

final report

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Abstract

This report summaries co-ordination activities associated with the management of R&D and adoption of Meat Standards Australia and the Lamb Supply Chain Group.

Significant achievements include:

- Developing the MSA beef 4/5* platform including re-vamping of carcase sorting concepts to replace boning groups.
- Awareness and adoption activities for the development of MSA beef and lamb with key processors and retailers.
- Awareness and adoption activities for the development of lean meat yield measurement in lamb with key processors and retailers.
- Development of new R&D programs around carcase grading in lamb to facilitate the measurement of lean meat yield and eating quality parameters.
- Development of new R&D leading a cuts based MSA grading model for lamb and yearling Merino sheep.
- Developing a strong relationship between the Sheep CRC and MLA with APMC.
- Significant adoption and awareness activities for beef and lamb producers.

Executive summary

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1 Project objectives - Section

1.1 Management associated with Meat Standards Australia

- Prepare agenda items and reports and respond to requests from MLA's managers eating quality committee.
- Prepare agenda items and reports plus chair sheep and lamb session of the MSA pathways committee
- Assist with the implementation of MSA at the direction of MLA including strategic meetings with MLA, processors and retailers.
- Design and manage new SMEQ R&D
- Undertake international collaboration at the direction of MLA

1.2 Management associated with the Lamb Supply Chain Group

- Attend and contribute to the Lamb Supply Chain Group (LSCG) meetings
- Undertake targeted interaction with key supply chain collaborators at the direction of MLA

1.3 Contribute to MLA management and awareness activities as directed by MLA

- At the direction of MLA contribute to awareness activities such as Ewetime, Meat Profit Days, Supply chain field days and More Beef from Pastures activities.
- Attend MLA management activities such as the Southern Team Meetings and others as directed by MLA

Milestones

Achievement Criteria		Due Date
1	Achievement of objectives and progress report on those objectives submitted to and accepted by MLA	30-Mar-2012
2	Achievement of objectives and final report on those objectives submitted to and accepted by MLA	30-Nov-2012

2 Results and discussion

2.1 Management associated with Meat Standards Australia

Beef:

The key activities included:

- Design and implementation of the temp @ pH 6 x gene marker experiment at ACC and the long distance transport project.
- Design, implementation and management of the MLA 4/5* project (B.BSC.0089) – in particular the day to day supervision of the Post Doc Peter McGilchrist.
- Design and implementation of new MSA optimisation systems for carcass sorting to replace boning groups.

- International collaboration to develop and finalise a collaborative PhD proposal with key European collaborators (France, Poland and Ireland) to understand production effects (breed, animal age, sex) on the eating quality of beef using the MSA consumer protocols conducted in Europe.

Lamb/Sheepmeats:

The key activities included:

- Development of the Lamb Supply Chain Group as the equivalent mechanism of the Beef MSA pathways group for lamb and sheepmeats.
- Managing the consumer testing of cuts from the Sheep CRC Information Nucleus flocks including extra samples from the Dorper site and Yearling Merino's.
- Managing the statistical work up to understand the influence of key fixed effects and co-variables on the eating quality of lamb via the Sheep CRC post doc Liselotte Pannier.
- Managing the statistical analysis by Tony Pleasants to develop a cuts grading scheme for lamb linked to sire breeding values of carcass and eating quality parameters (B.LSM.0033)
- Development of a new MSA lamb project 'Impact of extended time off feed on lamb eating quality'.
- Summary document produced on the influence of time off feed on muscle glycogen content of prime lambs.

Meetings associated with management of MSA research:

- MSA lamb stats meeting Sydney 14th July 2011
- MSA post evaluation meeting, Sydney 14th July 2011
- MSA beef long distance transport meeting Sydney, 17th October 2011
- MSA beef/lamb stats meeting Sydney 8th December 2011
- ALFA 4/5* presentation Sydney 9th December, 2011
- MSA eating quality planning meeting Sydney 12th January 2012
- Woolworths MSA beef 4/5* and MSA lamb meeting Sydney 27-28th March 2012
- Woolworths MSA lamb meeting, Sydney, 17th July, 2012
- MSA Beef pathways meeting, Brisbane, 31 July – 1st August, 2012
- MSA optimisation workshop, Sydney, 12th-13th September, 2012.

Days worked = 20

2.2 Management associated with the Lamb Supply Chain Group

Activities included contributions to planning and attendance of all 4 the Lamb Supply Chain Group meetings held during the project period:

- Meeting 1: 21st -23rd September Melbourne, 2011
- Meeting 2: 8-9th February, Sydney, 2012
- Meeting 3: 5-6th June, Brisbane, 2012
- Meeting 4: 16-18th October, 2012

Additional contributions included break out meetings with key supply chain partners to create awareness and adoption of the new research on lean meat yield and eating quality. Further meetings were undertaken to develop new grading technologies for lamb and to develop a Sheep CRC extension re-bid – the extra meetings included:

- Coles working group meeting – LMY and EQ presentations, Melbourne 21st September 2011
- JBS engagement meeting – LMY and EQ presentations, Melbourne 24th September 2011:
- AMPC meeting with Michelle Edge to scope contributions of CRC to the AMPC conference and other projects, Sydney 1st February, 2012.
- Lean meat yield and eating quality research outcomes. Presented to JBS Australia, Melbourne 2nd February 2012.
- Collaborative opportunities with Silver Fern farms, Sydney 8th February, 2012
- Lamb Futures workshop, Sydney, 10th February, 2012
- JBS engagement meeting, Brooklyn, Melbourne 6th-7th August, 2012
- WAMMCO board presentation on Sheep CRC extension and lamb grading research, Katanning, 26th September, 2012.
- Carometec/AMPC/MLA lamb grading meeting to plan MDC project P PSH 0631 'Proof of concept for new lamb carcass grading tools (Stage 1)', Sydney, 7th-8th October, 2012.
- AMPC supply chain officer interview panel, Sydney, 29th October, 2012.
- Sheep CRC Extension planning meeting with Industry steering committee, Sydney, 6th November, 2012.

A further 4 projects were managed on behalf of the Lamb Supply chain Group:

- (i) An R&D submission was made to AMPC regarding measurement technologies for lean meat yield and eating quality (GR fat-o-meter II and a multi spectral vision system). The outcome is the finalisation of a Meat Donor Company project 'P PSH 0631 - Proof of concept for new lamb carcass grading tools (Stage 1)' with the commercial partners Carometec (Denmark) and Food Processing Equipment (Sth Australia). After the proof of concept phase an R&D project will be submitted to develop data sets to underpin algorithm generation to allow full commercialisation.
- (ii) Negotiations were managed for Sheep CRC and MLA speakers to present the new research outcomes and directions on lean meat yield and eating quality to the annual AMPC Conference held in Sydney on 24-25th May, 2012.
- (iii) Two supply chain officer positions have been created to assist the Sheep CRC and MLA deliver new lean meat yield and eating quality outcomes from the Sheep CRC R&D. One officer has been appointed with JBS and another officer to collaborate with AMPC to work with a number of processors around Australia.
- (iv) A Sheep CRC extension bid for the meat science program has been developed in draft form and feedback has been received from scientific and industry sources. The plan has received high level support and will now be progressed in more detail during the first half of 2013.

Days worked = 25

2.3 Contribute to MLA management and awareness activities as directed by MLA

Direct contributions to MLA awareness activities via 16 presentations to Industry groups.

2011

- Australian lamb – best in the world – how and why ? presented to the Katanning Ewetime forum, 5th July, Katanning 2011
- Australian lamb – best in the world – how and why ? presented to the Northam Ewetime forum, 6th July, Northam 2011
- Australian lamb – best in the world – how and why ? presented to the Dandaragan Ewetime forum, 7th July, Dandaragan 2011 (Pearce speaker).
- Australian lamb – best in the world – how and why ? presented to the Tamworth Ewetime forum, 12th July, Tamworth 2011 (Pearce speaker).
- Recent developments in MSA lamb, presented to the QLamb AGM, Narrogin, 2nd August, 2011
- MSA 4/5* project and progress, WA Beef Council update Perth, 9th August, 2011
- The Australian systems for eating quality, presented to the Welsh lamb producers field day, 5th September, Aberystwyth, Wales
- How cattle production factors impact on the eating quality of beef – Australian QA schemes presented to the conference 'The optimization of beef production in Poland in accordance with a farm to fork strategy' 12/13th Sept. Warsaw, Poland
- Opportunities for harvesting 4 & 5* MSA graded beef cuts. Presented to the Australia Lot Feeders, 9th December, Sydney.

2012

- Increasing MSA compliance. Presented to the WA Dept Agric and Food beef workshops on increasing market compliance. 29th February, Mt Barker, WA.
- New research into eating quality of lamb – where to for MSA. Presented to the Australian Meat Processor Corporation annual conference, 24-25th May, Sydney
- Gene markers, marbling and MSA optimisation. Presented to the Beef CRC Final Beef Forum, 12-14th June, Brisbane.
- New eating quality outcomes – marbling and tenderness in lambs. Presented at LambEx conference, 27-29th June, Bendigo.
- Update on meat science research & genetic selection for meat quality. Presented to the AWI WoolClip day, Wickepin, 26th July, 2012.
- How can MSA beef grading assist a premium beef brand. Presented to the WA Angus Committee and guests, Perth, 5th October, 2012
- Genetics of meat quality for lamb. Presented to Merinotech breeders group, Kojonup, 25th October, 2012.

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