

APPENDIX A: BARLEY RESEARCH INVENTORY

Principle Investigator	Institution	Category	Title	Start Date	Duration (yrs.)	Total Funding (\$)	# Crops	Total Barley Funding (\$)	Funding per Year (\$/yr.)	Funders
Bullock, Paul	AAFC	Agronomy/ Pest Mgt	Selecting crop sequences and developing a risk model to mitigate FHB in western Canada cereal production // The Population structure of Fusarium pathogens of small cereals	2018	5	1,854,636	4	463,659	92,732	WGRF, BMBRI, Gov
Burgess, Gerry	SSCA	Agronomy	Monitoring SOC on commercial direct-seeded fields across Saskatchewan - Phase 4	2018	2	10,264	Whole Farm	10,264	5,132	SaskBarley
Caldwell, Claude	Dalhousie	Agronomy	Crop Protection and Growth Parameters	2018	5	459,331	3	153,110	30,622	AGC, Gov
Holzappel, Chris	IHARF	Agronomy	Contrasting fungicide applications and genetic fusarium head blight resistance for enhanced yield and quality of barley	2020	3	118,414	1	118,414	39,471	SaskBarley

Mills, Aaron/ Tidemann, Breanne	AAFC	Agronomy	The influence of preceding legumes and nitrogen management on malt barley yield and quality across Canada	2018	4	450,000	1	450,000	112,500	SaskBarley , BMBRI, Gov
Smith, Elwin	U of L	Agronomy	Economic value of diversified cropping systems	2018	5	274,045	Whole Farm	10,000	2,000	WGRF, BMBRI, Other
Tardiff, Francois	U Guelph	Agronomy	New Ontario solutions for wild oat control in spring wheat and barley	2020	2	51,700	2	25,850	12,925	GFO, Others
Thompson, Laurel	Lakeland College	Agronomy	Adapting Innovative Solutions for Increased Barley Profitability in Alberta: Expanding malt cultivar end-use using a PGR and N management	2019	2	187,680	1	187,680	93,840	ABC
Thompson, Laurel	Lakeland College	Agronomy	Managing malt genetics for feed end-use: increasing barley profitability by challenging traditional end-use boundaries	2020	1	12,000	1	12,000	12,000	ABC

Tone Ag, MARD, CMBTC, MB Ag.	MARD	Agronomy	On-Farm Research Program 2020	2020	1	136,703	1	136,703	136,703	MCA, Gov
Turkington, Kelly	AAFC	Agronomy	In-crop management strategies to reduce the impact of Fusarium head blight in barley	2018	5	508,200	1	508,200	101,640	SaskBarley , BMBRI, Gov
Columbus, Dan	PSC	Feed	Long term feeding of graded levels of deoxynival in grower- finisher pigs	2018	2	180,000	Not Crop Specifi c	180,000	90,000	SaskBarley
Newkirk, Rex	U of S	Feed	Reducing deoxynivalenol (DON) in fusarium infected barley through sorting, physical and chemical treatments	2017	3	25,000	1	25,000	8,333	SaskBarley
Penner, Gregory	U of S	Feed	Technician support for barley feed grain research	2019	5	250,000	1	250,000	50,000	SaskBarley

Penner, Gregory	U of S	Feed	Determining the minimum fibre requirement for feedlot cattle and improving the empirical prediction of ruminal pH	2018	5	503,989	Whole Farm	158,913	31,783	BCRC, Gov
Riberio, Gabriel	U of S	Feed	Ergot: how much is too much	2019	3	293,662	2	146,831	48,944	BCRC, Other
Sanford, Kim	U of L	Feed	Simple strategies to reduce impacts of ergot alkaloids on beef cattle	2019	4	267,292	Not Crop Specific	267,292	66,823	Alberta Beef, Gov
Zijlstra, Ruurd	U of A	Feed	Enhancing competitive value of barley in swine diets	2018	4	431,941	1	431,941	107,985	ABC, SaskBarley, MWBGA, Gov
Belzile, Francois	Laval	Genomics/Tools	CropSNP: ultra-low cost genotyping in barley and soy	2018	5	500,827	1	500,827	100,165	ABC, SaskBarley, GFO, PGQ, Gov

Foroud, Nora	AAFC	Genomics/ Tools	Enhancing the in vitro selection toolbox to develop Fusarium head blight resistant doubled haploid wheat and barley	2020	3	716,100	2	358,050	119,350	SaskBarley , WGRF, AWC, SaskWheat
Singh, Jaswinder	McGill	Genomics/ Tools	Integration of new molecular markers to develop pre-harvest sprouting tolerant cereals	2020	3	20,488	2	20,488	6,829	SaskBarley
Stasolla, Claudio	U of M	Genomics/ Tools	Genetic Resilience - Enhancing excess moisture tolerance in barley through manipulation of phytoglobins	2019	3		1	130,455	43,485	MCA, Gov
Geddes McAlister, Jennifer	U Guelph	Genomics/ Tools	Defining mechanisms of mycotoxin degradation in FHB of wheat and barley	2020	2	157,233	Not Crop Specific	157,233	78,617	GFO, Secan, OMAFRA
Badea, Ana	AAFC	Germplasm Screening/ Breeding	Breeding malting and food barley cultivars for western Canada at Agriculture and Agri-Food Canada's Brandon Research and Development Centre assisted by new technologies	2018	5	1,685,804	1	1,685,804	337,161	ABC, SaskBarley , MWBGA, WGRF, BMBRI, Gov

Badea, Ana	AAFC	Germplasm Screening/ Breeding	Core Agreement	2020	5	1,533,417	1	1,533,417	306,683	ABC, SaskBarley , MCA
Beattie, Aaron	U of S	Germplasm Screening/ Breeding	Breeding two-row malt, feed and food varieties	2018	5	1,091,067	1	1,091,067	218,213	ABC, SaskBarley , WGRF, BMBRI, Gov
Beattie, Aaron	U of S	Germplasm Screening/ Breeding	FHB screening of CDC barley selections, 2016- 2020	2016	5	547,500	1	364,167	72,833	SaskBarley , WGRF, Gov
Beattie, Aaron	U of S	Germplasm Screening/ Breeding	Core Agreement	2020	5	2,731,940	1	2,731,940	546,388	ABC, SaskBarley , MCA
Feurtado, John (Allan)	NRC	Germplasm Screening/ Breeding	Barley Lodging Getting to the Root of the Problem	2020	3	72,804	1	72,804	24,268	SaskBarley , SCA

Khanal, Raja	AAFC	Germplasm Screening/ Breeding	Breeding barley for high yield and resistance to Fusarium head blight for eastern Canada	2018	5	1,041,101	1	1,041,101	208,220	GFO, PGQ, AGC, BMBRI, Gov
Belzile, Francois	Laval	Germplasm Screening/ Breeding	2 row malting barley breeding program in Quebec	2020	2	653,720	1	653,720	326,860	PGQ, CRIBIQ, Semican, Cerela
Kutcher, Randy	U of S	Germplasm Screening/ Breeding	Searching for resistance to stripe rust and Fusarium head blight in barley (Hordeum spp.)	2019	2	70,000	1	70,000	35,000	SaskBarley
Juskiw, Pat	FCDC	Germplasm Screening/ Breeding	Barley Forage Co-op at Melfort	2018	3	17,250	1	17,250	5,750	SCA
Kabeta, Yadeta	FCDC	Germplasm Screening/ Breeding	Collaborative testing and development of forage barley varieties for western Canada	2020	3	35,500	1	35,500	11,833	SCA

Nyachiro, Joseph	FCDC	Germplasm Screening/ Breeding	Determining the critical traits associated with lodging in a set of elite breeding lines and Canadian barley varieties	2018	3	175,000	1	175,500	58,500	
Tucker, James	AAFC	Germplasm Screening/ Breeding	Developing barley germplasm with improved resistance to Fusarium head blight and other biotic stresses for western Canada at Agriculture and Agri-Food Canada's Brandon Research and Development Centre	2018	5	2,020,798	1	2,020,798	404,160	ABC, SaskBarley, MWBGA, WGRF, BMBRI, Gov
Turkington, Kelly	AAFC	Germplasm Screening/ Breeding	Phenotyping barley breeding lines and germplasm for disease resistance	2018	5	409,500	1	409,500	81,900	ABC, SaskBarley, BMBRI, Gov
Izydorcyck, Marta	CGC	Malt & Brew	The germinating seed microbe ecosystem of barley malt	2018	2	20,000	1	20,000	10,000	BMBRI
Li, Yueshu	CMBTC	Malt & Brew	Examination and definition of flavours and aromas and their precursors in malting barley cultivars	2018	3	300,000	1	300,000	100,000	SaskBarley, BMBRI, Gov

Li, Yueshu	CMBTC	Malt & Brew	Study of Barley Quality and Process Factors that can produce Malt with potential Premature Yeast Flocculation	2018	3	220,000	1	220,000	73,333	SaskBarley , BMBRI, Gov
Smyth, Stuart	U of S	Other	Industrial Research Chair Renewal - Agri-Food Innovation and Sustainability	2019	5	50,000	Whole Farm	50,000	10,000	SaskBarley
Catton, Haley	AAFC	Pest Mngt	Beneficial insects in Prairie Crops: quantifying the value and vulnerability of biological pest control	2019	3	59,378	Whole Farm	10,000	3,333	ABC
Fernando, Dilantha/Wang, Xiben	U of M	Pest Mngt	The population structure of Fusarium pathogens of small grain cereals, their distribution and relationship to mycotoxins	2018	5	840,075	4	210,019	42,004	SaskBarley , WGRF, BMBRI
Li, Susie	InnoTech AB	Pest Mngt	Development of a biosensor for Fusarium Head Blight forecasting in wheat	2019	3	221,000	Whole Farm	5,000	1,667	ABC

Sheedy, Claudia	AAFC	Pest Mngt	Development of a multiplex RT-immunoPCR assay and biosensor for the early detection of airborne fungal spores in cereal crops	2019	3	254,000	Whole Farm	5,000	1,667	ABC
Turkington, Kelly	AAFC	Pest Mngt	Barley pathogen variation and surveillance: implications for managing disease via host resistance and fungicides	2018	5	642,864	1	642,864	128,573	ABC, SaskBarley, MWBGA, BMBRI, Gov
Turkington, Kelly	AAFC	Pest Mngt	Prairie Crop Disease Monitoring Network // Coordination of a crop disease monitoring network for W. Canada	2018	5		Whole Farm	10,934	2,187	WGRF