## Funding Approved for Research<sup>†</sup>

RESEARCHER	PROJECT	START	END	MPSG FUNDING	TOTAL VALUE	
	CROP YIELD AND MARKET QUALITY					
MPSG – MCVET	Evaluating Yield, Disease Resistance and Protein in Pulse and Soybean Varieties	1990	ongoing	cost recovery	cost recovery	
AAFC – Mohr				\$73,462	\$144,022	
IHARF	Management Practices to Optimize Establishment and Early-Season Growth of Soybeans	2017	2021	\$35,280		
CMCDC				\$35,280		
U of M – Lawley	Cover Crop Strategies for Dry Beans and Soybeans in Manitoba	2017	2022	\$195,444	\$195,444	
AAFC – Mohr	Sustainable Soybean Cropping Systems for Western Manitoba	2017	2022	\$98,325	\$196,651	
U of M – MacMillan	Soybean Iron Deficiency Chlorosis – Variety Screening	2017	ongoing	In 2016, MPSG committed \$400,000 per year		
U of M – MacMillan	Effect of Preceding Crop and Residue Management on Dry Beans	2017	ongoing	for five years to support applied research at ti U of M. Under this program an Agronomist-in Residence conducts research, extension and student training. Projects are reviewed annu- to ensure they align with farmer priorities.		
U of M – MacMillan	Optimizing Nitrogen Rates for Dry Bean Production	2017	ongoing			
U of M – MacMillan	Novel Pulse Cropping Systems	2017	ongoing			
U of M – MacMillan	Pea Crop Rotation Length and Sequence	2020	2023			
U of M – Lawley	Optimizing the Frequency of Soybeans in Manitoba Crop Rotations	2018	2023	\$172,931	\$496,588	
U of M – Ayele	Mitigating Soybean Harvest Losses by Enhancing Podding Height	2018	2022	\$71,453	\$164,822	
AAFC – Hou	Dry Bean Breeding for Early Maturity and Pest Resistance	2018	2023	\$728,188	\$1,456,376	
AAFC – Bing	Des Des die efectield Dest Desistance and Electric	2010	2022	\$98,630	¢2.777.020	
AAFC – Han	Pea Breeding for Yield, Pest Resistance and Flavour	2018	2023	\$43,155	\$2,776,828	
AAFC – Cober	Short-Season Food-Type Soybean Breeding	2018	2023	\$186,930	\$2,368,188	
AAFC – Cober	Meeting the Soybean Protein Meal Standard in Western Canada	2018	2023	\$131,699	\$658,500	
U of G – Rajcan	Breeding for Organic Soybean Production	2018	2023	\$20,000	\$157,143	
MPSG – On-Farm Network	Soybean Response to Seeding Rate	2012	ongoing	OFN	OFN	
MPSG – On-Farm Network	Evaluation of Single vs. Double vs. No inoculation Strategies for Soybeans	2017	ongoing	OFN	OFN	
MPSG – On-Farm Network	Soybean Response to Biological Stimulants	2019	ongoing	OFN	OFN	
MPSG – On-Farm Network	Soybean Response to Row Spacing	2019	ongoing	OFN	OFN	
MPSG – On-Farm Network	Evaluation of Inoculation Strategies for Peas	2019	ongoing	OFN	OFN	
MPSG – On-Farm Network	Evaluation of Inoculation Strategies for Dry Beans	2019	ongoing	OFN	OFN	
MPSG – On-Farm Network	Dry Bean Response to Nitrogen Fertility	2019	ongoing	OFN	OFN	
MPSG – On-Farm Network	Intercropping with Soybeans	2019	ongoing	OFN	OFN	
MPSG – On-Farm Network	Pea Response to Seeding Rate	2021	ongoing	OFN	OFN	
WADO	Intercropping Practices for Yellow Peas	2019	2022	\$23,004	\$69,012	
AAFC – Mohr	Economic and Environmental Value of Peas and Soybeans in Rotation	2019	2022	\$82,800	\$160,560	
U of M – Stasolla	Genetics to Overcome Drought and Salinity Effects in Soybeans	2019	2022	\$139,725	\$270,945	
U of M – House	Overcoming the Discount for Low Protein: Genetic and Environmental Effects	2019	2021	\$48,875	\$140,635	
U of M – Oresnik	A Superior Rhizobium Strain for N-Fixation in Dry Beans	2019	2022	\$188,830	\$366,166	
MPSG/MCA/MCGA	Tools and Techniques to Manage Extreme Moisture	2019	2022	\$120,000	\$823,000	
U of M – House	Evaluating the Feeding Value of Western Canadian Soybeans for Layers, Pullets, Broilers and Swine	2020	2023	\$239,760	\$479,520	
U of M – Oresnik	Effect of the Frequency of Soybeans in Rotation on Rhizobium and Soil Microbial Community	2020	2023	\$110,486	\$214,247	
Roquette	Variety Adaptation Trial for Higher Protein Peas	2020	2022	\$0	\$17,064	
Roquette	On-Farm Assessment of Precision Phosphorus Management for Crop Dry-Down	2020	2022	\$0	\$17,280	
Roquette	Better Understanding of Return on Investment of Intercropping Combinations	2020	2022	\$0	\$18,507	
Roquette	Efficacy and Return on Investment of Foliar Fungicide in Yellow Peas	2020	2022	\$0	\$64,800	
Roquette	Pea Protein Survey/Investigation in the Swan River Region	2020	2020	\$0	\$5,076	
Roquette	Volunteer Soybean Control in Yellow Pea Production	2020	2022	\$0	\$22,200	
AAFC – Mohr	Optimizing Nitrogen and Phosphorus Management for Dry Beans in Southwestern Manitoba	2021	2023	\$93,150	\$186,300	
PAMI	Pea Seed Mortality Due to Air Seeder Damage	2021	2023	\$31,050	\$62,100	
Morden Community Economic Development Corporation	Validating Opportunities and Building Local Capacity for Digital Agriculture	2021	2023	\$32,000	\$202,000	

RESEARCHER	PROJECT	START	END	MPSG FUNDING	TOTAL VALUE
	REDUCE THE COST OF PEST CONTROL				
U of M – Gulden	Rotational Effects and Optimized Plant Spatial Arrangement for Wheat Production in Manitoba	2017	2022	\$82,800	\$349,140
U of M – Costamagna	Determining the Role of Crop and Non-Crop Habitats to Provide Sustainable Aphid Suppression in Soybeans	2017	2021	\$107,838	\$215,677
MPSG – On-Farm Network	Field Pea Response to Foliar Fungicide	2017	ongoing	OFN	OFN
MPSG – On-Farm Network	Dry Bean Response to Foliar Fungicide	2017	ongoing	OFN	OFN
MPSG – On-Farm Network	Soybean Response to Foliar Fungicide	2018	ongoing	OFN	OFN
MPSG – On-Farm Network	Faba Bean Response to Foliar Fungicide	2020	ongoing	OFN	OFN
AAFC – McLaren U of A	Management of Root Rot in Peas in Manitoba	2018	2023	\$0 \$45,404	\$88,305
AAFC – Vankosky	Prairie Insect Survey	2018	2023	\$20,000	\$571,000
AAFC – Leeson	Prairie Weed Survey	2018	2023	\$25,000	\$753,100
AAFC – Leeson	Prairie Herbicide-Resistant Weed Survey	2018	2023	\$3,000	\$88,000
AAFC – Geddes	The Next Generation of Prairie Herbicide-Resistant Weed Surveys	2020	2023	\$48,445	\$96,890
AAFC – Turkington	Prairie Disease Monitoring Network	2018	2023	\$45,000	\$1,360,000
AAFC – Geddes	Glyphosate-Resistant Kochia – Rotation, Seeding Rates and Row Spacings	2018	2023	\$15,000	\$1,282,000
PAMI – Landry	Spray Drift Reduction with High-Clearance Sprayers	2018	2023	\$30,000	\$424,000
AAFC – Mohr	New Crop Rotation Economics	2018	2023		
U of L – Leroy	Economics of Diverse Crop Rotations			\$35,000	\$1,300,000
AAFC – Chatterton	Optimizing Disease Management Strategies for White Mould and Bacterial Blights of Dry Beans	2018	2023	\$15,000	\$351,000
	Optimizing disease management strategies for writte modification bacterial blights of dry bears	2018	2023	\$61,951	\$616,904
AAFC – Chatterton U of S – Shirtliffe	Pea Root Rot – Resistance Genes, Crop Rotation and Intercropping	2018	2023	\$30,679 \$18,426	\$1,636,818
U of M – Tenuta  AAFC – Chatterton	Root Lesion Nematode Survey	2018	2023	\$20,639 \$4,975	\$853,813
AAFC – McLaren	Strategies for Effective Management of Phytophthora and the Root Rot Complex of Soybeans	2018	2023	\$75,506	\$887,919
LU – Bélanger	Root Diseases – Genetic Screening Methods	2018	2023	\$44,657	\$652,776
U of M – Daayf	Defining Pathogen-Related Soil Quality Targets for Annual Legumes to Pursue Through Crop Rotation	2019	2022	\$88,172	\$253,782
AAFC – Geddes	Integrated Weed Management to Mitigate Glyphosate-Resistant Weeds	2019	2022	\$110,940	\$309,984
Roquette	Developing the Capacity to Detect and Quantify Aphanomyces Oospores and Disease Severity in Manitoba	2020	2022	\$0	\$36,936
AAFC – Geddes	Manipulating Weed Seed Production Through Phenology-Based Weed Control	2021	2023	\$11,556	\$92,448
ACC – Singh	Developing a Weather-Based Fungicide Application Decision Support Tool for Managing White Mould in Dry Beans	2021	2023	\$41,850	\$83,700
	GROW MARKET DEMAND				
U of G – Duncan  AAFC – Ramdath	Cholesterol-Lowering Properties of Dry Beans	2018	2023	\$136,431 \$47,196	\$757,680
U of S – Nickerson AAFC – Hou	Pulse Ingredient Processing for Improved Flour Quality	2018	2023	\$103,802	\$2,866,150
	Dry Poor Cooking Quality	2010	2022	\$12,571	¢07.444
AAFC – Balasubramanium	Dry Bean Cooking Quality	2018	2023	\$15,942	\$87,444
	IMPROVE SOIL QUALITY				
U of M – Lawley	Cover Crops – Establishment Windows, Soil Health and Yield	2018	2023	\$40,000	\$1,519,772
MPSG – On-Farm Network	Tillage Management for Dry Beans	2020	ongoing	OFN	OFN
AAFC – Crittenden	Understanding How Soil Health Affects Corn and Soybean Yield and Quality	2020	2023	\$60,350	\$241,400
New Era Ag	Using Wood Ash as a Soil Amendment to Control Clubroot – Effect on Peas and Soybeans in Northwestern Manitoba	2020	2023	\$7,500	\$153,540
Agri-Earth Consulting, PBS Water Engineering	Beneficial Practices for Soil and Water Quality, Excess Water and Drought Resiliency in Southwestern Manitoba  The Effect of Low Ground Pressure Traffic Systems on Soil Compaction in Heavy Clay Soils	2020	2023	\$33,729	\$391,200
PAMI	Affected by Extreme Moisture Conditions	2021	2023	\$21,000	\$137,500
U of M – Bakker	Integrating Microbiology into Assessments of Soil Health in Manitoba	2021	2023	\$37,827	\$151,308 At time of printing.

AAF – Alberta Agriculture and Forestry
AAFC – Agriculture and Agri-Food Canada
BU – Brandon University
CMCDC – Canada-Manitoba Crop

Diversification Centre

IHARF – Indian Head Agricultural Research Foundation LU – Laval University MCGA – Manitoba Canola Growers Association MCVET – Manitoba Crop Variety Evaluation Trials MPSG – Manitoba Pulse & Soybean Growers MCA – Manitoba Crop Alliance PAMI – Prairie Agriculture Machinery Institute RRC – Red River College

RRC – Red River College
U of A – University of Alberta
U of G – University of Guelph

U of L – University of Lethbridge U of M – University of Manitoba U of S – University of Saskatchewan WADO – Westman Agricultural Diversification Organization