending June 2019:

- **3,100 t** of pecans (in-shell weight) was produced with a kernel weight equivalent weight of **1,767 t**.
- The value of production was worth **\$21.8 m** while the wholesale value of pecans in-shell and kernel supply was **\$23.5 m**.
- **15%** of Australian households purchased pecans, buying an average of **310 g** per shopping trip.
- The supply per capita of in-shell and kernel pecans was **60 g**, based on the volume supplied.

Pecan Supply Chain—Year Ending June 2019



Sources: AC; Australian Pecan Growers Association (APGA); CFVIWA; GTA; MP & DD (Freshlogic Analysis)



Year Ending June	2017		2018		2019	
	Value	Value	% YoY	Value	% YoY	
Production (KWE t)	1,482	1,500	+1%	1,767	+18%	
Production (\$m)	\$ 18.5	\$ 20.0	+8%	\$ 21.8	+9%	
Production area (Ha)	1,550	1,550	-	1,800	+16%	
Export Volume (KWE t)	676	458	-32%	386	-16%	
Export Value (\$m)	\$ 11.0	\$ 7.8	-29%	\$ 5.7	-27%	
Import Volume (KWE t)	-	-	-	-	-	
Import Value (\$m)	\$ -	\$ -	-	\$ -	-	
Supply (KWE t)	806	1,042	+29%	1,381	+33%	
Supply Wholesale Value (\$m)	\$ 16.2	\$ 20.1	+24%	\$ 23.5	+17%	
Supply per Capita (kg)	0.03	0.05	+47%	0.06	+23%	

Sources: AC; APGA;CFVIWA; GTA; MP & DD (Freshlogic Analysis)

*Note: all volumes quoted in the table above are in KWE.

Major Pecan Production Areas

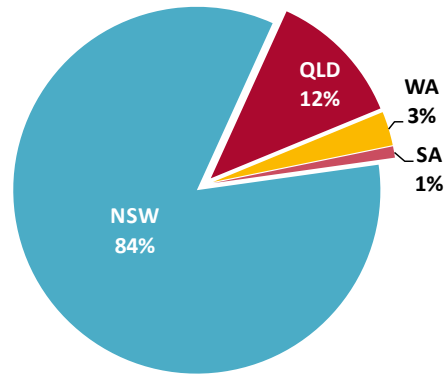
Pecans are predominantly produced in New South Wales, with the majority of production occurring in the **Gwydir Valley** in northern inland New South Wales.



Source: APGA



2018/19 Pecan Production by State



Source: APGA

Pecan Harvest Season by State (In-shell)

State	18/19 Tonnes	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
New South Wales	2,604	■									■	■	■
Queensland	372	■									■	■	■
Western Australia	93	■									■	■	■
South Australia	31	■									■	■	■
Harvest legend		■	■	■	■	■	■	■	■	■	■	■	■
		Harvest			End of Harvest						None		

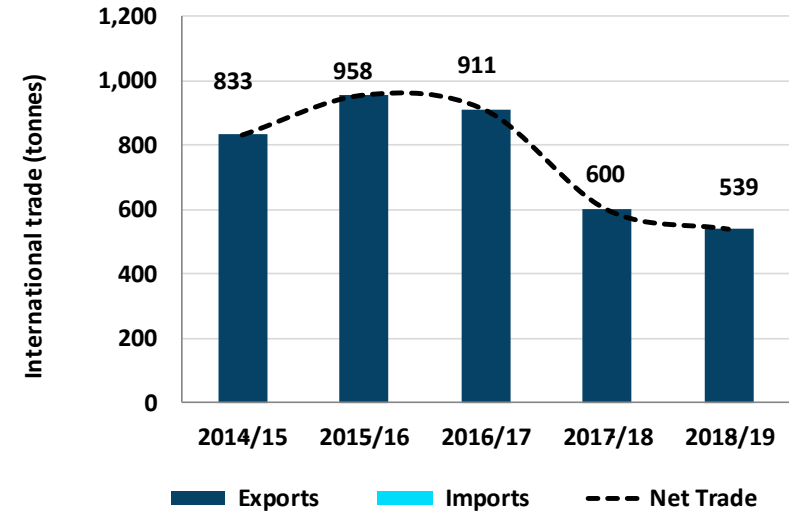
Source: APGA

Pecan International Trade

Australia is a net exporter of pecans, with the majority of exports being in in-shell form. For the year ending June 2019, Australia exported **357 tonnes** of in-shell pecans (**66%** of pecan exports) and **182 tonnes** of kernel pecans (**34%** of exports). The exports over the last 5 financial years is profiled in the graph to the right, where imports are counted as negative tonnes.



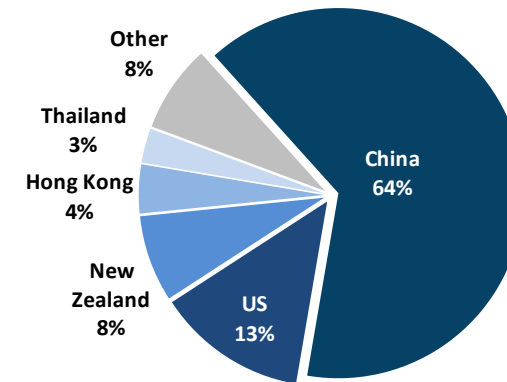
Net Pecan International Trade



Source: GTA

For the year ending June 2019, **64%** of exported pecans were sent to the China, as profiled in the chart below.

2018/19 Pecan Exports by Country



Source: GTA



Pecan Exports by State (both In-shell and Kernel)

Exports by state of production origin (Tonnes)			
Year Ending June	2015	2016	2017
New South Wales	820	499	434
Queensland	70	46	64
Victoria	15	48	41
Other	6	7	< 0.5
TOTAL	911	600	539

Pecan Exports by Country (both In-shell and Kernel)

Exports by country (Tonnes)			
Year Ending June	2017	2018	2019
China	163	144	347
US	277	89	71
New Zealand	19	56	41
Hong Kong	67	3	23
Thailand	23	141	16
Other	362	168	41
TOTAL	911	600	539

Source: GTA





Pistachios Overview

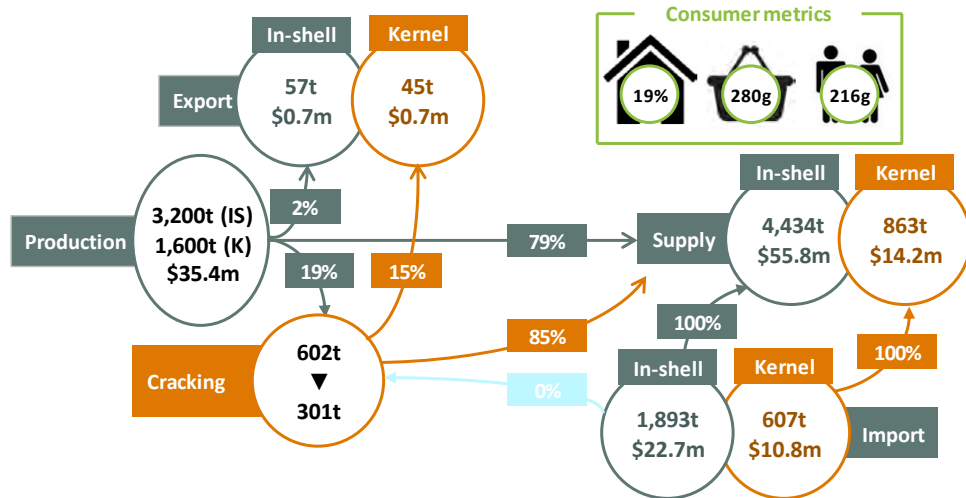
Pistachios are grown in the south of Australia, with the majority of production occurring in Victoria. Pistachio production follows a biennial pattern with high and low years and are predominately sold in-shell.



For the year ending June 2019:

- **3,200 t** of pistachios (in-shell weight) was produced with a kernel weight equivalent of **1,600 t**.
- The value of Australian production was worth **\$35.4 m**.
- The wholesale value of pistachios in-shell and kernel supply was **\$70 m**.
- **19%** of Australian households purchased pistachios, buying an average of **280 g** per shopping trip.
- The supply per capita of in-shell and kernel pistachios was **216 g**, based on the volume supplied.

Pistachio Supply Chain — Year Ending June 2019



Sources: AC; CFVIWA; GTA; MP & DD (Freshlogic Analysis)



Year Ending June	2017		2018		2019	
	Value	Value	% YoY	Value	% YoY	
Production (ISWE t)	1,600	3,200	+100%	1,850	-42%	
Production (\$m)	\$ 19.0	\$ 35.4	+86%	\$ 23.5	-34%	
Production area (Ha)	1,200	1,200	-	1,200	-	
Export Volume (t)	518	889	+71%	1,324	+49%	
Export Value (\$m)	\$ 5.0	\$ 8.2	+63%	\$ 16.6	>100%	
Import Volume (t)	1,875	2,658	+42%	2,114	-20%	
Import Value (\$m)	\$ 26.8	\$ 35.2	+31%	\$ 29.7	-16%	
Supply (t)	2,806	4,669	+66%	4,188	-10%	
Supply Wholesale Value (\$m)	\$ 41.2	\$ 62.7	+52%	\$ 62.5	>-1%	
Supply per Capita (kg)	0.11	0.19	+64%	0.17	-11%	

Sources: AC; CFVIWA; GTA; MP & DD (Freshlogic Analysis)

*Note: Export volume, supply volume and supply wholesale value have been modified from those published in the previous edition of the handbook (2017/18 version).

**Note: Supply chain volume and values for Pistachios have been compiled outside of THRUChain methodology, based directly on best information available.

Major Pistachio Production Areas

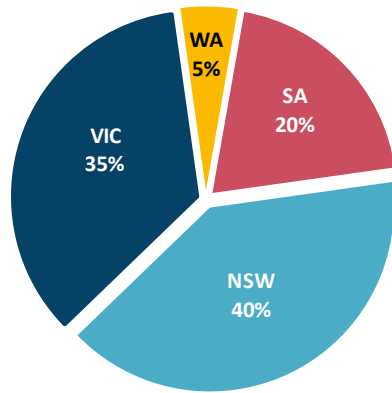
The major production areas are along the **Murray River Valley** between Swan Hill in Victoria and **Waikerie** in South Australia. Further plantings are in central west Victoria and Pinnaroo, South Australia. There are also a small number of growers in central NSW; southern Victoria and Western Australia.



Sources: ANIC; (Freshlogic Analysis)



2018/19 Pistachio Production by State



Source: (Freshlogic Analysis)

Pistachio Harvest Season by State (In-shell)

State	18/19 Tonnes	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
New South Wales	740								Harvest	Harvest	Harvest		
Victoria	648								Harvest	Harvest	Harvest		
Western Australia	93								Harvest	Harvest	Harvest		
South Australia	370								Harvest	Harvest	Harvest		
Harvest legend		Harvest	Harvest	Harvest	End of Harvest	End of Harvest	End of Harvest	End of Harvest	None	None	None	None	None

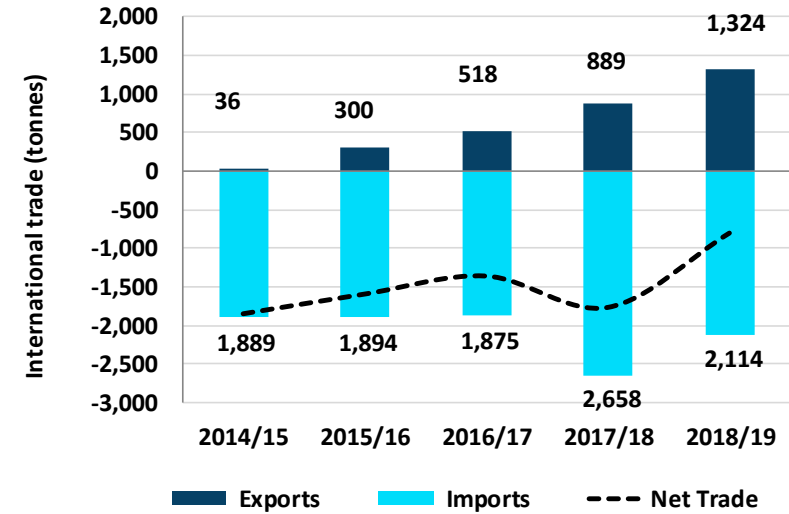
Source: (Freshlogic Analysis)

Pistachio International Trade

Australia is a net importer of pistachios, with the majority of imports being in in-shell form. For the year ending June 2019, Australia exported **1,277 tonnes** of in-shell pistachios (**96%** of pistachio exports) and **47 tonnes** of kernel pistachios (**4%** of exports), while importing **1,537 tonnes** of in-shell pistachios (**73%** of pistachio imports) and **577 tonnes** of kernel pistachios (**27%** of imports). The exports and imports over the last 5 financial years is profiled in the graph to the right, where imports are counted as negative tonnes. A large proportion of imports are classified as to which country they are sourced from.



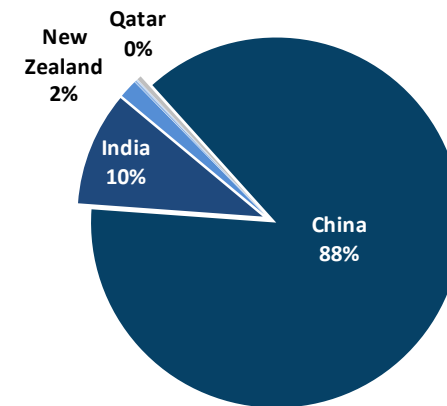
Net Pistachio International Trade



Source: GTA; (Freshlogic Analysis)

For the year ending June 2019, **88%** of exported pistachios were sent to India, as profiled in the chart below.

2018/19 Pistachio Exports by Country



Source: GTA; (Freshlogic Analysis)



Pistachio Imports and Exports by State (both In-shell and Kernel)

Imports by state destination (Tonnes)				Exports by state of production origin (Tonnes)			
Year Ending June	2017	2018	2019	Year Ending June	2017	2018	2019
Victoria	1,189	2,068	1,459	Victoria	511	756	1,193
New South Wales	402	317	291	New South Wales	2	5	61
South Australia	181	161	231	South Australia	< 0.5	92	27
Queensland	78	106	129	Queensland	-	< 0.5	< 0.5
Western Australia	25	6	4	Other	5	36	43
Other	-	-	< 0.5	TOTAL	518	889	1,324
TOTAL	1,875	2,658	2,114				

Pistachio Imports and Exports by Country (both In-shell and Kernel)

Imports by country (Tonnes)				Exports by country (Tonnes)			
Year Ending June	2017	2018	2019	Year Ending June	2017	2018	2019
US	1,392	2,243	1,817	China	392	792	1,162
China	117	159	169	India	13	26	131
Iran	295	225	56	New Zealand	20	20	21
Turkey	32	1	36	Qatar	< 0.5	1	2
Vietnam	-	-	14	Lebanon	< 0.5	2	2
Other	39	29	22	Other	93	49	5
TOTAL	1,875	2,657	2,114	TOTAL	518	889	1,324

Source: GTA; (Freshlogic Analysis)





Walnuts Overview

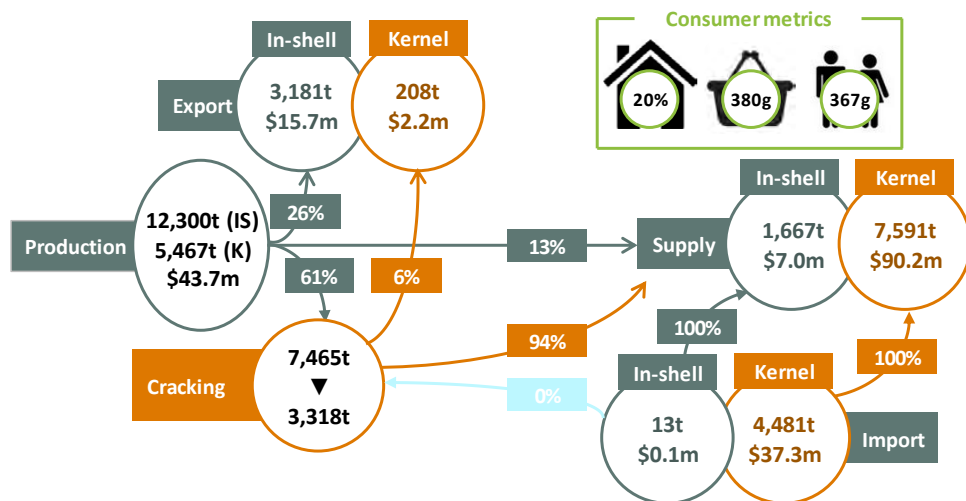
Walnuts are grown across Australia, with the majority of production occurring in New South Wales. Walnuts have a strong export focus, with a moderate volume of the Australian production being sold locally in-shell.



For the year ending June 2019:

- **12,300 t** of walnuts (in-shell weight) was produced with a kernel weight equivalent of **5,467 t**.
- The value of production was worth **\$43.7 m** while the wholesale value of walnuts in-shell and kernel supply was **\$97.2 m**.
- **20%** of Australian households purchased walnuts, buying an average of **380 g** per shopping trip.
- The supply per capita of in-shell and kernel walnuts was **367 g**, based on the volume supplied.

Walnut Supply Chain — Year Ending June 2019



Sources: AC; CFVIWA; GTA; Australian Walnut Industry Association (AWIA); MP & DD (Freshlogic Analysis)

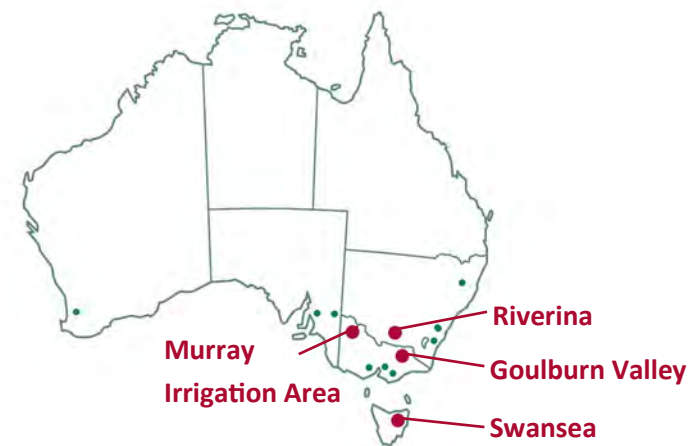


Year Ending June	2017		2018		2019	
	Value	Value	% YoY	Value	% YoY	Value
Production (ISWE t)	13,000	11,800	-9%	12,300	+4%	
Production (\$m)	\$ 33.0	\$ 38.6	+17%	\$ 43.7	+13%	
Production area (Ha)	3,890	3,890	-	3,890	-	
Export Volume (t)	4,750	5,399	+14%	3,389	-37%	
Export Value (\$m)	\$ 15.9	\$ 22.7	+43%	\$ 17.9	-21%	
Import Volume (t)	5,191	4,943	-5%	4,494	-9%	
Import Value (\$m)	\$ 42.3	\$ 49.2	+16%	\$ 37.4	-24%	
Supply (t)	9,058	8,135	-10%	9,258	+14%	
Supply Wholesale Value (\$m)	\$ 80.7	\$ 84.6	+5%	\$ 97.2	+15%	
Supply per Capita (kg)	0.37	0.33	-12%	0.37	+13%	

Sources: AC; CFVIWA; GTA; AWIA; MP & DD (Freshlogic Analysis)

Major Walnut Production Areas

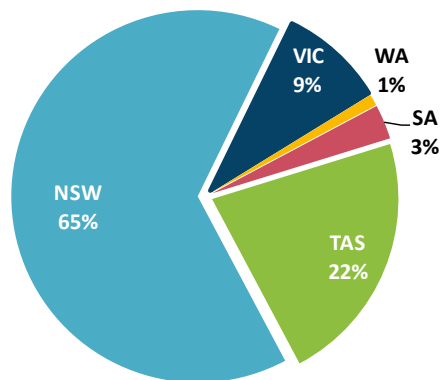
Walnuts are produced in the southern states of Australia, with the majority of production occurring in New South Wales. Major production regions include the **Riverina** in NSW; the **Goulburn Valley** and **Murray Irrigation Area** of Victoria; and the **Swansea** region in Tasmania.



Source: Wala



2018/19 Walnut Production by State



Source: WALA

Walnuts Harvest Season by State (In-shell)

State	18/19 Tonnes	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
New South Wales	7,995	■	■								■	■	■
Victoria	1,107	■									■	■	■
Western Australia	123	■									■	■	■
South Australia	369									■	■	■	■
Tasmania	2,706	■	■								■	■	■
Harvest legend		■	■	■	■	■	■	■	■	■	■	■	■
			Harvest				End of Harvest						None

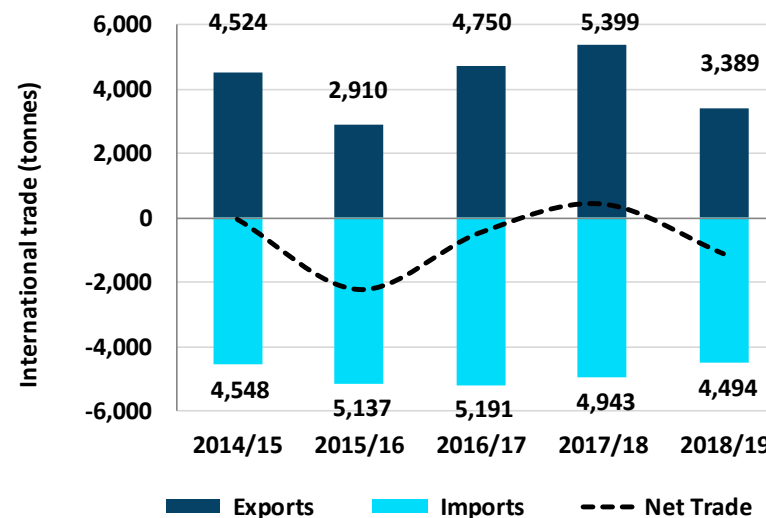
Source: AWIA

Walnuts International Trade

Australia has traditionally been a net importer of walnuts, although exports have been growing in recent years. For the year ending June 2019, Australia exported **3,181 tonnes** of in-shell walnuts (94% of walnuts exports) and **208 tonnes** of kernel walnuts (6% of exports), while importing **13 tonnes** of in-shell walnuts (<1% of walnut imports) and **4,481 tonnes** of kernel walnuts (99% of imports). The exports and imports over the last 5 financial years is profiled in the graph to the right, where imports are counted as negative tonnes. A large proportion of imports are classified as to which country they are sourced from.



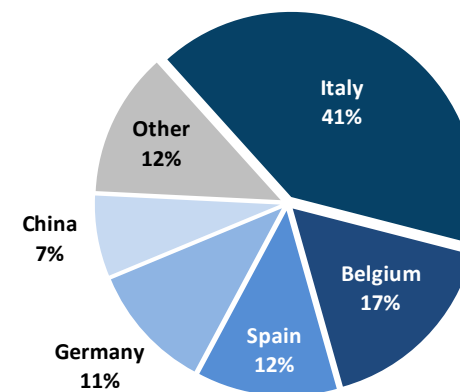
Net Walnut International Trade



Source: GTA

For the year ending June 2019, **41%** of exported walnuts were sent to Italy, as profiled in the chart below.

2018/19 Walnut Exports by Country



Source: GTA

Walnut Imports and Exports by State (both In-shell and Kernel)

Imports by state destination (Tonnes)				Exports by state of production origin (Tonnes)			
Year Ending June	2017	2018	2019	Year Ending June	2017	2018	2019
Victoria	2,995	3,285	2,779	New South Wales	4,663	5,341	3,352
New South Wales	1,480	1,055	1,174	Victoria	61	58	21
Queensland	354	321	323	Queensland	2	< 0.5	13
Western Australia	98	83	143	Western Australia	1	-	< 0.5
South Australia	264	199	75	South Australia	-	-	< 0.5
Other	-	-	-	Other	22	< 0.5	2
TOTAL	5,191	4,943	4,494	TOTAL	4,750	5,399	3,389

Walnut Imports and Exports by Country (both In-shell and Kernel)

Imports by country (Tonnes)				Exports by country (Tonnes)			
Year Ending June	2017	2018	2019	Year Ending June	2017	2018	2019
US	4,936	4,552	3,903	Italy	1,607	3,006	1,378
Vietnam	-	3	210	Belgium	839	239	563
China	38	217	144	Spain	457	463	413
Chile	167	113	142	Germany	451	419	370
Thailand	-	-	54	China	76	564	239
Other	50	58	41	Other	1,319	709	425
TOTAL	5,191	4,943	4,494	TOTAL	4,750	5,399	3,389

Source: GTA

