National Sclerotinia Initiative Funded Projects – 2024

1. Mapping basal stalk rot resistance and oxalic acid tolerance traits in two sunflower recombinant inbred line populations

   William Underwood
   USDA-ARS, Fargo, ND
   $79,562

2. Systems view of pathogenesis and host defense response at specific infection stages of Sclerotinia sclerotiorum

   Kiwamu Tanaka
   Washington State University, Pullman, WA
   $86,557

3. Identifying genetic determinants to Sclerotinia sclerotiorum aggressiveness across crop species

   Megan McCaghey
   University of Minnesota, St. Paul, MN
   $39,569

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

   Weidong Chen
   USDA-ARS, Pullman, WA
   $89,544

5. *Sclerotinia sclerotiorum* hijacks host cell death control in infecting plant

   Weidong Chen
   USDA-ARS, Pullman, WA
   $90,339

6. Improving resistance of spring canola to Sclerotinia Stem Rot

   Luis del Rio Mendoza
   North Dakota State University, Fargo ND
   $37,185

7. 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
   $37,276

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

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

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

   Shin-Yi Marzano
   USDA-ARS, Toledo, OH
   $79,000

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

    Phillip N. Miklas
    USDA-ARS, Prosser, WA
    $79,950

    Phil McClean
    North Dakota State University, Fargo, ND
    $74,545

    James Myers
    Oregon State University, Corvallis, OR
    $45,333

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

    Muklesar Rahman
    North Dakota State University, Fargo ND
    $46,150

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

    Jeffrey Rollins
    University of Florida, Gainesville, FL
    $92,595

13. Tapping wild Cicer genetic diversity for trait identification and breeding of resistance to Sclerotinia disease in chickpea

    Douglas Cook
    University of California, Davis, CA
    $106,851

14. Development of RNA Funficides for management of Sclerotinia Sclerotiorum on Canola

    Luis del Rio Mendoza
    North Dakota State University, Fargo, ND
    $40,556

15. Using genomics assisted breeding to advance sunflower germplasm development

    Brent Hulke
    USDA-ARS, Fargo, ND
    $88,787

16. Targeting essential genes in Sclerotinia sclerotiorum to achieve sclerotinia stem rot resistance in soybean
    Mehdi Kabbage
    University of Wisconsin
    $33,442

17. Pyramiding plant-derived small antifungal proteins to enhance white mold resistance

    Shin-Yi Marzano
    USDA-ARS, Toledo, OH
    $49,476

18. Development of small antifungal peptides as biofungicides for control of white mold in soybean

    Dilip Shah
    Donald Danforth Plant Science Center, St. Louis, MO
    $50,000

19. Developing soybean varieties with resistance to Sclerotinia stem rot

    Dechun Wang
    Michigan State University
    $79,764

20. Identification of Biological control agents in the Northern Great Plains and evaluation of BCAs for controlling Sclerotinia sclerotiorum

    Richard Webster
    North Dakota State University, Fargo, ND
    $61,020

21. Crop diversification manipulates soil microbiome for enhancing soybean resistance to Sclerotinia sclerotiorum

    Chuntao Yin
    USDA-ARS, Brookings, SD
    $84,098