## National Sclerotinia Initiative Funded Projects – 2022

1. Exploring defense proteins to improve plant resistance to Sclerotinia white mold

Weidong Chen USDA-ARS, Pullman, WA \$86,869

2. Sclerotinia sclerotiorum hijacks host cell death control in infecting plant

Weidong Chen USDA-ARS, Pullman, WA \$79,205

3. Improving resistance to Sclerotinia sclerotiorum in spring canola

Luis del Rio Mendoza North Dakota State University, Fargo ND \$30,000

4. Genetic variability associated with the traits of fungicide resistance and pathogenicity in *Sclerotinia sclerotiorum* 

Sydney Everhart University of Connecticut, Storrs, CT \$40,619

5. Improved white mold resistance in dry and snap beans through multi-site screening throughout major production areas

Francisco Gomez Michigan State University, E. Lansing, MI \$66,500

6. Evaluation and optimization of genomic selection for durable white mold resistance in dry bean

Francisco Gomez Michigan State University, E. Lansing, MI \$83,686

7. Greenhouse remodeling at the Northern Crop Science Laboratory to support National Sclerotinia Initiative research projects

Michael Grusak USDA-ARS, Fargo, ND \$300,000

8. Enhanced Sclerotinia stem rot resistance in soybean through the manipulation of *Sclerotinia* sclerotiorum virulence determinants

Mehdi Kabbage University of Wisconsin, Madison, WI \$50,630 9. Developing gemycircularvirus-based pesticide for the control of Sclerotinium sclerotiorum

Shin-Yi Marzano USDA-ARS, Toledo, OH \$76,700

10. Exploring RNAi-based management strategies to confer plant resistance to white mold infection

Shin-Yi Marzano USDA-ARS, Toledo, OH \$75,500

11. White mold resistance QTL: identification, interactions, and fine mapping in common bean

Phillip N. Miklas USDA-ARS, Prosser, WA \$79,650

Phil McClean North Dakota State University, Fargo, ND \$25,159

James Myers Oregon State University, Corvallis, OR \$65,799

12. QTL mapping of Sclerotinia head rot resistance and pyramiding of basal stalk rot QTL in sunflower

Lili Qi USDA-ARS, Fargo, ND \$45,000

13. Introgression and pyramiding of Sclerotinia stem rot disease resistant gene(s) into canola cultivars

Muklesar Rahman North Dakota State University, Fargo ND \$26,100

14. Characterizing and bioengineering soybean phenylpropanoid pathway genes for resistance against *Sclerotinia sclerotiorum* 

Ashish Ranjan University of Minnesota, St. Paul, MN \$93,186

15. Manipulating endogenous host pathways to enhance white mold resistance in Brassicaceae

Jeffrey Rollins University of Florida, Gainesville, FL \$88,440 16. Less is More: Removing R-gene mediated susceptibility to Sclerotinia sclerotiorum in soybean

Mitchell Roth The Ohio State University, Wooster, OH \$78,010

17. Exploiting small cysteine-rich antifungal peptides for management of white mold disease in soybean

Dilip Shah Donald Danforth Plant Science Center, St. Louis, MO \$74,000

18. Characterization of oxalic acid tolerance in sunflower basal stalk rot resistance

William R. Underwood USDA-ARS, Fargo, ND \$31,846

19. Enhancing soybean for resistance to Sclerotinia stem rot

Dechun Wang Michigan State University, East Lansing, MI \$77,025