THE UNIVERSITY OF WESTERN AUSTRALIA

Achieving International Excellence

Institute of Agriculture

Annual Research Report 2008

Contents

Compiled and edited by Mrs Erika von Kaschke and Prof Kadambot Siddique

Our Mission

To advance research, education, training and communication in agriculture and natural resource management for the benefit of mankind.

Our Vision

To be recognised for excellence in serving agriculture and the management of natural resources through research, education and training in a regional, national and international context.

Director's Report

In 2008 we made significant progress towards UWA Institute of Agriculture's (IOA) objectives and vision.

The highlights on the Institute's 2008 activities include: the Postgraduate Showcase, Industry Forum, and the Agriculture Open Day at Shenton Park Field Station. The Industry Forum, entitled "2020 Vision: The face of WA broadacre farming, explored current and future trends in broad acre farming systems in WA, and predicted some future trends".

The IOA reignited the Hector and Andrew Stewart Memorial Lecture in March 2008. Adjunct Professor Julian Cribb (University of Technology, Sydney) spoke about "The coming Famine". In this lecture, attended by almost 100 participants, he stressed the Australian experience in coping with droughts and the value of agriculture knowledge. This knowledge and experience will be useful for adapting to future climate change and Australia's role in global food security. See the list of our other Food and Agriculture Lecture Series in 2008 on page 16.

Mr Terry Enright from Mt Barker became the first farmer to be awarded an Honorary Doctorate in Agriculture from UWA. Dr Enright was recognised for his contributions over 25 years in industry leadership and strategic direction of agricultural research, development and education.

The International Centre for Plant Breeding Education and Research (ICPBER) was established with an overall objective for UWA to stay in the forefront of plant breeding education, research and technology. This new centre was launched on August 29 by Mr Kim Chance, former Minister for Agriculture and Food; Forestry; the Midwest and Wheatbelt. ICPBER is actively developing strategies to attract top quality undergraduates and postgraduates to study plant breeding and genetics at UWA.

International engagement remains a top priority for IOA. Twenty seven Iraqi agricultural scientists were trained during September and October 2008 in advanced Integrated Plant Disease Management (IPDM) at the IOA.

During 2008 we have had great success in attracting a number of externally funded research projects, and undergraduate and postgraduate students in agriculture and natural resource management areas. Student numbers in the BSc in Agriculture (and the combined degrees with Commerce and Economics) has remained consistent over the last several years.

We also continued our efforts in publishing high quality scientific papers in reputable journals. The full list of publications appears on page 22.

The Institute maintains delivering effective communication (through press releases, newsletters, public lectures etc) of agricultural research and teaching activities at UWA to industry, farmer groups, collaborators, funding bodies, potential students and alumni. We stay in touch with real world agriculture through active partnership with grower groups (Grower Group Alliance, Local Farmer Group Network, the WA No-Till Farmer Association (WANTFA) located on campus, and Departments of Agriculture and Food WA.

Positive feedback from external groups suggests that the endeavours of the IOA to increase the visibility of UWA agriculture amongst its collaborators and partners – research organisations, industry, growers, and agricultural advisors- are working. UWA is currently ranked 127 in the world (as defined by China's Shanghai Jiao Tong University rankings). I am excited about the future direction of the Institute of Agriculture and look forward to your participation and support.

Prof Kadambot Siddique

Chair in Agriculture and Director

Highlights for 2008

Integrated land and water management program

The Integrated land and water management program aims to enhance the sustainability of farming systems by providing leadership in dealing with major challenges in managing land and water resources in agricultural and natural systems, and addressing industry issues and needs from a strong scientific base.

Research breakthroughs

Zinc efficiency in barley

Mr Behzad Sadeghzadeh, PhD student and Professor Zed Rengel worked with Dr Chengdao Li from the Department of Agriculture and Food WA (DAFWA) to identify chromosomal regions conferring zinc efficiency in barley.

The discovery of genetic markers contributing to improved barley productivity and nutritional quality in zinc-deficient environments is promising because as an essential trace element for humans, zinc has a crucial role in more than 300 enzymes in the human body. Mr Sadeghzadeh discovered that some barley grow and yield well, even in zinc-deficient soils, because they are zinc efficient and have zinc-dense seed. A doubled-haploid population of 150 barley lines derived from a cross between a zinc-inefficient Australian cultivar, 'Clipper' and a zinc-efficient Algerian wild barley, 'Sahara 3771', were screened for seed zinc content under field conditions at UWA's Shenton Park Field Research Station.

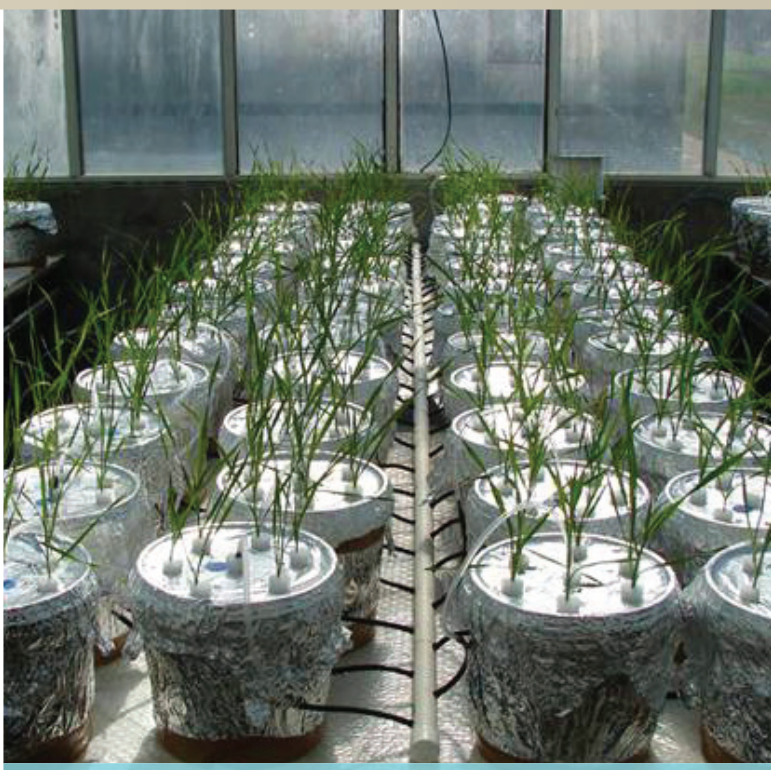
Comprehensive molecular mapping of doubled-haploid populations, using 302 markers, enabled them to identify quantitative trait loci for zinc accumulation in barley seed. Identifying molecular markers linked to genetic loci controlling seed zinc will allow more rapid and efficient screening of barley lines than traditional techniques. These findings have important implications for barely breeding programs and ultimately improving the zinc status of the human diet. For more information, go to **http://www.news.uwa.edu.au/ioa**

New screening techniques assessing ion toxicity tolerance

Dr Hossein Saberi and Professor Zed Rengel of the School of Earth and Geographical Sciences and Institute of Agriculture, UWA, have developed screening techniques for assessing the tolerance of different wheat varieties to ion toxicity (Funded by the Australian Research Council (ARC) and the Department of Agriculture and Food WA (DAFWA). The group has already identified useful variation for iron and manganese toxicity tolerance among wheat breeding lines.

This project would provide valuable information to growers on the reaction of traditional and new varieties to toxicity. It will also provide plant breeders with knowledge of wheat germplasm tolerant to ion toxicity. Identifying new lines with varying levels of ion toxicity tolerance will enable researchers to define regions of WA where it occurs and gain a clearer picture of how it can affect wheat production.

Read more about this and other stories at
http://www.news.uwa.edu.au/ioa



Development and optimisation screening techniques used to determine ion toxicity in wheat. (pots)

Soil quality website

UWA in collaboration with DAFWA have created a website for soil quality: www.soilquality.com.au Farmers can use the tools provided on this website to gain a greater understanding of the health of their soil. The website looks at regional soil quality information, compares data and examines soil relationships. Website users who register on this website could store their soil test results in the Soil Quality database, and instantly access their testing history. It also compares tests to other sites in a specific catchment area and region.

Highlights for 2008

Animal production systems program

The animal production systems program works towards developing clean, green and ethical systems for improved animal production. This concept is more than a major driver of our research because it is also incorporated into teaching of animal science and production program at UWA.

Most of the Animal Productions Systems program's scientific effort focuses on pasture-based, extensive production systems, although the group is also involved in the more intensive industries, such as aquaculture, pig meat, poultry and dairy cattle. In addition, they do significant research in the breeding of game birds, including the ratites (the emu and ostrich).

Extension and expansion

4th International Ratite Science Symposium

Experts on the rhea, ostrich and emu first attended a ratite symposium at UWA on June 26, and went onto Brisbane for the 4th International Ratite Science Symposium that accompanied the XXIII World Poultry Congress (June 30 to July 4, www.wpc2008.com).

Participants were introduced to the complexity of ratite farming, and provided an opportunity to share new knowledge about improving ratite welfare, reproductive performance and breeding technology to name but a few. For more on this topic go to http://www.ioa.uwa.edu.au/_nocache/?a=92717

Vice Chancellor, Prof Alan Robson, and Dr Rob Kelly (Program Leader, Livestock Environmental Systems and Chairman, CSIRO's Centre for Environment and Life Sciences (CELS) in Perth) during a visit to UWA Ridgefield on 31 October 2008.

Ridgefield farm

Expanding research and development needs at UWA has led to the purchase of a 1588 ha (3923 acre) farm, Ridgefield, at West Pingelly. UWA aims to make Ridgefield an example of farming with ethics, and state-of-the-art principles, whilst serving the local and international community.

This property was selected for a number of reasons like soil types, location, topography, rainfall, total area and the overall excellent condition of the property. It is ideal for development as a resource to facilitate state, national and international research with inputs from the local and WA farming community, re-affirming the long-term commitment of UWA to agricultural research and development.

UWA Ridgefield aims to demonstrate the highest principles of ecosystem management. This involves managing the impact of all commercial enterprises, but taking into account proper management of the natural environment in the surrounding areas. For more on this topic go to **http://www.ioa.uwa.edu.au/_nocache/?a=132867**

Highlights for 2008

Plant production systems program

The Plant Production Systems program endeavours to contribute to the productivity and sustainability of plant-based Australian agriculture through the application of science and technology. Australian agriculture includes a large land area (300-600 mm winter rainfall) devoted to rain-fed annual temperate crops, pastures/livestock. There is also much more intensive agriculture in areas of high rainfall and/or irrigation with crops (cotton, vines, orchards, vegetables, flowers etc), perennial pastures/livestock and other higher value agricultural products. The UWA Institute of Agriculture Plant Production Systems activities come under two areas of extensive and intensive agriculture.

Excellence training: Making a difference

IOA Plant Productions Systems Program workshop

The annual UWA Institute of Agriculture Plant Production Systems Program workshop was held on July 7 to discuss plant improvement research and education in Western Australia. The aim of the workshop was to get a better understanding of current crop improvement activities in WA, look at the main challenges and opportunities, and how to advance education and research collaboration. For more information go to: **http://www.ioa.uwa.edu.au/_nocache/?a=92717**

Establishing the International Centre for Plant Breeding Education and Research (ICPBER)

The ICPBER was launched on Friday, August 29 by Mr Kim Chance, former Minister for Agriculture and Food; Forestry; the Midwest and Wheatbelt. It will play a vital role in addressing the looming global shortage in plant breeding expertise.

The ICPBER aspires to satisfy the global need to develop rapid crop breeding skills to help us adapt to climate change and to secure the world's food supplies. The centre will provide much needed integrated expertise in genetics, biotechnology and plant breeding. It will help provide the next generation of professional plant breeders for Australia, the Asia-Pacific region, and the Indian Ocean rim. The ICPBER will significantly strengthen UWA's contributions to Australian and international agriculture. Read more on this at http://www.ioa.uwa.edu.au/_nocache/?a=92717

Left: Prof Willie Erskine, A/Prof Wallace Cowling and Mr Kim Chance, MLC

Highlights for 2008

Rural economy, policy and development program

The overall objective of the Rural Economy, Policy and Development program is to enhance the sustainability of rural industries, communities and regions. More specifically, the program aims to provide innovative research and education that: improves the productivity and prosperity of agricultural industries; addresses the environmental challenges facing rural regions; contributes to the broader economic and social development of rural industries, communities and regions; and enhances decision-making and rural policy.

Making agricultural science add up

The status of youth in rural areas

Over the last two decades there has been a steady decline in the number of youth moving into rural communities throughout Australia. Generally, inland agricultural communities are the most seriously impacted by this trend. Coupled with high rates of youth out-migration, many rural communities are facing difficulties in attracting youth to fill skilled job vacancies and apprentice positions. Declining youth in-migration also has social consequences, effectively reducing the capacity of rural communities to replenish their skill base and social networks through traditional avenues.

Since 2006 Professor Matthew Tonts from the Institute for Regional Development at UWA has been studying how perceptions of living and working in Western Australia's grianbelt influenced university students and graduates willingness to move to these regions for work. The major reason why youth leave rural areas is to access employment, education and social opportunities available in larger towns and cities. This study examining urban based youth intentions to move to rural areas found that some of the barriers to youth moving to rural areas were a perception that small rural communities were largely socially isolating compared to the social opportunities available in large towns and cities and that rural areas and industries offer minimal opportunities for career advancement. In particular those involved in law and business felt that rural areas offered little in the way of career advancement. On the other hand, those in natural and agricultural sciences, education and medicine expressed more optimism about the potential career opportunities in rural areas.

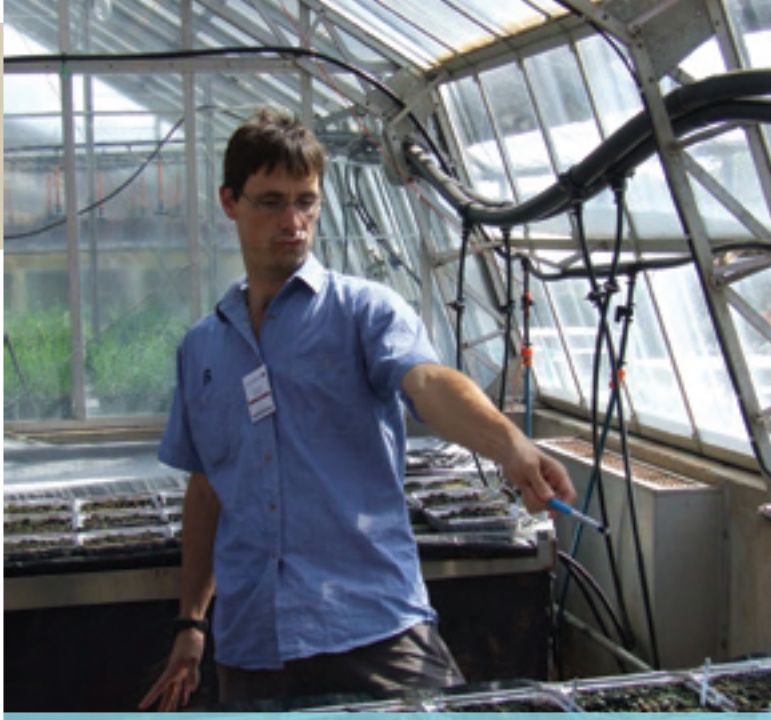
When comparing the responses of those who live, or had lived, in rural areas to those that had little experience in rural communities it was found that the perceptions of the first group were far more positive than for the latter. Those that had previously lived in the region were far more likely to move back to rural areas than those that had limited connection with rural communities.

Engineering soil quality indicators

Dr Atakelty Hailu, Senior Lecturer, School of Agricultural and Resource Economics, Faculty of Natural and Agricultural Sciences at UWA and Chief Investigator of an Australian Research Council (ARC) Discovery Project, is developing a procedure that uses mathematical models and numbers to investigate farming and environmental problems, summarising multiple physical, biochemical and biological parameters into a single soil quality index.

The index will be a useful tool to judge land productivity and evaluate the performance of investments in soil quality. The soil index construction procedure is more objective by utilizing a production input-output relationship estimated with field data, rather than ad hoc ways of converting multiple attributes into a single index. Dr Hailu's consistent results suggest it may be possible to construct indices which capture soils' capability, without referring to factors other than soil quality attributes. He is also developing an integrated economic-hydrologic model for 300 farms in the Katanning catchment, to provide a computer-based or 'virtual laboratory' for policy formulation on land use.

For more information go to http://www.ioa.uwa.edu.au/_nocache/?a=132867



Dr Michael Renton of UWA, pictured here, and Dr Sally Peltzer of DAFWA, Albany co-developed the Weed Seed Wizard to help growers manage the weed seed bank in the soil.

"Wizzing" what lies beneath

Dr Michael Renton of UWA and Dr Sally Peltzer of Department of Agriculture and Food WA (DAFWA), Albany have developed a computer simulation tool to help farmers curb the cost of weeds. The Weed Seed Wizard, was specifically designed to help growers manage the weed seed bank in the soil.

The Wizard builds a "reasonable representation" of how long-term factors, including dormancy, seed burial depth, soil type, soil moisture, seed species, rainfall and season, interact. This model could be the basis of a practical decision-aid tool to help farmers and consultants manage weed populations in real farming contexts and determine optimal control measures.

The trial prototype features a graphical user interface that runs as a stand alone application. The user interface includes windows where growers can edit the initial conditions of simulated paddocks and amend management options. Different weed management scenarios can be viewed and compared side-by-side, so the relative value of options is clear. The Wizard also incorporates documented knowledge about the different biology of each weed species and information on major weeds in each state. Read more on this story at http://www.ioa.uwa.edu.au/_nocache/?a=132867

Highlights for 2008

Education, outreach and technology exchange program

The Education, Outreach and Technology Exchange program has the following objectives:

- To attract and train outstanding undergraduate and post-graduate students in a range of scientific disciplines leading to careers in agriculture and natural resource management;
- To provide professional training to people already in the workforce to augment their skills to better serve the agricultural and natural resource management industries;
- To facilitate opportunities for technology exchange & knowledge transfer to industry & the rural community
- To communicate the role of the University of Western Australia in education, training and technology exchange to farmer groups, agribusiness, collaborators(national and international), funding bodies and potential students, highlighting the benefits contact with UWA may bring; and
- To raise public awareness and understanding of the significance of agriculture and natural resource management to WA and national economy.

Education

2008 brought a pleasing increase in enrolments in the undergraduate programs in agriculture and related disciplines when compared with 2007. Agricultural science and natural resource management programs attracted the greatest enrolments, with good interest in the two economics-based programs. There seems to be a high interest in combined degrees. 20 per cent of the 2008 cohort combined their science degree with commerce, economics or engineering.

The new program in climate studies has only attracted four students in its inaugural year. This was expected given approval of the degree was only granted in November 2007. Completion of undergraduate degrees in agriculture and related disciplines for the six year period from 2001 shows a relatively stable output of graduates over that time period. The greatest numbers of graduates have been in agricultural science and natural resource management, with smaller numbers in horticulture, animal science and landscape management. Numbers show that a good proportion returns to UWA for their postgraduate studies. The IOA continues to attract high calibre local and international post graduate students into PhD projects. During 2008 twenty eight students commenced their PhD, one MSc, and two graduate diploma degrees.

Outreach and Technology Exchange

2020 Vision: The face of WA broadacre farming

The Institute of Agriculture at UWA drew upon more than 200 years of combined knowledge from farmers and other industry experts at the Industry Forum, 2020 Vision: the face of WA broadacre farming on June 27. Speakers explored current and future trends in broad acre farming systems in WA, and predicted what future research and development strategies for integrated cropping and livestock systems might look like.

http://www.ioa.uwa.edu.au/_nocache/?a=92717

Iraqi training program- Integrated Plant Disease Management

27 Iraqi agricultural scientists were trained in advanced integrated plant disease management (IPDM) at the Institute of Agriculture (IOA) at The University of Western Australia (UWA) in a bid to help redress the sharp decline in crop production in Iraq over the past 20 years. During the five week AusAid funded intensive course, trainees attend lectures and practical sessions on plant pathogens, which include bacteria, viruses, nematodes, fungi and mycoplasma.

Students learned to identify and manage pathogens and translating these skills into practice by visiting WA field research stations. Chemical and biological control of plant diseases and development of resistance to fungicides were also covered. For more on this story visit **http://www.ioa.uwa.edu.au/_nocache/?a=132867**

Highlights for 2008

2008 Frontiers in Agriculture postgraduate showcase

The 2008 Frontiers in Agriculture postgraduate showcase on June 10 was no exception to previous years and proved the high quality education in agriculture at UWA. Eight students from the four schools within the Faculty of Natural and Agricultural Sciences presented their work at the showcase, displaying a high quality of research and communication skills. All the presentations are available on the IOA website (www.ioa.uwa.edu.au)

Inaugural UWA Agriculture Open Day

The IOA took showcasing agriculture one step further: more than 75 people, including farmers, industry groups, students and scientists, attended the inaugural IOA Open Day at UWA's Shenton Park Field Station on August 8, 2008. They saw the latest research in aquaculture and native fish breeding, alternative oilseeds, salt tolerant wheats, new legumes, canola, super brassicas, turf, emus and game birds.

Dowerin field day

Once again, the Institute of Agriculture had a booth at the Dowerin Field (August 27-28). This year the IOA displayed under the theme: healthy crops and healthy land. Some growers showed interest in being part of future collaboration on the Soil Quality website project between UWA and DAFWA. We had many enquiries from interested past and prospective students and parents on undergraduate and postgraduate courses within the agricultural and natural resource management areas at UWA.

Website – www.ioa.uwa.edu.au

2008 saw the Institute of Agriculture's website get a make-over to comply with UWA's new visual identity. Quality design and vital information makes it still the first port of call for information on UWA agriculture related information. The website is updated regularly, holding current and archived data.

Press releases and publications

The Institute of Agriculture were in the news several times during 2008. With the support of Brendon Cant and Associates the IOA has made 17 Press releases during the year (Table 1. Full details on website).

In 2008 the IOA School and Centre staff published one book, five book chapters, and 140 papers in refereed journals (Appendix 1). They also presented plenary and concurrent lectures, poster papers at various national and international seminars and conferences.

Table 1. IOA 2008 Press Release Dates and Titles

Date released	Press release
20 February	Heat on white rust in mustard
6 March	CLIMA consolidates as new Director commences
31 March	UWA researchers 'ion' out wheat toxicity issue
10 April	Mt Barker farmer awarded honorary doctorate in agriculture
16 April	Zinc link made in barley breeding
23 April	West welcomes Iranian input to barley breeding
3 May	The good oil on WA sandalwood
14 May	Masturbating ostriches a touchy business
29 May	Engineering soil quality indicators
12 June	UWA Institute of Agriculture showcases postgrads
26 June	Salinity: latest buzzword on Ross River Virus
31 July	Middle East meets western wheatbelt
20 August	Fish grains and game on UWA agriculture open day menu
29 August	UWA Plant Centre to help address global food shortages
24 September	UWA Institute of Agriculture helps deliver AusAid to Iraq
26 November	A 'C-change' for UWA Institute of Agriculture
10 December	CBH UWA scholarships an honour for Weetman and Alderman

Highlights for 2008

Hector and Andrew Stewart Memorial Lecture

The Institute of Agriculture reignited the Hector and Andrew Stewart Memorial Lecture in March 2008. Professor Julian Cribb, an Adjunct Professor in Science Communication at the University of Technology Sydney and a fellow of the Australian Academy of Technological Sciences and Engineering, covered the topic, the coming Famine.

He said Australia could and should play a major role in curbing a coming global famine because of its agricultural expertise and drought experience. He sketched a scenario of too many people, too little water, arable land, and an erratic climate against an increasing demand for quality food from a growing middle class world wide. He also believes a second agricultural revolution will come from the soil – rather than the lab alone.


Institute of Agriculture

UWA Institute of Agriculture helps deliver AUSAID to Iraq

IOA newsletter reaching wider audience

The Institute of Agriculture aims to bring high quality relevant information on its activities to alumni, agribusiness, growers and industry, funding bodies, research institutions, and UWA staff. During the middle of the year, the face of the IOA newsletter changed to incorporate the new UWA visual identity, without compromising on content. The newsletters were published during March, August and December 2008.

Mt Barker farmer awarded honorary doctorate in agriculture

Mt Barker farmer Terry Enright became the first farmer to be awarded an Honorary Doctorate in Agriculture from The University of Western Australia (UWA). Dr Enright has devoted 25 years in the enhancement and strategic direction of agricultural industry development, research and education in Australia.

Food Agriculture lecture series

During 2008 the Institute of Agriculture continued to build upon the successes of the Food and Agriculture Lecture Series 2007. This year the IOA organised eight public lectures (Table 2) attracting wide range audiences of between 30 and over 90 people. Details of these public lectures are available on the IOA website (www.ioa.uwa.edu.au).

Table 2. IOA Food and Agriculture Lectures 2008

Date	Presenter	Organisation	Title
7 March	Adjunct Professor Julian Cribb FTSE	University of Technology Sydney	"The Coming Famine"
28 March	Dr Jim Fortune	R&D Consultant, Adelaide	"Change and maturity in the Australian Wine Industry"
28 April	Emeritus Professor Philip Cocks	The University of Western Australia	"Climate change and the failure of our democratic institutions"
14 May	Mr Mick Keogh	Executive Director, Australian Farm Institute	"Changing demand for animal protein in Asia: challenges and opportunities for Australian agriculture"
6 October	Mr Jeremy Gilbert	Managing Director, Barrelmore Ltd, USA	'Reserves Growth the myth in the peak oil debate'
27 October	Mr Steve Waller	Director, Office of climate change, WA Government	"Opportunities and challenges for agriculture in a future low carbon world"
10 November	Prof Stephen Powles	Director, WA Herbicide Resistance Initiative (WAHRI), UWA	"Evolution in Action: My 25 years in herbicide resistance research"
11 December	Professor Dyno Keatinge	Director General, AVRDC, Taiwan	"Man Should Not Live by Bread Alone!"

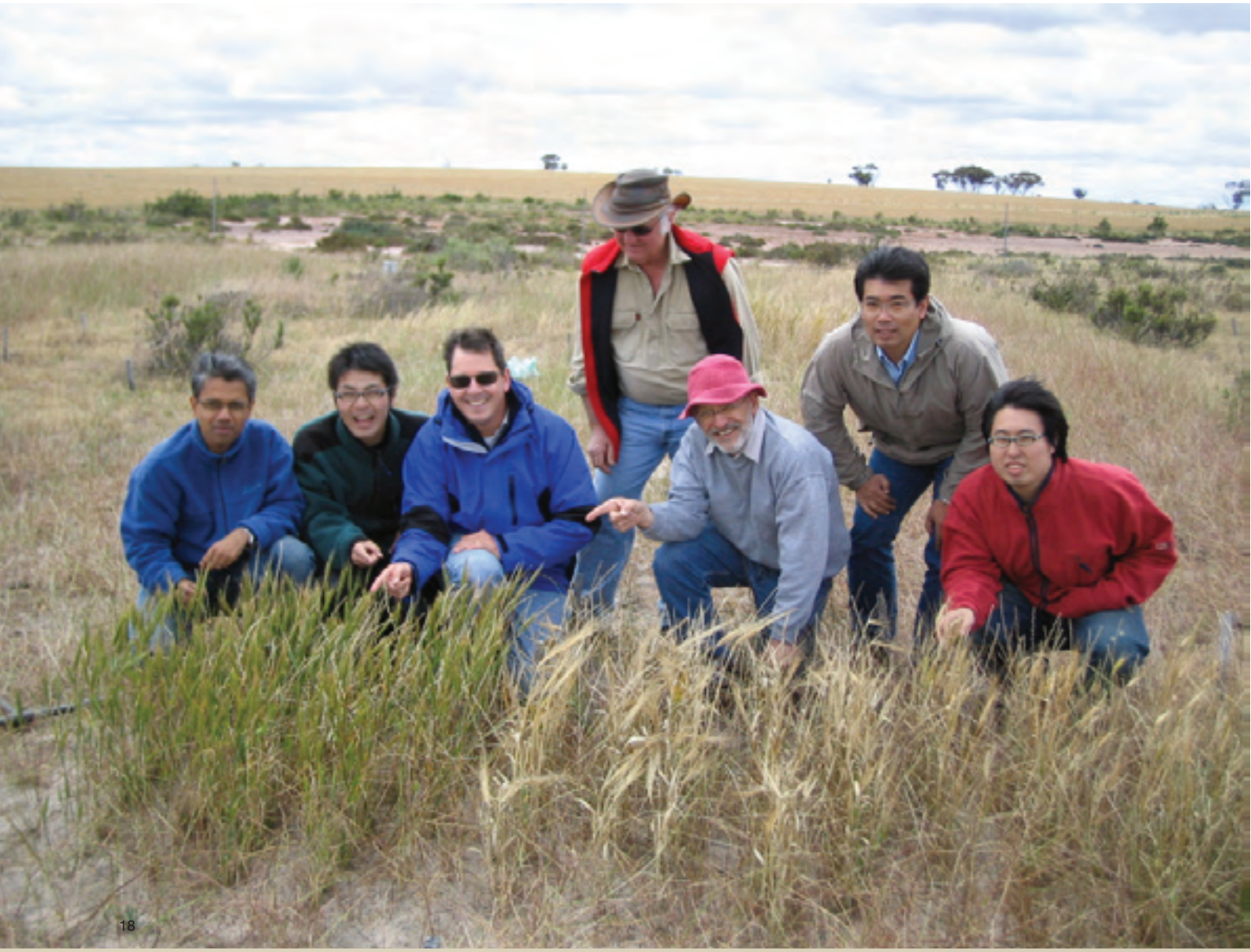
Memorandum of understanding (MoU)

The Institute of Agriculture has established several MoU with key overseas Universities and UWA. This year three MoU's were signed with overseas universities namely The University of Agriculture, Faisalabad (Pakistan) and Huazhong Agricultural University (China), China Agricultural University, Beijing (China).

Visitors

Visitors to the institute

The Institute of Agriculture continues to make linkages with organisations and Universities across the globe. During 2008 we received more than 85 national and international visitors including His Excellency Mr Mahmoud Movahhedi (Ambassador of the Islamic Republic of Iran), Dr Michel Thibier (Conseiller Scientifique, French Ambassy) and Prof Dyno Keatinge (Director General, AVRDC–The World Vegetable Centre,Taiwan).



Awards and Industry Recognition

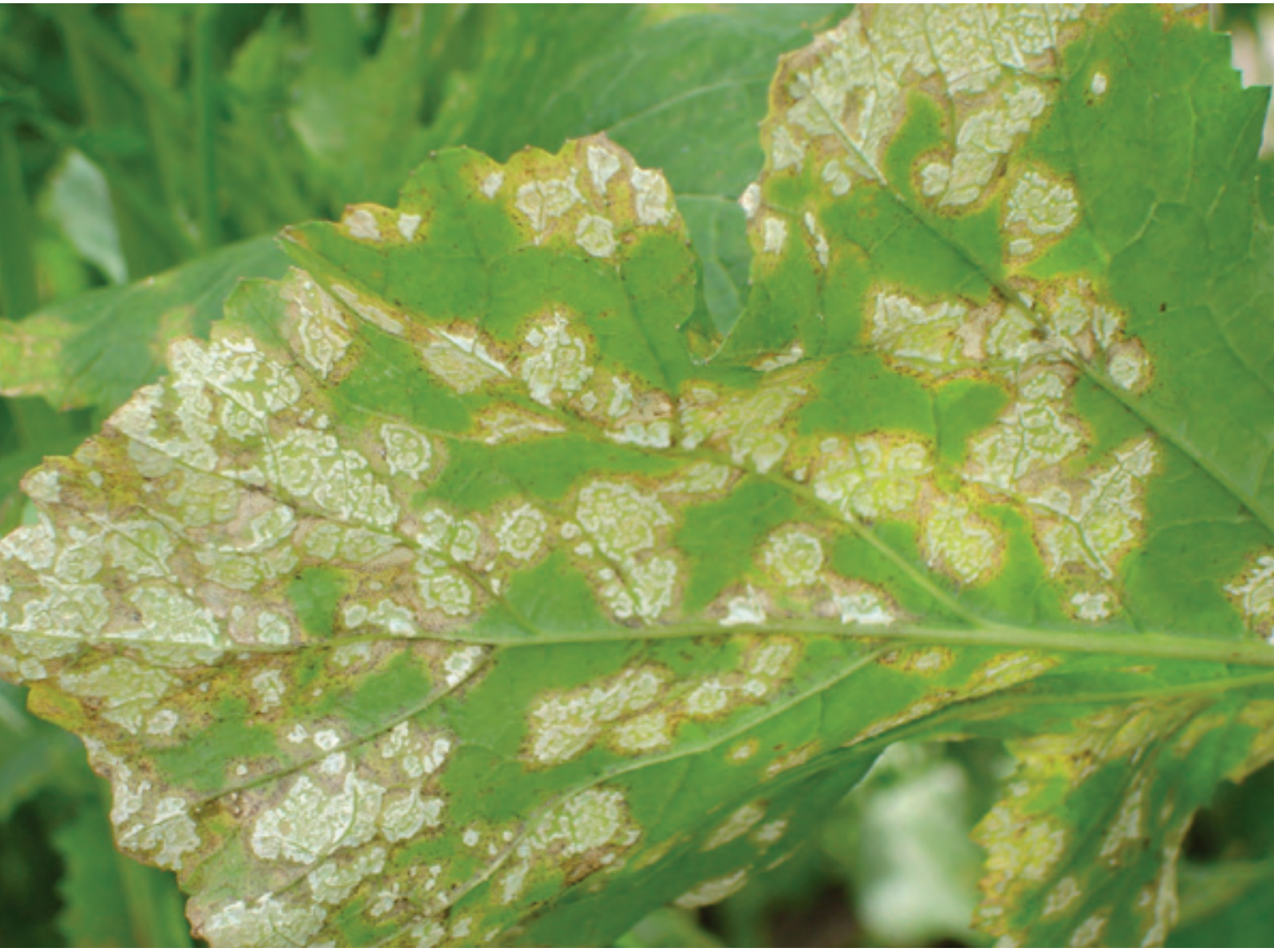
Awards and industry

IOA and associated staff and students were recognised for their successes and achievements in their fields during 2008.

Table 4: Research & Industry Recognition

Name	Award
Adjunct Associate Prof Ed Barrett-Lennard, Dr Sarita Bennett and Associate Prof Tim Colmer	Best poster at the 2nd International Salinity Forum in Adelaide (31st March to 4th April)
Mr Andrew Broun	Australian Agricultural and Resource Economics Society Honours Thesis prize WA
Ms Megan Chadwick (PhD student, School of Animal Biology)	Mike Carroll Memorial Traveling Fellowship 2007
Mr Weihua Chen (PhD student, School of Plant Biology)	Mike Carroll Memorial Traveling Fellowship 2007
Emeritus Prof Philip Cocks	Farrer Memorial Medal 2008
Dr Graeme Doole	PhD prize for Australian Agricultural and Resource Economics Society 2008
Ms Joanne Elliott	First prize in Young Professionals in Agriculture award AIAST
Dr Terry Enright	Honorary Doctorate in Agriculture from UWA
Ms Chelsea Fancote	Second prize in Young Professionals in Agriculture award AIAST
Mr David Feinberg, CBH and IOA External Advisory Board member	Appointed as member of GRDC Western Panel
Ms Tracey Gianatti	Appointed as member of GRDC Western Panel
Associate Prof Ross Kingwell	President-elect of Australian Agricultural and Resource Economics Society
Dr Imran Malik	Awarded a Japan Society for the Promotion of Science (JSPS) Postdoctoral Fellowship
Prof Steve Powles	• Appointment as Science Fellow (2009-2011), Australian Pesticides & Veterinary Medicines Authority (APVMA) • Appointed as Expert Advisor Gene Technology Regulator (2008-2010).
Mr Andrew Williams	2008 Australian Agricultural Industries Young Innovators and Scientists award
Dr Guijun Yan	Faculty of Natural and Agricultural Sciences Excellence in Teaching Award 2007
Professor Kadambot Siddique	Honorary Professor of Huazhong Agricultural University

New Research Projects



New research projects

IOA School and Centre staff continues to successfully gain funding for cutting edge research projects from various funding sources. These includes Australian Research Council (ARC)l, Grains Research and Development Corporation (GRDC), Rural Industries Research and Development Corporation (RIRDC), Australian Centre for International Agricultural Research (ACIAR), AusAID, Meat and Livestock Australia (MLA), Council of Grain Growers Organisation Ltd (COGGO). We also received funding from Department of Agriculture and Food WA (DAFWA), Department of Environment and Conservation WA (DEC), Department of Agriculture, Fisheries and Forestry (DAFF), Pilbara Iron Pty Ltd, International Crops Research Institute for the Semi Arid Tropics, Future Farm Industries, Government of WA, Worsley Alumina Pty Ltd, Chevron Australia Pty Ltd, King Island Council, Syrinx Environmental Pty Ltd, Australian Laboratory Services Pty Ltd, Avon Catchment Council and the University of Sussex. For more information on our research projects see the Institute of Agriculture newsletter on **www.ioa.uwa.edu.au**

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Mr Kevin Goss Chief Executive Officer, Future Farm Industries	kevin.goss@futurefarmcrc.com.au

External Advisory Board

The members of the EAB represent the cross section of the agricultural industries and natural resource management areas.

Mr Bruce Piper (Farmer & Chairman COGGO) (Chair)
Dr Stephen Loss (Manager, CSBP)
Mr Neil Young (Farmer & Chairman – GRDC Western Panel)
Mr Philip Gardiner (Farmer)
Mr Imre Mencshelyi (CEO, CBH Group)
Mr David Fienberg (Manager Aust. Grains Centre/Metro Grains Centre, CBH Group)
Mr Garry Robinson (Manager, Livestock Export, Wellard Rural Exports Pty Ltd)
Dr Peter Trefort (Director, Hillside Meats
Dr Tony Fischer (Honorary Research Fellow, CSIRO)
Dr Jim Fortune (Agricultural Consultant)
Ms Naomi Arrowsmith (Manager, Dept. of Water, Albany)
Dr Don McFarlane (CSIRO, WA Co-ordinator: Water for a Healthy Country Flagship)
Dr Peter O'Brien (Managing Director, RIRDC)
Mr Roger O'Dwyer (Executive Director, Industry & Rural Services, DAFWA)
Mr Andrew Ritchie (President, AAAC)
Prof Tony O'Donnell (Dean, FNAS, UWA)
Prof Kadambot Siddique (Director, IOA, UWA)
Mrs Christine Richardson (Faculty Manager, FNAS, UWA)

Appendix 1
Publications 2008

Refereed journals

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