

National Sclerotinia Initiative Funded Projects – 2023

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

Phillip N. Miklas
USDA-ARS, Prosser, WA
\$61,450

Phil McClean
North Dakota State University, Fargo, ND
\$44,504

James Myers
Oregon State University, Corvallis, OR
\$42,242

2. Developing gemycircularvirus-based pesticide for the control of *Sclerotinium sclerotiorum*

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

3. Development of RNA fungicides for management of *Sclerotinia sclerotiorum* on canola

Luis del Rio Mendoza
North Dakota State University, Fargo ND
\$75,780

4. Improving resistance to *Sclerotinia sclerotiorum* in spring canola

Luis del Rio Mendoza
North Dakota State University, Fargo ND
\$34,185

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

Muklesar Rahman
North Dakota State University, Fargo ND
\$27,293

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

Martin Chilvers
Michigan State University, East Lansing, MI
\$76,081

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

Ashish Ranjan
University of Minnesota, St. Paul, MN
\$73,242

8. Characterization of oxalic acid tolerance in sunflower basal stalk rot resistance
William R. Underwood
USDA-ARS, Fargo, ND
\$12,960
9. Exploiting small cysteine-rich antifungal peptides for management of white mold disease in soybean
Dilip Shah
Donald Danforth Plant Science Center, St. Louis, MO
\$49,056
10. Manipulating endogenous host pathways to enhance white mold resistance in Brassicaceae
Jeffrey Rollins
University of Florida, Gainesville, FL
\$68,522
11. Less is More: Removing R-gene mediated susceptibility to *Sclerotinia sclerotiorum* in soybean
Mitchell Roth
The Ohio State University, Wooster, OH
\$55,438
12. Targeting essential genes in *Sclerotinia sclerotiorum* to achieve sclerotinia stem rot resistance in soybean
Mehdi Kabbage
University of Wisconsin, Madison, WI
\$56,661
13. Improved white mold resistance in dry and snap beans through multi-site screening throughout major production areas
Martin Chilvers
Michigan State University, East Lansing, MI
\$67,276
14. Genetic variability associated with the traits of fungicide resistance and pathogenicity in *Sclerotinia sclerotiorum*
Sydney Everhart
University of Connecticut, Storrs, CT
\$64,441
15. Enhancing soybean for resistance to *Sclerotinia* stem rot
Dechun Wang
Michigan State University, East Lansing, MI
\$77,766

16. Exploring defense proteins to improve plant resistance to *Sclerotinia* white mold
Weidong Chen
USDA-ARS, Pullman, WA
\$88,545
17. *Sclerotinia sclerotiorum* hijacks host cell death control in infecting plant
Weidong Chen
USDA-ARS, Pullman, WA
\$87,345
18. Exploring RNAi-based management strategies to confer plant resistance to white mold infection
Shin-Yi Marzano
USDA-ARS, Toledo, OH
\$75,500
19. Systems view of pathogenesis and host defense response at specific infection stages of *Sclerotinia sclerotiorum*
Kiwamu Tanaka
Washington State University, Pullman, WA
\$82,563
20. Identifying genetic determinants to *Sclerotinia sclerotiorum* aggressiveness across crop species
Megan McCaghey
University of Minnesota, St. Paul, MN
\$36,770
21. Mapping basal stalk rot resistance and oxalic acid tolerance traits in two sunflower recombinant inbred line populations
William Underwood
USDA-ARS, Fargo, ND
\$82,540
22. Characterizing plant- and virus-derived proteins in important crops that enhance the resistance to white mold
Shin-Yi Marzano
USDA-ARS, Toledo, OH
\$83,332
23. Using genomics assisted breeding to advance sunflower germplasm development
Brent Hulke
USDA-ARS, Fargo, ND
\$81,934