










## RDAR Approved Projects FY2022 Q1 and Q2










These 50 projects were approved in Q1 & Q2:







- Canadian Agriculture Partnership Program - Accelerating Agricultural Innovation – 22 Projects;
- Fast Call for Drought - 3 Projects;
- Genome Alberta Special Call - 14 projects;
- General Acceptance – 11 projects

	Species		Project	Lead Organization	RDAR Approved Amount	Total Project Amount	RDAR Priority Outcome	
1	Barley		Testing of early barley/triticale lines in pre-variety trials for adaptation and stability in different agro-ecological zones of Alberta	Gateway Research Organization	\$61,780	\$124,750	Profitability & Competitiveness	
2	Beef Cattle		Exploring Salmonella and the microbiota in lymph nodes of cattle presented for slaughter	Beef Cattle Research Council	\$30,000	\$284,000	Meeting market demands	
3			Winter swath grazing demonstration and adoption rates survey among cattle producers	Lakeland College	\$70,000	\$151,040	Knowledge mobilization	
4			Automating Replacement Heifer Selection – Demonstration Site	Lakeland College	\$115,200	\$465,360	Profitability & Competitiveness	
5			Gentec Feeder Profit Index validation and deployment	University of Alberta	\$249,750	\$517,500	Profitability & Competitiveness	
6			Alberta BRD Initiative Phase 1: A Multidisciplinary initiative to apply genomics to reduce the incidence of BRD and antimicrobial use in western Canadian beef production	University of Alberta	\$363,640	\$576,815	Sustainable Production	
7			Genomics and transcriptomics of helminth parasites of Alberta livestock	University of Calgary	\$102,000	\$215,985	Profitability & Competitiveness	
8			A comprehensive sequencing and bioinformatics analysis pipeline for BRD pathogens in Alberta beef cattle	University of Lethbridge	\$335,000	\$604,000	Sustainable Production	
9		Bees		Enhanced disease management of varroa using heat treatment for honeybees. (Phase 2)	Alberta Beekeepers Commission	\$653,227	\$5,289,167	Sustainable Production

	Species		Project	Lead Organization	RDAR Approved Amount	Total Project Amount	RDAR Priority Outcome
10			Evaluating AI/ML and Robotics Utilizing a Beewise System in Reducing Colony Losses and Labour Requirements and Improving Production for the Alberta Apiary Sector.	Riff International Ltd.	\$238,248	\$1,603,700	Profitability & Competitiveness
11			Developing New Miticides for Varroa Destructor Control in Honeybees	University of Alberta	\$499,968	\$719,968	Profitability & Competitiveness
12			A Canadian system for detecting fraudulent honey	University of British Columbia	\$175,000	\$350,000	Meeting market demands
13	Canola		Effect of extreme heat during hybrid seed Canola pollination on pollen nutrient status and pesticide residue	Alberta Beekeepers Commission	\$64,240	\$130,240	Sustainable Production
14			Characterization of the clubroot resistance of turnip ( <i>Brassica rapavar. rapifera</i> ) introgressed into <i>Brassica napus</i> and development of molecular markers for use in canola breeding	University of Alberta	\$95,050	\$190,100	Profitability & Competitiveness
15			Generation of shatter-tolerant canola germplasm through rapid TILLING approach	University of Calgary	\$125,000	\$250,000	Profitability & Competitiveness
16	Dairy Cattle		Application of Precision Technology for Resilient Cows: Enhancing the sustainability of Alberta's dairy industry	Lactanet	\$725,000	\$1,760,000	Sustainable Production
17	Forage		Alberta Forage Sector Strategy Development	ARECA	\$64,000	\$138,000	Profitability & Competitiveness
18			Nutrient and mineral composition of Alberta pasture grass over the grazing period	Blue Rock Animal Nutrition	\$59,865	\$59,865	Profitability & Competitiveness
19			Evaluation of early seeded winter cereals for livestock feed as a drought management strategy	Lakeland Applied Research Association	\$8,740	\$17,480	Knowledge mobilization
20			Drought management in northeastern Alberta: Management strategies for dry conditions and extreme heat	Lakeland Applied Research Association	\$32,500	\$65,000	Knowledge mobilization
21			Climate Smart Management Practices & Farm Profit: a long-term farm scale project on the economics of climate	Peace Country Beef & Forage Association	\$92,457	\$185,873	Knowledge mobilization

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			adaptive agricultural practices.				
22			The Forage Production and Quality Potential, and Ecosystem Functions of Perennial Forage Mixes	Peace Country Beef & Forage Association	\$94,519	\$94,519	Sustainable Production
23			Evaluation of the ecosystem services and profitability of perennial grain crops for integrated grain and forage production in Alberta	Peace Country Beef & Forage Association	\$385,517	\$771,033	Sustainable Production
24	Hemp		CRHC Hemp Fiber Variety Trials in Alberta	Canadian Rockies Hemp Corporation	\$332,500	\$1,332,500	Profitability & Competitiveness
25			Herbicide screening for weed management in industrial hemp production in Alberta	Farming Smarter	\$74,000	\$148,000	Profitability & Competitiveness
26	Horticulture		Research and Development of a Novel Carbon Gel Substrate that will increase Productivity, Competitiveness and Carbon Reusability for CEA Facilities	Pure Life Carbon	\$571,927	\$1,511,254	Meeting market demands
27	Multiple		Phase 2 Regional Variety Trial Enhancement	Alberta Wheat Commission	\$105,000	\$105,000	Knowledge mobilization
28	Oats		Export Ready Alberta Oats: An expansion and tailoring of Oat Advantage's oat variety development platform to adapt to Alberta's climate and to meet Alberta's next-generation oat industry needs.	Vesper Sparrow Prairie Research Inc.	\$50,000	\$100,000	Profitability & Competitiveness
29	Pork		Exploiting a natural disease challenge model to select for disease resilient pigs	University of Alberta	\$717,500	\$1,500,000	Profitability & Competitiveness
30			Maximizing overall carcass value of commercial pigs using genomic selection	University of Alberta	\$750,000	\$1,750,000	Profitability & Competitiveness
31			Development and Implementation of Genomic Tools for Evaluating Comprehensive Cross-protection Targeting Bacterial Pathogens Plaguing the Pork Industry	University of Calgary	\$250,000	\$642,000	Profitability & Competitiveness

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32	Potato		Collaborative Potato Variety Trial - Alberta	Lethbridge College	\$150,000	\$150,000	Profitability & Competitiveness
33			Exploring Genomics of Potato Blackleg Resistance	University of Lethbridge	\$55,335	\$112,835	Profitability & Competitiveness
34	Poultry		Epidemiology of highly pathogenic avian influenza (HPAI) in Alberta, 2022	University of Calgary	\$15,755	\$15,755	Profitability & Competitiveness
35	Pulse		More Than Protein Ingredients Ltd will research, develop & propagate new yellow pea varieties unique in the marketplace	More Than Protein Ingredients Ltd	\$234,800	\$497,000	Meeting market demands
36			To enhance preprocessing with the adoption and verification of 2 new technologies in the protein fractioning industry to increase the value and functionality of the processed ingredients and create processing efficiencies	More Than Protein Ingredients Ltd	\$251,674	\$29,150,712	Meeting market demands
37			Lupin adaptability	SARDA	\$19,400	\$38,800	Knowledge mobilization
38			Risk mitigation for pulse growers: Expanding markets by feeding frost-damaged faba bean to pigs	University of Alberta	\$211,531	\$370,945	Meeting market demands
39			Expanding opportunities for Western Canadian faba bean ( <i>Vicia faba</i> ) as a feedstuff for broiler chickens and laying hens	University of Alberta	\$374,664	\$590,164	Meeting market demands
40	Sheep		Adaptation and Development of the Anesthetic Elastrator Band for the Canadian Lamb Industry.	Alberta Lamb Producers	\$399,217	\$802,568	Sustainable Production
41	Soil		Effect of rock phosphate and biochar soil amendment on berry crops, soil properties, and carbon emissions in four ecological soils of Southern Alberta	Red Crow Community College	\$108,600	\$162,900	Sustainable Production
42			Determining specific compost blends for regenerative Agriculture in central Alberta	University of Alberta	\$169,050	\$314,500	Sustainable Production
43			Exploring the agronomic and soil health benefits of liming in the Prairies	University of Alberta	\$205,000	\$900,280	Sustainable Production

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44			Alberta Soil Health: A Metagenomic and Metatranscriptomic Assessment of Benchmark Agricultural Soils	University of Alberta	\$412,600	\$835,375	Sustainable Production
45			Carbon Plus Exchange Pilot	Western Stock Growers Association	\$145,000	\$299,000	Sustainable Production
46			2022 Western Canada Conference on Soil Health	Foothills Forage and Grazing Association	\$24,037	\$48,074	Knowledge Mobilization
47		C	Impact of reduced tillage and crop-livestock systems on GHG emissions and C sequestration	Agriculture and Agrifood Canada	\$99,350	\$99,350	Sustainable Production
48	Value Added		Development of a Microwave Process for Drying Plant Proteins in a Pilot Manufacturing Setting	PIP Lethbridge Inc.	\$130,000	\$446,000	Meeting market demands
49	Water		Assessment of Strategic Water Management Projects to Support Investment and Growth in the SSRB South Saskatchewan River Operational Model.	Alberta Irrigation Districts Association	\$100,000	\$795,000	Sustainable production
50	Wheat		Multimomics study of host-pest interactions and oviposition deterrence (OD) in wheat midge	University of Alberta	\$659,850	\$1,356,992	Profitability & Competitiveness
<b>TOTALS</b>					<b>\$11,257,491</b>	<b>\$56,072,517</b>	