



Australian Government
**Cotton Research and
Development Corporation**

TRAVEL & CONFERENCE REPORT

Part 1 - Summary Details

Please use your TAB key to complete Parts 1 & 2.

CRDC Project Number: **TFT0005**

Project Title: **Natural Fibres in Australasia**

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Research Program: Value Chain

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Part 3 – Travel Report

(Maximum two pages)

1. A brief description of the purpose of the travel.

René van der Sluijs and Geoff Naylor travelled to New Zealand in April 2009 on the invitation of the Textile Institute to present papers on the Australian Cotton Industry.

2. What were the:

- a) **major findings and outcomes**
- b) **other highlights**

(a) Conference

2009 has been declared by the United Nations Food and Agriculture Organization as the International Year of Natural Fibres. In response to this the Textile Institute of New Zealand and the Textile Institute branch of New South Wales combined to host the conference on 'Natural Fibres in Australasia' which was held at the Otago University in Dunedin in New Zealand.

The conference was held over three days. The three daily themes were Protein Fibres, Cellulose Fibres and Natural Fibres in cultural artefacts. The conference was attended by 87 delegates. Presenters were mainly from New Zealand and Australia; however a wider international interest was evidenced by papers from Iran, Croatia and The Czech Republic.

The conference was opened by the NZ Minister of Agriculture, Hon David Carter. Being a wool grower David Carter's speech largely focussed on the current issues facing the NZ wool producers. He noted that in general the wool cheque the NZ sheep farmers receive is not sufficient to even pay for the shearing costs! One highlight in the NZ wool market is the very successful niche marketing of high value added 'base layer' garments by NZ Merino growers under the Icebreaker consumer label. This success has returned wool garments to main stream outdoors shops in Aus, NZ and North America. It combines high technical quality, good garment design features and clever marketing including an innovating swing tag using a 'baa code' which offers the consumer a trace back from garment to farm.

The protein fibres day largely had 10 papers largely focussed on wool (including two papers from CSIRO). It covered a large range of topics ranging from novel insect treatments for wool carpets (an important marketing segment for NZ wool), one highly technical paper on spinning and a range of papers on innovations wool consumer products e.g. wool-possum blends (a major commercial success story developed over the last 10 years).

The Cellulose day largely focussed on NZ flax. This native NZ plant grows prolifically in NZ. It was traditionally used widely by the indigenous Maori population in baskets, clothing and ropes. Following European settlement it continued to be a significant textile fibre right into the 1950s and 1960s. A consortium of NZ Crown Research Institutes is currently exploring opportunities to restart this industry with a new focus on composite materials.

Rene van der Sluijs and Geoff Naylor were the only two delegates that presented papers on cotton. Rene's paper was entitled 'Australia's position in the global cotton industry' and Geoff Naylor presented a paper on 'The Measurement of cotton fibre linear density and maturity and its potential value to textile processing'. Both papers were well received with a number of questions raised during the question and discussion period.

The final day focussed on Preservation of Natural Fibres in cultural artefacts. This reflects a strong interest in this area at the University of Otago in Dunedin. The focus was on Maori

artefacts. The key note speaker Dr France, a new Zealander who originally trained in Dunedin, gave an interesting overview of her current work leading The Preservation Research and Testing Division at The Library of Congress in Washington, DC. This included overcoming considerable technical challenges in preserving important artefacts including The Magna Carta, the first map of the world that included the Americas, and the original Star Spangled Banner.

Conference proceeding containing full written papers will be distributed to conference attendees in due course.

Other Highlights

A short tour of the Clothing and Textile Sciences Department of the University of Otago was particularly interesting. This small but dynamic department has four full time academic staff and their research interests include:

- Characterisation of selected fibres, fabrics, leather and clothing, and the effect of these on properties and performance
- Physical structure and performance of fibres/fabrics/products
- Effects of clothing and textiles on human performance; preventing and/or minimising severity of injury

3. Detail the persons and institutions visited, giving full title, position details, location, duration of visit and purpose of visit to these people/places. (NB:- Please provide full names of institutions, not just acronyms.)

N/A

4. a) Are there any potential areas worth following up as a result of the travel? b) Any relevance or possible impact on the Australian Cotton Industry?

Attendance at this conference gave Australia the opportunity to introduce the Cotton Industry to delegates and to highlight the fact that Australian cotton is a premium fibre. It also provided the opportunity to provide information on the work that is being done in Australia in the breeding, on farm, BMP and Post Harvest areas.

In the context of the Australian Cotton Industry's current interest in exploring options for creating specific value for Aussie cotton in the textile processing pipeline, the very successful NZ experience in developing the Icebreaker consumer brand might warrant further investigation. This brand has taken a niche geographically focussed natural fibre supply and cleverly created a highly successful consumer product and brand. It may be a valuable case study relevant to the aspirations of 'Aussie Cotton'.

5. How do you intend to share the knowledge you have gained with other people in the cotton industry?

The main objective was to introduce the Australian Cotton Industry to the delegates and this was achieved successfully. There was no new technical knowledge gained from the conference that needs further reporting to the wider cotton industry.