

'Fourth pillar' proposed for conservation agriculture

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Controlled traffic should be the 'fourth pillar' of conservation agriculture, according to Jeff Tulberg.

Dr Tulberg, from the University of Queensland, told delegates at the World Congress on Conservation Agriculture, held in Brisbane from September 26 to 29, that controlled traffic is as important as the current ABC of conservation agriculture – Absence of tillage, Biodiversity and Cover on the soil – and should stand with them as the fourth pillar of modern agriculture.

Controlled traffic is already practised hand in hand with conservation agriculture by many growers and it will be interesting to see whether or not it is

adopted as a factor as important as minimum or zero tillage, biodiversity and surface cover.

Delegates at the conference included a group of SANTFA representatives (Greg Butler, Alex Milner-Smyth, Simon Patterson, Michael Treloar, Neville Dolphin, Rob Rees, Trevor Polkinghorne and Mark Branson) whose attendance was funded by the GRDC.

Mark, who farms at Stockport and is a former president of SPAA, was one of the many farmers and researchers from around the globe who delivered presentations on aspects of no-till farming systems. Mark's presentation focussed on the increased water use efficiency rates he has been able to achieve through his 'system' approach to farming. He uses technologies and methods spanning all four pillars of conservation agriculture highlighted by Dr Tulberg, with precision agriculture and some good basic maths making major contributions to his ability to consistently achieve good yields even in relatively low-moisture seasons.

A field trip to the Gatton Campus of The University of Queensland provided an opportunity to see some trial work relevant to seeding into heavy rice stubbles and practical demonstrations of small-scale conservation agriculture seeders.

WA agricultural scientist, no-till advocate and McKell Medal winner Bill Crabtree spoke about soil nitrogen and incorporating legumes into a rotation.

As the congress progressed it became very apparent that Australia is at the forefront of conservation agriculture. This was evident from the presentations given by local farmers and the demand from international delegates for information from sectors across the Australian agricultural industry. Participants from overseas, especially

developing countries, were desperate to get their hands on written resources, and as I type some of SANTFA'S best-practise guides are on their way to several countries.

International delegates seemed to be more interested in farmers' experiences than traditional research results and SANTFA board members were in demand with overseas researchers and extension workers who wanted to hear about practical solutions direct from the source.

Our SANTFA farmers spent time with delegates from countries including Russia, France and New Caledonia.

This demand for practical, farmer-level information highlighted shortcomings in Australian agricultural research, much of which is quite removed from farmers, and pointed to the need for more practical on-farm trials and the important role of the farmer in adoption.

Kevin Rudd, the closing speaker, left some of us scratching our heads with his talk emphasising the need for increased food production (70% by 2050).

Keynote speaker Richard Heath, a NSW farmer who followed Rudd at the lectern for a vote of thanks, used the opportunity to ask how an increase in food production was possible given the government's declining financial contribution to agriculture and agricultural research.

His talk entitled "Have the good years become the bad years?", built around his struggles to keep a bumper 2010 crop pest and disease free, raised some important and interesting questions about modern conservation agriculture.

The next World Congress on Conservation Agriculture will be held in Winnipeg, on the US/Canada border, in 2014.

For copies of the presentations by Mark Branson or Richard Heath, contact Alex Milner-Smyth at the SANTFA office. 

