



AusScan Forum - *NIR technology for valuing and trading feed grains*

March 2009: Jasper Hotel, Melbourne, Victoria

Aim: To promote the use of NIR technology for the evaluation and trading of feed grains

This event brought around 80 participants from across the feed grain supply chain. These represented individuals and companies from grain growers, plant breeders, bulk handlers and marketers, feed millers and livestock end users, including poultry and pig production operations and feedlot and dairy operations.

The Forum presented information on the variation in the energy value of cereal grains for different livestock types, the inadequacy of current methods for measuring grain quality for animals, the use of NIR technology to measure the energy value of grain for animals and possible ways the NIR technology could be used to facilitate the trading of feed grains.

The Forum was Chaired by John Spragg with Roger Campbell and Peter Reading (GRDC) introducing the day. Dr John Black gave the keynote address covering the history of the project and the scientific explanation and interpretation.

The Forum emphasised the extent and depth of the project in examining 3,300 grains, primarily wheat, barley, oats, triticale and sorghum, with a wide range in chemical and physical characteristics believed to influence their nutritional value for livestock. All grains have been scanned with NIR and the extent and rate of digestion of components in selected grains examined with in vitro systems simulating rumen fermentation and intestinal digestion. Around 200 grains were selected on the basis of NIR scans, in vitro analysis, genetic background or growing conditions were fed to animals including sheep, cattle, pigs, broiler chickens and laying hens.

There was plenty of debate around the potential to use NIR analysis within the grain trading environment. This debate will continue as there is yet a clear pathway for NIR technology in the feed grain supply chain, although many recognise the benefits of objective measurement in the trading of grain and the huge potential for in-line applications at feed mills and for application in grain breeding development.