

Analysing Perceived Gaps in Canola Meal Research Information

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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

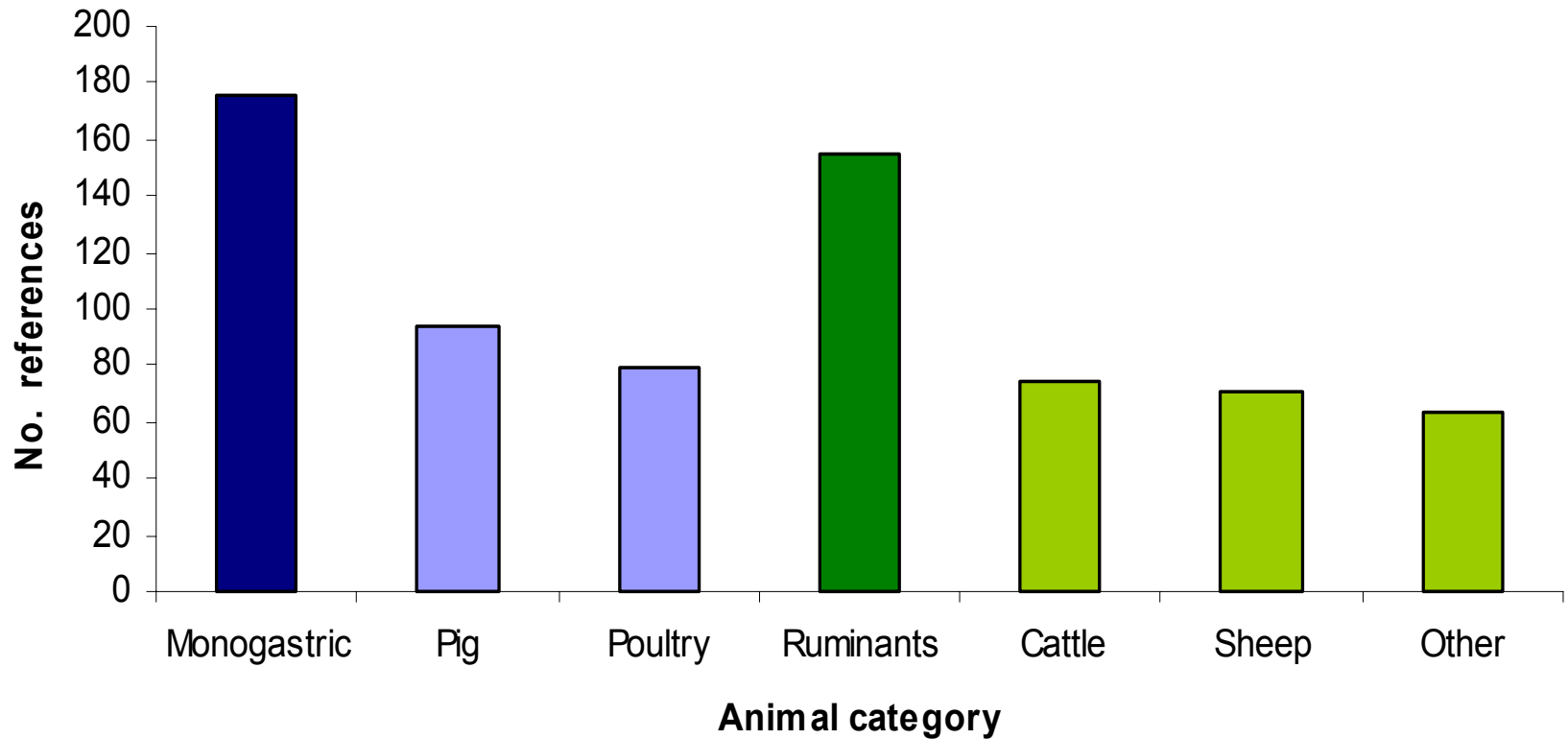
- Informal in-depth interviews
- Literature research
- Preliminary gap analyses

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)

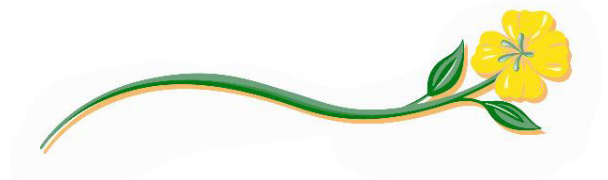


Table 4.2: Canola Meal Information (major topics) Identified for Poultry

Topic	General Poultry	Broiler	Layer	Turkey	Chick	Duck	Poult	Rooster	Geese
Added dietary fat				✓					
Amino acids	✗			✓					
Brown egg layers			✗						
Canola meal as substitution		✓			✓				
Carcass composition		✓							
Chemical composition	✓								
Dehulled canola meal		✓							
Dietary effects							✓		
Dietary protein	✓								
Egg composition			✓						
Egg quality			✓						
Enzyme degradation	✓								
Enzyme treatment	✓								
Energy fibre	✓		✓						
Feed conversion	✓		✓						
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				✓					
Yield / fatty acid composition		✓							

Poultry Research & Perceived Gaps



(✓ Identifies desktop research on canola meal and poultry, ✗ Identifies expert perceived gaps in poultry research, see section 4.2.2)

Topic	General Cattle	Dairy cattle	Steers	Beef Cattle	Calves	Beef Feedlot	Heifer	Bull
Amino acids		✓			✓			
Body condition				✓				
Bovine adipose tissue			✓					
By-pass protein		✗						
Canola meal vs cottonseed meal		✓						
Canola presscake		✓						
Carcass characteristics				✓				
Carcass yield							✓	
Digestibility		✗	✓		✓		✓	
Dry heat treatment canola meal			✓					
Dry matter	✓							
Fatty acid composition	✗		✓					✓
Feeding value			✓					
Gastromlistine tract			✓					
Growth rates & marbling	✗							
Pasture & protein supplements		✓	✓					
Heat & chemical treatment meal			✓					
Hydroxy analog trimethylamine		✓						
Lignosulfonate treated canola meal			✓		✓			
Liquid methionine		✓						
Lupins competitive / canola meal	✗	✗		✓				
Market specifications				✓				
Maximising profitability						✓		
Milk composition		✓						
Milk production & quality		✗						
Milk yield		✓						
Nutrient detergent insoluble protein				✓				
Nutrient value of canola meal	✓							
Heifer performance							✓	
Postruminal digestion	✓							
Rumen biohydrogenation		✓						
Rumen by-pass protein	✓							
Rumen degradability	✓			✓				
Rumen fermentation	✓		✓					
Sunflower meal vs canola meal	✗			✓				
Unsaturated fatty acids		✓						
West Australian canola meal info		✗						
Whey-canola meal					✓			

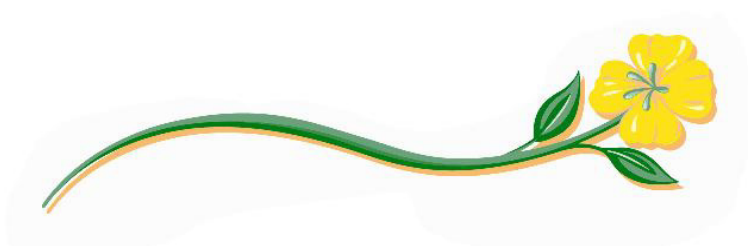
Cattle Research & Perceived Gaps



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				✗✓

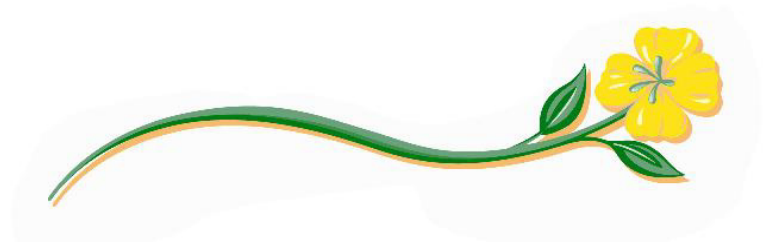
Information Attributes

Source	Journals	Conferences
Search	Web site	Anecdotal
Level	Technical	General
Credibility	Anecdotal	Web
Criteria	Credible source	Up-to-date



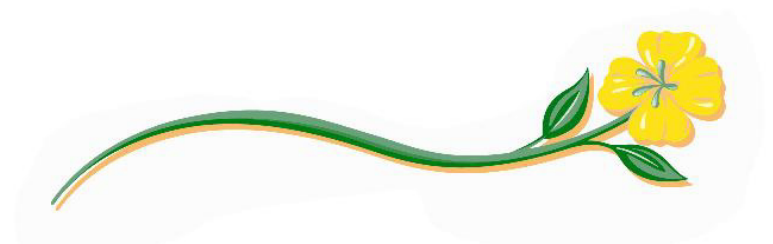
Are There Gaps in Published Canola Meal Research?

- **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

