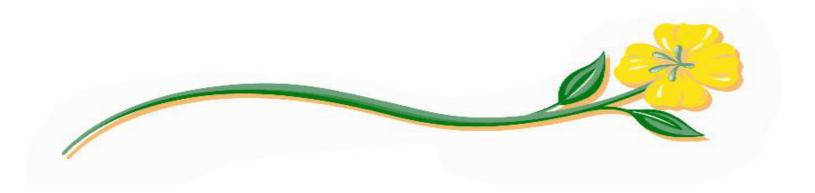
Analysing Perceived Gaps in Canola Meal Research Information

By Jade Graves

Supervisors Mrs Christine Storer Mr Jon Slee



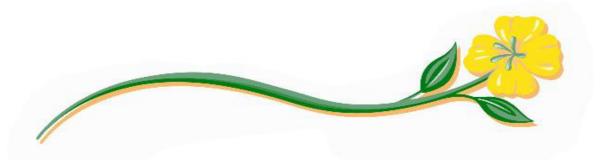
Aims & Objectives

Aims

- •Is CM research information reaching industry experts?
- •Gaps on CM information where?

Objectives

- •User perceptions of adequacy of research information
- Criteria used when sourcing information
- •Gaps in CM research
- •Experts' perception on information gaps



Methodology

Phase One

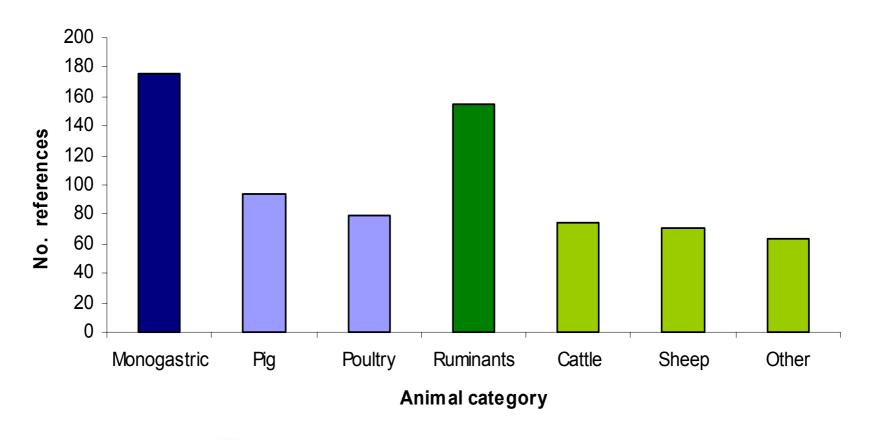
- Informal in-depth interviews
- Literature research
- Preliminary gap analyses

Phase Two

- Survey type
- Population of interest
- Sampling frame
- Employed within industry
- Data analyses



Results – Desktop Analyses





Phase Two – Expert Gap Analyses

- Industry Survey
 - 30 Animal Nutritionist
 - 30 Stockfeed Manufacturers & Oilseed Processors
 - 30 End Users (Mix feed on farm)



Table 4.2: Canola Meal Information (major topics) Identified for Poultry

Topic	General Poultry	Broiler	Layer	Turkey	Chick	Duck	Poult	Rooster	Geese
Added dietary fat			-	✓					-
Amino acids	×			\checkmark					
Brown egg layers			×						
Canola meal as substitution		\checkmark			\checkmark				
Carcass composition		\checkmark							
Chemical composition	\checkmark								
Dehulled canola meal		\checkmark							
Dietary effects							✓		
Dietary protein	✓								
Egg composition			✓						
Egg quality			✓						
Enzyme degradation	✓								
Enzyme treatment	✓								
Energy fibre	\checkmark		✓						
Feed conversion	\checkmark		\checkmark						
Feed intake			✓						
Growth						✓			✓
Metabolisable energy	✓					✓			
Nutrient digestibility		✓				✓			
Nutrient value	✓		✓		✓		✓		
Optimal inclusion levels	×	✓							
Performance								✓	
Pre-press solvent extracted	×	✓			✓				
Protein efficient ratio	✓				✓				
Replacement value	✓								
Trends & developments	✓								
Thyroid status		✓							
Weight gain				\checkmark					
Yield / fatty acid composition		✓							
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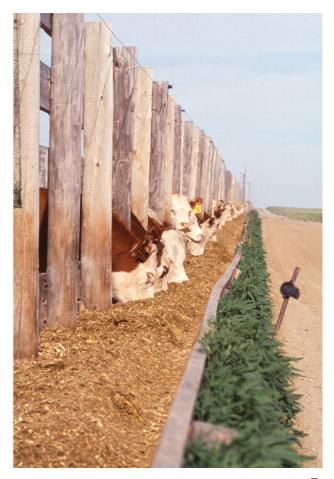
Poultry Research & Perceived Gaps



^{(✓} Identifies desktop research on canola meal and poultry, × Identifies expert perceived gaps in poultry

Amino acids Body condition Sovine adipose tissue By-pass protein X Canola meal vs cottonseed meal Canola presscake Carcass yield Digestibility X Y Objectibility X Y Objectibility X Y Objectibility X Y Objectibility Carcass yield Carcas yield	Topic	General Cattle	Dairy cattle	Steers	Beef Cattle	Calves	Beef Feedlot	Heifer	Bull
Bovine adipose tissue By-pass protein Canola meal vs cottonseed meal Canola presscake Carcass characteristics Carcass spield Digestibility Dry heat treatment canola meal Dry matter Fetty acid composition Feeding value Gastromlistine tract Growth rates & marbling X Pasture & protein supplements Heat & chemical treatment meal Hydroxy analog trimethylamine Lignosulfonate treated canola meal Liquid methionine Lupins competitive / canola meal Liquid methionine Market specifications Maximising profitability Milk composition Milk production & quality Milk yield Nutrient value of canola meal V Heifer performance Postruminal digestion Rumen bjohydogenation Rumen by-pass protein Rumen degradability V Rumen fermentation Sunflower meal vs canola meal Line Australian canola meal V V V V V V V V V V V V V	Amino acids		✓			✓			
By-pass protein	Body condition				\checkmark				
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Cattle Research & Perceived Gaps



Gaps	Pigs	Poultry	Cattle	Sheep
Breeding sows	×✓			
Energy fibre	×✓			
Ileal amino acids digestibility	×✓	×✓	×	×
Inclusion rates	×	×√ ×√		
Young pigs	×✓			
Brown egg layers		×		
Prepress solvent extracted		×✓		
By-pass protein			×	
Fatty acid composition			×✓	
Growth rates & marbling			×	
Lupins vs canola meal			×✓	
Milk production & quality			×	
Sunflower vs canola meal			×✓	
Western Australia information			×	
Back fat /fat composition				×
Feed conversion ratio				×✓

Information Attributes

Source Journals Conferences

Search Web site Anecdotal

Level Technical General

Credibility Anecdotal Web

Criteria Credible source Up-to-date



Are There Gaps in Published Canola Meal Research?

• YES

- Gaps can be related to Chakrapani's 5 theories
 - Service quality gap
 - Understanding gap
 - Design gap
 - Delivery gap
 - Communication gap



Conclusion & Recommendations

- Many canola meal topics need addressing
- Further research & recommendations
 - Further segmentation
 - AOF set up canola meal reference database
 - Suggestion page
- Identify Key nutritionist for each livestock sector for clear communication flow.

- Identify Key Priorities for each livestock class and region.
- Develop national research strategy & open communication links with research institutes and universities.
- Develop Australian benchmarks for Canola Meal Quality and monitor annually.



Thank you to the AOF for there support

