

Checkoff supported Research projects	Actual FY 2019-20	Budget FY 2020-21
End Use Quality	\$733,500	\$766,000
Ag Products Development Center	\$300,000	\$300,000
Crop Quality Survey	\$58,000	\$60,000
Durum Quality Research Support	\$42,500	\$45,000
End-Use Market Development	\$40,000	\$50,000
HRS Quality Research	\$40,000	\$40,000
HRW Quality Research Support	\$30,000	\$30,000
Kernel Bleaching of Durum	\$30,000	\$30,000
Mixograph	\$0	\$33,000
Peroxidase Activity and Pasta Brightness	\$25,000	\$0
Specialty Wheat Quality Research Support	\$47,000	\$47,000
Specialty Wheat Quality Research Technician	\$58,000	\$58,000
Technical & Info Services	\$58,000	\$58,000
*Tempering HRS Wheat for Chlorinated Water	\$5,000	\$5,000
Vibe QM3 Seed & Grain Analyzer	\$0	\$10,000
Wheat Breeding/ Genetics	\$355,180	\$438,933
Develop Haploidization System for Wheat Breeding	\$0	\$34,826
Durum Breeding	\$100,000	\$105,000
Durum Germplasm Low Cadmium	\$18,100	\$18,100
Enriching the Gene Pool for Wheat Impr	\$35,000	\$35,000
*Eval Durum Lines for Kernel Shape/Size	\$0	\$8,257
Field Plot Combine	\$0	\$60,000
Genomic Selection to Improve Durum Yield/Quality	\$43,080	\$33,000
Genomic Selection to Accelerate Breeding Populations in Spring Wheat	\$10,000	\$20,000
HRS Wheat Breeding	\$125,000	\$100,750
HRW Breeding	\$24,000	\$24,000
Agronomic/Disease/Pest Management	\$185,273	\$234,012
CRISPR/Cas9 Genome Editing	\$30,000	\$0
DON Testing of Durum in Western ND	\$7,080	\$7,080
DON Testing of HRS in Western ND	\$0	\$7,080
*Early Generation Selection in HRW	\$5,000	\$0
Eval Fungicide Seed Treatments	\$8,060	\$8,060
Eval Germplasm to Stem/Leaf Rust Resistance	\$0	\$35,099
Eval Stripe Rust Pathogens at High Temps	\$0	\$18,000
Eval Tools for Head Blight/Ergot/Leaf Streak	\$0	\$25,190
FHB Resistance in Wheat	\$30,000	\$30,000
*Genomic Back Cross to Improve Durum Yield	\$3,000	\$3,000
*Investigate Prevalence of Tan Spot in Durum	\$6,555	\$6,693
Method to Detect Bacterial Leaf Streak Pathogen	\$21,480	\$21,480
New Varieties High Input Management	\$14,500	\$19,500
*Nitrogen Dynamics in Mixed Species Crop Residue	\$2,684	\$5,916
*Plant Resistance to Wheat Stem Sawfly	\$6,914	\$6,914
Orange Wheat Blossom Midge Survey	\$10,000	\$10,000
Resistance to Bacterial Leaf Streak	\$30,000	\$30,000

Wheat Desiccation Trials	\$10,000	\$0
Marketing/Economics	\$123,000	\$78,000
Commodity Trading Room	\$50,000	\$0
Market Development Support	\$18,000	\$20,500
Strategy/Analysis for New Technology Collaborations	\$20,000	\$22,500
Upper Great Plains Transportation Institute	\$35,000	\$35,000
Other	\$159,365	\$280,000
Equipment Maintenance	\$9,365	\$30,000
Northern Crops Institute General Support	\$100,000	\$100,000
New Technology Research Contingency	\$0	\$100,000
Wheat Marketing Center	\$50,000	\$50,000
Soil Science	\$121,349	\$99,011
Wheat Response to Salinity	\$31,628	\$ 31,628
Lime Application Effects on Soil PH & HRS Wheat	\$14,056	\$0
Lysimeter Study	\$26,822	\$ 18,540
SHARE Farm-Larimore	\$48,843	\$ 48,843
Total	\$1,677,667	\$ 1,895,956

*Checkoff match to grants approved by the Wheat Research Committee of the State Board of Agricultural Research and Extension (SBARE).