

Compendium of Research

This research was compiled to identify "who's doing what and where?" in the private and public sector of the Value Added Agriculture Grain Based Food Product and Animal Feed industry across Northern Alberta.



Enterprise and Advanced Education Entrepreneurship & Regional Development Branch Updated December 11, 2012



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Note.

Keywords have been identified for each research project listed; this document may be searched using the 'Find" function.

Agricultural Institute of Canada

| Title | Agricultural Institute of Canada (AIC) Publications |
|-------------------|---|
| Proponent | Agricultural Institute of Canada |
| Website | www.aic.ca - subscriber access provided by Alberta Government Library. |
| Contact | Tel: 613-232-9459 Email: journals@aic.ca Agricultural Institute of Canada 9 Corvus Court Ottawa, ON K2E 7Z4 |
| Project Abstract | You can register to receive notification of the latest AIC publications. <u>Alerts</u> A number of author submitted manuscripts to Canadian Journal of Plant Science, Canadian Journal of Soil Science, and Canadian Journal of Animal Science. Beginning in 2012 all review papers will be available once published on the web and all papers will be open access after one year. A sample of abstracts relevant to northern Alberta are noted below: Livestock manure improves acid soil productivity under a cold northern Alberta climate The acid-ameliorating properties of feedlot cattle manure on barley and canola productivity in acid soils were evaluated from 2003 to 2007 at Fort Vermilion and Beaverlodge research stations in northern Alberta, Canada. Selection and establishment of Alberta agricultural soil quality benchmark sites Forty-three benchmark sites were established to monitor soils across the agricultural regions of Alberta. Soil chemical and physical properties were examined in an initial pedological investigation in 1997. Effect of fall and spring seeding on canola productivity in the Peace River region of northern Alberta was assessed. Long-term changes in the frost-free season on the Canadian prairies The climate of the prairies has warmed over the past century, especially during late winter and early spring. Some regions of the prairies have warmed faster than others. Climate change has been documented to affect living systems in North America, such as promoting earlier phenological development and longer growing seasons. |
| Issues/Concerns | n/a |
| Application | northern Alberta, provincial, national |
| Sponsors /Funding | various |
| Keyword tags | in the search area labeled "Abstract" insert recommended keyword tag(s): Alberta, Animal Feed Production, Animal Feed Processing, Feed Processing; Grain Based Food; Northern Alberta, Processing, Value-Added |

| Title | Applied Research, New Technology and the Forage Industry |
|------------------|---|
| Proponent | Agricultural Research and Extension Council of Alberta (ARECA) |
| Website | www.areca.ab.ca |
| | <u>Search ARECA Projects</u> <u>Enewsletter and Publications</u> |
| Contact | Dr. Ty Faechner, Executive Director Direct: 780-416-6046 Tel: 780-416-6046 |
| | Email: <u>faechner@areca.ab.ca</u> |
| | #211 - 2 Athabascan Avenue Sherwood Park, AB T8A 4E3 |
| Project Abstract | ARECA is a not-for-profit organization working with producers to enhance and improve their operations through access to field research and new technology. 13 member organizations focus on both applied research and the forage industry, Each member association delivers programs and develops projects that address the concerns and priorities of producers in their specific regions. |
| | Members located across northern Alberta are listed below: |
| | Central Peace Conservation Society (former member) <u> Home</u> Contact Staff CPCA Research Projects |
| | Gateway Research Association <u>Home</u> Contact Staff <u>GWFA Research Projects</u> |
| | Lakeland Agricultural Research Association (LARA) <u> Home</u> Contact Staff LARA Research Projects |
| | Mackenzie Applied Research Association <u> Home</u> Contact Staff MARA Research Projects |
| | North Peace Applied Research Association (NPARA) <u> Home</u> Contact Staff <u>NPARA Research Projects</u> |

| | Peace Agricultural Research and Demonstration Association Home Contact Staff PARDA Research Projects Smoky Applied Research and Demonstration Association |
|-------------------|--|
| Issues/Concerns | n/a |
| Application | northern Alberta, provincial, national |
| Sponsors /Funding | Agriculture and Agri-Food Canada (Advancing Canadian Agriculture and Agri-Food (ACAAF) Program; Agriculture & Food Council; Alberta Agriculture and Rural Development; Alberta Barley Commission; Alberta Canola Producers Commission; Alberta Crop Industry Development Fund Inc; Alberta Innovates; Agriculture Opportunity Fund; Alberta Pulse Growers; The Canadian Cattlemen's Association; Dow AgroSciences; Ducks Unlimited Canada. |
| Keyword tags | Beef; Grain Crops; Feed; Nutrition; Oil And Seed Crops: Specialty Crops |

| Title | Evaluation and Adaptation of Controlled Traffic Farming in Alberta |
|-------------------|--|
| Proponent | Agricultural Research and Extension Council of Alberta (ARECA) |
| Website | www.areca.ab.ca |
| Contact | Dr. Ty Faechner Executive Director Email: <u>faechner@areca.ab.ca</u> Direct: 780-416-6046 Tel: 780-416-6046 |
| | #211 - 2 Athabascan Avenue Sherwood Park, AB T8A 4E3 |
| Project Abstract | Controlled Traffic Farming Alberta (CTFA) is a farmer-led initiative aimed at evaluating controlled traffic farming systems in Alberta. They are interested in taking no-till and precision agriculture to the next level. |
| | Its vision is to help farmers successfully adopt controlled traffic farming systems that improve soils, increase production per unit of input, decrease cost per unit of production and increase net returns. |
| | Its mission is to evaluate and assess controlled traffic farming systems in Alberta conditions and provide farmers and agronomists with high quality, unbiased information so that they can make informed decisions about adopting controlled traffic farming. |
| Issues/Concerns | n/a |
| Application | provincial |
| Sponsors /Funding | Project Cost: \$462,000 |
| | Funded by: Canadian Agricultural Adaptation Program (CAAP) |
| | Estimated Completion Date: October 31, 2013; final report due December 31, 2013 |
| Keyword tags | Crop Production; No-Till; Precision Agriculture; Technology; Traffic Farming Systems |

Agriculture and Agri-Food Canada (AAFC)

| Title | AgPal |
|-------------------|--|
| Proponent | Agriculture and Agri-Food Canada (AAFC) |
| Website | www.agpal.ca |
| Contact | Email: <u>AgPal-AgriGuichet@agr.gc.ca</u> |
| Project Abstract | AgPal is a web-based discovery tool developed by Agriculture and Agri-food Canada (AAFC) to help producers and others in the agriculture and agri-business sector find the federal, provincial and territorial programs and services that specifically apply to them. |
| | AgPal was designed to put all of that information at your fingertips; to become the one-stop shop for Canadian farmers and agri-businesses looking for information about government resources, programs and services. |
| | Search filters include: Innovation & Agricultural Research |
| | AgPal links you directly to all of Agriculture and Agri-food Canada, Farm Credit Canada, and Nova Scotia's programs and services, as well as those of Ontario's Growing Forward program. Information, from other provinces, new tools and features will be added in the coming months. |
| Issues/Concerns | Information on western provinces not yet added |
| Application | national |
| Sponsors /Funding | various |
| Keyword tags | Beef; Feed; Grain Crops, Oil And Seed Crops, Specialty Crops; Nutrition |

| Title | Cereal Research Centre (CRC) |
|-------------------|--|
| Proponent | Agriculture and Agri-Food Canada (AAFC) |
| Website | www4.agr.gc.ca |
| | <u>Cereal Research Centre (CRC)</u> |
| Contact | Johanne Boisvert, Director of Research and Development Direct: 204-983-0466 |
| | Tel: 204-983-5533 |
| | Email: johanne.boisvert@agr.gc.ca |
| | 195 Dafoe Road |
| | Winnipeg, MB R3T 2M9 |
| Project Abstract | The Cereal Research Centre (CRC), located in Winnipeg, Manitoba, is part of Agriculture and Agri-Food Canada's national network of 19 research centres. The CRC focuses on the development of technologies that enhance profitability and environment sustainability as well as contribute to the health and wellness of Canadians. Supported by a unique human nutrition platform, the centre is dedicated to the development of superior varieties of high quality and disease resistant cereals, oilseeds and pulse crops that minimize producer risks and enhance opportunities in sustainable crop systems. |
| | The CRC is associated with three satellite locations: the Morden Research Station, the Canadian Centre for Agri-Food Research in Health and Medicine, and the Richardson Centre for Functional Foods and Nutraceuticals. |
| | The centre leads research in six areas: |
| | Cereal diseases; |
| | Cereal germplasm and genomics; |
| | Flax and Eastern Prairie Pulse crop germplasm; |
| | Human nutrition, food health attributes, and functional foods; |
| | Bioprospection from bioresources: cereals, pulses, and oilseeds; |
| | Grain and grain products storage research. |
| Issues/Concerns | n/a |
| Application | provincial, national |
| Sponsors /Funding | various Read: Crain Crana: Nutritian: Oil And Sead Crana: Specialty Crana |
| Keyword tags | Beef; Feed; Grain Crops; Nutrition; Oil And Seed Crops; Specialty Crops |

| Title | Economic and Market Information |
|-------------------|---|
| Proponent | Agriculture and Agri-Food Canada (AAFC) |
| Website | www4.agr.gc.ca |
| | <u>Economic and Market Information</u> <u>An Overview of the Canadian Agriculture and Agri-Food System 2012</u> |
| Contact | Tel: 613-773-1000 |
| | Toll-free: 1-855-773-0241 |
| | Email: <u>info@agr.gc.ca</u> |
| | 1341 Baseline Road |
| | Ottawa, Ontario K1A 0C5 |
| Project Abstract | The Agri-Food Trade Service (ATS) provides centralized access to market information, trade counseling and export support activities, which will take the exporter from initial enquiry to foreign market. |
| | Animal feed and pet food |
| | Bakery products |
| | Ethnic, gourmet and specialty foods |
| | Functional foods and nutraceuticals |
| | Oilseeds, cereals and grains |
| | Organic natural and health foods |
| | Pasta and noodles |
| | <u>Processed and snack foods</u> |
| | Pulses and special crops |
| | <u>Services, distribution, consumer and retail</u> |
| Issues/Concerns | n/a |
| Application | general information; industry overviews; provincial, national |
| Sponsors /Funding | various |
| Keyword tags | Beef; Feed; Grain Crops; Nutrition Oil And Seed Crops; Specialty Crops |

| Title | Science Publications and Resources (Research Publications by Year) |
|-------------------|--|
| Proponent | Agriculture and Agri-Food Canada (AAFC) |
| Website | www4.agr.gc.ca Research Projects |
| | AAFC Research Centres include the <u>Cereal Research Centre (CRC)</u> |
| | Projects may be researched using these links: A to Z Subject Index Growing Forward - Developing Innovative Agri-Products Science Publications and Resources Economic and Market Information Market Information by Product |
| Contact | Jeff Stewart, Director of Research and Development Tel: 403-317-2208 Email: jeff.stewart@agr.gc.ca |
| | Lacombe Research CentreBeaverlodge Research FarmTel: 403-782-8101Tel: 780-354-2212 |
| | 6000 C and E TrailBox 29Lacombe, AB T4L 1W1Beaverlodge, AB T0H 0C0 |
| Project Abstract | Two of Agriculture and Agri-Food Canada's national network of 19 research stations are located in Alberta: Lacombe Research Centre (Lacombe, Alberta) with priority areas: Integrated meat science and production systems: bioactive lipids and nutritional quality; Microbiological safety and storage stability of meat; |
| Issues/Concerns | n/a |
| Application | northern Alberta, provincial, national |
| Sponsors /Funding | various |
| Keyword tags | Beef; Feed; Grain Crops; "Northern Alberta" Nutrition Oil And Seed Crops; Specialty Crops |

Alberta Agriculture and Rural Development

| Title | Alberta Agriculture Catalogue of Publications, DVDs, CD-ROMs |
|-------------------|---|
| Proponent | Alberta Agriculture and Rural Development |
| Website | www.agric.gov.ab.ca Crops Publications |
| | <u>Varieties of Cereal and Oilseed Crops for Alberta</u> |
| | <u>Livestock Publications</u> <u>Utilizing Annual Cereals for Livestock Feed. Revised 2009.</u> |
| | Alberta Feedlot Management Guide: Nutrition and Management Nutrition and Management: Processing Feed Grains |
| Contact | Information Management |
| | Tel: 800-292-5697 Email: <u>duke@gov.ab.ca</u> |
| Project Abstract | The Ministry is responsible for the management of programs designed to facilitate the development of all components of the agriculture and food industry, to sustain the natural resource base of the industry and to encourage the development of rural communities. |
| | The majority of fact sheets are available online in html or pdf format. Fact sheets may be based on provincial industry work, research and/or journal articles. Information is geared to producers and provides up-to-date information on a wide range of agricultural and horticultural practices. |
| Issues/Concerns | n/a |
| Application | general information; industry overviews; background; provincial |
| Sponsors /Funding | various |
| Keyword tags | Beef; Cereal Varieties; Crop Varieties; Feed; Grain crops; Livestock Feed; Nutrition Oil and Seed Crops; Specialty Crops; Processing Feed Grains |

| Title | Crops Product Development and Processing Program |
|-------------------|---|
| Proponent | Alberta Agriculture and Rural Development |
| Website | www1.agric.gov.ab.ca |
| | <u>Crops Processing</u> |
| Contact | Alison G. Campbell, Research Project Coordinator |
| | Tel: 780-980-4246 |
| | E-mail: alison.g.campbell@gov.ab.ca |
| | Food Processing Development Centre 6309 - 45 Street Leduc, AB T9E 7C5 |
| Project Abstract | Crops processing includes food and natural health product applications. The Centre's Crop Product Development and Processing program is coordinated by the complementary expertise of its cereal scientists, food scientists, and processing technologists. |
| Issues/Concerns | n/a |
| Application | provincial, national |
| Sponsors /Funding | various |
| Keyword tags | Baking; Beef; Compound and Extraction; Drying; Feed; Fractionation; Grain crops, Forage, Milling; Nutrition; Oil and Seed Crops, Particulate Filtration; Sieving; Specialty Crops, Ultra Filtration / Reverse Osmosis |

| Title | Grass and Legume Seed Market Update |
|-------------------|--|
| Proponent | Alberta Agriculture and Rural Development |
| Website | www1.agric.gov.ab.ca |
| | Grass and Legume Seed Market Update |
| Contact | David Wong, Market Specialist |
| | Tel: 780-538-5289 |
| | Email: david.k.wong@gov.ab.ca |
| | Ag-Info Centre Tel: 310-FARM (3276) |
| | Rm. 1201 10320 – 99 St, Provincial Building |
| | Grande Prairie, AB T8V 6J4 |
| Project Abstract | These monthly commentaries provide quotes of prices being offered to growers of grass and legume seed. |
| Issues/Concerns | n/a |
| Application | provincial, national |
| Sponsors /Funding | Agriculture and Rural Development |
| | Last Update: Ongoing |
| Keyword tags | Legume; Market Update; Price; Seed |

| Title | Grass/Legume Seed Production in the Peace River Region of Canada |
|-------------------|--|
| Proponent | Alberta Agriculture and Rural Development |
| Website | www1.agric.gov.ab.ca |
| | Grass/Legume Seed Production |
| Contact | David Wong, Market Specialist |
| | Tel: 780-538-5289 |
| | Email: david.k.wong@gov.ab.ca |
| | Ag-Info Centre |
| | Tel: 310-FARM (3276) |
| | Rm. 1201 10320 – 99 St, Provincial Building |
| | Grande Prairie, AB T8V 6J4 |
| Project Abstract | Weather conditions in the Peace River region of Canada, primarily long summer days and cool evenings during the growing season, has made this area an ideal location for the production of cool season grass and legume seed crops. The turf and forage seed acreage in this region comprises 37% of Canada's total forage seed acres, making the region the world's 2nd largest turf and forage seed production region (by area) after Oregon's Willamette Valley in the USA. Typically, 50 to 60 million lbs of grass and legume seed would be harvested out of this region. |
| | There are 4.3 million acres of cropped land in the Peace River Region of Alberta and British Columbia, Canada. The 2006 census indicates there were 181,000 acres of turf and forage seed in the "Alberta Peace", with another 66,000 acres on the BC side of the Peace Block. In total, there were 248,000 acres in the region. However, this acreage is down an astonishing 183,000 acres from the 2001 census. |
| Issues/Concerns | The Peace region continues to grow grass and legume seed in abundance, but grass and legume seed expansion in other provinces has added to the Peace regions' lower acres in recent years, as some contract production has move to other provinces. As well, with current economic conditions in the USA (2009-2010), and higher prices for more traditionally grown crops (wheat and canola), acres have diminished even further since the official 2006 Canadian census of Agriculture was conducted. |
| Application | northern Alberta |
| Sponsors /Funding | Alberta Agriculture and Rural Development |
| | Last updated: October 3, 2011 |
| Keyword tags | Forage Seed Crops; Peace River Region; Grass/Legume Seed Growers and Acres (1986 to 2006); Grass/Legume Seed |
| | Infrastructure in the Peace; Seed Processors |

| Title | Productivity Improvement: Assistance - Automation and Lean Assessments |
|-------------------|--|
| Proponent | Alberta Agriculture and Rural Development (ARD) |
| Website | www1.agric.gov.ab.ca |
| | Program Overview |
| Contact | Nicola Stevens, ARD Project Lead |
| | Tel: 403-948-8511 |
| | Email: nicola.stevens@gov.ab.ca |
| | Productivity Improvement Team Contact Information |
| | Crop Business Development Branch |
| | Airdrie Agriculture Centre |
| | 97 East Lake Ramp NE Airdrie, AB T4A 0C3 |
| Project Abstract | The Productivity Improvement Initiative strives to assist producers and processors remain competitive, despite increased competition, rising prices, and a shortage of qualified employees, through increased efficiencies and technological capabilities. |
| | The Project provides the opportunity to have a consultant conduct an on-site assessment of your agricultural facility, free of charge for qualified, approved applicants. Three options are provided to enhance competitiveness, boost productivity and increase market share: |
| | Automation/Equipment |
| | Lean Manufacturing Lean & Green |
| Issues/Concerns | Proponent must be willing to share information with Alberta Agriculture and Rural Development (ARD) staff and |
| | consultants |
| Application | provincial, national |
| Sponsors /Funding | Alberta Agriculture and Rural Development; Companies who are in the business of growing and are looking to improve |
| | their current level of productivity through increased automation or adoption of lean practices. |
| Keyword tags | Agriculture; Competitiveness; Efficiencies; Innovation; Processing Productivity Improvement; Technology; Value Added |

| Title | The Pulse Industry in Western Canada |
|-------------------|---|
| Proponent | Alberta Agriculture and Rural Development |
| Website | www.agric.gov.ab.ca |
| | Online Report |
| Contact | Sharon Faye, Market Analyst, Competitiveness and Market Analysis Branch Tel: 780-422-5326 |
| | E-mail: <u>sharon.faye@gov.ab.ca</u> |
| | 3rd fl JG O'Donoghue Building 7000 - 113 Street |
| Project Abstract | Edmonton, AB T6H 5T6 Canada's pulse production and exports have been rising since the early 1990s. In 2006, Canada produced 3.6 million tonnes of peas, lentils, chickpeas and beans. The 2007 production area was estimated at 2.3 million hectares. The Prairies produce approximately 96% of Canada's pulses, with peas representing the greatest volume (68%) followed by lentils (17%), beans (10%), and chickpeas (4%). Canada exports approximately 75% of its total production: pea exports mainly go into India, Spain, and China; lentils are distributed to several countries; a large percentage of beans go to the US and UK; and chickpeas are exported to Pakistan, India, Jordan and other countries. |
| | The three main markets for pulses are food, feed, and ingredients. The ingredient market breaks pulses into starch, protein, and fibre that can then be used for food or feed. Canada's pulse consumption as food is small compared to other countries. Canada's pea consumption is estimated at 1% of its total production, while around 19% is used for feed. The demand for pulses for use as food and feed is expected to rise globally. The Canadian ingredient market uses approximately 50,000-70,000 tonnes of pulses processed into flour or its constituent parts. |
| | This document highlights the Opportunities and challenges for the pulse crop industry in the domestic and international marketplace; processing and marketing in Western Canada; and includes a Chart of the Pulse Industry Supply Chain. |
| Issues/Concerns | The challenge remains to overcome transportation hurdles and to meet market demands in a timely fashion. Through the use of Edmonton and Calgary's transload terminals and the new container facility at the Port of Prince Rupert, the pressure will be eased at Vancouver's port in the handling of special crops. Ongoing coordination and management of containers continues to be one of the main focal points for industry at this point in time. |
| Application | provincial, national |
| Sponsors /Funding | Date: October 2007 |
| Keyword tags | Canadian Pulse Exports; Crop Production Area; Feed Market, Grains; Ingredients Market; Oilseeds And Pulse Crops; Prairie Region; Pulse Crop Production; Western Canada Seeded Area; Transportation and Handling Opportunities |

Alberta Barley Commission

| Title | Barley Research (Alberta) |
|-------------------|---|
| Proponent | Alberta Barley Commission |
| Website | www.albertabarley.com |
| | • <u>Research</u> |
| | Projects can be researched via links to their five research priority areas: |
| | o <u>Feed</u> |
| | o <u>Malt</u> |
| | Agronomy & Production Bioproducts/Bioecomony |
| | • Food & Nutrition |
| | |
| Contact | Darcy Kirtzinger, Policy & Research Coordinator |
| | Tel: 403-219-6265 |
| | Cell: 780-878-3237 |
| | E-mail: <u>dkirtzinger@albertabarley.com</u> |
| | #200, 3601A 21 Street NE |
| | Calgary, AB T2E 6T5 |
| Project Abstract | Through its research program, the Alberta Barley Commission fosters development of new and improved technologies by initiating and coordinating research on barley in the areas of production, processing, marketing, and product development. The Commission informs membership of project launches, progress and results through its <u>Barley Country</u> <u>newsletter</u> , and participation in numerous community and industry events including regional meetings and its annual general meeting. Click here for a list of <u>Barley Research Needs and Priorities</u> |
| | Linda Whitworth, the Alberta Barley Commission's market development manager, is making plans to capitalize on <u>hulless food barley</u>, driving new market opportunities for the province's barley farmers. |
| | The Alberta Barley Commission is one of several organizations that provide funding for developing a new western Canada-wide post-registration variety testing (PVT) system. The PVT project is led by the <u>Agricultural Research and</u> <u>Extension Council of Alberta (ARECA).</u> |
| Issues/Concerns | n/a |
| Application | northern Alberta, provincial, national |
| Sponsors /Funding | Research Partner List and Links (comprehensive list) |
| Keyword tags | Barley Research; Feed; Food & Beverage Barley Research Projects; Health Claims; Industrial Use; Malting Barley; Performance Data; Post-Registration Variety Testing (PVT) System; Shochu Barley; Value-Chain; Variety Yield |

Alberta Canola Producers Commission (ACPC)

| Title | Canola Research |
|-------------------|--|
| Proponent | Alberta Canola Producers Commission (ACPC) |
| Website | http://canola.ab.ca |
| | <u>ACPC Canola Research</u> |
| | Completed research projects are summarized on the Canola Council of Canada website: |
| | Oil Nutrition |
| | Meal Nutrition |
| | <u>Crop Production</u> |
| Contrat | Tel: 780-454-0844 |
| Contact | Email: web@canola.ab.ca |
| | #170 14315 118 Avenue |
| | Edmonton, AB T5L 4S6 |
| Project Abstract | Representing Alberta's canola producers, the ACPC Agronomic Research Committee allocates producer dollars to various agronomic research projects that meet ACPC's mission of increasing the long term profitability of Alberta's canola growers. |
| | In 2008-09, after 10 years experience partnering with Agriculture and Agri-Food Canada (AAFC) in canola agronomic research, the ACPC entered into another five year agreement with AAFC. The agreement includes all of the AAFC research stations in western Canada and all canola agronomic research underway by AAFC. Currently there are more |
| | than 10 trials underway. |
| Issues/Concerns | n/a |
| Application | provincial, national |
| Sponsors /Funding | various |
| Keyword tags | Agronomy Research; Canadian Agri-Science Clusters Initiative Canola/Flax Science Cluster 2009-2013; Clubroot Research; Crop Production; Disease Research; Insect Research; Meal Nutrition; Oil Nutrition |

Alberta Crop Industry Development Fund (ACIDF)

| Title | ACIDF Feeding Initiative |
|-------------------|--|
| Proponent | Alberta Crop Industry Development Fund (ACIDF) |
| Website | www.acidf.ca |
| | <u>Feeding Initiative Program Overview</u> <u>Reference Page</u> – updates, research, projects funded |
| Contact | Rob Hand, Feeding Initiatives, ACIDF |
| | Cell: 403-872-8262 |
| | Email: rob@acidf.ca |
| | |
| | Agriculture Building |
| | 5030 - 50 St. |
| Project Abstract | Lacombe, AB T4L 1W8 The objective of this initiative is to improve the competitiveness of Alberta's feed grain production and its utilization through |
| | livestock. Feed grains include wheat, barley, triticale, hulless barley, peas, co- products of sufficient volume such as DDGS, canola meal, wheat millrun and the possibility of new crops down the road. It will be accomplished through supporting research and development projects, attracting investment into the feed grain production and feeding sector, accelerating commercialization of leading edge technology and strengthening supply chain's business relationships. The Feeding Initiative deliverables include: New processes or technologies in feed processing. New technologies and practices to better determine feed quality and value. Evidence for use by industry of the analytical feed quality control. |
| | Economic impact of the new technologies in industry as evidence by enhanced feed efficiency and /or lower cost feeding strategies. |
| | Additional cumulative investment from other sources. |
| Issues/Concerns | n/a |
| Application | provincial |
| Sponsors /Funding | Cost: \$8 million |
| | Funded by: ALMA (Alberta Livestock and Meat Agency) |
| Keyword tags | Completion Date: 2013 Barley; Canola Meal; Feed Grains Research; Hulless Barley; Innovation; Near Infrared Spectroscopy (NIRS); Peas; |
| Reyword tags | Technology; Triticale; Wheat; Wheat Millrun |
| | reennology, mileale, wheat million |

| Title | Project Listings |
|-------------------|---|
| Proponent | Alberta Crop Industry Development Fund (ACIDF) |
| Website | www.acidf.ca |
| | <u>Project Listings</u> (MS Excel spreadsheets) <u>Reference and Strategy Documents</u> |
| Contact | For detailed information on any proposal, please contact the lead investigator for the activity. |
| | Agriculture Building 5030 - 50 St. Lacombe, AB T4L 1W8 |
| Project Abstract | A comprehensive list of proposals supported by initiative. These MS Excel spreadsheets list the basic information on each proposal in the ACIDF portfolio. |
| Issues/Concerns | n/a |
| Application | provincial |
| Sponsors /Funding | Project Status: Completed and ongoing |
| | Last Updated: August 2012 |
| Keyword tags | Automation And Productivity; Crop Research; Feed Grain Quality And Supply; Feed Grains Research; Feeding Initiative; Industry Development; Innovation; Near Infrared Spectroscopy (NIRS); Royalty Barley And Triticale; Technology |

Alberta Government

| Title | Alberta Government Library (Science Databases) |
|----------------------|--|
| Proponent Website | Government of Alberta; ServiceLink www.servicelink.gov.ab.ca/libraries/services • Library Services Access the following Science Databases related to Agriculture and Rural Development: • Agricola • CAB Abstracts • Environment Complete • MEDLINE • Science Direct (Tipsheet) General Inquiries: Linda R Scott @gov.ab.ca Inquiries regarding the library web site: Ann Schiebelbein, Library Web Administrator Ann.Schiebelbein@gov.ab.ca |
| Project Abstract | Edmonton AB T5K 2M4 The Alberta Government Library (AGL) provides a full range of library services through its four site libraries. Individual |
| Issues/Concerns | site libraries may provide specialized services in their subject area. Contact the <u>site library</u> for further information. Searching techniques may be required; however; staff support is provided. |
| Application | northern Alberta, provincial, national |
| Sponsors /Funding | n/a |
| Keyword tags | Agronomy Research; Barley; Canola Meal; Crop Production; Crop Disease Research; Feed Grain; Feed Market; Feed Grains Research; Feed Processing; Feed Technology; Food Processing; Grains; Hulless Barley; Ingredients Market; Innovation; Meal Nutrition; Milling; Near Infrared Spectroscopy (NIRS); Technology; Oil Nutrition; Oilseeds And Pulse Crops, Peas; Processing Technology; Triticale; Value Added Processing; Wheat; Wheat Millrun |

Alberta Innovates Bio Solutions

| Title | Biolink Research Project Database |
|------------------|--|
| Proponent | Alberta Innovates Bio Solutions |
| Website | http://biolink.albertainnovates.ca |
| | • To search the BioLINK database for information related to a research project; click here. |
| Contact | Tel: 780-427-1956 Email: <u>bio@albertainnovates.ca</u> <u>Staff Directory</u> 18th Floor, Phipps McKinnon Building |
| | 10020 - 101A Avenue Edmonton, AB T5J 3G2 |
| Project Abstract | The searchable research project database offers access to abstracts and final reports for more than 3000 research projects funded through Alberta Innovates Bio or Alberta Prion Research Institute (APRI) or the legacy organizations: Alberta Agricultural Research Institute (AARI); Alberta Forestry Research Institute (AFRI) and Alberta Life Sciences Institute (ALSI). |
| | A sampling of projects relevant to value-added agriculture feed and processing are listed below. |
| | Novel Enzymes of Ruminal Origin to Improve Fibre for Feed and Industrial Professes Completion Date: October 31, 2006 Project Objectives: |
| | Identification of ruminal sources of genes coding for novel rate-limiting enzymes that enhance fibre digestion. Elucidation of the effects of hydroxycinnamic acid esterases on fibre digestion. |
| | Optimizing the production of these rate-limiting enzymes using recombinant expression systems. Evaluate the effect of supplementation of these enzymes into existing commercial enzyme preparations. Identify efficacious enzyme cocktails for use in livestock feeds and industrial processes. |
| | Bioactive Substances from Mustard Seed and Plant-Biorefinery Approach Funding Consortium Completion Date: Jan 31, 2009 |
| | Project Objectives: 1. Canada is the second largest producer of mustard seed in the world; and is the dominant exporter. Alberta has a significant capacity in the crop; as production is concentrated in the Prairies. |
| | Three types of mustard seed are produced in Canada; yellow; brown and oriental. There is potential for growth in the production of mustard in Canada; provided that novel applications for mustard seed are secured. Importantly from these vase applications; the development of value-added productions for many niche uses is |

| | expected. 3. The project will use the general biorefinery approach to produce highly valuable products such as: a) mustard oil (high erucic – good lubrication properties – biolubricants and/or biodiesel application) b) natural allylisothiocyante – to be used as additive to food products – great export potential c) Asian market protein concentrate - valuable protein for food or feed applications; and d) glucosinolate concentrates – products for nutraceutical and functional food. 4. These products will be obtained from the biomass (in the case; mustard plant) using the novel biorefinery approach. Biorefinery processes are being attempted elsewhere. Similar to oil-based refineries; where many petrochemicals are produced from crude oil; biorefineries will produce many different bio-products brom biomass. This is a new area for research in the bio-economy and matches well with Alberta strengths. The Development of Continuous Membrane Filtration Reactors Completion Date: March 31, 2010 Project Objectives: |
|-------------------|---|
| | This project sets up a comprehensive plant to develop a standardized continuous membrane bioreactor with immobilized enzymes/micro-organisms (CMBRE) for processing the value-added agricultural feeds and by-product streams. The main goal will be bioconversion of agricultural feeds by immobilized enzymes on membranes in continuous bioreactor to bio-fuel and membrane filtration and recovery of ethanol from brewing wastes and include: 1. the set up of an experimental CMBRE infrastructure. |
| | the engagement of relevant stakeholders and securing of ongoing in-kind support from industry. the validation of a design for continuous membranes reactors with selected membranes; fungi and enzymes. the development of a methodology for novel bio-converted products produced by continuous membranes filtration reactors that is accompanied by a training manual for the Agricultural Industry in Alberta. a technology transfer and final report to the Agriculture Funding Consortium about the status of the research project. |
| Issues/Concerns | Database mining required; see keyword tags. |
| Application | northern Alberta, provincial, national |
| Sponsors /Funding | various |
| Keyword tags | "Animal Feed" or "Animal Feed Processing" or "Animal Feed Production" or "Food Production" or "Food Processing" or "Livestock Feed" or "Agri-Food*" or "Grain*" or "Oilseed*" or Wheat or Barley or Oats or Flax or Rye or Triticale or Peas or Canola or "Artisan Grains" or 'Northern Alberta" |

Alberta Livestock and Meat Agency Ltd. (ALMA)

| Title | ALMA List of Projects |
|-------------------|---|
| Proponent | Alberta Livestock and Meat Agency Ltd. (ALMA) |
| Website | http://alma.alberta.ca |
| | <u>ALMA List of Projects</u> <u>Livestock Feeding Initiative</u> |
| Contact | Tel: 780-638-1699 |
| | Email: info@almaltd.ca |
| | |
| | Suite 101, Ellwood Office Park South |
| | 1003 Ellwood Road SW |
| | Edmonton, AB T6X 0B3 |
| Project Abstract | The Alberta Livestock and Meat Agency (ALMA) is a provincial government agency established to help advance the <u>Alberta Livestock and Meat Strategy</u> (ALMS) - a roadmap designed to drive positive change within Alberta's livestock and meat industry. |
| | ALMA's vision is to "be a catalyst in the development of a profitable and internationally competitive Alberta livestock and meat industry." As a catalyst; ALMA provides ideas; information and investment opportunities to the industry and the Government of Alberta. The agency develops policy that drives ALMA investment; directs ALMA strategies and influences public policy related to regulations; legislation; programs; and issues of importance to the livestock and meat sectors. As well; ALMA identifies solutions and engages the industry to foster collaboration and alignment between industry and government priorities. |
| | ALMA's programs stimulate innovation and encourage the adoption of best practices; develop new technologies and state-of-the-art processes. The agency's priority areas are market access; streamlining the regulatory burden; synergistic growth; domestic positioning and information flow. |
| Issues/Concerns | n/a |
| Application | northern Alberta, provincial, national |
| Sponsors /Funding | various |
| Keyword tags | Automation and Efficiency; Commercialization; Feed Processing; Food Processing; Industry Development; Meat Processing; New Product Development; Research And Development; Supply Chain; Technology Adaptation; Technology Innovation; Value-Added |

Alberta Pulse Growers Commission (APG)

| Title | Pulse Research |
|-------------------|--|
| Proponent | The Alberta Pulse Growers Commission (APG) |
| Website | Alberta Pulse Growers |
| Contact | Leanne Fischbuch; Executive Director Tel: 1-877-550-9398 Email: <u>Ifischbuch@pulse.ab.ca</u> 220, 5906 - 50th St Leduc, AB T9E 0R6 |
| Project Abstract | A producer-driven not-for-profit organization funded by a levy deducted at the point of pulse crop sale. Pulse Crops grown in Alberta include field peas; dry beans; chickpeas; lentils; and faba beans. Research now underway: Creating Pea Ingredient Supply Capacity to Build Value Added Demand Evaluating the variation in competitive ability among semi-leafless pea cultivars Prevention of abiotic stress-induced seed/pod loss in pulse crops through manipulation of hormonal pathways Improving field pea production and competitive ability using genotypic mixtures Development of crop management practice; using plant growth regulators to manage secondary crop growth and accelerate crop Flavour Improvement of Foods Containing Pea Fractions Incorporation of low tannin faba bean fractions in selected food systems |
| Issues/Concerns | n/a |
| Application | provincial |
| Sponsors /Funding | Project Cost: \$169,425 Project Cost: \$172,845 Project Cost: \$1,275,000 Project Cost: \$75,000 Project Cost: \$87,650 Project Cost: \$61,575 Project Cost: \$56,795 All Projects Funded by: Canadian Agricultural Adaptation Program (CAAP) Estimated Completion Date: October 31, 2013; final report due December 31, 2013 |
| Keyword tags | Chickpeas; Dry Beans; Faba Beans; Field Peas; Lentils; Pea Fractions; Pea Ingredient; Production; Variety; Tannins |

Alberta's Seed Industry Partnership

| Title | Alberta's Seed Guide |
|----------------------|---|
| Proponent | Alberta's Seed Industry Partnership |
| Website | www.seed.ab.ca |
| | > click on "Digital Publications" > "seed varieties" to access the new variety list and performance data. |
| Contact | Lorena Pahl, General Manager |
| | Cell: 403-325-0081 |
| | Tel: 403-782-8022 |
| | E-mail: lorena.pahl@seed.ab.ca |
| | |
| | Alberta's Seed Industry Partnership |
| | 5030 - 50 St. |
| Ducie et Ale etue et | Lacombe, AB T4L 1W8 |
| Project Abstract | Established in 1991, the Seed Industry Partnership has been a joint effort of the Association of Alberta Co-op Seed Cleaning Plants and the Alberta Seed Growers' Association. These groups have been working together to educate |
| | producers on seed issues facing Alberta. |
| | producers on seed issues facing Alberta. |
| | This New Varieties List is company-supplied information developed for the convenient reference of readers. Includes |
| | Performance Trials and Grower Directory. Regional Performance Variety Trial Results for Cereals, Canola, Flax, Silage, |
| | Hay and Pasture, and Special Crops. Updated Annually in the Fall issue. |
| Issues/Concerns | The management of this web site does not guarantee accuracy of the claims made. Some registrations may be pending; |
| | following the outcome of the Regional Recommending Committee Meetings. |
| Application | provincial, national |
| Sponsors /Funding | Alberta Cereal and Oilseed Variety Testing Program Sponsors: |
| | Agricultural Research and Extension Council of Alberta; Agriculture and Agri-Food Canada; Alberta Agriculture and Rural |
| | Development; Alberta Barley Commission ; Alberta Seed Growers' Association; Alberta Winter Wheat Producers' Commission; Alliance Seed Corporation; Association of Alberta Co-op Seed Cleaning Plants; Battle River Research |
| | Group; Bayer Crop Science; British Columbia Grain Producers Association; Canterra Seeds; Chinook Applied Research |
| | Association; Faurschou Farms; FP Genetics; Gateway Research Organization; Lakeland Agricultural Research |
| | Association; Mackenzie Applied Research Association; Mastin Seeds SeCan; Smoky Applied Research and |
| | Demonstration Association; Southern Applied Research Association; Syngenta Seeds Canada; University of Alberta; |
| | University of Saskatchewan; Viterra; Western Ag Seed Innovations |
| Keyword tags | Growers Directory; New Varieties; Performance Trials; Research |

Beef Cattle Research Council

| Title | Research – Feed Grains and Grains Efficiency |
|-------------------|---|
| Proponent | The Canadian Cattlemen's Association (CCA) |
| Website | www.beefresearch.ca |
| | Feed Grains and Grains Efficiency |
| Contact | Tel: 403-275-8558 Email: <u>info@beefresearch.ca</u> |
| | Head Office - Calgary |
| | Ste. 310, 6715 – 8th St. NE Calgary, AB T2E 7H7 |
| Project Abstract | The <u>Beef Cattle Research Council (BCRC)</u> is Canada's national industry-led funding agency for beef research. The BCRC is funded through a portion of a producer-paid national levy as well as government funding, and is directed by a committee of beef producers from across the country. |
| | The BCRC's mandate is to determine research and development priorities for the Canadian beef cattle industry and to administer national check-off funds allocated to research. |
| | As the only national beef cattle industry research agency, the BCRC plays an important role in identifying the industry's research and development priorities and subsequently influencing public sector investment in beef cattle research. The profitability and health of the finishing sector relies in large part on the production of high quality and yielding feed grains, and animals that are highly efficient in converting feed mass into increased body mass. Research in this area provides identification and validation of economical methods of identifying seedstock with improved feed efficiency and the development of new feeds and alternative feeding strategies. |
| | Further research is needed to improve feed efficiency through animal breeding, improve feed supply and utilization, and improve management of manure nutrients. |
| Issues/Concerns | n/a |
| Application | provincial, national |
| Sponsors /Funding | Research Partner List and Links (comprehensive list) |
| Keyword tags | Animal Feed; Feed; Cattle; Feed Supply and Utilization; Management; Nutrition |

Bioriginal Food & Science Corp.

| Title | ALA and GLA Published Research |
|-------------------|--|
| Proponent | Bioriginal Food & Science Corp. |
| Website | www.bioriginal.com |
| | <u>Published Research Abstracts by Category</u> Alpha-linolenic acid (ALA) Gamma-linolenic acid (GLA) |
| Contact | Tel: 306-975-1166 E-mail: <u>business@bioriginal.com</u> |
| | 102 Melville Street Saskatoon, SK S7J 0R1 |
| Project Abstract | Headquartered in Saskatoon, SK, Bioriginal has state-of-the-art GMP production facilities in North America; Europe and Asia; and a global distribution network that spans six continents. |
| | Bioriginal produces and distributes high-quality, innovative Essential Fatty Acid (EFA) solutions. EFAs are available in a full range of Omega-3; Omega-6 and Omega-9 actives from both marine and plant sources in various delivery formats. |
| | Since its beginning in 1993; Bioriginal has worked vigorously to earn customers' trust and confidence. It tests EFAs at every stage of production. It's exclusive BIO-ELITE® process ensures exceptional purity and quality. |
| | Bioriginal's scientific team has evaluated independent studies conducted in the areas of <i>Gamma-linolenic acid (GLA)</i> and <i>Alpha-linolenic acid (ALA)</i> and chosen the most scientifically significant to be included in one easy-to-navigate resource center. The database includes concise abstracts on over 1000 published articles by leading scientists. |
| Issues/Concerns | n/a |
| Application | provincial (SK), national; global |
| Sponsors /Funding | In Saskatoon, Bioriginal partners with, <u>Agriculture and Agri-Food Canada</u> ; the <u>Saskatchewan Research Council</u> ; the <u>Saskatchewan Food Processors Association</u> , and the <u>University of Saskatchewan's College of Pharmacy</u> , Department of Horticulture, Crop Development Centre and <u>POS Bio-Sciences</u> . Past partnerships include: <u>Harvard Medical Centre</u> , <u>Tufts</u> , the <u>New England Medical Centre</u> , the <u>US Department of Agriculture</u> , the <u>National Research Council</u> , the <u>University of Guelph</u> , and the <u>University of Western Ontario</u> . |
| Keyword tags | Active Ingredients; Alpha Linolenic Acid (ALA); Borage; Derivative Fatty Acids; Essential Fatty Acid (EFA) Solutions; Fatty Acid Concentrates; Flax; Food Products; Gamma Linolenic Acid (GLA); Ingredients; Omega 3 Oil; Omega-3; Omega-6; Omega-9 Oils; Specialty Nutritional Oils; Nutraceutical Powders; Value-Added |

Branding the Peace Country (BPCA)

| Title | Defining Quality for Peace Country Agriculture: A Strategic Approach to Global Competition (Research Series) |
|------------------|---|
| Proponent | Branding the Peace Country (BPCA) |
| Website | http://gopeaceregion.com/branding.asp |
| | Research Series Briefing Report |
| Contact | <u>Contact Us Link</u> |
| | Branding the Peace Country Association |
| | (Note: April 10, 2013; The Association has disbanded. All research materials are housed by the Northern Alberta Development Council) |
| Project Abstract | The Branding of the Peace is an initiative to market the Peace Country as a region producing high quality products. The initiative originated with a study funded by the Kiwanis Enterprise Centre in Dawson Creek in 1999. The Branding of the Peace Country Association (BPCA) was formed and products may bear the BPCA logo provided they: |
| | Are of assured quality |
| | Are produced using best practices |
| | Are produced in an environmentally responsible manner Are made in the Peace Country |
| | A series of three research papers were completed to Identify, define and substantiate the "superior quality" claims associated with the northern growing advantage for agricultural commodities grown in the Peace Country: |
| | Foreign Direct Investment – Revisited (2007) |
| | Following up on the recommendations presented in the 2005 report; this report assesses the current status of foreign direct investments in the Peace Country and offers directives to Branding the Peace Country to differentiate the region on the international markets. Accessible to partners and non-partners. Non-partner download Fee is \$350.00. |
| | Transportation of Peace Country Grain – Positioning for Export (2008) |
| | Summarizing Peace Country production and export data for the 2006 crop year; this document clarifies the logistics of transporting bulk grains; relates the Peace Country to international markets; and highlights export positioning challenges |
| | for the most northern agricultural region in the North America. |
| | An Evaluation of Fatty Acid Composition and Lignan Content of Peace Country Flax (March 2009) In partnership with nationally renowned bio-genetic research scientists Dr. Jian Zhang (Alberta Research Council) and Dr. Cao Rong (Agriculture Canada) samples of Peace Country flax were analysed for Omega3 content and compared to other flax producing regions. The preliminary findings of this report indicate the Peace Country does have a northern grown |

| | competitive advantage for Omega3 levels in flax. The information presented in the proposed series of research projects will be used by Branding the Peace Country to design and implement advocacy campaigns that: |
|-------------------|--|
| | showcase the superiority of Peace Country agricultural to buyers (local; national; international); increase the negotiation power of Peace Country producers to these buyers; encourage Peace Country producers to invest in high quality free market crops; identify alternative niche markets; support the Peace Country's demands for reliable; affordable transport systems that enhance direct to the buyer transactions; |
| | promote the creation of an "ingredient tracing system "for consumer foods claiming "Product of Canada" status. |
| Issues/Concerns | Transportation remains an issue for transporting goods; and subsequent export challenges and opportunities |
| Application | northern Alberta |
| Sponsors /Funding | Northern Alberta Development Council (NADC); North Peace Economic Development Commission; Alberta Research Council; Foreign Affairs and International Trade Canada; Agriculture and Agri-Food Canada |
| Keyword tags | Fatty Acid Composition; Flax; Food Processing; Feed Processing; Ingredient; Northern Alberta; Omega 3; Peace Country; Value-Added |

Brewing and Malting Barley Research Institute (BMBRI)

| Title | Research Funding Projects |
|-------------------|--|
| Proponent | Brewing and Malting Barley Research Institute (BMBRI) |
| Website | www.bmbri.ca/research |
| | <u>Funded Projects</u> |
| Contact | Tel: 204-927-1407 |
| | Email: info@bmbri.ca |
| Project Abstract | P.O. Box 1497, Station Main Winnipeg, Manitoba R3C 2Z4 BMBRI supports the development and evaluation of new malting varieties for Canada. Research funding is awarded |
| | annually to fund to innovative research projects and helps establish research priorities for malting and brewing improvements. The grants often draw matching funding. |
| | Most current BMBRI-supported projects focus on understanding the composition and physiological behavior of malting barley and on developing new tools to support barley breeding research. BMBRI also sponsors seminars to encourage the flow of information between the farming, research and industry communities. |
| Issues/Concerns | n/a |
| Application | northern Alberta, provincial, national |
| Sponsors /Funding | BMBRI currently (as of March 2010) represents nine leading North American maltsters and brewers. |
| Keyword tags | Barley Research; Malting Barley; Malting Barley Quality Traits; Variety Evaluation |

The Canadian Cattlemen's Association (CCA)

| Title | National Beef Industry Development Fund |
|-------------------|---|
| Proponent | The Canadian Cattlemen's Association (CCA) |
| Website | www.cattle.ca |
| | <u>Research and Development – Projects Funded</u> <u>Industry Analysis</u> |
| Contact | Tel: 403-275-8558 |
| | Email: <u>feedback@cattle.ca</u> |
| | Ste. 310, 6715 – 8th St. NE |
| | Calgary, AB T2E 7H7 |
| Project Abstract | The CCA structure represents every phase of the production system; the purebred, cow/calf, backgrounding and feedlot sectors. The association was founded by producers and is led by a producer-elected board of directors from across Canada. The CCA works with other sectors of the agriculture and food industries on matters of mutual concern. |
| | The purpose of the NBIDF fund was to promote and enhance the competitiveness of the beef industry in Canada through funding research and/or development programs. It ran from March 2002 to March 2006 and was directed by an industry/government oversight committee and managed by the CCA. Through stakeholder consultations, the following four priorities were identified: |
| | Expanded market share and security |
| | Increased product value |
| | Improved alignment of the supply chain |
| | Investment in knowledge and education (through innovation and adaptation) |
| Issues/Concerns | n/a |
| Application | provincial, national |
| Sponsors /Funding | NBIDF was an investment of \$9.25 million by the governments of Canada, British Columbia and Alberta. |
| Keyword tags | Beef Production; Processing; Feed; Innovation; Supply chain |

Canadian Food Inspection Agency

| Title | List of Registered Varieties by Crop Type with Canadian Representatives |
|-------------------|---|
| Proponent | Canadian Food Inspection Agency |
| Website | www.inspection.gc.ca |
| | List of Registered Varieties |
| Contact | Tel: 780-495-3333 <u>Contact Us</u> <u>Local Offices – Operations</u> Alberta North (includes NWT and Nunavut) Room 205 – 7000 113 St Edmonton, AB T6H 5T6 |
| Project Abstract | The CFIA's Variety Registration Office (VRO) registers varieties of most agricultural crops in Canada. Variety registration serves several purposes: • it ensures health and safety requirements are met • it verifies claims made and ensures accurate representation in the marketplace • it provides identification and traceability of plants with novel traits (PNTs) • it ensures varieties meet the internationally recognized definition of a variety • it acts as the respository for the official variety description and the official reference seed sample which are used to verify varieties throughout their commercial lifespan • it plays a gatekeeper role for maintaining/improving quality standards for grains in Canada • it facilitates the seed certification system in Canada Direct links to Crop Varieties: • Barley • Lentil • Bans, Field • Lupin, Field Mustard • Buckwheat • Canola/Rapeseed • Canarygrass • Faba Beans • Flax • Oats |
| Issues/Concerns | n/a |
| Application | northern Alberta, provincial, national |
| Sponsors /Funding | Canadian representatives include public and privately funded industry plant breeders' or owners of the variety |
| Keyword tags | Cereals; Oilseeds; Pulses |

Canola Council of Canada

| Title | Canola Performance Trials |
|-------------------|--|
| Proponent | Canola Council of Canada |
| Website | http://canolaperformancetrials.ca/# |
| | <u>Canola Council's Performance On-line Database (POD)</u> |
| Contact | Toll-Free: 1-866-479-0853 |
| | Email: admin@canolacouncil.org |
| | Canola Council of Canada |
| | 400-167 Lombard Avenue |
| | Winnipeg, MB R3B 0T6 |
| Project Abstract | The Canola POD was developed by the Canola Council of Canada to allow farmers to explore canola performance trial results from a broad range of sources in their own area. The Canola Council of Canada delivers the program on behalf of the three prairie canola groups. Trials provide relevant and unbiased performance data that reflects actual production practices; and comparative data on leading varieties and newly introduced varieties. Results for 2011 are based on 23 small plot trials and 108 field scale trials across the Prairies. |
| Issues/Concerns | n/a |
| Application | northern Alberta, provincial (AB, SK, MB) |
| Sponsors /Funding | Funded by the three prairie canola grower groups: Alberta Canola Producers Commission; Saskatchewan Canola Development Commission (SaskCanola) and the Manitoba Canola Growers Association. |
| Keyword tags | Alberta Canola Producers Commission; Canola; Field Scale; Canola Variety Trials; Performance Trials; Small Plot Trials; Variety Evaluation. |

Canola Council of Canada

| Title | Canola/Flax Agri-Science Cluster |
|-------------------|--|
| Proponent | Canola Council of Canada |
| Website | www.canolacouncil.org |
| | <u>Crop Production Research</u> <u>Oil Research Projects</u> <u>Meal Research Projects</u> <u>Canola Oil Research Directory</u> |
| Contact | Toll-Free: 1-866-479-0853 |
| | Email: admin@canolacouncil.org |
| | 400-167 Lombard Avenue Winnipeg, MB_R3B 0T6 |
| Project Abstract | More acres and higher yields will be needed to meet the canola industry's production target of 15 million tonnes by the year 2015. The <u>Canola/Flax Agri-Science Cluster</u> initiative provides financial funding contributions for recipients to carry out research projects with universities and other research and development organizations. |
| | The cluster aims to bring together canola research in three areas: oil nutrition, meal nutrition and crop production. |
| | The <u>Canola Oil Research Directory</u> is a comprehensive list of canola oil human nutritional research published in peer- reviewed scientific journals since canola was developed in the mid-20th century. Use Search to find a specific article by author; journal name; year published; and/or article title. |
| Issues/Concerns | n/a |
| Application | northern Alberta; provincial; national; The agreement includes all of the AAFC research stations in western Canada and all canola agronomic research underway by AAFC. |
| Sponsors /Funding | Project Cost: Agriculture and Agri-Food Canada (AAFC) Funding up to \$14,500,000 (includes \$5,550,220 for AAFC research) Project Start: 2009-04-01 Estimated Completion Date: 2013-03-31 |
| Keyword tags | Alberta Canola Producers Commission; Canola Oil Research; Crop Production; Crop Research; Oil Nutrition; Oil Research; Meal Nutrition; Meal Research; trans fat; heart disease; saturated fat; alpha-linolenic acid; Mediterranean diet. |

Cargill Limited

| Title | Canola Crush Plant (Announced) |
|-------------------|---|
| Proponent | Cargill Limited |
| Website | www.cargill.com |
| | <u>Cargill News Release on Project</u> |
| Contact | Brigitte Burgoyne |
| | Tel: 204-947-6187 |
| | Email: Brigitte_Burgoyne@cargill.com |
| | P.O. Box 5900 |
| | 300-240 Graham Avenue |
| | Winnipeg, MB R3C 4C5 |
| Project Abstract | Cargill is an international producer and marketer of food, agricultural, financial and industrial products and services. |
| | On October 1, 2012, Cargill announced plans to build a canola processing facility near Camrose, AB. The new crush facility is projected to have the capacity to process 850,000 metric tonnes of canola per year and will serve Alberta canola farmers by providing a consistent and competitive point of delivery. |
| | Subject to receiving all required approvals, construction is expected to be completed in time for the 2014-15 canola harvest. This significant investment in Alberta will generate approximately 800,000 hours of employment throughout the construction phase. In addition, Cargill expects that 50 permanent full time positions will be created. |
| Issues/Concerns | The new facility would be the first crushing plant to be built in Alberta in the last 30 years |
| Application | provincial, western provinces |
| Sponsors /Funding | Project Cost: not yet known |
| | Funding: Cargill Limited |
| | Project Completed: Fall 2015 |
| Keyword tags | Canola Processing; Cargill; Crushing; Feed; Grain Processing; Value-Added |

CEAPRO

| Title | Research Funding (Ingredients) |
|-------------------|---|
| Proponent | CEAPRO |
| Website | www.ceapro.com |
| | <u>Research and Development</u> |
| Contact | Tel: 780-421-4555 |
| | Email: info@ceapro.com |
| | 4174-10230 Jasper Ave NW Edmonton, AB T5J 4P6 |
| Project Abstract | Ceapro Inc. is a Canadian biotechnology company involved in the development of proprietary extraction technology and the application of this technology to the production of extracts and "active ingredients" from oats and other renewable plant resources. Ceapro adds further value to its extracts by supporting their use in cosmeceutical; nutraceutical; and therapeutic products for humans and animals. |
| | Ceapro's team of skilled and experienced researchers takes concepts from idea to commercialization by focusing on research collaborations and partnerships to find new active ingredients and to develop new processing technologies. |
| | Current projects are focused on Canadian crops with newly discovered unique attributes to assess the potential for new and innovative ingredients for cosmetic and personal care products. Existing products are under further evaluation for previous undetermined cellular activities, and performance testing (anti-ageing, anti-inflammatory, atopic dermatitis, etc.). |
| | On November 14, 2012, CEAPRO signed a Letter of Intent with AAFC to collaborate in the commercial development of a unique variety of oats developed by AAFC. This new variety of oats will enable Ceapro to extract larger quantities of its flagship product, avenanthramides, which are bio-active compounds exclusively found in oats in very small quantities. <u>News Release</u> |
| Issues/Concerns | CEAPRO holds intellectual property that is protected in jurisdictions around the world |
| Application | provincial, national, global |
| Sponsors /Funding | Strategic research partnerships with Canadian Universities; CEAPRO also collaborates with the Leduc Food Processing Development Centre (FPDC); NRC's Institute of Nutrisciences and Health (NRC-INH) and the Food Technology Centre (FTC), both centres are located in Charlottetown, PEI. |
| Keyword tags | <u>Avenanthramides; Beta Glucan;</u> Biological Products; Biotechnology; Clinical Trials; Extraction Technology And Processes; Functional Foods; Innovative Technology; Nutraceuticals; Oat Fractionation; Pharmaceutical |

Community Futures Grande Prairie & Region

| Title | Regional Agri-Food Project Resulting in New Product and Market Development! |
|-------------------|---|
| Proponent | Community Futures Grande Prairie and Region |
| Website | www.nayec.ca |
| Contact | Holly Sorgen, Executive Director Tel: 780-814-5340 Email: holly@cfofgp.com #104, 9817-101 Avenue Grande Prairie, AB T8V 0X6 |
| Project Abstract | Community Futures Grande Prairie & Region and its partners launched the "Adding Value to the Agri-Food Value Chain - Creating Opportunities" project early in 2010. Since then, hundreds of Agripreneurs were interviewed with a number attending Community Cafes to discuss issues pertaining to the value added agriculture sector in Northwest Alberta. 12 moved forward to one on one interviews with 6 identifying strong abilities to pursue new product and new market development opportunities related to their businesses. Of those 12, 6 were matched up with Business Coaching to assist them in developing comprehensive Business Plans, while also preparing "Pitches" for a panel of experts. This helped the Agripreneurs become more confident in their business viability and also got them to the next level of the project. Resources are now in place to support those Agripreneurs in a number of ways including new market testing, packaging, nutritional analysis, recipe development, professional industry assistance, etc. The projects ended in March of 2012. |
| Issues/Concerns | n/a |
| Application | northern Alberta |
| Sponsors /Funding | Project Cost: \$37,500 Funded by: Canadian Agricultural Adaptation Program (CAAP) Estimated Completion Date: October 31, 2013; final report due December 31, 2013 |
| Keyword tags | Business Development; Community Development; Economic Development; Market Development; New Product |

Farming Smarter Association

| Title | Farming Smarter |
|-------------------|---|
| Proponent | Farming Smarter Association |
| Website | <u>http://farmingsmarter.com</u> <u>Video Library (Projects)</u> – information and technology transfer |
| Contact | Ken Coles, General Manager Tel: 403-381-5118 Cell: 403-317-0757 Email: ken@farmingsmarter.com #100, 5401 - 1st Ave S Lethbridge, AB T1J 4V6 |
| Project Abstract | An alliance of the Southern Applied Research Association (SARA) and the Southern Alberta Conservation Association (SACA), Farming Smarter works to provide ongoing support for agronomy in Southern Alberta. Through its website and magazine, it seeks to provide an agricultural knowledge network for those looking to evaluate innovative opportunities, explore emerging issues and join an ongoing exchange of information. Association Objectives: To partner with agriculture organizations and producers to develop and apply innovative ideas and management practices to advance production agriculture; To create an environment that promotes an efficient; interactive exchange of ideas and unbiased; scientifically sound information between agricultural stakeholders; To identify and encourage capitalization of agri-environmental stewardship opportunities into production agriculture. |
| Issues/Concerns | Based in southern Alberta; may have limited applicability to northern Alberta |
| Application | provincial |
| Sponsors /Funding | Collaborate with approximately 70 agricultural organizations (click here to view Sponsor List) |
| Keyword tags | Crop Production; Feed Production; Feed Processing; Information And Technology Transfer |

Feedlot Health Management Services Ltd.

| Title | Individual And Additive Value Of Conventional And Non-Conventional Technologies In Commercial Beef Feedlot Production |
|-------------------|--|
| Proponent | Feedlot Health Management Services Ltd. (FHMS) |
| | www.feedlothealth.com |
| Website | FHMS Research |
| Contact | Tel: 403-938-5151 Email: <u>fhms@feedlothealth.com</u> |
| | PO Box 140 Okotoks, AB T1S 2A2 |
| Project Abstract | FHMS is a comprehensive beef industry consultancy, providing veterinary services, herd health programs and computerized health-recording systems and other informational tools to producers throughout western Canada and the United States. |
| | It seeks to enhance the efficiency, quality and consistency of beef production for clients. FHMS incorporates the results of its studies into computerized economic models, to assess the cost-benefits of the technology and products in question. |
| | FHMS research team does about 25 research studies a year. The FMHS client base includes: beef cattle producers, pharmaceutical companies, government agencies, technology providers, feed companies and other organizations with connections to the beef industry. |
| Issues/Concerns | n/a |
| Application | provincial, national |
| Sponsors /Funding | Project Cost: \$1,037,529 |
| | Funded by: Canadian Agricultural Adaptation Program (CAAP) |
| | Estimated Completion Date: October 31, 2013; final report due December 31, 2013 |
| Keyword tags | Disease Investigations; Grain And Forage Production Evaluations; Innovation; New Technology Assessments; Product Safety And Efficacy Studies; Technology |

Field Crop Development Centre and Lacombe Research Centre

| Title | Cereal Research Report |
|-------------------|--|
| Proponent | Field Crop Development Centre and Lacombe Research Centre |
| Website | www.agric.gov.ab.ca Field Crop Development Centre (FCDC) – Research Projects |
| | FCDC projects are detailed in the <u>2012 Cereal Research Report</u> |
| Contact | Dr. James H. Helm Tel: 403-782-8696 Email: james.helm@gov.ab.ca Field Crop Development Centre |
| | 5030 - 50 Street |
| | Lacombe, AB T4L 1W8 |
| Project Abstract | The Field Crop Development Centre (FCDC) of Alberta Agriculture & Rural Development has been involved in the development and evaluation of barley, triticale, and winter wheat cultivars for Alberta since 1973. The primary interest of this program has been the production of high yielding, high quality feed barley and triticale. Of particular interest has been the development of feed barley varieties with improved levels of protein and energy digestibility. |
| | In 1993, Lacombe Crop Research became the Alberta center for barley research under an Alberta/Canada Barley Development Agreement. The Agriculture & Agri-Food Canada barley programs at Beaverlodge and Lethbridge were closed down or phased out and integrated into the Alberta Agriculture program. |
| | Since 1979, barley lines have been evaluated for annual forage production as whole plant silage in addition to the selection for grain yield. To diversify the cereals in Alberta, the FCDC program expanded to include the development of spring triticale, winter triticale, and winter wheat varieties. |
| | A program for breeding two-row malting barley varieties is also present with specific crosses for malting quality first made in 1992. The goal of the malting program is to put good disease resistance and lodging resistance into a high quality malting type. |
| Issues/Concerns | n/a |
| Application | northern Alberta, provincial, national |
| Sponsors /Funding | Agriculture and Agri-Food Canada; Alberta Agriculture and Rural Development |
| Keyword tags | Barley Development; Barley Varieties; Cereal Research; Research Projects; Technology Transfer and Market Development; Triticale and Winter Wheat Development; Triticale And Winter Wheat Varieties; Variety Development |

James Richardson & Sons, Limited

| Title | Richardson Announces Agreement to Purchase Viterra Assets |
|-------------------|---|
| Proponent | James Richardson & Sons, Limited |
| Website | www.richardson.ca News Release |
| Contact | Tracey Shelton, Director, Corporate Communications Tel: 204-934-5169 Cell: 204-799-2838 Email: <u>communications@richardson.ca</u> Richardson International 2800 One Lombard Place Winnipeg, MB R3B 0X8 |
| Project Abstract | James Richardson is a 100% Canadian-owned and controlled, private corporation owned by the Richardson family. The company has interests in agriculture and food processing, oil and gas exploration and development, financial services, real estate and private equity investments and is headquartered in Winnipeg, Manitoba. The assets to be acquired by Richardson include 19 country elevators and the crop input centres co-located with those elevators which complement the Richardson Pioneer network of grain elevators and crop input centres across Western Canada. Following the transaction, Richardson and Glencore-owned Viterra will be similarly sized grain handling companies. New Alberta Elevator Locations Lacombe East, AB Lavoy, AB High Level, AB Provost, AB Vulcan, AB |
| Issues/Concerns | Reducing the dominance of a single company should benefit western Canadian farmers through increased choice and competition for their business. |
| Application | provincial, national, global |
| Sponsors /Funding | Funding: + \$900 million |
| Keyword tags | Crop inputs; Elevator Locations; Logistics |

| Title | Richardson Invests \$15 Million to Expand Canola Oil Processing Facility |
|-------------------|--|
| Proponent | James Richardson & Sons, Limited |
| | www.richardson.ca |
| Website | |
| | News Release |
| | See also Richardson introduces high oleic canola oil with natural antioxidants |
| Contact | Tracey Shelton, Director, Corporate Communications |
| | Tel: 204-934-5169 |
| | Cell: 204-799-2838 |
| | Email: communications@richardson.ca |
| | Richardson International |
| | 2800 One Lombard Place |
| | Winnipeg, MB R3B 0X8 |
| Project Abstract | On January 28, 2011, Richardson International Limited announced an investment of \$15 million to expand and enhance its canola oil processing plant in Lethbridge, Alberta to meet increasing customer demand for healthier food products. |
| | The canola packaging plant in Lethbridge will be increased by 40 per cent with the addition of 33,000 square feet - warehouse space and bulk oil storage. The project will increase efficiencies by fully automating the oil receiving and blending process. |
| | Richardson has made a significant investment in research and development over the last 18 months to develop new canola-based oil, non-hydrogenated margarine and shortening products for the food processing, bakery, food service and retail markets. |
| | In addition to the expansion project at Lethbridge, Richardson will open a new \$1.5 million lab facility and pilot plant at the Lethbridge facility to continue research and development work. |
| Issues/Concerns | Trans fat legislation in Canada and the U.S. and the lack of functional trans fat compliant products have contributed to the |
| | increase in demand for innovative new products. |
| Application | provincial, national, global |
| Sponsors /Funding | Funding: \$15 million canola oil processing plant |
| | Funding: \$1.5 million lab facility and pilot plant |
| Keyword tags | Canola Oil Processing; Health Food; Innovative Food Products; Trans Fat |

Lakeland College Applied Research and Innovation

| Title | Agricultural Science Projects |
|-------------------|---|
| Proponent | Lakeland College Applied Research And Innovation |
| Website | www.lakelandcollege.ca |
| | <u>Agricultural Science Projects</u> |
| Contact | Diane Harms, Director, Applied Research and Innovation Tel: 780-581-0656 |
| | Email: <u>Diane.Harms@lakelandcollege.ca</u> |
| | General Inquiries: 780-853-8734 Email: <u>appliedresearch@lakelandcollege.ca</u> |
| | 5707 College Drive Vermilion, AB T9X 1K5 |
| Project Abstract | Lakeland College is pursuing both crop and livestock research projects. Recent acquisition of ten quarters of farmland increased its capacity to undertake projects both independently and in partnership with companies. In 2011, the college pursued several crop trial and demonstration projects with several industry partners. A new partnership with New Holland Agriculture and the availability of a plot seeder helped expand crop research projects in 2012. |
| | Crop research is focused on crop and forage varieties that are commonly grown in the region and the commercial scale demonstration of new varieties. |
| | Crop Research Demonstrations |
| | Third-party, neutral, local location to showcase changing demonstrations by companies like DuPont, Dow, Bayer, Canterra, Pioneer and Monsanto. |
| | Feed Intake Research Helps Beef Cattle "GrowSafe" GrowSafe technology tags individual animals and measures how much they eat by weight; and how often they feed; identifying the beef industry efficiency conversion rates. Beef cattle feed testing compares high moisture barley or dry rolled barley finishing diets. |
| Issues/Concerns | |
| Application | northern Alberta; province |
| Sponsors /Funding | DuPont, Dow, Bayer, Canterra, Pioneer and Monsanto. Natural Sciences and Engineering Research Council of Canada funded <i>GrowSafe</i> equipment; Alberta Rural Development Network funded best applications for GrowSafe research. |
| Keyword tags | Barley Processing Research; Commercial Scale Demonstrations; Crop Research; Demonstration Farm; Feed Research; northern Alberta; Production Trials |

Monsanto Canada Inc

| Title | Monsanto's Technology Organization |
|-------------------|--|
| Proponent | Monsanto Canada Inc |
| Website | www.monsanto.ca |
| | <u>Monsanto Research Projects</u> <u>Technology Focus Areas</u> |
| Contact | Tel: 204-985-1000 |
| | 900 - One Research Road Winnipeg, MB R3T 6E3 |
| Project Abstract | Monsanto is an agricultural company and leading global provider of technology-based solutions and agricultural products that improve farm productivity and food quality. Monsanto is provincially located with Production/Breeding Facilities at Lethbridge and at the Edmonton Research Farm. |
| | AB Monsanto's Technology Organization is a multi-functional, multi-crop organization focused on five broad areas: Biotechnology – discovery and development of genes to create new traits such as herbicide tolerance, insect resistance, drought tolerance, higher yield and increased nutrition. |
| | Breeding – Is responsible for identifying the best parent lines or inbreds in crops and breeding for the highest quality hybrids or varieties that contain desirable characteristics like higher yield potential, better disease resistance and drought tolerance. The team utilizes molecular markers and marker assisted breeding to achieve |
| | these goals. 3. Breeding Technology – integration of traited seed from biotechnology 4. Regulatory – necessary for government approvals prior to launch. |
| | Kegulatory – necessary for government approvals prior to faulterit. Chemistry – responsible for weed management solutions, improved seed treatments for insect resistance, crop protection for development and promotion of agronomic practice improvements to enhance yield potential and sustainability. |
| Issues/Concerns | Canada is the third largest producer of genetically modified organisms (GMOs) in the world. As the cultivation of GMO crops intensifies and expands; ecological risks are emerging; such as superweeds; pest resistance; and adverse effects on non-target organisms. (Environment Canada) |
| Application | provincial; national; global |
| Sponsors /Funding | Monsanto; interested in external collaborations and partnering |
| Keyword tags | Advanced Traits And Technologies; Chemistry And Microbiology; Crop Protection Solutions; Glyphosate-Resistant; Innovative Research Ideas; Novel Technologies; Plant Biotechnology And Genomics; Plant Breeding Technologies; Roundup Ready Canola; Trait Licensing |

NeoVentures Biotechnology Inc.

| Title | Optimization Of A Bar-Code Detection System For CWRS Wheat Varieties |
|-------------------|--|
| Proponent | NeoVentures Biotechnology Inc. |
| Website | http://neoventures.ca |
| Contact | TouCH Platform - <u>pdf document</u> Cropomics - <u>www.cropomics.com</u> |
| | Tel: 519-858-5052 Email: info@neoventures.ca |
| | The Stiller Centre 700 Collip Circle London, ON N6G 4X3 |
| Project Abstract | NeoVentures provides custom aptamer development services for all stages of <u>aptamer</u> development strategies including: |
| | customized aptamer identification platforms (selection strategies including counter selection for optimum specificity); development of aptamer based diagnostic platforms; |
| | development of production systems for commercialization. |
| | The Touch Platform technology allows producers to manage the quality of their crops and improve the quality and consistency of protein, oil, and other grain traits with a topical application to the crop at flowering time. The technology will improve the grain consistency by minimizing the environmental influences on the production of the proteins responsible for good baking quality (<u>News Release</u>) |
| | NeoVentures has entered into confidentiality agreements and discussions regarding the development of this technology with several interested parties. To learn more about this technology, potential partners are asked to contact the company directly. |
| Issues/Concerns | Privately held Canadian company; confidentiality agreements are in effect. |
| Application | Provincial; national |
| Sponsors /Funding | Project Cost: n/a Funded by: Canadian Agricultural Adaptation Program (CAAP): \$37,500; Agricultural Innovation Program (AIP): \$106,222 Estimated Completion Date: December 31, 2013 |
| Keyword tags | Aptamer; Bar-Code Detection System; Biotechnology; Cropomics; Diagnostic Platforms; Innovative Technology; Production Systems; Selection Strategies Touch Platform Technology; Wheat Varieties |

| Title | Opportunity Analysis of Value Added Agriculture in The Peace Region. Final Study Report, Action Plan and Communication & Promotional Terms of Reference. |
|-------------------|--|
| Proponent | Coordinated by The Peace Value-Added Strategy Group for the Peace Value-Added Ag & Food Association and the Peace Region Economic Development Alliance (PREDA). |
| | Note. The Peace Value-Added Strategy Group and the Peace Value-Added Ag & Food Association have both disbanded. |
| Website | www.peacecountrycanada.com |
| | Peace Region Economic Development Alliance - PREDA |
| Contact | Dan Dibbelt, Executive Director |
| | Peace Region Economic Development Alliance (PREDA) |
| | Tel: 780-527-6232 Email: preda@peacecountrycanada.com |
| Project Abstract | PREDA is a partnership of 25 municipalities, educational institutions, business groups and Community Futures working together to guide regional economic development of Alberta's Peace Country. The analysis is part of a long-term strategy to diversify the agriculture industry in the Peace Region of British Columbia and Alberta through a viable value-added agriculture industry. |
| | Results of the research identified five enterprises offering potential for investors in the Peace River Region. Honey Processing Medicinal Herbs and Essential Oils Organic Flour and Baking Products |
| | The Study concluded with the recommendation that a series of enterprise-specific champions be identified to promote the development of each of these enterprises within the Peace Region. |
| Issues/Concerns | n/a |
| Application | northern Alberta |
| Sponsors /Funding | Project Report Date: November 2001 Dissemination of project findings was supported by the <u>Northern Alberta Development Council.</u> |
| Keyword tags | Baking; Diversification; Organic Flour Processing; Peace Region; Products; Value-Added Agriculture |

| Title | Peace River Region Agri-Food and Forestry Value-Added opportunities – Final Report |
|-------------------|---|
| Proponent | Peace Region Economic Development Alliance (PREDA). |
| Website | www.peacecountrycanada.com |
| Contact | Dan Dibbelt, Executive Director Peace Region Economic Development Alliance (PREDA) Tel: 780-527-6232 Email: <u>preda@peacecountrycanada.com</u> |
| Project Abstract | PREDA is a partnership of 25 municipalities, educational institutions, business groups and Community Futures working together to guide regional economic development of Alberta's Peace Country. This study identified many value added opportunities and initiatives for the Peace River region of Alberta. |
| | Key conclusions: Peace region strengths – the region has a large productive land base which currently is used for agriculture and forestry. The region hosts about 20% of the province's agriculture sector. Peace region weaknesses - the region is far from (human and animal) markets (either domestic or export positions) and must rely on rail or transport with few choices. Additionally, the support system for creating new value added businesses or innovation is very weak compared with the Edmonton-Calgary corridor. A third weakness is the low knowledge / experience base of the region in value added projects. Skills, technology and knowledge need to be improved as Alberta moves to a knowledge-based economy. Community interest – a number of people in various communities are interested in creating value added businesses, as indicated by membership in PREDA or through the direct contact and attendance at workshops. Two workshops were held (Grande Prairie; Fairview) - 20 people attended each workshop. A need for action exists – given the global economy, commodity thinking and community interest, a need for action exists. This report indicates a number of specific project and strategic opportunities. |
| Issues/Concerns | This report may be dated. |
| Application | northern Alberta, Peace River Region |
| Sponsors /Funding | Project Cost: n/a Funded by: PREDA Project Report Date: September 2000 |
| Keyword tags | Agri-Food; Cattle Raising And Feeding; Investment Opportunities; Organic Crops; Value-Added Opportunities |

| Title | Peace Country: Regional Investment Intelligence Profile |
|-------------------|---|
| Proponent | Peace Region Economic Development Alliance (PREDA). |
| Website | www.peacecountrycanada.com |
| | Project Report |
| Contact | Dan Dibbelt, Executive Director |
| | Peace Region Economic Development Alliance (PREDA) |
| | Tel: 780-527-6232 |
| | Email: preda@peacecountrycanada.com |
| Project Abstract | PREDA is a partnership of 25 municipalities, educational institutions, business groups and Community Futures working together to guide regional economic development of Alberta's Peace Country. Prepared by Schollie Research & Consulting, this Report provides a breakdown of the Agriculture Industry in the Peace Country (Section F.4, pp 25-26). |
| | In 2006, gross farm receipts for the Peace Country were \$634.9 million dollars with Peace Country farms producing a substantial proportion of the province's field crops: • 71.0% of the province's forage seed |
| | 20.7% of the province's canola |
| | 19.4% of the province's hay and fodder crops |
| | The Report provides data tables for: |
| | Farms by Industry Group |
| | Selected Field Crops Grown in the Peace Country |
| | Selected Livestock Numbers for the Peace Country |
| Issues/Concerns | The Agriculture landscape has undergone significant changes in recent years. However, this project provides relevant |
| | benchmark data. |
| Application | northern Alberta, Peace Country of Alberta |
| Sponsors /Funding | Project Cost: n/a |
| | Funded by: PREDA |
| | Project Report Date: Fall 2008 |
| Keyword tags | Farms in The Peace Country; Field Crops; Livestock Numbers; Northern Alberta |

Portage College, St. Paul Campus

| Title | Food Processing/Food Sciences Training Facility |
|-------------------|---|
| Proponent | Portage College; St. Paul Campus |
| Website | http://www.portagecollege.ca/Continuing_Ed/Food_Sciences.htm |
| | Project Overview News Release |
| Contact | Paul Pelletier, Manager of the Food Sciences Centre Tel: 780-645-5223 ext. 236 Email: paul.pelletier@portagecollege.ca |
| | St. Paul Campus Box 1471 5205-50 Avenue St. Paul, AB T0A 3A0 |
| Project Abstract | The Food Processing/Food Sciences Training Facility will provide an innovative teaching and processing facility to help establish a regional food industry in the St. Paul and eastern region of the province. The facility will provide processing capacity and food sciences technology for local and small food growers to bring their products into the commercial retail market. Food sciences training for certificate and diploma programs will be offered through Portage College's St. Paul Campus; opening opportunities for youth and community residents to develop hands-on skills for use in the growing industry. |
| | Expected Outcomes and Benefits: All projects go through a selection process to ensure they will improve the quality of life for Albertans. This project meets this objective through the following outcomes and benefits: Provides opportunity for new equipment and food products to be tested in a functional and certified facility Creates a local workforce trained in food sciences for up to 140 post-secondary students annually through the creation of new food sciences programming Diversifies the region's local economies through value-added agriculture that will stimulate economic growth within rural communities The facility will become a small-scale incubator for smaller food producers in the region |
| Issues/Concerns | |
| Application | northern Alberta, eastern region of Alberta |
| Sponsors /Funding | Total Investment: \$5.5 million. RADF Investment: \$950,000; Other Investment: \$3.9 million Project Period: February 2012 - December 2013 |
| Keyword tags | Equipment Food Processing; Food Sciences Technology; Value-Added Agriculture |

Pulse Canada

| Title | Food and Nutrition Research |
|-------------------|--|
| Proponent | Pulse Canada |
| Website | www.pulsecanada.com |
| | Food & Nutrition Research Scientific Advisory Board |
| | Related: |
| | Pulse News Network |
| | Building on Success: The Canadian Pulse Industry (comprehensive overview) |
| Contact | Tel: 204-925-4455 |
| | Email: office@pulsecanada.com |
| | |
| | 1212-220 Portage Avenue |
| | Winnipeg, MB R3C 0A5 |
| Project Abstract | Pulse Canada is the national association representing growers, traders and processors of Canadian pulse crops (peas, beans, lentils and chickpeas). Canada is the world's largest supplier of pulses. In 2008, Canada exported more than \$2 |
| | billion of pulse products to more than 150 countries. |
| | Research on the health attributes of pulses, along with their functional properties in food systems and food product applications, and pulse processing technology, is needed to advance Canada's pulse industry. |
| | |
| | Research results in these areas are used to boost consumer demand and to encourage the food industry to increase their |
| | incorporation of pulses and pulse components into food products. |
| Issues/Concerns | n/a |
| Application | provincial, national |
| Sponsors /Funding | Project Cost: AAFC Funding up to \$7,000,000 (includes \$3,200,000 for AAFC research) |
| | Date of Acceptance: 2010-04-01 |
| | Estimated Completion Date: 2013-02-28 |
| Keyword tags | Food and Nutrition; Food Ingredient Sector; Healthier Food; Processing and Utilization; Pulse Ingredients |

| Title | Pulse Science Cluster | |
|-------------------|---|--|
| Proponent | Pulse Canada | |
| Website | www.pulsecanada.com | |
| Contact | Tel: 204-925-4455 Email: <u>office@pulsecanada.com</u> 1212-220 Portage Avenue Winnipeg, MB R3C 0A5 | |
| Project Abstract | Pulse Canada is the national association representing growers, traders and processors of Canadian pulse crops (peas, beans, lentils and chickpeas). Canada is the world's largest supplier of pulses. In 2008, Canada exported more than \$2 billion of pulse products to more than 150 countries. | |
| | The Pulse Science Cluster aims to augment existing research investments, to advance sustainable production and to enhance profitability of the Canadian pulse industry. Three research themes were identified as important to the continued growth and sustainability of the pulse sector: Genetic Improvement – To enhance the competitiveness and profitability of Canadian pulse crop. Research will focus on plant breeding and trait development leading to the development of pulse varieties with improved adaptation to a changing climate, improved disease resistance and increased yield. Agronomy and Sustainable Production – Research will focus on the development of beneficial management practices in various agri-climatic zones such as crop rotation, weed management, nutrient use efficiency and disease management, leading to improved profitability of pulse varieties. Processing and Utilization – To support market development in the food and food ingredient sectors to respond to consumer demand for healthier foods through increased use of pulses and pulse ingredients. Research will focus on the development of pulse ingredients and so and food ingredients and so and food ingredients. | |
| Issues/Concerns | n/a | |
| Application | northern Alberta, province; Project participation includes AAFC Researchers in Beaverlodge, AB | |
| Sponsors /Funding | Project Cost: AAFC Funding up to \$7,000,000 (includes \$3,200,000 for AAFC research) Date of Acceptance: 2010-04-01 Estimated Completion Date: 2013-02-28 | |
| Keyword tags | Food Ingredient Sector; Healthier Food; Plant Breeding; Processing and Utilization; Pulse Crop; Pulse Varieties; Research; Sustainable Production; Pulse Ingredients | |

| Regional Economic Deve | lopment Initiative | for Northwest A | lberta (REDI) |
|-------------------------------|---------------------|-----------------|---------------|
| Regional Economic Deve | iopinent initiative | | |

| Title | Grow North Implementation Project |
|-------------------|--|
| Proponent | Regional Economic Development Initiative for Northwest Alberta (REDI) |
| Website | www.rediregion.ca |
| | |
| | <u>Grow North Value-Added Agriculture Project</u> Project Fact Sheet (includes a list of contacts) |
| | |
| Contact | Clark McAskile, REDI Committee Liaison |
| | REDI Office: 780-926-7314 |
| | E-mail: <u>info@rediregion.ca</u> |
| | P.O. Box 210 |
| | 9810-99 St |
| | High Level, AB T0H 1Z0 |
| Project Abstract | REDI is an alliance of four communities with an aggregate population base of 21,700. One of eleven Regional Economic |
| | Development Alliances across the province, REDI exists to promote and enhance economic growth amongst its member communities and to promote the region as a whole, rather than as individual communities. |
| | REDI completed a comprehensive feasibility study for an integrated value-added agriculture project called the Northwest Alberta Agricultural Ventures Concept (NWAAVC). This project was turned over to Grow North who completed a detailed business plan for the project. Grow North is a locally owned corporation formed to construct and operate the Value-added Agricultural Project conceived by REDI. The integrated agriculture and Biofuels project will benefit the producers in northwest Alberta by providing a local market for their grain, cattle and hogs. |
| | The proposed project is a multi-million dollar integrated ethanol plant, feedlot, bio-generation plant and kill/cut meat (beef and hog) processing facility to be located in the region. Grow North is implementing the project with the assistance of REDI. This stage will include share sales, preliminary engineering and site selection. |
| Issues/Concerns | Ongoing – commitment from investors and producers is required. |
| Application | northern Alberta, northwest Alberta |
| Sponsors /Funding | Project Cost: \$400,000 |
| | Funded by: Bio Fuels Opportunities for Producers Initiative (BOPI); Agriculture & Food Council (\$300;000); Community |
| | Futures Northwest Alberta (\$100;000 unsecured debt); and Grow North |
| | Estimated Completion Date: Feasibility Plan Completed in 2005 |
| Keyword tags | Biofuels; Bio-Generation; Ethanol Plant; Feasibility Study; Feedlot; Meat Processing Facility; Northwest Alberta |

Viterra Global

| Title | Viterra Canada (Research and Development; Viterra Acquisition by Glencore) |
|------------------|---|
| Proponent | Viterra Global |
| Website | www.viterra.com |
| | <u>Research and Development</u> |
| Contact | Tel: 403-440-1119 |
| | Calgary Office |
| | Bow Valley Square 2 |
| | 3600 205 - 5 Avenue SW Calgary AB T2P 2V7 |
| Project Abstract | Viterra provides premium quality ingredients to leading global food manufacturers. Headquartered in Canada, the global agri-business has operations across Canada, the United States, Australia, New Zealand and China, as well as a growing international presence that extends to offices in Japan, Singapore, Vietnam, Switzerland, Italy, Ukraine, Germany, Spain and India. Driven by an entrepreneurial spirit, Viterra operates three distinct business segments: Grain Handling and Marketing, Agri-products and Processing. Viterra has made significant investments in seed research and development in Western Canada. |
| | Agri-Products In Canada and Australia, Viterra invested in research and development that focuses on new seed varieties tailored to meet the needs of destination customers and farmers. |
| | Grain Handling and Marketing As the largest grain handler in Canada with over 45% of the western Canadian market share, Viterra's sourced and marketed grain is delivered to customers in more than 50 destination countries. |
| | Processing Viterra is involved in processing oats, wheat, custom-coated grains and canola in North America. Additionally, it has malt processing in Canada and Australia and durum processing in the United States. It is the third largest North American manufacturer and marketer of dry pasta products. As one of the world's largest industrial oat processors it produces quality oat products for major cereal and breakfast bar brands. Viterra is the largest maltster in Australia supplying major brewers in Asia and Australia. |
| | With custom mills and operations in New Zealand, Viterra provides animal feed products and nutrients |

| | to the dairy, beef, poultry, and hog industries. This provides stable, non-seasonal margins, creates end- markets for its grain, and diversifies its customer base. |
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| | <u>News Releases</u> |
| | On December 7, 2012, Viterra announced that the acquisition of Viterra by a subsidiary of Glencore International Plc (Glencore) received regulatory approval from the Ministry of Commerce of the People's Republic of China (MOFCOM). This was the final outstanding regulatory approval of Glencore's acquisition of Viterra pursuant to a court approved plan of arrangement (the Arrangement). Viterra now expects the effective date of the Arrangement to be December 17, 2012. Glencore is one of the world's leading integrated producers and marketers of commodities, headquartered in Baar, Switzerland, and listed on the Lender and Leng Keng Stack Furtherness. |
| | Switzerland, and listed on the London and Hong Kong Stock Exchanges. Glencore has worldwide activities in the production, sourcing, processing, refining, transporting, storage, financing and supply of Metals and Minerals, Energy Products and Agricultural Products. |
| Issues/Concerns | This acquisition will impact both the Canadian and Australian agricultural landscapes. Certain information in the press release is "forward-looking information" within the meaning of applicable Canadian securities legislation and is prospective in nature, including information regarding completion of the Arrangement. Forward-looking information is not based on historical facts, but rather on current expectations and projections about future events, and is therefore subject to risks and uncertainties which could cause actual results to differ materially from the future results expressed or implied by the forward-looking information. |
| Application | provincial, national, global |
| Sponsors /Funding | n/a |
| Keyword tags | Agri-Products; Grain Handling and Marketing; Processing |