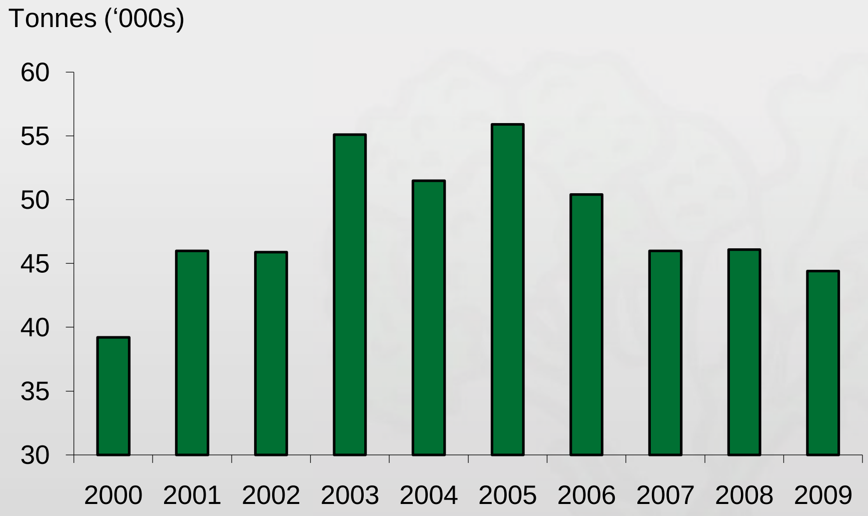
Vegetable Spotlight – Broccoli

Summary

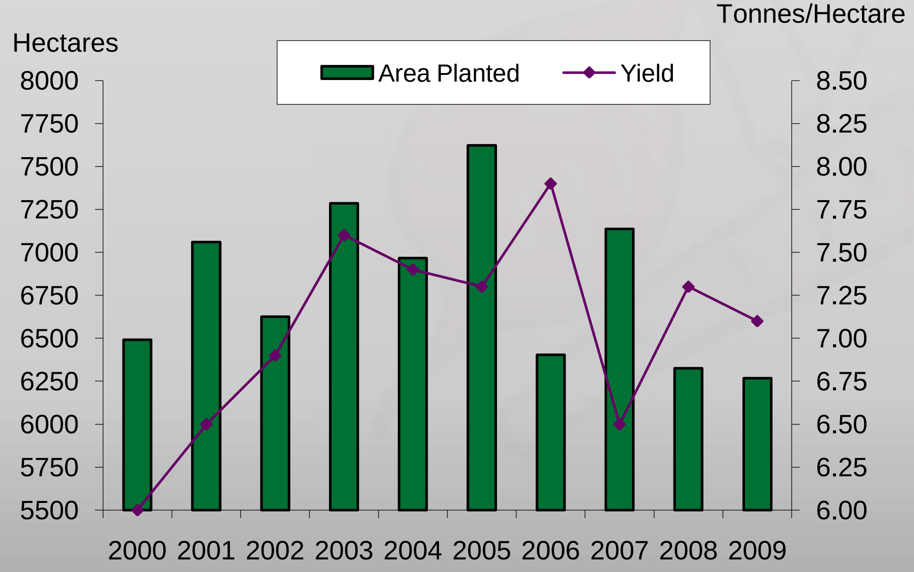
- Broccoli is Australia's 10th largest vegetable crop in terms of value, accounting for 3.4% of total vegetable production with a gross value of $101.2 million in 2008/09.
- Production fell by 4% in 2009 to 21% below its level in 2005.
- The area planted fell by 1% in 2009 to 6,268 hectares, down by 18% from a peak of 7,263 hectares in 2005.
- Australian broccoli farmers were successful in improving yields significantly between 1998 and 2006. This upward trend has not been sustained since then.
- Victoria is the largest producer with 50% of national production in 2009. Production in the other states ranged from 1.5% in South Australia to 20% in Queensland in 2009.
- The gross value of broccoli production rose by 9% in 2009 to its highest total in the reporting period.
- The total number of growers rose from 348 in 2008 to 406 in 2009.
- Australia runs a positive balance of trade in broccoli. The value of exports rose in 2008/09, but the longer term trend is a significant decline over recent years.

Production

National Production



Area Planted v Yield



The Australian Bureau of Statistics employed a new methodology for collecting data for the 2005/06 Agricultural Census. As a result, the data generated from that and subsequent years – such as production volumes, area planted and yields –is not directly comparable to historical statistics. Readers should use this material with caution.

Current Australian Broccoli Production

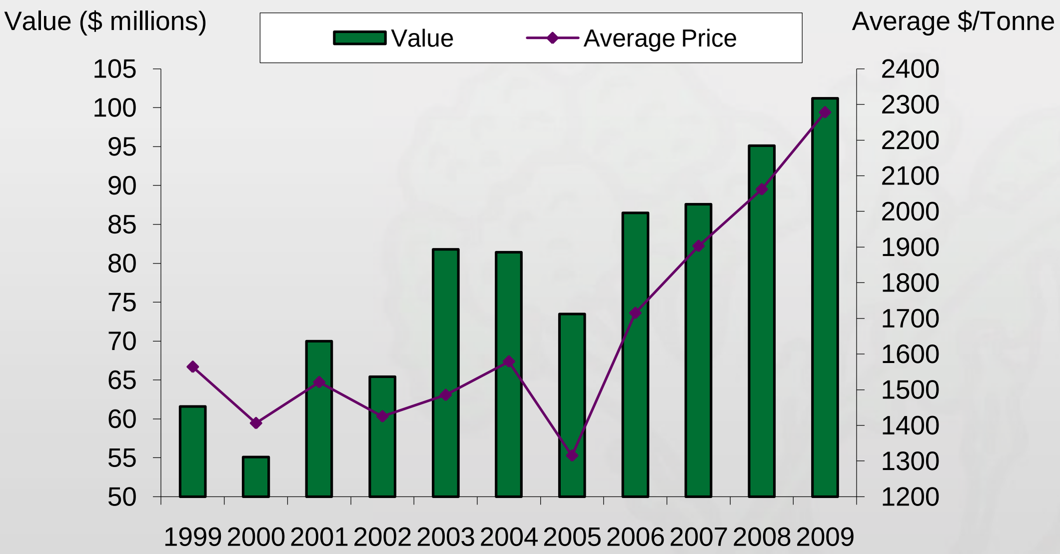
- Australian broccoli production fell by 4% in 2009 to 44,418 tonnes.
- The area planted fell by 1% in 2009 to 6,268 hectares.
- Yields fell by 3% in 2009, to 7.1 tonnes per hectare, slightly reversing a gain of 12% in 2008.

Long Term Production Trends

- Broccoli production in Australia declined by 21% in cumulative terms between 2005 and 2009.
- The area planted has fallen by 18% since a peak of 7,263 hectares in 2005.
- Australian broccoli farmers had enormous success in driving efficiency gains by raising the yield of the crop by 46% from 5.4 tonne/hectare in 1998 to 7.9 tonne/hectare in 2006. Yields have been volatile since then and in 2009 were 10% below peak levels in 2006.

Production

Value of Production



Price Per Tonne

Domestic Value of Production

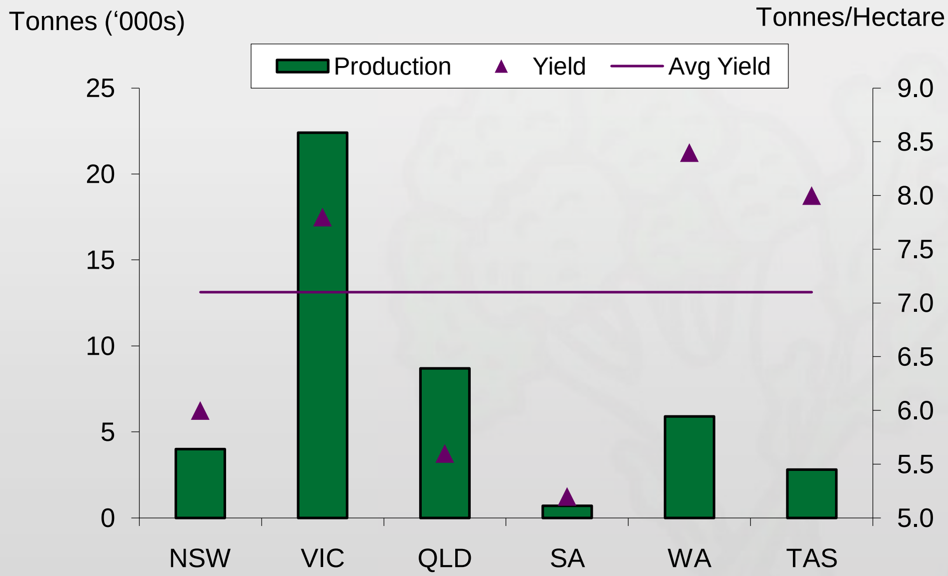
- The gross value of broccoli grown in Australia in 2009 was $101.2 million, an increase of 6% on the previous 12 months and the fourth consecutive annual increase.
- The annual value of production in 2009 was the highest annual total in the reporting period and 64% above the 1999 level.

Broccoli Pricing

- Average prices based on production estimates rose strongly in 2009, extending the pronounced upward trend since 2005.
- Export prices also rose in 2009 with a similar pattern to domestic prices.
- In recent years, Australia has imported broccoli in very small quantities. Prices have been excluded from the chart as they may not provide an accurate indication of actual levels.

Production

Production v Yield



Vegetable	Average for 3 years ending 1999(kg)	Average for 3 years ending 2009(kg)
Broccoli	1.7	2.0
Carrots	11.1	9.8
Potatoes	70.5	61.6
Tomatoes	22.0	20.9

State Broccoli Production

• Broccoli production is concentrated in Victoria, which accounted for 50% of the national total in 2009. Queensland and Western Australia are the next most important, accounting for 20% and 13% of the total respectively in 2009. Production is minimal in South Australia with a share below 2%.

• There are significant year-to-year fluctuations in production in individual states. In 2009, production fell by 29% in Queensland and by 19% in New South Wales, with smaller declines in Western Australia and South Australia. Production rose by 15% in Victoria and by 6% in Tasmania.

• Yields in 2009 ranged from 5.2 tonne/hectare in South Australia to 8.4 tonne/hectare in Western Australia.

Broccoli Consumption

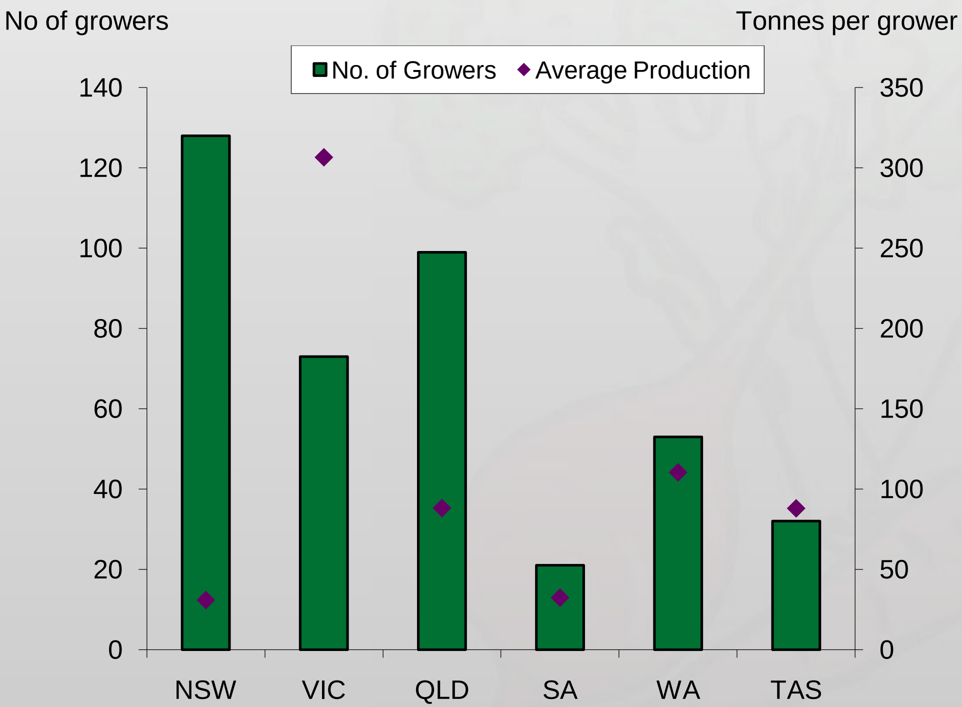
• Data on consumption is fragmented and anecdotal.

• Based on official production data and population statistics it is estimated that annual consumption has risen in recent years to around 2.0 kg per capita.

• Comparisons with estimates of per capita consumption of some other major vegetables are presented in the table to the left.

Production

Broccoli Growers by State



- The total number of broccoli growers in Australia rose from 348 in 2008 to 406 in 2009.

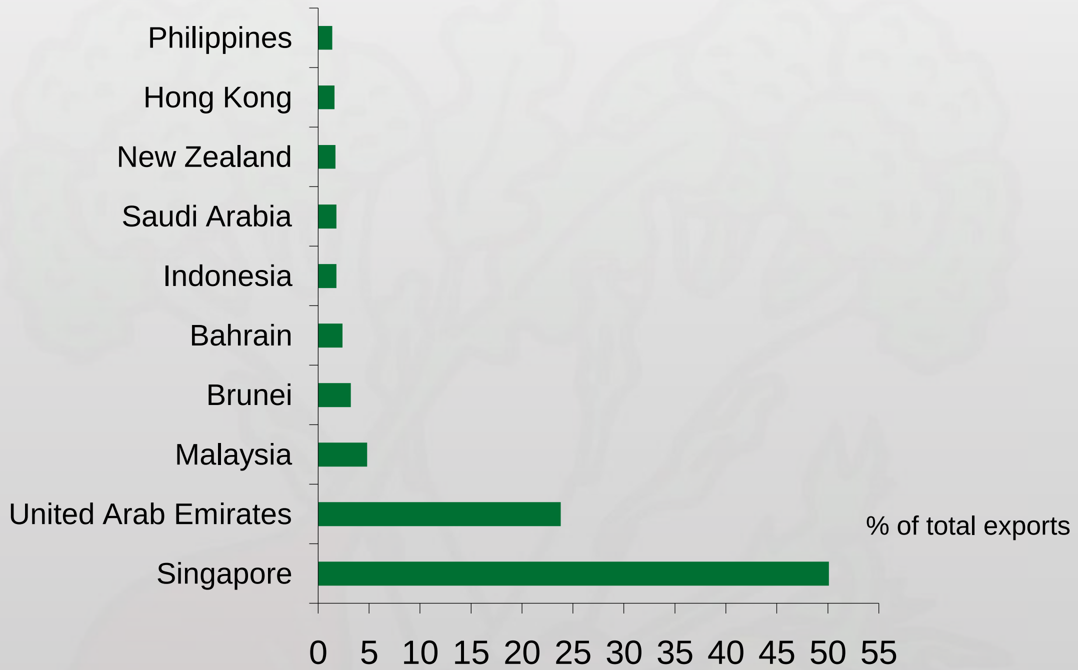
- There were increases in the number of growers in all states except Western Australia. The biggest increases were in New South Wales, where the number of growers rose from 82 in 2008 to 128 in 2009, and Tasmania from 21 to 32 over the same period. The number of growers in Western Australia declined from 60 to 53.

- The big increase in growers in New South Wales in 2009 raised its share of the national total to 32%, overtaking Queensland with 24%. However the scale of growers in NSW is generally small.

- Average production per grower is highest in Victoria with an average of 307 tonnes per grower, approaching three times the national average of 109 tonnes. Production of 110 tonnes per grower puts Western Australia just above the national average..

Exports

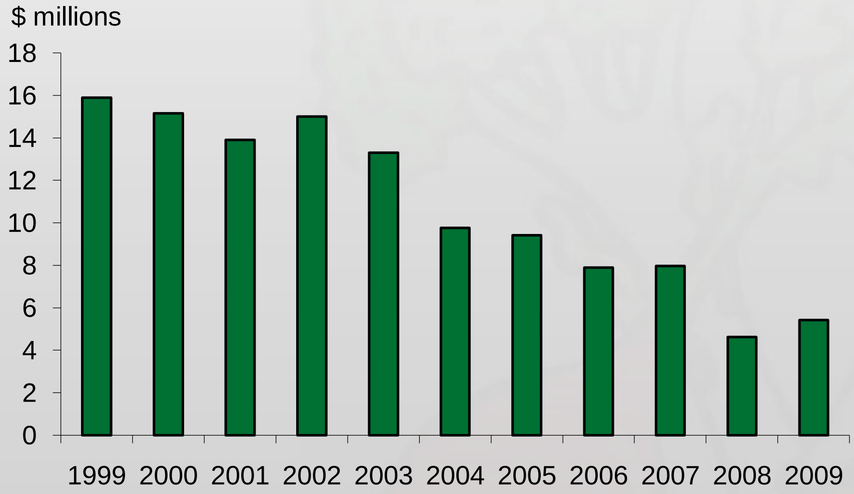
Characteristics of Australian Broccoli Exports



- Exports are exclusively fresh with the main markets in South East Asia and the Middle East.
- Singapore is the most important market, accounting for 50% of exports in 2008/09. South East Asia accounted for over 60% of the total. Malaysia is the second most important Asian market but accounted for less than 5% of exports in 2008/09, down sharply from 30% in 2001/02.
- The United Arab Emirates has been the second most important market since 2004/05. The UAE's share of the significantly diminished export market has grown from 2% in 2001/02 to 24% in 2008/09.
- Other markets in the Middle East include Bahrain and Saudi Arabia.

Exports

Value of Broccoli Exports



- Broccoli exports rose to by 17% in 2008/09 from the previous year to $5.4 million.

- The increase interrupts a long-term decline which saw broccoli exports decline from a peak on $18.1 million in 1997/98, to $4.6 million in 2007/08. The decline over recent years reflects the growing dominance of China in this labour-intensive market.

- Imports of broccoli are negligible.

Market

Market Segments

•The broccoli market consists of the fresh market segment and the processed segment (which is predominantly composed of freezing.)

•Broccoli can either be of the sprouting or heading variety. There are a wide range of broccoli varieties such as calabrese, romanesco, green comet, mercedes and emperor

•Despite the different varieties of broccoli available, most stores only stock the calabrese variety.

•A recent addition is booster broccoli which contains 40% more more active antioxidants than regular broccoli varieties. and has been scientifically proven to contain significantly higher levels of the powerful antioxidant, sulforaphane than other regular varieties of broccoli. The sulforaphane in Booster Broccoli works by triggering enzymes that help eliminate toxins, to enhance the body's own defence system. Regular consumption of foods containing SF is suggested to have a significant preventative effect in heart disease and a range of cancers.

Market Access

- Domestic markets are free and there are no restrictions on broccoli production.
- Imports of fresh broccoli are free to enter Australia whilst a 5% tariff applies on frozen broccoli (4% for developing nations)
- Access to foreign markets is reasonable with freight costs being the major barrier to expanded exports.
- Exports to Singapore and Malaysia do not incur a tariff.
- The only significant tariffs in place in the region are in Taiwan, the Philippines, Korea and Vietnam with tariffs of 27%, 25%, 20% and 15%(phasing down to zero in 2017)respectively.

For further details on these statistics please contact AUSVEG on (03) 9882 0277.