Australian Organic Market Reporting - Tracking Horticultural Organic Growth, Trends and Markets

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Biological Farmers of Australia Ltd

Project Number: HG08080

HG08080

This report is published by Horticulture Australia Ltd to pass on information concerning horticultural research and development undertaken for the hort general (not industry specific) industry.

The research contained in this report was funded by Horticulture Australia Ltd with the financial support of Biological Farmers of Australia.

ISBN 0 7341 3055 4

Published and distributed by:
Horticulture Australia Ltd
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HAL

Horticulture Australia

Horticulture Australia

HAL Project Number: **HGO8080 (November 2012)**

Project Title:

"Australian Organic Market Reporting"

Author: Andrew Monk*

* This report is based on excerpts from, and therefore is a modified and condensed version of: Monk, A, Mascitelli, B, Lobo, A, Chen, J & N Bez, 2012. *Australian Organic Market Report 2012*, BFA Ltd, Chermside, Brisbane, Australia

Research Provider: Biological Farmers of Australia Ltd

HAL Project Number: HGO8080 (November 2012)

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Statement about the purpose of the report:

The project's purpose was to progress more effective research data collection, industry database development and market development mapping of the emerging organic horticultural sector, in the context of the wider organic marketplace and industry within Australia.

Acknowledgment of all funding sources:

This project has been funded by HAL using voluntary contributions from BFA Ltd and matched funds from the Australian Government.

Industry support from sponsors via BFA Ltd included:

Bellamy's; Citrolife; five:am; Freedom Foods; Inglewood Farms; Sydney Essential Oil Company; Australian Organic Meats; SeaSol; Moraitis; Kadac; Angove Family Wines; and Wray Organic.

Departmental and financial support was also obtained from the SA Government; TAS Government; Victorian Government and VOIC (industry group); and the WA Government.

Date of the report: November 2012

Media Summary

The organic market sector in Australia has been growing, and there is clear demand signaled from the major supermarkets to obtain more such produce. The challenge for the organic industry has been to rise to meet this demand, and to track progress and developments within the sector.

The project "Australian Organic Market Reporting" arose due to the recognized need from within industry, including retailers, to increase the understanding of the organic marketplace and the nature and extent of organic producers across sectors.

Since this program began it has become evident that this report is being used as an important tool by producers benchmarking their own investments and developments in the sector. This report also is playing a vital role in information dissemination to those either involved in, or looking at investing into, this market and industry segment.

The project objectives included creating a focal point for the collation of more reliable data sets to track industry growth, in what is a very fractious and diverse industry and marketplace. The project has produced two reports, in 2010 and 2012, being the Australian Organic Market Report, creating a tracking mechanism for past and future growth for the industry.

The benefits and outcomes to further the development of the organic horticulture industry have included:

- The solid establishment of biennial research and reporting on industry development;
- The provision of information and data for industry stakeholders to base business and research investment decisions on;
- Information on trends in the consumer marketplace to assist producers and others in the supply chain in understanding the organic demand and meeting this demand.

The industry is now reliant on, and expectant of, this biennial report as part of a longer term tracking and benchmarking tool for the industry, while continuing to play a crucial role in production and investment decisions for horticultural primary producers and others in this supply chain through to retail.

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1. INTRODUCTION AND PROJECT OBJECTIVES

Background to the Project

The Australian Organic Market Reporting program arose due to the recognized need from within industry, including retailers, to increase the understanding of the organic marketplace and the nature and extent of organic producers across sub-sectors. Since this program began it has become evident that this report is being used as an important tool by producers benchmarking their own investments and developments in the sector. This report also is playing a vital role in information dissemination to those either involved in, or looking at investing into this market and industry segment.

The project objectives included creating a focal point for the collation of more reliable data sets to track industry growth, in what is a very fractious and diverse industry and marketplace. The project also aimed to produce two reports, in 2010 and 2012, being the Australian Organic Market Report, to create a tracking mechanism for past and future growth for the industry. Lastly the communication and dissemination of these reports via industry seminars, via the media, and other private or industry specific forums has been a key focal point of the project to enable a wide uptake and use of this research and report.

'Organic' is a labelling term that denotes products that have been produced in accordance with organic production standards and certified by a duly constituted certification body or authority.

Organic agriculture is based on minimizing the use of external inputs, avoiding the use of synthetic fertilisers and pesticides … methods are used to minimize pollution of air, soil and water.

Organic food handlers, processors and retailers adhere to standards to maintain the integrity of organic agriculture products. The primary goal of organic agriculture is to optimize the health and productivity of interdependent communities of soil life, plants, animals and people.

Codex Alimentarius, Food and Agriculture Organization of the United Nations, Food Standard CAC/GL 32 1999: Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods

The process/methodology

This Australian Organic Market Report 2012 combines research reports from Swinburne University of Technology, Melbourne, the Australian Bureau of Statistics (ABS) and Mobium Group Pty Ltd.

In line with the Australian Organic Market Report 2010, Swinburne undertook independent surveys to collect data on the level of organic production and sales in Australia in terms of volumes produced and financial value to the individual sector level. Additional questions were asked in relation to business sentiment, plans for expansion or contraction in the current and next year and financial margins achieved in comparison with past years.

In building on the 2010 and 2008 reports the aim was to achieve survey-style consistency across years, whilst improving on the format and simplicity for respondents. Results from the Agricultural Census, July 2011, are also included in this Report for the first time, as it pertains to organic primary production.

A specific question set was developed to capture the required consumer data to meet project objectives in 2009. This research was conducted again in 2010 and 2011 and repeated in 2012. The survey for this Report was for value adding and marketing (non-primary production) sectors, post-farm gate to retail, including export and import. ABS covered organic primary production in the 2011 Agricultural Census.

A simplified and modified version of prior year reports, the questionnaire remained aligned with ABS categories for integration of data. The survey content was reviewed during a pilot phase by a range of organic industry sectoral representatives and researchers. Direct email to industry was based on existing known databases of the organic industry, from extensive prior research work. This approach ensured the majority of the industry was reached, where individual private certification agencies did not or do not divulge publicly their client lists. The requirement more

recently of the USDA to mandate public lists of certified clients (four Australian certifiers maintain an accreditation with the USDA NOP) – along with the presence of Sensis and other public data on certified organic businesses, including that provided by public industry organisations – enabled researchers to reach the vast majority of the post farm-gate industry sector via this online surveying.

Within the framework of the online survey, organic industry operators were segmented into two categories: wholesaler/retailer and manufacturer/processor. Within these two categories respondents were provided with eight sectors within which they could respond. The organic sectors included: meat; dairy; fruit/vegetables; bread/bakery; wine/beverages; grocery; textiles; and skincare. The questions that respondents from each of these organic sectors were asked included: sales breakdown; primary sales outlets; sourcing of the product; the primary distribution outlets; and export and import markets. Questions in relation to business sentiment, margins on sales and related expected trends were also asked.

National production data for the sectors has been calculated with the use of ABS data, along with the post-farm-gate surveys and related research, and crosschecking of other publicly available data by Swinburne. This research approach has been bolstered and crosschecked via interviews from supply chain members from primary production, through processing and wholesaling, to retail. Additional crosschecking was possible via domestic retail tracking agencies such as Euromonitor and IBISWorld, along with publicly available data from certification organisations and other market sources.

The online post-farm-gate survey was distributed to 747 companies; 347 fully or partially completed the survey (46.45%) with 149 comprehensive responses (19.94%). This is a considerable increase from the 2010 and 2008 survey response rates. The time period of the survey was 25 days during August and September 2012. As a form of data validation of the survey results, an interview process was also undertaken of the key players. Thirty-two interviews with important and representative players from the eight key segments of the organic industry were also undertaken to cross-validate sectoral values and assumptions, while also seeking additional qualitative data. In addition, all Australian based certification organisations were informed of the survey and requested provision of crosschecking and supportive data, with the three largest certifying bodies providing information for this Report.

The term ‘organic’ in the Report is used to indicate farms at all stages of conversion to certified organic, from pre-certification, through in-conversion status, to full certified organic status. This is in line with internationally recognised production and marketing requirements for farming, value adding and marketing. The term ‘organic’ in this Report encompasses and subsumes a category of the organic market sector, biodynamic production and marketing. This Report and the research behind it has utilised data from certified organic (and certified biodynamic) operations only (and not operations that may claim organic status but are not certified by any recognised industry standards and certification programs) in calculating all values in this Report.

Other data sets

DAFF Export Organic Program (formerly AQIS) regrettably now collects (collates and reports) little data from accredited certifiers beyond the number of organic operators in the supply chain, the area used for organic agriculture and the volume of exported organic produce. The data that is collated is reported to the EU under privacy provisions between these governments. Such data that is publicly available, along with sectoral business reporting data and other available market information and research, were crosschecked for validity and reliability before being reported in this research or used as part of the basis for estimating sectoral values.

As with previous industry reporting (Halpin 2004; BFA 2008 and 2010) private certifier data (estimated to make up some 20% of the industry numerically by primary producer operator, but less than 10% by non-primary producer operator) was largely unavailable due to confidentiality requirements or demands within those types of agencies. This was managed by taking a cross-sector review of market values as reported by the market itself, adjusting for overall values obtained by accommodating this missing data set, as well as crosschecking values via other information available as noted above. The direct emailing out to all publicly known organic operators, irrespective of certification agency involvement, also ensured as wide and deep a pool as possible to sample the industry.

The approach of only using the survey format for post-farm-gate operators has enabled a greater simplicity and, in turn, reliability to the data collected for this research. Further, an inordinate amount of energy, time and cost was required – with much variability and 'noise' in the results – to obtain and interpret data from a wide range of primary producer sectors in past reports. The ability to obtain similar volume and value data from post-farm-gate sources including surveys has greatly simplified that part of the research process for future reports, along with the use of such information as the ABS Agricultural Census data.

Australian Bureau of Statistics Agricultural Census data

Results from the Agricultural Census, July 2011 are also included in this Report for the first time, as it pertains to organic primary production. Additional investigative research was requested of the ABS to analyse the key questions in this Census relating to farm values and volumes by sector, which in turn could then be compared with, and crosschecked against, the post-farm-gate surveys and research.

Farm numbers, hectares certified and main farming activity are now tracked by the ABS due to two key questions relating to certified organic status, and area of farm certified. Answering positively to such questions then enables the ABS, with additional research, to collate respondents into separate sectors and production volumes based on responses to all other questions in the Census. Additional assumptions and estimations have to be made of overall values, volumes and areas under certification due to the existence of some operations having split (or partial) certification. In such instances a conservative approach has been taken to estimate value (taking the lower number of value reported from such data).

While the ABS data is robust for those respondents who have completed that section of the Census, clearly based on other available data on the industry the reporting of certified operator numbers is significantly lower in the ABS than it is from other known industry sources. This, combined with the consequent potential underreporting on volumes, areas and values for each sector, has been taken into consideration in the overall Report and in terms of estimates of values for each market sector.

Having noted this, a conservative approach has been taken in these cross-estimates. This additional data source (of the ABS), even though available to the organic industry now only every five years, is a welcome and important additional source of information when conducting research into the organic industry.

As was the aim of the 2010 Report, surveys and categorisation was built upon the ABS-style industry categories for consistency. This has enabled a smooth transition to this new form of data collection, while building on the progressive chronological benchmarking of industry from 2008 through to 2012.

Consumer data

Consumer data has been based on the research conducted by the Mobium Group. A specific question set was developed to capture the required consumer data to meet the project objectives in 2009. This research was conducted again in 2010 and 2011 and repeated in 2012, with an expanded range of questions relating to country of origin and retailer of origin consumer perceptions, along with identification of recognised organic brands in the Australian marketplace. While the question sets each time have included new questions, each research round has included directly comparable questions with the first research round conducted in March 2009.

The organic relevant question set was executed in conjunction with the Mobium Group Green-Tracker quantitative research study (see section 5 and the outline of LOHAS in this Report) resulting in the final report called Organic Participation & Perceptions: Australian Consumer Research 2012. A secure online survey was used to manage the data collection. A random sample was recruited from an ESOMAR (World Association of Opinion and Marketing Research Professionals) compliant, national research only, consumer panel.

A target sample size of over 1000 was specified with a series of quotas to ensure the configuration was consistent with the Australian Bureau of Statistics Census 2011 national profile. The primary audience was adult Australians aged 18–69. Key filters included: gender; geography; age; and income. The data was collected over seven days in May 2012. Mobium is a member of the Australian Social & Market Research Society (ASMRS). All research

methodologies, data collection, analysis and reporting was conducted in accordance with the ASMRS Code of Conduct.

Outcomes

The key outcomes involved the publication of two industry documents in 2010 and 2012 respectively both named the Australian Organic Market Report, building on a 2008 report commissioned by the BFA Ltd. These reports are available for industry via free download at bfa.com.au or via internet search of Australian Organic Market Report.

These reports comprehensively cover the sectors that make up the Australian organic industry, and report in more detail on the outline below under the heading Market Reporting.

These publications were followed by industry presentations to retailers, industry groups, government agencies and commercial companies interested in improving the supply chain for organic produce, or reviewing their investment in this market sector.

The biennial reports have become a critical tool for this industry sector in benchmarking growth, tracking progress and enabling primary producers and others involved in the supply chain to make informed decisions about their farming or food industry investments in this market sector.

Australian organic industry overview

The period since the Australian Organic Market Report 2010 has brought mixed blessings for organic business people. For many there have been bountiful outcomes, while others have been on the receiving end of being rationalised, out competed or simply bought out. Some have discovered they cannot keep up with demand. Farmers and retailers have lost fertile and reliable markets.

The organic industry has experienced solid growth in demand for certified organic products in Australia. There are more people consuming organic products now than in 2010.

The Australian organic sector remains a shining example of industry self-regulation. Australia is one of the most open organic markets in the world, enabling relative ease of trade in ingredients and new products. This is not always a reciprocal situation for exporters, who face red tape and differing certification and standards in importing countries.

Some organic businesses have been squeezed by cheaper imports and relentless big retail pressure on pricing. There has also been innovation and collaboration to establish efficient and resilient cooperative marketing ventures.

In horticulture, the likes of Organic Farm Gate, a marketing network of primary producers, enable better planning and supply management in selected crop lines. While some of this is then directly marketed and supplied into end markets, it also builds volumes and capacity in their respective market segments for their competitors. Organic horticulture has also seen the entry and establishment of well-known larger scale conventional primary producers such as Coolibah Herbs and Mulgowie Farming Company.

The message here is that it is difficult to go it alone or without scale and a diversity of produce types and growing areas.

Ease of access to organics remains one of the largest barriers for consumers. It is a challenge not just for the producer or processor but also for the whole supply chain to address. Without profitable or economically viable means of producing certain crops at the prices demanded at retail level, there will be no suppliers willing to move into that domain in the short to medium term. This has rendered some sectors and subsectors of the industry in a state of frozen animation, where known consumer demand and potential simply isn't and can't be met due to lack of product on shelves that consumers walk past daily.

The experience of Moraitis, one of Australia's largest (conventional) wholesalers of fresh produce indicates a pathway that may assist in partial resolution of this impasse. Ensuring a reasonable return to the farmer – that reflects the potential additional risk taken on by that farmer and a fair return for the additional production costs of organic, while cutting out some of the usual margin at both wholesale and retail – has seen a significant growth in volume of product supplied in the past two years (Dench McClean Carlson 2012).

Growth prospects

The Australian Organic Market Report 2010 showed a 48% increase in farm-gate sales in the two years to 2010 and industry retail value estimated at $947m. With a break in drought conditions, though not without other challenges outlined in this Report hampering some sectors, further growth of $1.276bn including exports has been experienced in the two years to 2012.

'Easy gains' of industry value growth could be over. Growth is continuing but with far tighter financial margins and more realistic expectations of growth of 10–15% per annum. Backed by separate research findings and claims (IBISWorld 2012a), these estimates still put organics in one of the 'top five growth industries' in Australia in 2012.

Growth in the coming years is expected to remain respectable and well above conventional food and beverage market growth. There will also be standout sectors and businesses that grow well beyond this average.

The challenge for the organic industry is to manage the further squeezing of margins while remaining financially viable and able to invest in innovation and business development to keep up with changing consumer demand of specifications.

Horticulture has continued to experience flattening of margins and mixed communication about market requirements. Some primary producers have remained solid in the face of changes within the sector (though often taking hits to the margin). Organic primary producers continue to experience pressures on margins and expectations of 'get bigger or get out'.

Some in the larger end of the horticulture sector haven't survived industry changes and have closed or gone into administration in the two years to 2010, including Ladybird Organics, Clyne Foods and Kailis Organic Olive Groves. The latter was put into administration in 2011-12 with a mixture of a high Australian dollar, a tighter environment in which to raise equity and debt and a flood of cheap olive oil all impacting.

In the food services sector, catering providers such as Original Foods and Organicus failed to achieve market support and profitability and faced liquidation in Melbourne and Sydney respectively. In contrast some award winning and leading restaurateurs have successfully championed organic food and beverage. Mark Best of Marque and now Pei Modern is one of the latest entrants into this (high value food services) space and is doing exceedingly well in an environment that is washing away others who are possibly less stable, overcommitted and facing financial strains.

The growth in the range of organic lifestyle products is on display with the likes of cosmetics, boutique beers and mainstream wines and fertiliser products available on supermarket shelves and through export markets.

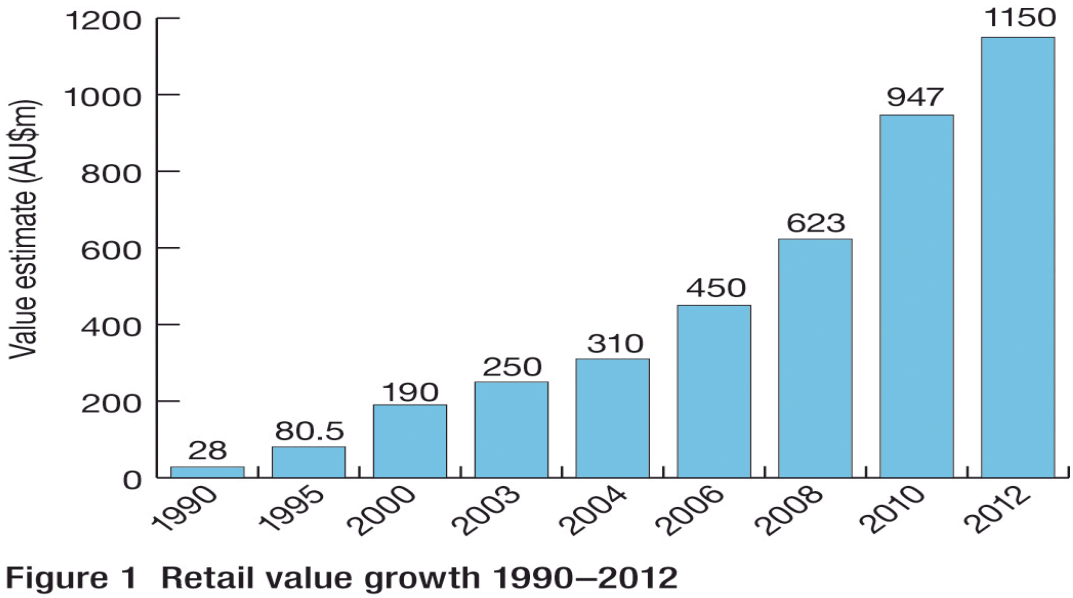

Figure 1 Retail value growth 1990–2012

Figure 1: Retail values organic products 1990 to 2012 ($AU)

Two faces of consumers

Increasingly evident are two types organic consumer: the traditional, who is often found in the minority 'Leaders' category of consumers (those more likely to purchase green products and be a leader in environmentally aligned practices) and the mainstream consumer. Traditionals are more likely to frequent independent retailers, farmers' markets and specialised organic greengrocers, whereas mainstreams are more likely to purchase at supermarkets and are possibly less interested in the broader environmental and social/welfare attributes of organic.

This divide is becoming more evident as the average organic consumer is arising increasingly from the mainstream rather than the traditional segment of consumers. The challenge for the organic industry is to meet the expectations of both consumer types while remaining relevant, as well as improving ease of availability and pricing.

Prices have rationalised to points that have seen new product ranges born or new consumers enter the market. The organic supply chain remains a fragile and easily disturbed or disrupted channel and one where short-term gains for retailers and consumers on lower prices may lead to longer-term bottlenecks arising from a lack of willing suppliers (either farmers or processors) to fill the demand at rationalised prices.

The ideal balance is pricing that keeps sufficient numbers of farmers and processors in business while supplying and satisfying the requisite number of consumers willing to pay a price they deem good value, even if that price is above conventional food prices.

While price/value remains the highest recognised barrier to the purchase of organic produce, this barrier has reduced since the AOMR 2010.

There remains a growing consumer interest in purchasing products with health, food safety, environmental and animal welfare benefits – attributes inherent in organic foods and beverages. There is also a growing number of consumers who dabble occasionally in organic foods, when the time, price and product take their fancy. Even a doubling of this consumer impulse will have a significant impact on industry growth. This is one thing that big retail does understand and is clearly trying to position on.

For organic industry stakeholders, the challenge is to rise to meet those demands, while remaining true to the ideals and compliance requirements of the organic standards and also remaining profitable and resilient to withstand the forces and distractions of this tense but exciting growth phase of the industry.

Value of organic market sectors

The estimate of Australian farm-gate sales of certified organic produce is $300,637,412 – a rise of 34.67% over the two years to 2012 or 16% per annum. Total sales from part or fully certified organic farms according to the ABS 2011 Agricultural Census is $432,211,807.

Beef, fruit and vegetables have the highest sales followed by dairy products. Fruit and vegetables are the most regular items purchased by consumers.

In 2001 industry estimated organic farm income was $89m, including organic goods sold on the conventional market (Wynen 2003). In 2003, Halpin (2004) estimated $128m for certified organic sales. In the Australian Organic Market Report 2010 the farm-gate value estimate was $223,224,003.

Commodity	National estimate 2012	National estimate 2010	National estimate 2004
Beef (including calves)	72,756,243	34,456,100	52,349,101
Fruit (plus grapes)	61,616,250 4,854,346	39,700,000	21,373,875
Vegetables and herbs (plus nurseries)	60,610,721 3,584,000	77,500,000*	24,384,964
Dairy products	29,225,572	17,914,000	7,410,000
Wool	25,360,226	826,993	nr
Lamb	18,643,215	11,307,000	2,915,387
Poultry (meat)	17,713,370	15, 349,000	353,337
Grains and oilseeds	17,006,447	9,456,000	17,565,525
Fodder (hay)	5,527,539	nr	nr
Honey	5,020,000	9,789,000	nr
Eggs	4,387,287	3,200,000	795,755
Nuts	3,408,732	2,234,824	with fruit
Goats	1,910,608	nr	nr
Essential oils	1,389,345	1,234,056	nr
Pigs	421,884	255,030	745,750
Misc.	3,627,000	nr	nr

nr = not reported in prior reports
NB: Wool, goats, fodder and misc. not included in total estimate farm-gate sales
*possible over-reporting with different methodology (non ABS)

Figure 2 Estimate of national sectoral farm-gate sales (AU$)

Australian organic farmers and farmland

In 2012 the number of organically certified farming operations is 2117. When added to 187 input manufacturers, 765 value adders and marketers, total certified organic operations within Australia are 3069 compared with 2986 in 2010.

A farming operation is defined as an agricultural business that may have multiple other farm unit holdings. The ABS records businesses only as an entire 'agricultural business' which may include multiple farm unit holdings. Only businesses with ABNs and registered as a primary production business are recorded within the ABS Agricultural Census.

The ABS reported 1520 primary producers as agricultural businesses in the 2011 Agricultural Census. The additional number of primary producers in the organic sector is estimated at 597, based on certifier reports to the researchers and crosschecking with other industry data.

There are 187 businesses that are certified in the farm inputs and approved products sector (fertilisers, crop management inputs and processing products) by the two main organic industry groups, BFA Ltd and NASAA Ltd.

The number of certified primary producers has been increasing over the previous seven years to 2010 at a net rate of 5% annually. The two years to 2012 has seen a slower growth in entry of farmers (as opposed to farm units), while there has been a significant increase on 2010 figures relating to numbers of post-farm-gate businesses (value adders and marketers).

New South Wales continues to dominate by number of certified operators. Queensland maintains relatively high numbers of certified operators per capita and remains with the largest area of certified land, while Victoria leads with manufacturing and higher value-added sectors such as dairy, as the majority of Australia's organic dairy farmers are currently based in that state. South Australia specialises in grape production as well as horticulture more generally, while Western Australia and Tasmania note production of pome fruits, olives and vegetables as some of their specialisations.

Vegetable and herb production

The organic vegetable industry is a diverse sector. Producers range in size and market orientation. Vegetable producers are feeling the pressure of reduced prices as volumes have increased. Underlying this remains unmet demand for consistent supply of quality products, particularly to the major retailers.

A limited number of medium to larger farms often produce only one or a few commercial crops, while smaller producers traditionally produce a broad variety of crops for local and sometimes state capital city markets. Many of the smaller farms are not captured in the ABS data, leading to an underreporting of operator numbers for this sector.

The organic vegetable sector has undergone considerable structural adjustment over the past few years with the entrance of major retailing chains, which in turn has created higher demand for produce. The expansion of some existing organic producers, combined with the entrance of some larger conventional producers, now with organic lines, has resulted in reduced farm-gate prices. It has also forced some to exit the industry, or market only to local markets, where before they may have supplied state capital markets.

This adjustment is evident in the direct supply of some product lines (from carrots to bananas) from larger producers, or networks of producers to retail markets where traditionally they would have gone through certified organic wholesalers. Conventional wholesalers with organic certification have also entered the organic vegetable market.

While some of the long-standing certified wholesalers have reported healthy increases in overall throughput as well as turnover, others have reported no significant increase in turnover over the past year. The latter are more likely to be suppliers exclusively to smaller independent retailers, where there is growth but also increased pressure on margins.

Some producer-driven cooperative marketing structures, such as the Organic Farm Gate, exist in this industry, though they are rare. Most producers, unless of considerable size, choose instead to market their products via the traditional wholesaling sector. Most capital cities have more than one organic wholesaler.

The 2010–2012 period was not an easy one for some producers, even with the end of drought. Some had been hit by fire (Vic) followed by floods (Vic, NSW, Qld), plague locust (Vic, NSW) and other natural challenges that have put some producers well behind production plans and have significantly strained finances.

Production was also reported as having been impacted by flooding in 2010-11 according to the conventional production report by ABARES (2011b) "… flooding in eastern Australia is estimated to have reduced agricultural production by at least $500–600m in 2010-11, with significant impacts on the production of fruit and vegetables …".

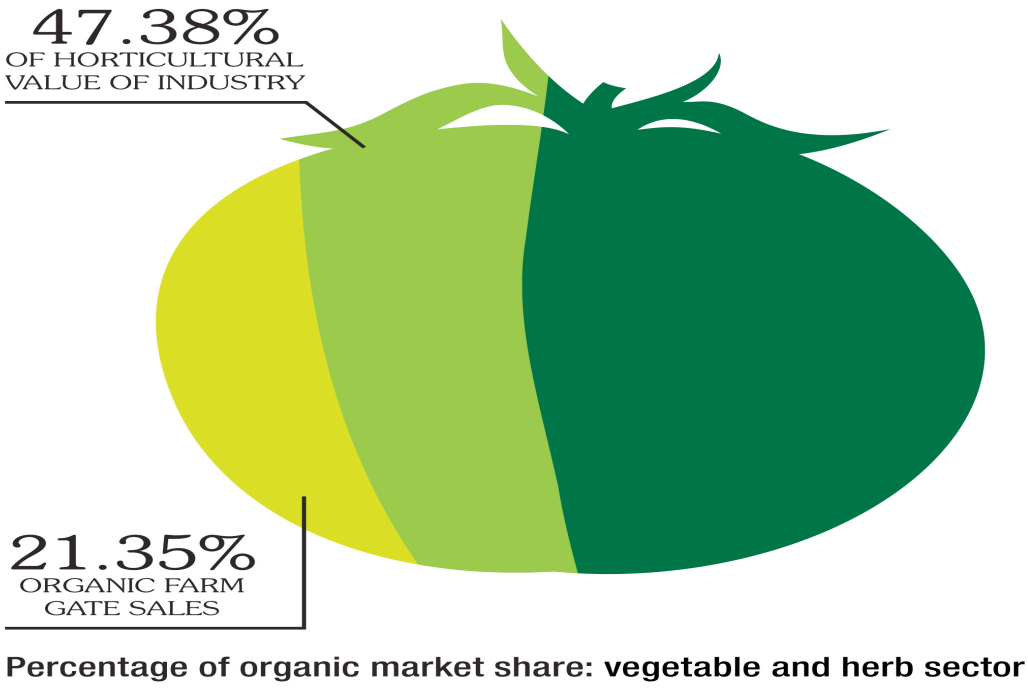

Figure 3 Percentage of industry value: vegetables and herbs

Sales and volume

The certified organic vegetable industry reports farm sales of $60,610,721, down from 2010 estimates. Reports of volume of production were stable from a range of producers and wholesalers, however prices per kg are generally lower than in the past two years. This is most likely due to the entry of larger producers who are supplying higher volumes into the major retail chains (ie and therefore bypassing traditional channels). This may account for some of the estimated lowering in overall value of this sector through this time.

The major value crops are carrots, potatoes, broccoli and pumpkins, while lines such as herbs ($2m), asparagus ($0.954m), sweet corn ($1.198m) and lettuce ($1.37m) filled niches in this market. The ABS categorisation means

that the 'other vegetables' category alone reported $11,031,614 in value, which would include crops such as zucchini, eggplant and capsicum. Some product lines such as tomatoes remain consistently undersupplied from a small number of producers and remain an opportunity for others to produce consistently to market specification.

Sectors not specifically covered in this Report include certified organic nursery production. Operations recorded by the ABS are in Western Australia, Northern Territory, South Australia, Victoria and Queensland, with Queensland rating the highest production of undercover nursery production. National farm-gate value for the nursery sector is estimated at $3.584m.

While operators are increasingly seeking certified organic seedlings there remains an undersupply of reliable, certified nursery material. While it is not mandatory to source certified organic seedlings (if not available in commercial quantities) the production and certification of seedlings for producers remains a market opportunity for nurseries.

Organic floriculture (flower farming) is in an infantile state in Australia, but with prospects as the market for organic lifestyles continues to develop. Areas in Queensland and Victoria are producing in this sector, however recorded retail sales of such products has not been researched or recorded.

Mushroom production was reported from four producers only in Victoria, Queensland and New South Wales.

Looking forward

The post-farm-gate surveys from processors and wholesalers makes this point clear: "The lack of a reliable supply of organic fruit and vegetables (for processing) in Australia has made it almost impossible to support local growers".

Larger retailers continue to cite lack of consistent volumes of supply of a range of staple organic vegetables as hampering the potential growth of this sector – this is despite many farmers claiming they are regularly stuck with product that cannot be sold on the organic market at a reasonable price.

Producers also cite pricing and cutting of margins to points where it is not viable for them to risk production of a given crop as the reason for not supplying. The work of wholesalers and retailers collaborating to establish more confidence in production and supply planning will be critical for this industry sector to move beyond this impasse.

Fruit (including olives and wine grapes)

Fruit has seen a significant rise in production and sales. Farm-gate value of fruit production is estimated at $61,616,250 (see below for values of wine grapes). In 2010 the organic fruit sector was estimated to be $39.7m (an increase of over 50% over two years). The 2010 figure may have been underreported (due to a low return on surveys from this sector) but this trend is also reflecting a growing sector experiencing new larger producers who are also involved in other commodities such as eggs, vegetables and meat, though also with the exit of some medium to smaller-scale producers.

Sixty per cent of organic consumers note fruit and vegetables as their most regular purchase. This sector still has significant room for growth.

Wine grapes have significantly increased in value, while apples, citrus and olives represent the other top-performing crops in the organic fruit sector for farm-gate returns. Apple production has expanded due to more regular demand for volumes from supermarkets, while olive production has expanded particularly in Western Australia.

Niche and seasonal crops such as berries have a small number of dedicated professional and productive producers, with a lot of potential to expand supply. ABS data from similar crops such as guava, jackfruit, lychees, dates,

rambutans and custard apples, did not report significant value. Other crops such as bananas recorded a $2.089m farm-gate value, while pineapples reported $0.774m.

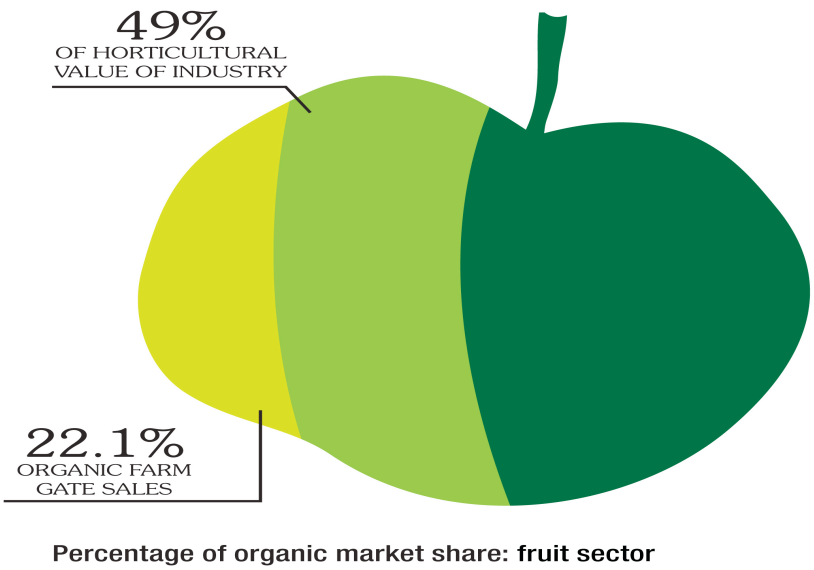

Figure 4 Percentage of industry value: fruits

Wine grapes

Farm-gate value for wine grapes is conservatively estimated at $4,854,346. Total farm returns, including those with partial certification of farm units or varieties, is $25.138m. This is indicative of large wine producers entering the market recently.

Farms with certification across the whole farm (greater than 95% of land) produced organic wine grapes to the value of $2,058,216. South Australia represented most of this production with $1,940,026 for fully certified farms and some 85% overall of estimated value of production nationally. Grape growing is also registered in Victoria, New South Wales, Western Australia and Tasmania.

Wine grape production has increased by 107% over the two years from 2010. Larger wine houses such as Angove and Yalumba, and expansion by well-established companies such as Temple Bruer Wines, have contributed to this increase.

Farm-gate value of table grapes is $197,368, with an evident unmet demand for grapes at retail level (particularly the popular seedless varieties), mostly produced in New South Wales, South Australia and Western Australia. Grapes for drying is $344,652; Victoria represents the lion's share of production value.

The industry lost its largest single primary producer and drier of Australian organic grapes in Clyne Foods (Victoria) in 2011 forcing farm-gate values down. In the face of this, processors and retailers are continually under pressure to import product to meet demand for snack products and ingredient sultanas for mueslis and snack bars.

Kiwifruit

Kiwifruit production was only reported by ABS in New South Wales from five producers with 109.1 ha of farmland connected with mixed farming enterprises. An additional estimated 11.5 ha of immature crop has been recorded, suggesting additional capacity for expansion of supply. The lower farm-gate estimate according to ABS is $273,480.

Kiwifruit is also imported from New Zealand in unrecorded but significant volumes. It is one of a very limited number of fresh organic produce lines imported into Australia (there are stringent quarantine requirements and mandatory fumigation with prohibited inputs for many other fresh fruit and vegetables). Australian producers are faced with the challenge of a higher Australian dollar against the NZ dollar. NZ also produces greater volumes and has lower production costs, so NZ kiwifruit is noticeably cheaper on average.

Berries

Organic berry production includes those retailed by major retailers: blueberries, strawberries and raspberries. Berries' farm-gate value is $3.11m.

Other berries (including heirloom varieties) have a production of 2869kg from seven operators – 1 tonne alone from Western Australia. A value of $1.15m was attributed to other berries.

Organic blueberries reported came from 14 operators in Victoria and New South Wales. They produce 18,746kg from fully certified farms (6.9 ha) and12,994kg from partially certified farms. An additional 5.3 ha of land is noted as not yet productive crop, which is expected to come online by 2014. Blueberries have an estimated farm-gate value of $0.937m. It is known that there are certified organic (biodynamic) producers in Tasmania, however these were not reported in the ABS data, probably due to smaller volumes direct marketed as a hobby. This is similar for other states.

Strawberries were reported from eight operators – 9914kg. Queensland produces the majority of that volume. Raspberries were reported as 2003.7kg with only 0.2 ha of land noted as not yet productive crop coming on in the two years to 2014.

Apples and pears

Estimated farm-gate value for organic apples and pears is $11,076,760. Victoria represents over $3.5m of this production, with production in South Australia and Western Australia also higher than the national average. Apple production was possibly underreported in Tasmania and New South Wales, given the number of reported producers from industry in those states.

The value of pears nationally is less than $1.5m. Pears are mostly produced in Victoria, registering $857,592 in value from fully certified farms. Western Australia is the second largest producer. Pears are undersupplied according to retailers and wholesalers. Processors are also seeking more juicing fruit.

Farms where pome fruit production was the main agricultural business reported the following areas certified (that is, total farm area certified including non-pome fruit areas): New South Wales (400.9 ha) followed by Victoria (177.9 ha), Tasmania (129.6 ha) and Western Australia (99.7 ha). In all states bar Victoria, the majority of pome fruit production occurred on partially certified properties.

In 2010 the average price for apples was $2.30/kg and for pears $2.50/kg. The greater demand for volume is from major retailers. Apple and pear prices are expected to remain stable during 2012-13. This is due to price competition from major supermarkets and expected industry expansion. The recent repeal of the ban on New Zealand apples may have a long-term impact on the organic apple sector, though quarantine protocols (which may potentially permit access for organic apples) are quite exacting and may slow any development of imports.

Stone fruit

Stone fruit reports $6,372,626 in farm-gate value; plums $1.049m, nectarines $0.906m, apricots $0.8m and cherries $0.634m. There is 536.7 ha of land certified for farms with stone fruit as their major commodity, with a total of 809.4 ha of farmland connected to farms where stone fruit is the main business. Victoria has most of this farmland, followed by New South Wales and South Australia. This sector has seen the entrance of medium to large-scale professional producers in what is possibly one of the most challenging organic commodities to produce. The farm-gate value of stone fruit production attributed to farmers with fully certified operations in 2011 was $795,901, while an additional $1.2m in production is attributable to this sector from farms with partial certification.

Stone fruit is undersupplied according to some retailers, though with more recent entrants to this market this may change in the coming years. Due to the seasonality of this commodity there are supply challenges into the major retailers given the planning and the risks of supply associated with this product line. Additionally the higher risks associated with stone fruits (susceptibility to pests and diseases) often deters producers from large-scale production. Improvements in integrated pest management and availability of some organic-approved pest management inputs may see changes in the years ahead. Supportive research is also required to help this sector sustain growth.

Citrus

Citrus production is across five production states, with New South Wales reporting the highest area of certified land where citrus is the main commodity for the agricultural business at 226.5 ha. This is followed by Victoria with 115.1 ha (with an additional 31 ha from farms with partial certification but more than 50% of the farm certified) and Queensland with 66.9 ha, Western Australia with 25.4 ha and South Australia with 14.8 ha.

The value of citrus is $5.298m; oranges are 80% of this figure ($4.183m – navels produced at a 3 to 1 ratio over valencias). Other citrus includes mandarins ($0.512m); limes ($0.2m) and lemons ($0.19m). Farm-gate value for oranges in 2010 was $2.90/kg. With the increased presence of major supermarkets supplying organic produce, farm-gate prices are likely to come down, particularly as more production comes online, creating opportunities for marketers to find alternative suppliers.

Olives

Farm-gate value of olives is $2,093,919. Olive growing has expanded significantly in the two years from 2010, particularly with the expansion (including a public equity offering) of such operations as Kailis Organic Olive Groves in Western Australia. While Kailis remains in administration, some within the olive industry expect it will be refinanced and managed as an organic farm (given the competitive advantages to pricing and market positioning in what is an increasingly crowded and competitive conventional market, including from cheaper imports from Europe in particular).

WA has the most certified farmland where olive production is the major commodity for that agricultural business with some 328.4 ha. Victoria has 261.8 ha of land associated with fully certified farms and a further 573.4 ha of farmland where there is partial (more than 50%) of farmland certified. South Australia is next with 28.3 ha recorded, followed by New South Wales 24.4 ha and Queensland 23.5 ha. Areas were reported from 22 separate agricultural businesses.

This sector has the long-term challenge of dealing with cheaper imports of olive oil and a very competitive international marketplace for those considering exporting. Positioning in what is a very crowded market with a unique offering in terms of proprietary branding of product is a major challenge for this sector and individual businesses.

Nuts

This sector has grown significantly since 2010. The Australian organic nut industry is sparsely spread and suffers from lack of critical mass or sufficient processing capacity to keep post-farm-gate costs to a minimum.

Some cooperative production and marketing is undertaken in the macadamia sector (for example, the Macadamia Processing Company), however the broader nut industry will need to boost production and collective marketing or fall prey to rising imports (in particular almonds, walnuts and pecans). Major retailers report ongoing undersupply of these lines and a concern with lack of foreseeable future supply.

Sales and volume

Total farm-gate value for the organic nut industry is $3,408,732. According to ABS statistics almonds have the largest value with $1.609m. Macadamias are next with $1.144m followed by walnuts $297,111. Pecans and pistachios were not reported in quantities above $0.2m.

Looking forward

The challenge for this sector is its size and distribution and the need to work on cooperative production planning and marketing structures. A significant threat exists from high volumes of cheaper imports, which could affect the long-term domestic price for local nuts. Value adding (roasting, chocolate coatings, confectionery), and consideration of select higher value export destinations, may help this sector hedge its bets against future market volatility from imports.

The Australian organic consumer in 2012

Each year Australian consumers are asked a range of organic-specific questions as part of the broader Green-Tracker research conducted by Mobium Group.

In May 2012 Australian organic consumers were asked the regular set of questions, as reported in the Australian Organic Market Report 2010, along with some additional questions relating to country of origin, retailer origin and trust in organic foods, where a recognised certification mark was present.

This section makes references to Lifestyles of Health and Sustainability (LOHAS) types: Leaders (are highly committed to sustainability), Leaning (have moderate commitment), Learners (have recent awareness of sustainability) and Laggards (have low levels of interest). (Refer to the full Australian Organic Market Report which contains an explanation of this research methodology.)

The summary of results below builds on four years of comparative data of organic consumers in Australia.

	2012	2010	2009
Perceived Benefits of Organics			
Chemical free	79%	83%	82%
Additive free	77%	74%	77%
Environmentally friendly	67%	69%	70%
Most Important Benefits of Organics (high + moderate importance)			
Chemical free	89%	91%	
Additive free	88%	89%	
More nutritious	88%	87%	
% households purchased any organic product last year	65%	61%	
Highest penetration categories (purchased in last year)			
Organic fresh fruit & vegetables	60%	57%	
Organic home-cooking ingredients	45%	44%	
Organic canned goods	39%	42%	
Highest purchase frequency categories (every 1-30 days)			
Organic non-alcoholic beverages	49%	48%	
Organic fresh fruit & vegetables	47%	45%	
Organic dairy	44%	40%	
Major barriers to further purchase			
Price/Value	80%	81%	82%
Knowing you can trust it is organic	48%	57%	54%
Quality of Produce	41%	46%	New
Prompted Awareness of Organic Certification marks			
ACO	31%	23%	21%
NAASA	19%	15%	12%
USDA	7%	New	New

Figure 5 Snapshot of findings

Consumer understanding of organic

Year on year there is strong consistency within the Australian community about the perceived benefits of organic food. 'Free from' aspects remain the key perceived benefits of organic food in Australia, continuing a consistent pattern over three years from 2009.

Four of the five leading benefit attributes overall continue to revolve around what organic food 'does not contain'. Benefit attributes are chemical free (79%), additive free (77%), hormone/antibiotic free (64%) and non-GMO (62%).

Enhanced food traceability (48%) continues to lift as a known benefit, moving to the 6th ranked, up from 14th in 2010. This outcome is reflective of larger social trends that show consumers are becoming more interested in the source of their food.

Increased nutrition (47%) and better taste (42%) continue to be rated more moderately in terms of understood benefits.

The number of those who saw benefits between organic products and climate change dropped dramatically in 2012 compared with 2010. This may reflect general community fatigue and disengagement about climate change and carbon emissions due to the protracted carbon tax debate over the period. A consistent 7% overall said that they were 'not sure' or 'don't know' what the benefits of organic food are.

The research suggests that community understanding of the key benefits of organic is well entrenched and clear.

Benefits of most importance to consumers

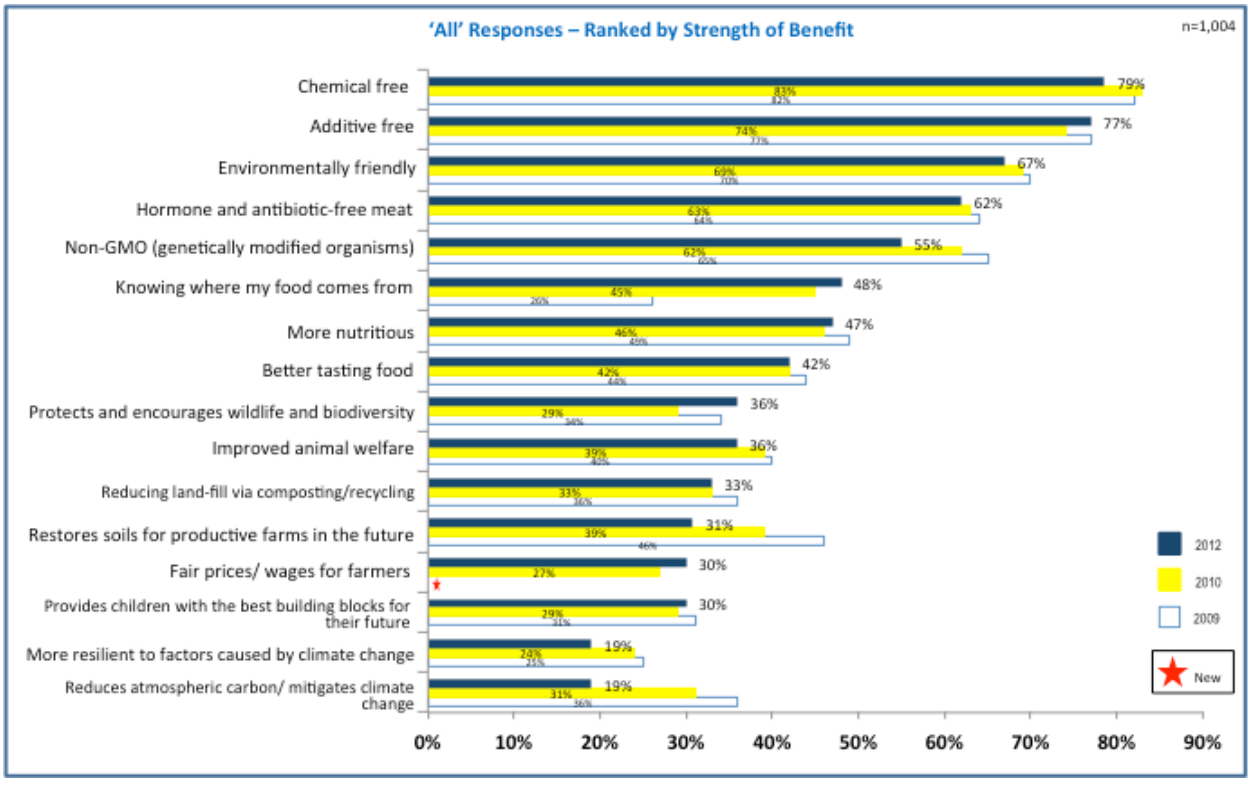

Figure 6 Perceived benefits

Most consumers rate the chemical free and additive free attributes, as well as enhanced nutrition and taste, as the most important benefits of organics to them.

Those organic benefits with the highest importance have remained consistent in their overall ranking since 2010.

The benefits of organics with the highest combined 'of high importance' and 'of moderate importance' rating are chemical free (89%), additive free (88%), more nutritious (88%) and better tasting (85%).

Each of these benefits exhibits a strong level of 'what's in it for me?' personal benefit. Those aspects that provide a health and wellness payback have the strongest resonance and are the most salient themes for the majority of the community.

The addition of two new aspects in 2012 has impacted on the rankings of some stated benefits. Notable changes include:

- 'Improves my overall health and wellbeing' (new in 2012) ranked 5th overall highlighting the importance placed on personal health. Does not contain GMOs slipped from 5th to 8th ranked (perhaps reflecting a lack of mainstream media attention on this issue over recent years);
- 'Fair prices/wages to farmers' lifted from 10th to 9th (potentially impacted by ongoing price wars between the major supermarkets on milk and other commodity-based products that are squeezing farmer/grower/supplier margins).

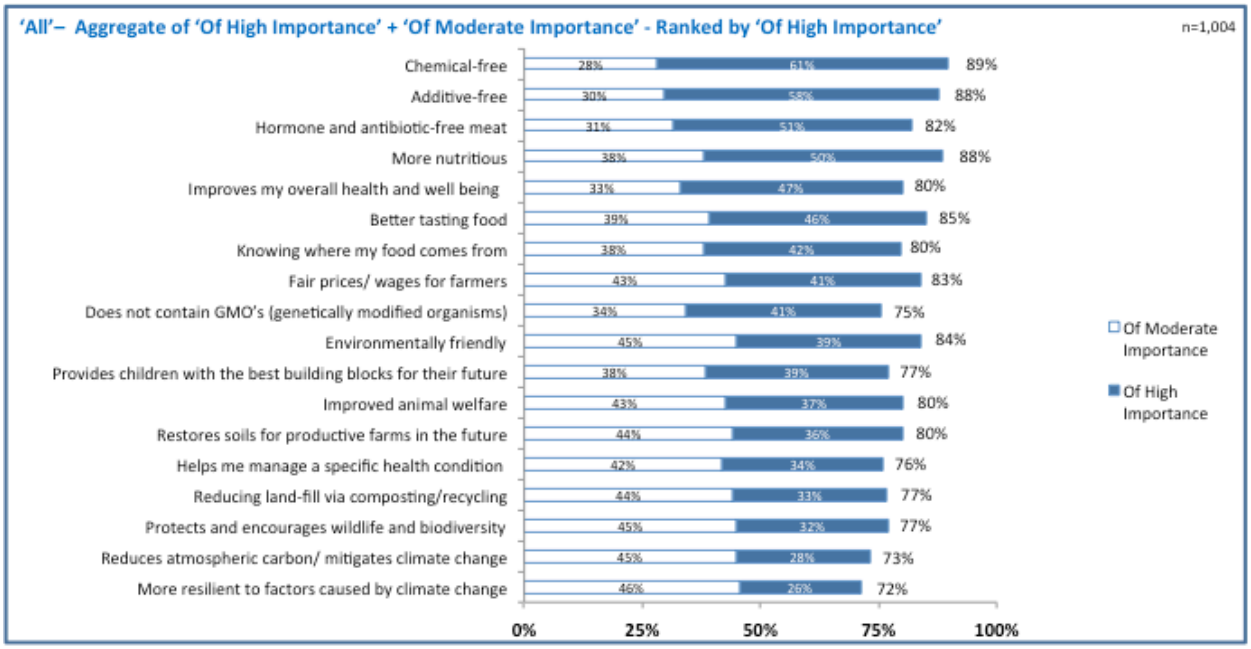

Figure 7 Organics: important factors

Purchasing behaviour

How often do Australians buy organic?

In 2012, 65% of adult Australians claimed to have purchased at least one organic product.

Demographics are not good predictors of tendency to purchase, the strength of individuals' values about personal, community and planetary wellbeing and the manifestation of these in one's worldview and lifestyle options. The strength of LOHAS alignment correlates with participation in organics.

The base of organic product purchasing is drawn from all parts of the community. The demographic profiles of an organic purchaser and non-purchaser show very similar characteristics.

The penetration of organics within the community remains strongly aligned to LOHAS segments. Leaders continue to be the most committed group, with 92% saying they had purchased organic in 2010. However there is good progression across all segments: Leaning, Learners and Laggards segments all show strong gains in participation compared with 2010.

In 2012 nearly eight in 10 in the Leaning group said that they had purchased organic compared with over half those in the Learners and now just under a quarter of the Laggards. Laggards, while remaining 'under indexed' in terms of participation, are up 60% on 2010 figures.

The use of organic products amongst Australian households is progressively becoming more mainstream over time. Continuation of this trend will be important for sustained industry growth into the future. The impact of even a doubling of purchase behaviour by infrequent (but still growing in number) consumers could increase sales of organic products.

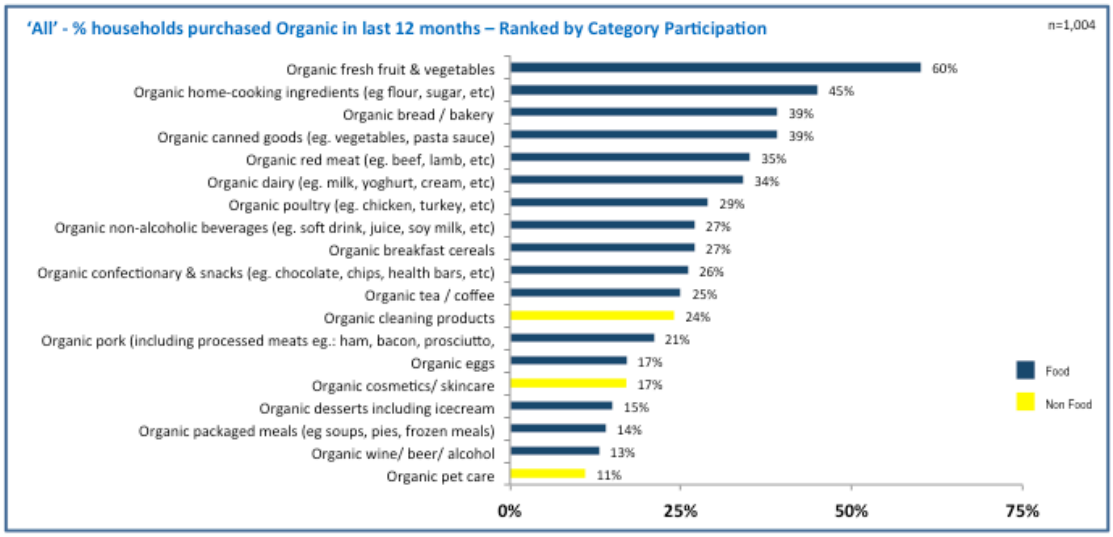

Figure 8 Participation rates

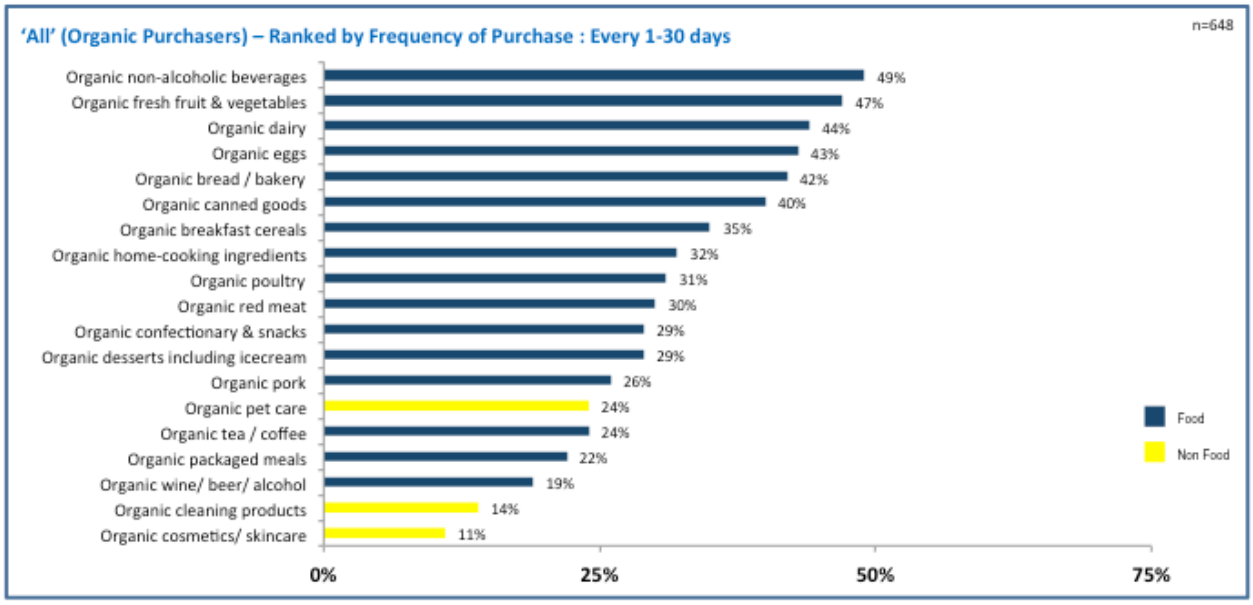

Figure 40 Purchase frequency

Who buys organic?

The household purchase penetration of organic food categories varies widely.

LOHAS Leaders remain the primary participants in the organic market. This cohort participates at much higher rates across all categories than the rest of the community – in many segments two or over three times higher than the overall average. There is a major opportunity for the organic industry to drive increased participation in the Leaning and Learners components of the community. Engaging these groups will be crucial as participation rates of the Leaders move towards saturation.

Fresh produce is the most highly shopped organic segment, with 60% of households indicating that they purchased at least one organic fresh fruit or vegetable in the past year (up from 57% in 2010).

Pullout quote: "Of the 19 categories, 15 showed an increased level of purchase every 1–30 days. Dairy, bread/bakery, breakfast cereals and packaged meals all showed the strongest improvement – up 4% since 2010."

Household staples are next (cooking ingredients 45%, canned goods 39%) then bread (also 39%), red meat (35%) and dairy items (34%).

In general food products have the highest participation rates, in contrast to non-food items such as cleaning products (24%), cosmetics/skincare (17%) and pet care (11%).

Almost all organic product categories have experienced increases in claimed participation rates compared with 2010.

Purchasing of organic dairy is up by 6%, as are poultry and confectionery/snacks; non-alcoholic beverages and pork are up 5%. These segments showed the biggest gains.

The purchase frequency of organic products amongst current purchasers exhibits wide variation by category. No single category has over 50% participation on a monthly basis.

As expected, participation frequency is stronger for consumable food items than for non-food categories.

Non-alcoholic beverages are the most likely to be purchased every month, with 49% of current organic purchasers indicating they buy every 1–30 days. Fresh fruit and vegetables (47%), dairy products (44%), eggs (43%) and bakery items (42%) have the next highest level of frequent purchase.

Current organic purchasers are showing a tendency to purchase more frequently in most categories compared with 2010.

Of the 19 categories, 15 showed an increased level of purchase every 1–30 days. Dairy, bread/bakery, breakfast cereals and packaged meals all showed the strongest improvement – up 4% since 2010.

Organic canned goods (-2%), desserts (-2%), cleaning products (-2%) and cosmetics (-1%) categories were purchased less frequently (every 1–30 days) than in 2010, albeit noting a rounding average of 1% discrepancy.

Most current organic purchasers are infrequent purchasers in the majority of categories.

Whilst category consumption dynamics have an impact, there is a clear opportunity in all categories for current organic purchasers to continue to increase their frequency of buying.

The Leaders are by far the most committed and regular participants in the market.

The Leaning, Learners and Laggards who do buy organic purchase on a much more ad hoc basis in general, with significantly lower frequency than the Leaders.

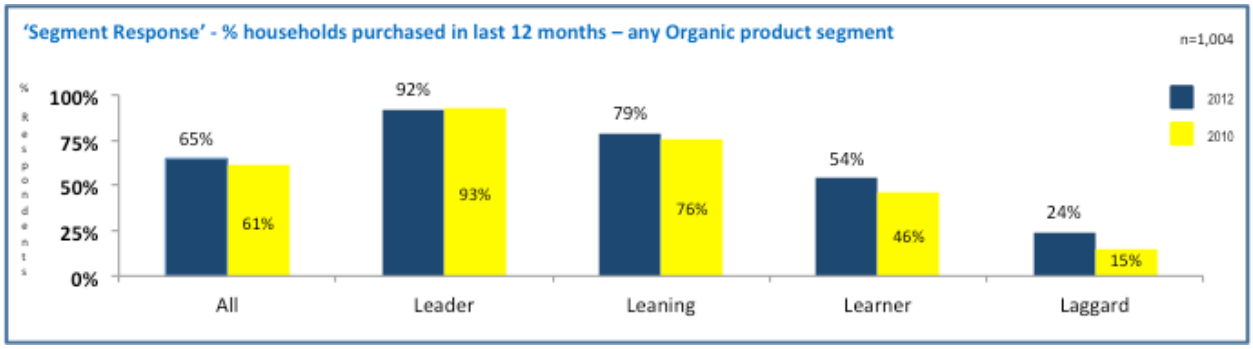

Figure 9 Segment response: % households purchasing in 2011-12

How much do consumers spend?

The estimated proportion of total food budget spent on organic products is 10% or less of household expenditure.

A cluster of highly committed organic purchasers exists within the current market with 14% in total saying that they usually outlay 50% or more of their household food-spend on organic products.

Most households (58%) who currently purchase organics estimate that they spend 10% or less on organic food at present. In total, 71% overall indicate that they spend 20% or less of the total food budget on organics.

Barriers to buying more organic

Value, trust, quality and information are the largest barriers for Australian consumers in further uptake of organic food. These barriers have all significantly decreased since the 2010 Report.

Cost continues to be the most significant overall barrier to increased purchase of organics; 80% of all respondents rated 'price/value' (81% in 2010) as the primary roadblock to increased participation in organics.

'Being able to 'trust it is organic' was next at 48%. Overall this aspect fell from 57% in 2010 suggesting that there is growing confidence in the integrity of organic food claims.

'Quality of produce' was cited by 41% (46% in 2010). Forty-one per cent say that they are interested in more information about organics to assist in making an informed choice (up from 39% in 2010).

Over-packaging (7%) and freshness of produce (19%) remain weaker barriers for most. Over-packaging in particular is an interesting outcome given there is a vocal minority not satisfied with current packaging arrangements, particularly arising from the mainstream retailers.

Availability and convenience issues continue to wane as barriers with 'easier access/convenience of buying' continuing an easing bias in 2012 – 39% say this is a current issue compared with 50% in 2010.

This outcome is in line with continued ranging of more products in more categories, in particular in mainstream supermarkets, increasing access and convenience.

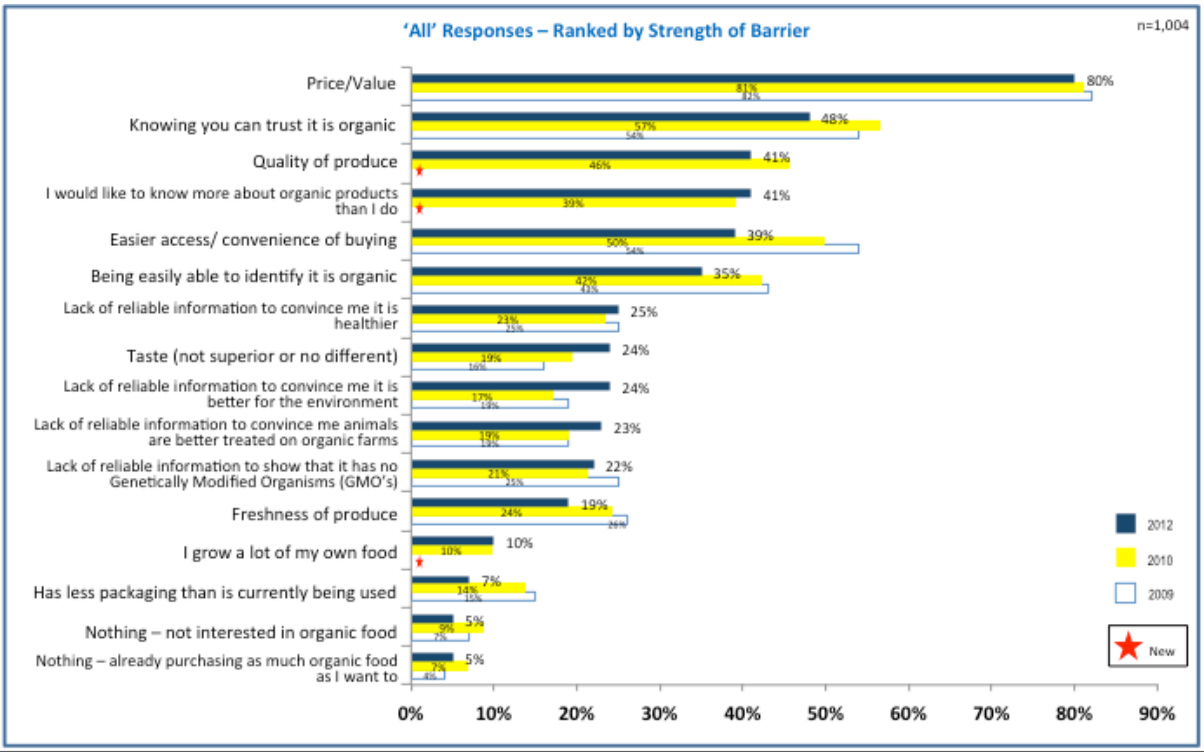

Figure 10 Organics: barriers to purchase

Organic certification and consumer trust

There has been a strong increase in awareness about certification marks. Overall, 53% of respondents said they knew 'certification marks are used on labels as a guarantee a product is organic', up from 42% in 2010 (a rise of 26%).

This increase may have been due to high profile media on the issue over the period generated by organisations such as Choice. In 2010 Australian Certified Organic (ACO) was awarded winner of the Choice Awards 2010 Best Food Endorsement Program, in competition with the National Heart Foundation tick, Dolphin friendly, Fairtrade and others.

Compared with 2010 there has also been an increase in the number of Australians who say that they recognise selected organic certification marks. This continues an upward trend from the recognition levels benchmarked in 2009.

In 2012 the Australian Certified Organic Bud logo again had the highest prompted recall compared with other organic certification logos, achieving strong growth to 31% overall prior recognition (up from 23% in 2010) while 58% of leaders, being the most common consumers of organic, had prompted awareness of this mark (up from 44% in 2010).

The NASAA Certified Organic mark was the only other domestic logo of note with 19% overall awareness (up from 15% since 2010). The next most recognised organic logo was one found on imported products, the USDA organic seal. It was assessed for the first time and ranked third with 7% claimed prior recognition. All other organic logos in Australia were at 5% Australian public recognition or below, including foreign country or certifier brands on imported products.

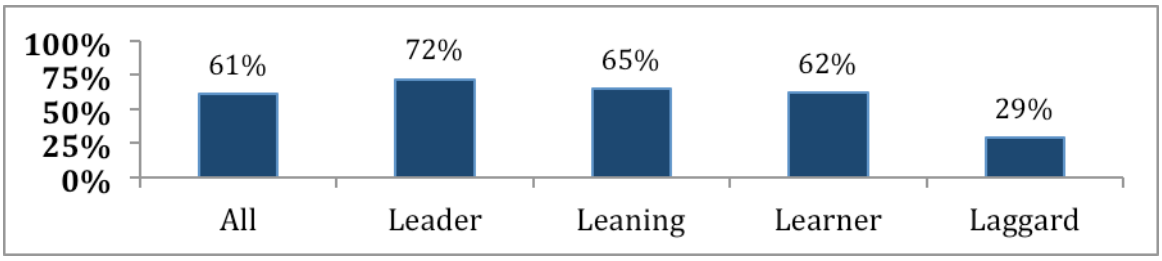

Figure 11 Organic certification and increased consumer trust in products

Respondents were asked: Does / would an organic certification mark (that is, a mark that tells you the product meets organic standards) increase your trust in organic products that carry that mark?

Those in the Leaders group are most affirmative of the increased trust afforded by a certification mark, with 72% believing there is a positive benefit.

Many in the Leaning and Learners groups also have similar views, with 65% of Leaning and 62% of Learners indicating that a certification mark can improve the standing of products that have them; Laggards predictably were less convinced.

Just under 80% overall believe that, all other things being equal, an organic certification mark on a product may have some level of influence in their purchase decision. In total six in 10 said that it would have a 'moderate' (31%) or 'strong' (29%) level of influence.

Over one-third (36%) said that they wouldn't buy a product that was not certified.

Just 5% of Leaders indicated that they would buy a non-certified product. This highlights a relatively high level of understanding of the importance of certification in the verification claims of organic products.

Country of origin of food

Quality

When considering the quality of organic product produced in the nominated countries, Australian goods were seen to provide the highest levels of confidence.

Over 80% in aggregate indicated that that were 'very' (44%) or 'moderately' (40%) confident in the quality of organic product from Australia.

New Zealand sourced product had the next highest confidence level (68% aggregate), then the UK (48%) and the US (43%).

Italian (35%) and Japanese (29%) sourced goods generated more modest levels of confidence in quality.

Organic product from India (6%) and China (5%) did not generate strong levels of confidence in their quality for the vast majority. Overall 75% said that they were 'not at all confident' in the quality of Chinese organic products and 70% had the same opinion of product whose country of origin was India.

Organic integrity

The validity/integrity of certification of Australian product generated the highest levels of confidence by Australian consumers.

In total 77% said that they were 'very' (38%) or 'moderately' (39%) confident in the integrity of certification within Australia.

New Zealand certification validity had the next highest confidence level (63% aggregate), then the UK (49%) and the US (44%). Italian (33%) and Japanese (31%) certified goods generated more modest levels of confidence.

Organic certification processes in India (7%) and China (6%) were not seen to be credible by the vast majority. Overall 75% said that they were 'not at all confident' in the integrity of Chinese certified organic products and 69% said the same thing about Indian certification.

Where do consumers buy organics?

Supermarkets are the dominant channel for most shoppers who purchase organic products. Approximately three in four purchasers frequent a supermarket at some time to buy organic products.

There is evidence of multi-channel participation by many current organic purchasers, where product type influences shopping dynamics. For example, an organic shopper may buy organic fresh fruit and vegetables from a greengrocer, bread from a bakery and other categories from the supermarket.

In general the Leaders are much less likely to shop in major supermarkets in most categories, in particular 'fresh' product segments – they over-index in buying from organic and wholefood stores and other specialty formats,

markets and online/direct.

The Leaning and Learners are much more likely to purchase the majority of their organics from a major supermarket.

Figure 12 Purchasing behaviour: organic fruit and vegetables % who purchased in last 12 months

3. DISCUSSION AND RECOMMENDATIONS

The Australian Organic Market Report has highlighted growth as well as the challenges faced by producers and marketers within this emerging and developing niche market sector. There also remain some challenges associated with ensuring consistency of future data collection and reporting, including the changing sources of available data able to be used in future reports.

For the organic industry to continue to develop and meet rising demand for organic produce, particularly from the horticultural sector, ongoing tracking by industry will be required to measure growth, assess ongoing market gaps, while providing information and data for those considering producing and investing in this market sector.

The evolution of methodology in comparison with the 2010 market report has highlighted the importance of maintaining an updated database of industry contacts, along with ensuring methodologies remain consistent across the years to deliver a reliable source of data through time.

The future success of primary producers in the field, and others along the value adding chain to retail will remain reliant upon data such as this in assessing their own business within this sector, given the lack of other data sets or partial data sets across a limited sectoral range only.

The methodologies used in this Australian Organic Market Reporting have highlighted this importance of a multiple approach to collating data, given the complexities of the industry and showing that even the ABS data, backed up by legal requirements for completion of forms, remains with some challenges in painting the full picture of the industry at farm level, letalone retail and export levels. Further the fact that the ABS Ag Census only occurs each 5 years exacerbates the challenge here, and the need to rely upon a range of approaches in collecting and collating data within the industry.

The organic industry, from farm through to major retailers, have responded positively and supportively to the presence of this market report and have noted the need for this report to remain on the landscape of this industry to enable the industry to continue to track and monitor its progress and to deliver on what are discernible and distinct market signals of demand for such produce.

4. ACKNOWLEDGEMENTS AND REFERENCES

The following parties and individuals are gratefully acknowledged for their assistance, collaboration and support in the process of completing this research project.

We are grateful to the supply chain businesses – processing, wholesaling and retail – for assistance in crosschecking available data sets with actual market values and volumes, and also to the business people who participated in additional interviews and discussions.

Thank you to industry survey 2012 respondents, organic farmers who participated in the Australian Bureau of Statistics (ABS) 2011 Agricultural Census and consumers who took part in the Mobium Group 2012 Green-Tracker and prior research surveys.

Thank you to ABS staff and managers for the initial insertion of organic questions into the 2011 Agricultural Census. Also thanks to Jenny Spencer and Mary Eagle, and other technical and statistical staff, for the timely delivery of data and general assistance. Also thanks to the ABS managers who recognised the national interest need to include organic-specific questions in the ABS data.

Alex Mitchell, currently completing her PhD, was originally contracted and funded by the Biological Farmers of Australia Ltd under the Australian Organic Market Reporting program. Thank you to Alex for her assistance in ensuring consistency of approach, checking data and related editing, as well as her general guidance given to the organic industry in Australia in her role within the Department of Primary Industries, Parks, Water and Environment (DPIPWE), Tasmania.

The researchers acknowledge the assistance and support of Biological Farmers of Australia Ltd and the Organic Federation of Australia Ltd in promoting the survey to relevant sectors of industry. Thanks also to the offices of Australian Certified Organic, NASAA Certified Organic and Organic Growers of Australia for assistance in the confirmation of specific data sets.

The researchers acknowledge the feedback and support from Organics Tasmania, the Victorian Organic Industry Committee (VOICe) and representatives from the South Australian and Western Australian government departments of PIRSA and WA Food and Farming respectively.

Lastly and most importantly we acknowledge the foresight and recognition by HAL of the emerging nature and importance of the organic industry to the horticultural sector via the support shown in funding the Australian Organic Market Reporting project.

Abbreviations

ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
ABN	Australian Business Number
ABS	Australian Bureau of Statistics
ACO	Australian Certified Organic
AOMR	Australian Organic Market Report
AQIS	Australian Quarantine and Inspection Service
BDRI	Bio-Dynamic Research Institute
BFA	Biological Farmers of Australia Ltd
COR	Canadian Organic Regime
DA	Dairy Australia Ltd
DAFF	Department of Agriculture, Fisheries and Forestry, Australia
EU	European Union
FiBL	Research Institute of Organic Agriculture
GMO	genetically modified organism
ha	hectare(s)
HAL	Horticulture Australia Ltd
IFOAM	International Federation of Organic Agriculture Movements
IOAS	International Organic Accreditation Service
ISO	International Standards Organisation
JAS	Japanese Agricultural Standard
LOHAS	Lifestyles of Health and Sustainability
MAFF	Ministry of Agriculture, Forestry and Fisheries (South Korea)
MLA	Meat Livestock Australia
NASAA	National Association for Sustainable Agriculture, Australia
NCO	NASAA Certified Organic
NOP	National Organic Program (United States)
OFC	Organic Food Chain
OGA	Organic Growers of Australia
OMRI	Organic Materials Research Institute
TOP	Tasmanian Organic-Dynamic Producers

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