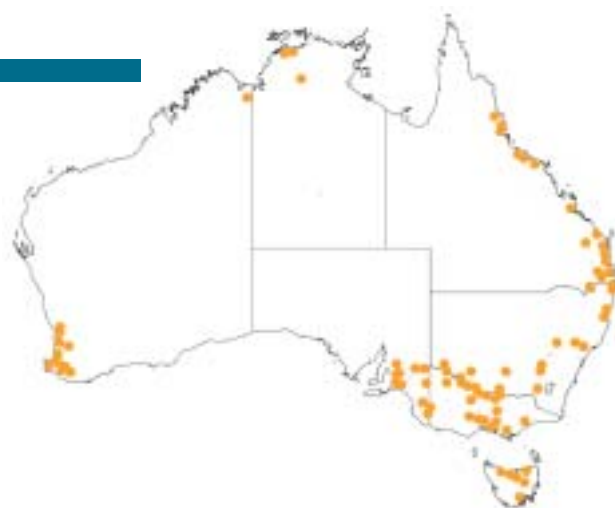


5 Horticulture



Location

Horticulture in Australia is extremely diverse and comprises fruit, vegetables, nuts, nursery products, extractive crops, cut flowers and turf. However, this summary discusses only the two main sectors: fruit and vegetables.

Because horticulture is intensive, the actual areas used are small compared with those used for other agricultural activities. Furthermore, horticulture requires reliable sources of water and so often occurs in major irrigation areas such as the Murrumbidgee Irrigation Area, the Ord, Sunraysia and the Murray Valley.

Industry features — fruit

Table 9 shows the major features of the Australian fruit industry, including its size, output and market orientation.

Table 9 **Overview of Australian production and trade of fruit**

	Unit	1993–94	2002–03
Production			
Bananas	kt	219	265
Oranges	kt	582	633
Apples	kt	307	326
Table grapes	kt	na	137
Pears (excl nashi)	kt	155	136
Other	kt	na	529
Total	kt	na	2 026
Gross value ^a			
Bananas	\$m	264	330
Oranges	\$m	299	345
Apples	\$m	309	390
Pears (excl nashi)	\$m	116	82
Other	\$m	485	1 016
Total	\$m	1 473	2 163

a In 2003–04 dollars.

b Fresh product.

c ABS 2001a, all horticulture, including fruit and vegetables.

na Not available.

Continued overleaf

Table 9 Overview of Australian production and trade of fruit (cont.)

	Unit	1993–94	2002–03
Export volume^b			
Oranges	kt	88	133
Apples	kt	36	32
Pears (excl nashi)	kt	27	18
Other	kt	na	79
Total	kt	na	302
Export value^a			
Oranges	\$m	90	149
Apples	\$m	48	42
Table grapes	\$m	38	97
Pears (excl nashi)	\$m	35	23
Other	\$m	85	186
Total	\$m	296	497
Employment^c			
Horticulture and fruit growing	'000		69.7

Sources: Horticulture Australia Limited; ABS 1995–96, 2001 a,b.

Markets

The Australian fruit industry is strongly oriented towards servicing the domestic market. Around 84 per cent of production in 2002 was consumed in Australia.

- Nevertheless, there is a growing export trade in fresh fruit. Producers and packers recognise the potential for good returns from servicing the rapidly expanding demand for fresh product, particularly in Asia, where consumer incomes in a number of countries are growing relatively strongly.

With some exceptions, the major export markets for Australian fruit are in Asia. In 2002–03, the main markets for oranges were Malaysia, Hong Kong and the United States; for apples, India, Malaysia and Sri Lanka; for table grapes, Hong Kong, Malaysia and Indonesia; and for pears, Singapore, Malaysia and Indonesia.

Ongoing multilateral and bilateral trade negotiations aimed at achieving improved market access for agricultural products will be important to the future expansion of the Australian horticulture industry.

- Areas of trade policy concern include export subsidies, domestic supports and quarantine measures.
- Australia's relationship with China is particularly important to horticulture, especially because China's accession to the World Trade Organization means that negotiations under the WTO Agreement on the Application of Sanitary and Phytosanitary Measures must be concluded before Australian horticulture products can be accepted into the Chinese market.

The continuous development of increasingly efficient and flexible supply chains for Australian horticulture products will be essential in meeting the changing demands of domestic and offshore consumers, and in adjusting to the rapid changes occurring in global retailing channels.

- With the Australian horticulture industry lacking critical mass in many export markets, horizontal and vertical cooperation and collaboration will be important to the development and operation of successful supply chains.

Industry features — vegetables

Table 10 shows the major features of the Australian vegetable industry, including its size, output and market orientation.

Table 10 Overview of Australian production and trade of vegetables

	Unit	1993–94	2002–03
Production			
Potatoes	kt	1 185	1 247
Tomatoes	kt	327	364
Carrots	kt	195	306
Mushrooms	kt	39	39
Onions	kt	213	229
Lettuce	kt	93	122
Other	kt	683	391
Total	kt	2 735	2 698
Gross value ^a			
Potatoes	\$m	440	496
Tomatoes	\$m	225	231
Carrots	\$m	118	166
Mushrooms	\$m	199	198
Onions	\$m	138	129
Lettuce	\$m	77	108
Other	\$m	680	850
Total	\$m	1 877	2 178
Export volume ^b			
Potatoes	kt	15	30
Tomatoes	kt	5	3
Carrots	kt	35	76
Onions	kt	60	36
Lettuce	kt	3	3
Other	kt	na	47
Total	kt	na	195
Export value ^a			
Potatoes	\$m	7	13
Tomatoes	\$m	10	7
Carrots	\$m	27	48
Onions	\$m	40	26
Lettuce	\$m	7	6
Other	\$m	127	99
Total	\$m	218	199

a In 2003–04 dollars.

b Fresh product.

na Not available.



Sources: Horticulture Australia Limited; ABS 2001 b.

Markets

Major export markets for Australian vegetables are mostly in Asia and the European Union. In 2002–03, the main markets for potatoes were Korea, Malaysia and Mauritius; for tomatoes, New Zealand, Singapore and Hong Kong; for carrots, Malaysia, Singapore and the United Arab Emirates; for onions, the Netherlands, the United Kingdom and France; and for lettuce, Singapore, the Philippines and Malaysia.

In Australia, fresh fruit and vegetables are sold through direct contracts with major retailers, through wholesale contracts or through fresh produce markets.

- Some grower groups have expressed concern that the fresh produce markets do not operate transparently, efficiently and fairly, and have sought regulatory intervention to ameliorate some of the perceived problems.
- In response, the Australian Government has agreed to introduce a mandatory code of conduct for fresh produce transactions under the Trade Practices Act.

Farm businesses

Although there do not appear to be any publicly available data on fruit and vegetable farm business performance, a number of general comments are relevant.

- Quality assurance systems are increasingly being adopted by growers and packers in response to market signals from retailers and processors.
- Food Safety Standards are also a regulatory driver for those who sell direct to the public or who process product on farm.
- Growers of various vegetables, apples, pears, summer fruit, cherries, mangoes and table grapes who are involved in trade with the United Kingdom or Europe are required to be certified to a specific protocol.
- Productivity gains in the horticulture industry will be important for international competitiveness and for determining the farm-level allocation of resources between the various fruits and vegetables and other industries.
- Water availability and cost are significant longer term issues for many Australian horticulturists.

Crop management

The diversity of crops and climates in Australia, while providing market advantages, also means there are a range of pests and diseases to be managed. Extensive quarantine arrangements attempt to prevent the arrival of new pests and diseases in Australia and the further dispersal of established pests such as fruit fly and potato cyst nematode.

Limited research into genetic improvement — and only for major crops, such as apples and grapes — is conducted in Australia. Most improvements come from direct introduction of new varieties through major international breeding companies.

Natural resource management

The horticultural industries are aware of the need to improve natural resource management. Integrated pest and disease management are well advanced, and environmental codes of practice and quality assurance systems are becoming more common. Challenges in production, and sometimes in processing, remain in water management, salinity, fertiliser losses, waste management and biodiversity conservation.

Employment and infrastructure

The Australian horticultural industry consists of more than 40 individual industries (or commodities). Employment in the horticulture and fruit-growing industry accounts for almost 25 per cent of overall agriculture sector employment. The individual industries are highly diverse in their size, operational complexity, organisational arrangements, maturity, and marketing and supply chain focus. Some industries are highly regionalised, while others are more broadly based.

The greatest industry employment is in Queensland (26 per cent of total industry employment in 2001), Victoria (22 per cent) and New South Wales (21 per cent).

- Farmers/managers make up only 40 per cent of those employed in the industry, with a large proportion of the remainder made up of skilled agricultural workers, particularly in harvesting and in associated areas such as transport, handling and marketing.
- Farmers/managers in the industry have a relatively low median age (47 years in 2001).

New and emerging horticultural opportunities

Asian foods

Australian demand for Asian foods is growing with the increasing Asian influence on cuisine. Australian producers' ability to undertake high-quality volume production and their ability to find niches give them a competitive advantage in supplying this market.

Culinary herbs

Changes in Australia's ethnic mix and lifestyle have greatly increased demand for fresh culinary herbs, and the industry has grown rapidly in both magnitude and diversity to meet this demand. Victoria and Queensland are the major producers, but significant production occurs in Western Australia, South Australia, New South Wales, Tasmania and the Northern Territory.

- The industry is thought to have 40–50 significant commercial participants, with a large number of smaller growers. Most production occurs close to markets, with about 90 per cent sold as fresh herbs.

Olive oil

Australian production of olive oil is currently very low at an estimated 1500 tonnes a year, but is expected to grow significantly. Although South Australia has historically been the state with the greatest output of olive products, plantings have expanded in recent years in New South Wales, Victoria, Western Australia and Queensland.

- It is estimated that 2006 current plantings will have the potential to produce up to 28 000 tonnes of olive oil a year by 2006, reaching 40 000–50 000 tonnes by 2011.

Institutional arrangements

Peak bodies

More than 40 peak industry bodies represent growers of diverse horticultural crops (fruits, nuts, vegetables, nursery products, flowers and turf).

The Horticulture Australia Council is the peak body representing growers' interests to government on issues affecting the entire industry. Other peak bodies represent areas of the supply chain, for example the central wholesale markets, while Growcom is an agri-political organisation representing Queensland growers of fruit and vegetables.

Marketing and research and development arrangements

The industry-owned company Horticulture Australia Limited (HAL) provides marketing and research and development for the benefit of the horticulture industry. HAL receives grower levies and voluntary contributions, together with matching government funding (up to a maximum of 0.5 per cent of industry gross value of production) for eligible research and development expenditure. Currently, 23 horticultural industries have in place statutory levies that are paid to the company. HAL also administers export control powers for selected commodities to selected markets.

In 2003–04, HAL spent \$9.3 million on marketing programs and \$57.3 million on research and development projects. Research and development expenditure focused on supply-chain management, quality assurance and food safety, skills development and industry communication, post-harvest biosecurity, biotechnology, breeding and evaluation, protective cropping, plant health, agronomy, crop regulation and physiology, irrigation, sustainable practices and technology transfer.



Industry outlook

Key factors for the future include the following:

- continuing productivity improvement for Australian horticulture in all parts of the supply chain, with the industry's reliance on high-cost labour (relative to international competitors) being a major challenge
- support policies in major producing, exporting and importing countries and their effect on how Australian horticulture exports expand
- management of product marketing issues in Australia and its influence on industry structure at grower and wholesale levels
- continuing developments in technology and its impact on access to information, farm management, labour productivity and environmental practice and monitoring
- maintaining and improving quality assurance and food safety to meet export market requirements, particularly for the European Union
- best-practice policies in pest and disease management in addressing biosecurity issues.