# Australian hydroponic and greenhouse industry national conference 2007

Stephen Goodwin Australian Hydroponic & Greenhouse Association

Project Number: VG06042

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179 Elizabeth Street Sydney NSW 2000

Telephone: (02) 8295 2300 Fax: (02) 8295 2399

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## FINAL REPORT FOR PUBLIC DISTRIBUTION

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**Project Title:** AUSTRALIAN HYDROPONIC

AND GREENHOUSE INDUSTRY NATIONAL CONFERENCE 2007

**Author:** Stephen Goodwin

Research Provider: Australian Hydroponic &

**Greenhouse Association** 





**HAL Project Number:** VG06042

**Project Leader:** Dr Stephen Goodwin

**Administrative Contact:** Ms Saskia Blanch

Administrator

Austalian Hydroponic & Greenhouse Association

PO Box 538

Narrabeen NSW 2101

**Phone/Fax:** 02 – 9939 5993

Email: administrator@ahga.org.au

## **Purpose of the Report:**

This report describes the 9<sup>th</sup> biennial national conference of the Australian hydroponic & greenhouse industry conducted by the Australian Hydroponic & Greenhouse Association in Launceston, 24-27 June 2007.

## **Acknowledgment of Funding Sources:**

The Australian Hydroponic & Greenhouse Association is grateful to Horticulture Australia Limited (HAL) through the national vegetable levy and Moraitis Produce for providing significant financial support to the project. Without it the project would not have been possible. Details of conference sponsorships of lesser amounts are provided in the report.

**Date of the Report:** 31 October 2007

#### **Disclaimer:**

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### **Media Summary:**

The Australian Hydroponic & Greenhouse Association (AHGA) represents the protected cropping industry at a national level. A key activity of the AHGA is a national conference and trade exhibition held every two years. The greenhouse and hydroponic industry is at the leading edge in the adoption of technology for the production of horticultural crops. Costs of high end technology can be \$3 million per hectare. As such the AHGA regards the biennial opportunity afforded by a national conference a vitally important activity in providing growers and prospective growers at all levels with tools to make informed decisions about all facets of this industry and practices.

The aims of the conference were thus to provide a forum for the dissemination of cutting edge research information, core educational topics relevant to hydroponic and greenhouse production and pest and disease management, and grower experiences focused on improvements to productivity and quality in the commercial and retail sectors of the hydroponics and greenhouse industry. Networking with people from within the industry, to share personal experiences and to discuss relevant topics with key researchers, growers and retailers, were regarded as key opportunities provided by the conference.

The AHGA believes that the knowledge and ideas gained by participants should enable them to achieve improvements in the areas of management decisions, environmental control, systems management and post-harvest handling techniques resulting in improved productivity, product quality and profitability.

In 2007 the AHGA conducted the 9<sup>th</sup> national conference and trade exhibition at the Hotel Grand Chancellor in Launceston on 24-27 June. This conference reached new heights and was widely reported as being the best that had been held to date. There was a total of 334 participants. The conference is traditionally held in June-July as this is the period of slowest crop activity affording growers the time to attend the event.

At each national conference the AHGA attempts to set new performance goals for the benefit of industry. One of these has been to take the conference to regional centres where this industry is represented. After the resounding success of the first regional venue for the national conference in Bundaberg in 2005, the AHGA committee decided to hold its 2007 conference in Tasmania. This State has a small greenhouse industry that has potential for expansion, particularly into capsicums for which there is considerable interest at the moment. Tasmania was also considered to be in a unique position in that it is both fruit fly and tobacco blue mould free. This gives the State an edge over the mainland in looking off shore at export markets. The AHGA was keen to showcase Tasmania as a promising region for future development of the industry.

At the Launceston conference, the AHGA set two new goals. Firstly it attempted to address the future challenges confronting industry and the Association, and secondly it sought to attract new growers to the conference. The Moraitis Hydroponics 2007 Australian hydroponic & greenhouse industry national conference adopted 'Challenge the Future as its theme. Two outstanding speakers in Mark McCrindle, a social sciences researcher and Australian communicator of some note, and Veronica Richardson, chief executive, Flowers & Plants Association in the UK, opened the conference. Both speakers challenged conference participants to think just where their personal and industry's future may lie and how to get there. They come with outstanding credentials in marketing success and as stimulating speakers. For the remainder of the conference, the speaking program provided a diverse array of topics

with expert speakers from Australia and overseas. With the conference format traditionally adopted by the AHGA, most talks were presented at least twice (see copy of conference program in Appendix 2). This enables participants to get to the talks that most appealed to them.

In addition to a stimulating speaking program, there were also three workshops on marketing, minor pesticide use and the future direction of industry. The first two were technical in nature and well received. As to the future direction of this industry, the AHGA in representing the interests of both vegetable and cutflower producers around Australia, is currently asking itself how this can be achieved to best meet the needs of its constituents in the future. A vigorous discussion was held with representatives of the cutflower industry (Brian Shannon, FAQI), herb and spice industry (Robert Hayes, AHSIA) and greenhouse vegetable industry (Graeme Smith and Stephen Goodwin) in the panel and participants in the general assembly of the conference.

The second goal, to attract new grower participants, also achieved success. A HAL leadership development grant to enable growers to attend the conference (VG06142) was offered to greenhouse vegetable producers and industry leaders who had not previously attended a national conference. The number of new growers was remarked upon by a number of trade exhibitors and regular conference attendees. This was a major achievement.

The trade exhibition attracted strong interest from conference attendees. Exhibitors reported increased interest in new business.

While northern Tasmania does not have a large greenhouse industry, the farm tour contained some excellent and diverse examples of interest to all who participated.

### **Planning the National Conference:**

The AHGA sets itself a number of logistical goals when commencing the planning of a national conference. The target audience for the conference are existing and intending members of the Australasian greenhouse and hydroponics industry.

- (a) The conference is well organised.
- The AHGA appointed a Conference Chairman from within the AHGA committee. A local industry committee in Tasmania headed by local grower and AHGA committee member Marcus Brandsema was established. A professional conference organising company (Conference Designs) was employed to attend to registrations and finances. Separate organisers for the trade exhibition, sponsorships, advertising and conference proceedings were appointed. Launceston was visited on a number of occasions to review progress.
- (b) The conference program and invited speakers were in place and the conference brochure printed by the end of February 2007.
- (c) The marketing and promotion strategy was implemented from March 2007.
- (d) A sensory budget was developed in early 2007. Initial estimates were drawn from the previous conference budget and from known costs at the time of preparation.
- (e) Pre and post conference surveys were conducted on the program and other key aspects. Data were analysed. The post-conference survey from 2005 was used as a guide for the planning of conference 2007.

The key factors to adoption of the information were to have organisational arrangements in place 18 months out from the conference and have a timely completion of the program, preparation of the Proceedings before the conference and final report.

The key personnel in the organisation of the 2007 national conference were:

Conference Chairman Dr Stephen Goodwin
Chairman Local Organising Committee Marcus Brandsema
Administration Saskia Blanch

Trade, Sponsorship & Proceedings Sue Korevaar & Kate Kimlin

Marketing & Promotion Steven Carruthers
Surveys & Budgetary Rick Donnan
Proceedings Editorial Kate Kimlin

External Conference Organisation Conference Designs

## **Evaluation of effectiveness – survey results:**

The conference objectives stated in the application were:

- 1. Improved opportunities for the greenhouse industry to develop and grow through exposure to technology, new information and overseas experiences.
  - 2. Increased industry profile to internal and external stakeholders.
  - 3. Build networks and relationships with partners such as allied trades, regional groups and the host city community and local growers.
  - 4. Developed skills and knowledge base through workshops for special interest groups in the industry.
  - 5. Exhibited trade information and materials to industry.
  - 6. Facilitated the adoption of R&D and marketing outcomes through the presentation and transfer of findings and new ideas in the conference program and related post-conference activities.

The results of a post-conference survey are given in Appendix 1. Overall the level of satisfaction was high.

### (a) General Evaluation:

Lecture format: 83% rated it very good – excellent.

Comment: The AHGA has adopted the same format at recent conferences. Four concurrent rooms at each session allowed the talks to be programmed so that there were multiple opportunities for delegates to hear their preferred talks. See Conference Program in Appendix 2 for details. At this conference there were nine sessions providing delegates with the opportunity to attend nine talks. In addition two workshops were also programmed into the day sessions. The third workshop on industry future direction was held on Sunday evening after the AHGA AGM.

Lecture content: 72% rated it very good - excellent.

Comment: See results of specific delegate evaluation of lectures in Appendix 1. In any conference the AHGA attempts to cater for all levels and commodity interest. This presents quite a challenge so the above assessment was gratifying.

Venue: 73% rated it very good – excellent.

Comment: It is always a challenge to find a venue that provides enough space to hold the plenary session, four rooms for the concurrent sessions and a large area for the trade exhibition. This was a good venue.

Meals: 69% rated it very good – excellent.

Comment: Lack of places to sit and eat was a problem. Long lines for lunch incorrect.

Conference Dinner: 84% rated it very good – excellent. At the 2005 conference it was felt that there were too many formalities. A significant effort was put into making the 2007 dinner a memorable event. Theming, Tassie wines and contributions from the major sponsor to the menu, plus music and a rescheduling of formalities (awards, speeches) to a bare minimum, made it more enjoyable. The auction, which was a new initiative, was protracted and detracted from the enjoyment. Lack of non alcoholic drinks is a fair comment.

Conference organisation/administration: 86% rated it very good to excellent. Comment: Do not agree with the negative comment about the external organisers. The AHGA was very satisfied with their contribution.

Overall: 88% rated the conference very good to excellent.

#### (b) Evaluation of Lectures:

Comment: Lectures were rated according to expectation so that a mean score of 2 or < meant that overall the topic was regarded as having been better or much better than expected. A mean score of 2-3 meant that the lecture was similar to or better than expected. It is pleasing to report that each topic exceeded expectations (ie mean < 3) with 30% highly regarded (ie mean < 2).

## **Conference Program:**

The conference program is given in Appendix 2. The evaluation of the lectures (Appendix 1) demonstrated a high level of satisfaction. The AHGA attempted to provide a spread of subjects and level of technical difficulty. While many of the topics were generically applicable to all crops represented at a protected cropping industry national conference, considerable effort was also made to attract some new and diverse areas of interest resulting in 23 topics for delegates to select from.

## **Delegate list – including name and state:**

See attached list in Appendix 3. Produced from conference organiser (Conference Designs) electronic web-based database. There were 334 conference participants. Detailed accounts are presented in Appendix 4. Revenue was \$279, 557 and expenditure \$236, 120 giving a net profit of \$43, 437. This included a HAL conference grant of \$42,000 and major sponsorship from Moraitis Hydroponics of

\$20, 000. The AHGA was not always confident of attracting the latter. Without this industry assistance it would have been impossible to conduct the conference without running at a loss. For this reason the AHGA is grateful to HAL and the national vegetable levy for its support. The 2007 national conference cost \$706/delegate.

## **Key outcomes of the conference:**

- 1. Given that an industry conference is primarily held for the benefit of industry producers it is particularly rewarding to report that the 2007 event attracted increased numbers of growers as a result of a new initiative between the AHGA and HAL (project VG06142 leadership development).
- 2. A meticulously put together program provided a strong and diverse technical content that attracted favourable comment.
- 3. Strong opportunities were provided for producers and other industry stakeholders who attended the conference to actively participate in forums in key areas (marketing, minor use pesticides and industry future).
- 4. A strong trade exhibition displayed the latest technology for greenhouse and hydroponic producers, plus opportunities to discuss adoption and investment with the companies.
- 5. Overall excellent networking opportunities were provided for stakeholders.
- 6. Further networking opportunities were provided in a social atmosphere at the conference dinner.

#### **Recommendations:**

Although a modest profit was made by the AHGA (see explanation of key role of major sponsorships above) it is strongly recommended that HAL conference grant support be continued. The costs of conducting a national conference are an unknown at the commencement of the process. The AHGA is managed by an entirely voluntary committee and the membership fees are such as to retain growers in the association. The Association does not have reserves of surplus funds to underwrite the national conference. It has to rely exclusively on moneys attracted through sponsorships, industry support and conference registration fees for its financial viability and to enable it to maintain the high professional and technical standard that is associated with it.

## **Acknowledgements:**

The AHGA is grateful to the following companies and organisations for their financial support of the 2007 Australian hydroponic & greenhouse industry national conference:

Major sponsor Moraitis Hydroponics

Gold Horticulture Australia Limited

Tasmanian Department of Economic Development

**Greenhouse Constructions** 

Rijk Zwaan Syngenta Seeds

Silver EKKO

Hortraco Trading

Hortworks

**NSW** Department of Primary Industries

Organic Crop Protectants RB Irrigation Technology Wilk van der Sande

Bronze Agricola Crop Insurance

Austsafe Super

Calclear

## **Proceedings:**

A bound Proceedings was produced prior to the conference and a copy was provided to each participant in their conference bags at registration. Copy enclosed.

## **APPENDIX 1. Conference Evaluation**

## (a) AHGC 2007 – delegate general evaluation

**Rating of lecture format:** 

rating	excellent	very good	good	fair	poor
total	15	33	10	0	0

**Comments:** Multiple lecture sessions great idea – kept to time really well (x 4).

Far too many lectures, not able to get to all interesting ones (x 2).

Maybe 1 hour sessions.

**Rating of lecture content:** 

rating	excellent	very good	good	fair	poor
total	11	30	15	1	0

**Comments:** Good show! Best conference yet and well targeted (x 4).

A lot of content too basic- not specific, content was interesting -not practically useful.

Overseas growers/researchers need to speak reasonable English.

Retail Value adding - didn't address this topic- was for hydroponic shops, not growers.

Good use of experts to provide practical knowledge.

Power Point presentations can be boring if read from screen without expanding topic.

## Were there any topics missed that you would have liked in this conference?

More flower industry focus (x 6).

Hydroponic lettuce (x 2).

Consumer perception / Supermarket trends for hydroponic fruit & veg (x 2).

More strategic marketing/retail of hydroponic crops. More experience talks, ie.

growers /marketing organisations - their story.

Water purification for comparison of membrane filters, etc.

Confidor in hydroponic lettuce & other crops, MRL's.

More energy options, IPM and future movements in technology.

Extension & requirements/needs by industry.

Media options & comparative advantages.

Organics – some details would have been helpful.

More from growers on their solutions to various issues - learn from hands on experience.

## **Rating of venue:**

rating	excellent	very good	good	fair	poor
total	27	22	13	5	0

**Comments:** Well planned out- very good job (x 3).

A bit cold at times & intrusive (x 3).

Good conf. layout – sick building syndrome, didn't sleep in 3 nights.

Sometimes hard to see screens.

Once knew where to go – was fine.

Insufficient rubbish bins.

## Rating of meals:

rating	excellent	very good	good	fair	poor
total	18	25	13	5	1

**Comments:** Meals – great, plenty of food (x 2).

Sweets at breaks –usually all too sweet/creamy (x 2).

Tassie / Hydroponic produce should have been shown off (x 2).

Supply lunch pack for exhibitors on Sunday – set up from 10am – many travelled that morning.

Hotel breakfast over priced.

Water and coffee always empty, long lines for lunch.

Did not cater for chocolate allergies.

Lack of places to sit & eat.

### **Rating of conference dinner:**

rating	excellent	very good	good	fair	poor
total	23	14	3	3	1

**Comments:** Spectacular and congrats – a new standard (x 9).

Auction horribly tedious and way too long (x 5).

Theme brilliant (x 4).

Main course under cooked (x 4).

Food cold (x 3).

Difficult to engage with people – too noisy and dark (x 3).

Dancing OK for those who like it. Others want to mingle and talk, but music was too loud (x 3).

Perhaps auction shorter and between courses.

Suggest silent auction format – allowing time to circulate.

Booked in, but could not attend - Dinner should be Monday night.

Lack of options for non drinkers.

### Rating of conference organisation/administration

rating	excellent	very good	good	fair	poor
total	27	24	6	1	1

**Comments:** Well done (x 5).

GST should be included from the start.

Any issues were dealt with quickly.

External organisers hopeless.

## Overall rating of conference (excluding farm visits):

rating	excellent	very good	good	fair	poor
total	22	29	7	0	0

## **Comments:**

Good value – excellent (x 8).

## **Additional comments:**

Too close to end of financial year.

Children shouldn't attend – hearing speakers hard with constant chatter & running around.

Good opportunity to see the industry.

Should have a prize for completing survey forms.

Do not supply melamine walls for booths - Velcro friendly essential.

Make delegate name badges double sided. Murphy's Law - reverse side on show.

Discount for multiple delegates attending from same company.

Exhibitors needed for small growers. Trade displays- many forget big growers

Late finish of farm visits unable to connect flights – needed to stay longer. Perhaps arrange finish to tie in with flights, and must warn delegates of timings in early preconf info.

Farm visits interesting (x 3) – (wasn't a specific question).

## **Respondents:**

Growers	27
Suppliers	19
Retailers	2
Students	1
Researchers	2
Educators	4
Others	<u>12</u>
Total	<b>67</b>

## AHGC 2007 delegate survey - rating of lectures

				rating compared to expectation			for nex	t confe	rence ?			
No.	Торіс	Speaker	much better	better	similar	Worse	much worse	total	av'ge weight	have again	drop it	percen t again
		Weighting .	1	2	3	4	5					
1	Changing times – changing trends	Mark McCrindle	26	12	16		2	56	1.93	27	10	73%
2	Generic promotion of fresh produce	Veronica Richardson	22	13	11	2		48	1.85	25	6	81%
3	Pesticide minor use	Workshop 1	10	6	14	3		33	2.30	30	0	100%
4	Bumbles in the driving seat – NZ IPM	Terril Marais		7	11	3		21	2.81	15	2	88%
5	Successful IPM in practice	Horst Sjostedt	6	11	17	3	2	39	2.59	27	0	100%
6	Management of hydroponic systems	Rick Donnan	9	11	9	1		30	2.07	22	1	96%
7	Year round berry fruit production	Mike Nichols	4	4	7	2		17	2.41	9	5	64%
8	Effective use of heat buffer systems	Ben van Onna	13	7	8	3		31	2.03	21	1	95%
9	Optimising by temperature integration	Ben van Onna	16	10	11	2		39	1.97	24	3	89%
10	Growing g/h vegetables in Canada	Joe Doef	7	10	5	1		23	2.00	15	3	83%
11	Marketing g/h vegetables in Canada	Joe Doef	5	5	6			16	2.06	9	5	64%
12	Automation in packhouse facilities	Rene de Vos	2	6	10	5		23	2.78	13	3	81%
13	Risky business - on-farm assurance	Joe Ekman	3	3	8			14	2.36	8	2	80%
14	Innovative marketing for Asian veg	Jenny Ekman	11	4	7	1	1	24	2.04	16	5	76%
15	Aquaponics & green rooftops	Roe & Midmore	8	3	5			16	1.81	13	3	81%
16	Hydroponic heated tomato growing	Toon Oomen	6	8	4	1		19	2.00	17	1	94%
17	Opportunities from new crops	J.Badgery-Parker	9	13	14	5		41	2.37	32	1	97%
18	Nitrate accumulation in leafy veg	Sophie Parks	1	6	11	1		19	2.63	5	10	33%
19	Best place to grow g/h crops in Aust?	Graeme Smith	17	13	11			41	1.85	24	8	75%
20	Irrigation in protected cropping	Graeme Smith	14	16	6			36	1.78	27	0	100%
21	Overseas disease threats to Aust crops	Len Tesoriero	7	8	6			21	1.95	18	0	100%
22	Retail value adding	Steven Palmer		2	3	1		6	2.83	6	2	75%
23	Renewable energy heating	Ken Holland	8	11	7	5	1	32	2.38	19	4	83%
	Marketing produce in the future	Workshop 2	7	3	7	4	2	23	2.61	13	5	72%
	Total		204	189	207	39	6	645	2.15	435	80	84%

Notes: 67 surveys were returned. Some had very few or no lecture ratings, and a few rated all their attendances "much better".

Weighting is 1 for best, 5 for worst. Total is the total number commenting upon that lecture.

Average weight: the lower the better. Under 2.0 is a high rating, over 3.0 is a low rating. The average was 2.15, (higher in bold).

Does delegate suggest this be used for next conference? The higher the perecentage - the more in favour. Under 80% (bold) is doubtful.

## **APPENDIX 2**

## **MORAITIS HYDROPONICS 2007**

Australian Hydroponic & Greenhouse Industry National Conference

## **Conference Detailed Program**

## **Day 1 – Sunday 24<sup>th</sup> June 2007**

Time	Topic	Presenter
1.00 – 5.00pm	Trade exhibition open to public & delegates	
1.00 – 6.00pm	Registration	
1.30 -	Official opening trade exhibition, present medallions to sponsors	
5.15 – 7.00pm	AHGA AGM, discussion on future directions of the industry	
7.00 – 8.00pm	Welcome cocktails	

Concurrent presentations. Thanks to those who returned the preference survey, which helped greatly in laying out the sessions. You have a choice of 9 out of 20 presentations. **Hints:** Decide your program early and start by first choosing your priority topics which are only presented once (marked 1 of 1). Also, don't just choose the first presentation of topics with multiple presentations, a later slot may suit better and have fewer attendees. You will probably need to cycle through your options in order to make your final choices.

## Day 2 - Monday 25<sup>th</sup> June 2007

Time	Topic	Presenter
8:00 – 9.00am	Registration & trade exhibition open	
9.00 - 9.30am	Welcome & official opening – Senator the Hon. Eric Abetz	
9.30 – 10.15am	Presentation of awards and scholarships Short presentation by major sponsor	
10.15 – 11.00am	Morning Tea	
11.00 – 11.45 am	Keynote speech 1 – Changing times, changing trends: a snapshot of the 21 <sup>st</sup> Century consumer and worker	Mark McCrindle
11.45 – 12.30pm	Keynote speech 2 – Generic promotion for fresh produce does work	Veronica Richardson
12.30 – 12.45pm	Short presentations by gold sponsors	
12.45 – 2.00pm	Lunch	
2.00 – 2.40pm	Concurrent Lectures, Session A - (# 1 of 9)	
Room 1	Successful IPM in practice (# 1 of 2)	Horst Sjostedt
Room 2	Opportunities from new crops - making the most of greenhouse and hydroponic horticulture (# 1 of 3)	Jeremy Badgery-Parker
Room 3	Automation developments and possibilities in packhouse facilities in the future (# 1 of 2)	Rene de Vos
Room 4	Retail value adding - benefits for you and your client (# 1 of 2)	Steven Palmer

2.50 – 3.30pm	Concurrent Lectures, Session B - (# 2 of 9)		
Room 1	Where IS the best place to grow greenhouse crops in Australia ? (# 1 of 2)	Graeme Smith	
Room 2	Fundamental management of hydroponic systems (# 1 of 3)	Rick Donnan	
Room 3	Marketing greenhouse vegetables in Alberta, Canada (# 1 of 1)	Joe Doef	
Room 4	Bumbles in the driving seat - IPM the NZ way	Terril Marais	
3.30 – 4.15pm	Afternoon Tea		
4.15 – 4.55pm	Workshop # 1 (# 1 of 2)		
Room 1	Minor pesticide use – GAP analysis & further pesticide needs, plus a new APVMA initiative for reduced-risk pesticides	Facilitator: Peter dal Santo	
5.05 – 5.45pm	Concurrent Lectures, Session C - (# 3 of 9)		
Room 1	Effective use of heat buffer systems (# 1 of 1)	Ben van Onna	
Room 2	Opportunities from new crops - making the most of greenhouse and hydroponic horticulture (# 2 of 3)	Jeremy Badgery-Parker	
Room 3	Overseas disease threats to Australian ornamental and vegetable hydroponic crops - what to look out for (# 1 of 2)	Len Tesoriero	
Room 4	Hydroponic heated tomato growing is top sport! (# 1 of 2)	Toon van Oomen	
5.45pm –	Evening free		

# Day 3 - Tuesday 26<sup>th</sup> June 2007

O8:00am — Trade exhibition open  O8:00am — Trade exhibition open  Concurrent Lectures, Session D - (# 4 of 9)  Room 1 Successful IPM in practice (# 2 of 2)  Understanding irrigation in protected cropping and soilless culture (# 1 of 2)  Room 3 Nitrate accumulation in leafy vegetables, a potential food safety and product quality problem (# 1 of 2)  Sophie Parks  Room 4 Year round berry fruit production (# 1 of 1)  Mike Nichols  Oncurrent Lectures, Session E - (#5 of 9)  Room 1 Temperature integration for optimum crop photosynthesis (# 1 of 2)  Room 2 Aquaponics & Green Rooftops (# 1 of 1)  Room 3 Growing greenhouse vegetables in Alberta, Canada (# 1 of 2)  Room 4 (# 1 of 2)  Room 5 Growing greenhouse vegetables in Alberta, Canada (# 1 of 2)  In 30 – 11.15am Morning Tea  11.15 – 11.55am Concurrent Lectures, Session F - (# 6 of 9)  Room 1 Hydroponic heated tomato growing is top sport! (# 2 of 2)  Room 2 Fundamental management of hydroponic systems (# 2 of 3)  Room 3 Risky business - new developments in on-farm assurance programs (# 1 of 1)  Room 4 Automation developments and possibilities in packhouse facilities in the future (# 2 of 2)  Concurrent Lectures, Session G - (# 7 of 9)  Room 1 Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)  Room 4 Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)  Room 4 Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)  Room 4 Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)  Room 1 Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)				
Concurrent Lectures, Session D - (# 4 of 9)  Room 1 Successful IPM in practice (# 2 of 2) Horst Sjostedt  Room 2 Understanding irrigation in protected cropping and soilless culture (# 1 of 2)  Room 3 Nitrate accumulation in leafy vegetables, a potential food safety and product quality problem (# 1 of 2)  Room 4 Year round berry fruit production (# 1 of 1) Mike Nichols  P.50 - 10.30am Concurrent Lectures, Session E - (#5 of 9)  Room 1 Temperature integration for optimum crop photosynthesis (# 1 of 2)  Room 2 Aquaponics & Green Rooftops (# 1 of 1) Bertt Roe & David Midmore  Room 3 Growing greenhouse vegetables in Alberta, Canada (# 1 of 2) Joe Doef  Room 4 (# 1 of 2)  Room 4 (# 1 of 2)  Room 5 Room 6 Renewable energy heating and reduced reliance on fossil fuels (# 1 of 2)  Room 7 Concurrent Lectures, Session F - (# 6 of 9)  Room 1 Hydroponic heated tomato growing is top sport! (# 2 of 2)  Room 2 Fundamental management of hydroponic systems (# 2 of 3)  Risky business - new developments in on-farm assurance programs (# 1 of 1)  Room 4 Automation developments and possibilities in packhouse facilities in the future (# 2 of 2)  Concurrent Lectures, Session G - (# 7 of 9)  Renewable energy heating and reduced reliance on fossil fuels (Renewable energy heating and reduced reliance on fossil fuels (Renewable energy heating and reduced reliance on fossil fuels (Renewable energy heating and reduced reliance on fossil fuels (Renewable energy heating and reduced reliance on fossil fuels (Renewable energy heating and reduced reliance on fossil fuels (Renewable energy heating and reduced reliance on fossil fuels (Renewable energy heating and reduced reliance on fossil fuels (Renewable energy heating and reduced reliance on fossil fuels (Renewable energy heating and reduced reliance on fossil fuels (Renewable energy heating and reduced reliance on fossil fuels (Renewable energy heating and reduced reliance on fossil fuels (Renewable energy heating and reduced reliance on fossil fuels (Renewable energy heating and reduced relian	Time	Topic	Presenter	
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Room 2 Understanding irrigation in protected cropping and soilless culture (# 1 of 2)  Room 3 Nitrate accumulation in leafy vegetables, a potential food safety and product quality problem (# 1 of 2)  Room 4 Year round berry fruit production (# 1 of 1)  P.50 – 10.30am Concurrent Lectures, Session E - (#5 of 9)  Room 1 Temperature integration for optimum crop photosynthesis (# 1 of 2)  Room 2 Aquaponics & Green Rooftops (# 1 of 1)  Room 3 Growing greenhouse vegetables in Alberta, Canada (# 1 of 2)  Room 4 Renewable energy heating and reduced reliance on fossil fuels (# 1 of 2)  Room 1 Hydroponic heated tomato growing is top sport! (# 2 of 2)  Room 2 Fundamental management of hydroponic systems (# 2 of 3)  Room 3 Risky business - new developments in on-farm assurance programs (# 1 of 1)  Room 4 Automation developments and possibilities in packhouse facilities in the future (# 2 of 2)  Room 4 Renewable energy heating and reduced reliance on fossil fuels (Ken Holland)  Room 4 Renewable energy heating and possibilities in packhouse facilities in the future (# 2 of 2)  Renewable energy heating and reduced reliance on fossil fuels (Ken Holland)  Room 1 Renewable energy heating and reduced reliance on fossil fuels (Ken Holland)	9.00 – 9.40am	Concurrent Lectures, Session D - (# 4 of 9)		
Room 3   Nitrate accumulation in leafy vegetables, a potential food safety and product quality problem (# 1 of 2)   Sophie Parks    Room 4   Year round berry fruit production (# 1 of 1)   Mike Nichols    9.50 - 10.30am   Concurrent Lectures, Session E - (#5 of 9)    Room 1   Temperature integration for optimum crop photosynthesis (# 1 of 2)   Ben van Onna    Room 2   Aquaponics & Green Rooftops (# 1 of 1)   Brett Roe & David Midmore    Room 3   Growing greenhouse vegetables in Alberta, Canada (# 1 of 2)   Joe Doef    Room 4   Renewable energy heating and reduced reliance on fossil fuels (# 1 of 2)   Ken Holland    10.30 - 11.15am   Morning Tea    11.15 - 11.55am   Concurrent Lectures, Session F - (# 6 of 9)    Room 1   Hydroponic heated tomato growing is top sport! (# 2 of 2)   Toon van Oomen    Room 2   Fundamental management of hydroponic systems (# 2 of 3)   Rick Donnan    Room 3   Risky business - new developments in on-farm assurance programs (# 1 of 1)    Room 4   Automation developments and possibilities in packhouse facilities in the future (# 2 of 2)    Room 4   Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)    Room 1   Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)   Ken Holland    Room 1   Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)   Ken Holland	Room 1	Successful IPM in practice (# 2 of 2)	Horst Sjostedt	
Room 4 Year round berry fruit production (# 1 of 1) Mike Nichols  9.50 – 10.30am Concurrent Lectures, Session E - (#5 of 9)  Room 1 Temperature integration for optimum crop photosynthesis (# 1 of 2)  Room 2 Aquaponics & Green Rooftops (# 1 of 1)  Room 3 Growing greenhouse vegetables in Alberta, Canada (# 1 of 2)  Room 4 Renewable energy heating and reduced reliance on fossil fuels (# 1 of 2)  10.30 – 11.15am Morning Tea  11.15 – 11.55am Concurrent Lectures, Session F - (# 6 of 9)  Room 1 Hydroponic heated tomato growing is top sport! (# 2 of 2)  Room 2 Fundamental management of hydroponic systems (# 2 of 3)  Room 3 Risky business - new developments in on-farm assurance programs (# 1 of 1)  Room 4 Automation developments and possibilities in packhouse facilities in the future (# 2 of 2)  Room 4 Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)  Room 4 Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)  Room 1 Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)  Room 1 Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)	Room 2		Graeme Smith	
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Aquaponics & Green Rooftops (# 1 of 1)  Room 3 Growing greenhouse vegetables in Alberta, Canada (# 1 of 2) Renewable energy heating and reduced reliance on fossil fuels (# 1 of 2)  Ken Holland  10.30 – 11.15am Morning Tea  11.15 – 11.55am Concurrent Lectures, Session F - (# 6 of 9)  Room 1 Hydroponic heated tomato growing is top sport! (# 2 of 2) Toon van Oomen Room 2 Fundamental management of hydroponic systems (# 2 of 3) Risky business - new developments in on-farm assurance programs (# 1 of 1)  Automation developments and possibilities in packhouse facilities in the future (# 2 of 2)  Room 1 Room 1 Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)  Ken Holland  Ken Holland	Room 1		Ben van Onna	
Room 4  Renewable energy heating and reduced reliance on fossil fuels (# 1 of 2)  Ken Holland  10.30 – 11.15am  Morning Tea  11.15 – 11.55am  Concurrent Lectures, Session F - (# 6 of 9)  Room 1  Hydroponic heated tomato growing is top sport! (# 2 of 2)  Fundamental management of hydroponic systems (# 2 of 3)  Room 2  Fundamental management of hydroponic systems (# 2 of 3)  Risky business - new developments in on-farm assurance programs (# 1 of 1)  Room 4  Automation developments and possibilities in packhouse facilities in the future (# 2 of 2)  Rene de Vos  Rene de Vos  Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)  Ken Holland	Room 2	Aquaponics & Green Rooftops (# 1 of 1)		
(# 1 of 2)  10.30 – 11.15am Morning Tea  11.15 – 11.55am Concurrent Lectures, Session F - (# 6 of 9)  Room 1 Hydroponic heated tomato growing is top sport! (# 2 of 2) Toon van Oomen  Room 2 Fundamental management of hydroponic systems (# 2 of 3) Rick Donnan  Room 3 Risky business - new developments in on-farm assurance programs (# 1 of 1)  Room 4 Automation developments and possibilities in packhouse facilities in the future (# 2 of 2)  12.05 – 12.45pm Concurrent Lectures, Session G - (# 7 of 9)  Room 1 Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)  Ken Holland	Room 3	Growing greenhouse vegetables in Alberta, Canada (# 1 of 2)	Joe Doef	
Concurrent Lectures, Session F - (# 6 of 9)  Room 1 Hydroponic heated tomato growing is top sport! (# 2 of 2) Toon van Oomen  Room 2 Fundamental management of hydroponic systems (# 2 of 3) Rick Donnan  Room 3 Risky business - new developments in on-farm assurance programs (# 1 of 1)  Room 4 Automation developments and possibilities in packhouse facilities in the future (# 2 of 2)  Room 1 Concurrent Lectures, Session G - (# 7 of 9)  Room 1 Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)  Ken Holland	Room 4		Ken Holland	
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Room 2 Fundamental management of hydroponic systems (# 2 of 3) Rick Donnan  Room 3 Risky business - new developments in on-farm assurance programs (# 1 of 1)  Room 4 Automation developments and possibilities in packhouse facilities in the future (# 2 of 2)  Room 1 Concurrent Lectures, Session G - (# 7 of 9)  Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)  Ken Holland	11.15 – 11.55am	Concurrent Lectures, Session F - (# 6 of 9)		
Room 3  Risky business - new developments in on-farm assurance programs (# 1 of 1)  Room 4  Automation developments and possibilities in packhouse facilities in the future (# 2 of 2)  Rene de Vos  12.05 – 12.45pm  Concurrent Lectures, Session G - (# 7 of 9)  Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)  Ken Holland	Room 1	Hydroponic heated tomato growing is top sport! (# 2 of 2)	Toon van Oomen	
Programs (# 1 of 1)  Room 4  Automation developments and possibilities in packhouse facilities in the future (# 2 of 2)  Room 1  Rene de Vos  Ken Holland	Room 2	Fundamental management of hydroponic systems (# 2 of 3)	Rick Donnan	
in the future (# 2 of 2)  Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)  Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2)  Ken Holland	Room 3			
Room 1 Renewable energy heating and reduced reliance on fossil fuels (# 2 of 2) Ken Holland	Room 4		Rene de Vos	
(# 2 of 2)	12.05 – 12.45pm			
Room 2 Fundamental management of hydroponic systems (# 3 of 3) Rick Donnan	Room 1			
	Room 2	Fundamental management of hydroponic systems (# 3 of 3) Rick Donnan		

Room 3	What Asian vegetable is that? - developing an innovative marketing strategy for Asian vegetables (# 1 of 1)	Jenny Ekman	
Room 4	Overseas disease threats to Australian ornamental and vegetable hydroponic crops - what to look out for (# 2 of 2)  Len Tesoriero		
12.45 – 2.15pm	Lunch - Trade exhibition closes after lunch		
2.15 – 2.55pm	Concurrent Lectures, Session H - (# 8 of 9)		
Room 1	Temperature integration for optimum crop photosynthesis (# 2 of 2)	Ben van Onna	
Room 2	Understanding irrigation in protected cropping and soilless culture (# 2 of 2)  Graeme Smith		
Room 3	Bumbles in the driving seat - IPM the NZ way (# 2 of 2)  Terril Marais		
Room 4	Retail value adding - benefits for you and your client (# 2 of 2)	Steven Palmer	
3.05 - 3.45pm	Concurrent Lectures, Session J - (# 9 of 9)		
Room 1	Where IS the best place to grow greenhouse crops in Australia ? (# 2 of 2)	Graeme Smith	
Room 2	Opportunities from new crops - making the most of greenhouse and hydroponic horticulture (# 3 of 3)	Jeremy Badgery- Parker	
Room 3	Nitrate accumulation in leafy vegetables, a potential food safety and product quality problem (# 2 of 2)	Sophie Parks	
Room 4	Growing greenhouse vegetables in Alberta, Canada (# 2 of 2)	Joe Doef	
3.45 – 4.15pm	Afternoon tea		
4.15 – 4.55pm	Workshop # 2 (# 2 of 2)		
Room 1	Marketing opportunities for hydroponic produce – where are they and how can you get to them?	Facilitator: David Costa	
4.55pm	Lecture component of conference ends.		
7.00 – 7.30pm	Pre-dinner drinks		
7.30pm – late	Conference dinner in auditorium		

Day 4 - Wednesday 27<sup>th</sup> June 2007

8.00am - 4.45pm Farm tours (depart Grand Chancellor Hotel)

Conference Design Pty Ltd

## EVENT STATISTICS REPORT

Page: 1

#### Australian Hydroponics and Greenhouse Association Conference Printed on Mon 3 September 07 at 15:51:00

Attend Total To Be Required Total Paid Total O/S Refunded CONFERENCE STATISTICS: Acompanying Person 0.00 0.00 0.00

Accompanying Person		19	0.00	0.00	0.00	0.0
т	rotal:	19	0.00	0.00	0.00	0.0
Conference Registrations						
Complimentary - Committee		9	0.00	0.00	0.00	0.0
Compilmentary - Encouragement Scholarship		5	0.00	0.00	0.00	0.0
Complimentary - Other		7	0.00	0.00	0.00	0.0
Complimentary - Speaker		19	0.00	0.00	0.00	0.0
Day - Monday		12	3815.00	3815.00	0.00	0.0
Day - Tuesday		10	3465.00	3465.00	0.00	0.0
Exhibitor Registration (Additional)		38	14720.00	14335.00	385.00	0.0
Exhibitor Registration (Inclusive)		44	0.00	0.00	0.00	0.0
Member Registration		98	52950.00	52200.00	750.00	0.0
Non-Member Registration		46	30300.00	29640.00	660.00	0.0
Student Registration		4	1540.00	1540.00	0.00	0.0
т	Total:	292	106790.00	104995.00	1795.00	0.0
Seeding Funds						
Albert Hall Deposit		1	500.00	500.00	0.00	0.0
Seeding Funds		1	10000.00	10000.00	0.00	0.0
т	Total:	2	10500.00	10500.00	0.00	0.0
Sponsorship						
Black & White Advertisement		1	220.00	220.00	0.00	0.0
Bronze Sponsor		4	2860.00	2860.00	0.00	0.0
Gold Sponsor		4	23100.00	23100.00	0.00	0.0
Naming Rights		1	16000.00	16000.00	0.00	0.0
Silver Sponsor		8	24182.00	24182.00	0.00	0.0
Costa - Welcome Reception		1	3850.00	3850.00	0.00	0.0
Winter Subsidy		1	3150.00	0.00	3150.00	0.0
Winter Subsidy GST Component		1	315.00	0.00	315.00	0.0
Т	Total:	21	73677.00	70212.00	3465.00	0.0
GRAND TO	TAL:	334	190967.00	185707.00	5260.00	0.0

## **APPENDIX 4. Detailed accounts for the 2007 Conference**

Income	Amount \$	Total
Conference Registrations	106,790.00	
Trade Exhibition	46,298.00	
HAL Conference Grant	42,000.00	
Social Functions	10,791.75	
Sponsorships	73,677.00	279,556.75
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Expenditure		
Airfares	1,804.43	
Airfares-Committee	751.61	
Audio Visual	11,389.99	
Banquet Food & Drinks	20,663.10	
Banquet Theming	11,857.32	
Banquet – Hall Hire	2,365.00	
Bus Tour Lunch	2,028.00	
Bus Tour Rental	4,200.00	
BvOnna Workshop	292.50	
BvOnna Workshop	360.00	
Refreshments		
Committee Accomm.	7,017.74	
Credit Card Fees	3,680.03	
Encouragement Schols.	5,480.96	
HGC Venue & Catering	77,203.40	
Insurance	1,753.40	
Conference Organiser –	15,235.00	
Management Fee	,	
Conference Organiser –	1,218.00	
Postage, Courier	,	
Marketing – Advertising	6,060.70	
Marketing – Conference	3,461.70	
Name Badges	2,696.27	
Postage	1,378.18	
Proceedings – Editing	2,500.00	
Proceedings – Printing	5,940.00	
Speakers – Accomm.	4,784.15	
Speakers – Expenses	12,261.97	
Speakers – Gifts	270.09	
Speakers – Invited	3,500.00	
Stationery	934.07	
Tea & Coffee	197.51	
Telephone	1,098.22	
Trade Booth Hire	10,995.60	
Trade Exhibition Co-odinator	5,133.00	
Trophies & Awards	743.96	
Venue Investigation	1,995.63	
Website Marketing	465.00	
Welcome Cocktails	4,403.40	236,119.93
Balance		43,436.82