

## Primary Growth Partnership: Dairy Post - Farm Gate Programme Executive Summary (July - September 2012)

Fonterra has undertaken a significant strategic refresh, the results of which are now flowing into the PGP programme in terms of direction, structure and resources. This process has been supported by external experts, research providers and Fonterra marketing and innovation representatives from across the business. This has resulted in an increase in momentum across the programme.

Most of the new positions for PhD and Post-Doctoral Fellowships created through the PGP programme have now largely been filled and people are on the ground. One of the significant issues in getting these people on the ground continues to be the delays in getting visas from the New Zealand Immigration Service.

To back up the new protein quality methodology it is likely that the United Nations Food and Agriculture Organisation (FAO) and the World Health Organisation (WHO) will call for this methodology to be exemplified by way of an international study led and coordinated by the Riddet. To ensure the momentum of this significant development is maintained, the Riddet is proceeding with scoping an international study without delay. The role of the PGP programme in supporting this future work is to be determined.

ZESPRI research has generated large datasets from three genotypes of kiwifruit, some of which had been given pre-harvest treatments expected to modify their surface properties. A wide range of destructive and non-destructive techniques have been tested, generating important insights into which technologies hold promise for future development. A second set of approximately 17,000 loggers has been installed in pallets over the 2012 harvest season and sent to markets in different supply chains around the globe. Fruit has been shipped over a 5 month period so the data also covers a range of cool storage durations in New Zealand. This data has been analysed so that commercial post-harvest conditions can be simulated under laboratory conditions to assess the impact on fruit form given pre-harvest treatments.

The programme intends to publish research findings, wherever possible, to facilitate international acceptance on new technologies. This quarter two papers have been accepted for publication.

- Rong Zhang, Tamar Kadar, Ernest Sirimann, Alastair MacGibbon, Jian Guan. *Age-related memory decline is associated with vascular and microglial degeneration in aged rats*. Behavioural Brain Research 235 (2012) 210– 217
- “Single Sampling Inspection by Variables for Bounded Quality Characteristics Based on Beta Distributions” was submitted 20th September to The Journal of Computational Statistics and Data Analysis.