Resilient Food Systems for a Changing World:

Proceedings of the
5th World Congress of Conservation Agriculture
INCORPORATING
3rd Farming Systems Design Conference

Brisbane Convention & Exhibition Centre
Brisbane Australia • 26–29 September 2011
www.wcca2011.org
Resilient Food Systems for a Changing World:

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5th World Congress on Conservation Agriculture

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3rd Farming Systems Design Conference

25 – 29th September 2011, Brisbane, Australia

Co-location of the 5th World Congress on Conservation Agriculture (WCCA) and the 3rd Farming Systems Design (FSD) Conference, with substantial input from Landcare, provides a great opportunity to explore the application of conservation agriculture practices and principles in a broad systems context.

Our common objective is the design of more productive, economic, and sustainable farming systems to meet the challenges of expanding population, global change, and environmental degradation.

© WCCA/FSD Local Organising Committee
c/o Australian Centre for International Agricultural Research
GPO Box 1571 Canberra ACT 2601
Theme 1: More efficient management practice in conservation agriculture

Lead papers
Spatial variation of soil constraints and its implications for site-specific soil and nutrient management in conservation agriculture
Author(s): Y. Dang, L. Bell, R. Dalal

Disc seeders in conservation agriculture: an Australian survey
Author(s): J. M. A. Desboilles

Soil and yield improvements from controlled traffic farming CTF on a red chromosol were similar to CTF on a swelling black vertosol
Author(s): T. Ellis, S. Sedeghatpour, C. Hignett

Crop roots and crop residues management: impacts on soil structure under zero tillage
Author(s): M. Fuentes, Paola Solis, F. De León, C. Castorena, B. Govaerts

The effect of tillage practice and residue management on wheat yield and yield stability in two agro-ecological environments in Mexico
Author(s): B. Govaerts, N. Verhulst, K. D. Sayre

Conservation agriculture in cereal systems of South Asia: effect on crop productivity and carbon-based sustainability index
Author(s): M. L. Jat, R. K. Jat, R. Gupta, R. Gopal

Short-term effect of no-tillage on profitability, soil fertility and microbiota: a case study in a tropical ecosystem (altitude plains, LAO PDR)
Author(s): P. Lienhard, F. Tivet, A. Chabanne, L. Séguy, A. Khamhung, K. Panyasiri, P. A. Maron, L. Ranjard

The real adoption of conservation agriculture in the Lake Alaotra area after 10 years of diffusion
Author(s): E. Penot, J. Fabre, R. Domas

The synergy of raised beds, controlled traffic, minimum tillage and stubble retention deliver higher water use efficiency in South West Victoria, Australia
Author(s): R. Peries, J. S. Gill

Development of the conservation agriculture equipment industry in Sub-Saharan Africa
Author(s): B. Sims, C. Thierfelder, J. Kienzle, T. Friedrich, A. Kassam

Genetic control of wheat adaptation to conservation agriculture
Author(s): R. M. Trethowan, T. Mahmood, Z. Ali, K. Oldach

Trade-offs of crop residue use in smallholder mixed farming systems in Sub-Saharan Africa and South Asia
Author(s): D. Valbuena, B. Gerard, A. Duncan, N. Teufel, S. Homann, M. Bhatia

Oral presentations
A preliminary evaluation of furrow inflow rate and cut-off time on the performance of smallholder raised bed farming systems
Author(s): G. Akbar, A. D. McHugh, S. R. Raine, G. Hamilton

Conservation tillage systems for peanut cultivars in rotation with sugarcane and pastures in Brazil: effects on yield pod and root growth

Sustainable agriculture under climate change in the Aral Sea Basin: introducing legumes in crop rotations
Author(s): M. Bourgault, C. A. Madramootoo, H. A. 1 Webber, G. Stulina, M. Horst, D. L. Smith

Using conservation agriculture to improve water use efficiency in wheat crops on the Bransom farm in South Australia
Author(s): M. Branson

Innovations for relay planting of wheat in cotton: a breakthrough enhancing productivity and profitability of cotton-wheat systems of South Asia
Author(s): G. S. Buttar, H. S. Sidhu, V. Singh, N. Gupta, R. Gupta, M. L. Jat, B. Singh

Effects of minimum and conventional tillage systems on maize grain yield and soil fertility in Western Ethiopia
Author(s): T. Debele
About the necessity of adequately defining no-tillage - a discussion paper  

Conservation agriculture, aggregate stability and the organic carbon distribution in soil aggregates  
Author(s): M. Fuentes, L. Dendooven, F. De León, J. Etchevers, C. Hidalgo, B. Govaerts

Happy seeder technology: a solution for residue management for the sustainability and improved production of the rice-wheat system on the Indo-Gangetic Plains  
Author(s): M. K. Gathala, V. Kumar, Virender Kumar, Y. S. Saharawat, J. Blackwell, J. K. Ladha
Paper Submission
Condensed paper submissions are invited for the 5th World Congress on Conservation Agriculture (WCCA5) incorporating 3rd Farming System Design Conference (FSD3).
Early paper submission will allow early notification of acceptance, which will be important for overseas delegates needing time to arrange Visas, travel and financial assistance.
The 3-page condensed paper format will provide delegates with a concise record of all papers. It is important that authors follow the Congress paper submission format, which can be downloaded from the Congress website: www.wcca2011.org/condensed.htm
Super early bird registration closes on 31st December 2010. Early bird registration closes on 31st March 2011
Final date for paper submission is 15th May 2011 but earlier submission is advisable for authors particularly seeking oral presentations, or requesting financial assistance.
All inquiries regarding condensed papers for WCCA5 & FSD3 2011 should be emailed to: infowcca5@icmaust.com.au.

Workshop Proposals
Workshop proposals are invited to promote debate on important issues of CA and FSD. Details on the website: www.wcca2011.org/Workshop.htm

Mid-Congress Field Day
This will be held at University of Queensland Gatton campus on 28 September, featuring demonstrations of high and intermediate-technology conservation agriculture equipment and techniques. It will be combined with CA and FSD workshops, and conclude with the Congress dinner.

Venue
The Brisbane Convention & Exhibition Centre is a world-class purpose-built venue renowned for its operational and service excellence. The Centre is located in a unique urban cultural and entertainment precinct in the heart of Brisbane known as South Bank.
South Bank is a unique riverside cultural and entertainment precinct in the heart of the city of Brisbane. Set in lush subtropical riverfront parkland, it is a dynamic urban lifestyle and retail precinct that showcases Queensland’s art and culture and hosts one of the world’s most important collections of indigenous art. Located on a one kilometre stretch of the Brisbane River, South Bank is home to the only sand and swimming beach in the heart of an Australian city. You’ll be surprised at the diversity of attractions, with rainforest walks, more than 30 restaurants, cafes and bars, stylish shops, symphony orchestras, state opera companies, performing arts theatres and art culture including Australia’s newest and largest Gallery of Modern Art.
Brisbane is an alive and bustling city of 1.6 million people that features all the requisite offerings of the nation’s fastest growing capital—world-class facilities and ever-expanding infrastructure, and unparalleled support services, shopping and entertainment. Brisbane also combines traditional Australian informality and friendliness with a multicultural atmosphere. Restaurants offering menus from many different parts of the world can be found within 10 minutes walk of the Congress venue.
The WCCAS venue of choice is a central city location, convenient for visitors with easy and direct access to an efficient citywide transport network of buses, trains, taxis and the river’s high-speed regular catamaran service. The city to airport Air Train is also very convenient and operates from the South Brisbane train station, adjacent to the Brisbane Convention & Exhibition Centre.

Registration
Key dates for registration
Close of Super Early Bird Registration 31 December 2010
Close of Early Bird Registrations 31 March 2011
Close of Standard Registrations 30 August 2011
Registration fees (AUS) (cost includes field day and dinner)
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Contact Us
All enquiries including registration, accommodation, sponsorship and exhibition should be directed through the Congress secretariat.
WCCA5 & FSD3 2011 Congress Secretariat
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South Brisbane QLD 4101
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