FY2025 ARS Call for National Sclerotinia Initiative Research Project Plans

CALL FOR PROPOSALS

PREFACE – This is the 24th year of the National Sclerotinia Research Initiative. The Steering Committee of the Initiative is leading a process to continue the development and execution of a comprehensive *Sclerotinia sclerotiorum* research strategy, that within budgetary constraints, provides recommendations to the USDA-ARS for yearly project funding. Thus, the Steering Committee seeks plans of work for Fiscal Year 2025 (FY25) to address important research areas related to managing this disease (see below). **The deadline for FY25 submissions is January 31, 2025.**

INTRODUCTION – The goal of the Sclerotinia Initiative is to use cooperative research to expeditiously discover economic solutions in the areas of crop management, crop protection and enhanced plant varieties to combat the disease of Sclerotinia or white mold. The Initiative is guided by a Steering Committee that includes commodity group and ARS representatives. Each year, the Steering Committee submits to the USDA-ARS a comprehensive and optimized research plan designed to achieve the Initiative's goals. That plan is the Initiative's recommendation for how the USDA-ARS can most effectively employ the funds appropriated by the U.S. Congress for collaborative *Sclerotinia sclerotiorum* research. Funding for the FY25 Initiative is contingent on appropriations being approved by the U.S. Congress.

The Initiative is now asking for plans of work for potential research projects for funding in FY25. Depending on your institution's requirements, the authorized organizational representative's signature may not be required at this stage. Submitted plans of work will be evaluated by both an independent Scientific Review Panel and by the review committees of Affiliated commodity groups. Those judged to have scientific merit will be asked to prepare final plans containing authorized organizational signatures, revised budgets, and any required changes in the proposed research, within 60 days from receipt of notification. Participating National Sclerotinia Initiative commodity groups include: 1) canola, 2) dry bean, 3) pea, lentil & chickpea, 4) soybean, and 5) sunflower. Plans of work addressing one or all of these crop areas will receive priority during the review/funding process. Plans of work that include collaborations with scientists working on other crops will be accepted provided one of the five participating crop groups remains the primary focus of the collaboration. Additionally, basic research on Sclerotinia sclerotiorum that is not related to any crop, but substantially advances scientific knowledge of the disease will be considered.

Plans of work will be accepted for research pertaining to any/all of the following research areas:

- 1. Germplasm Resources & Translational Genomics
- 2. Pathogen Biology & Mechanisms of Resistance
- 3. Disease Management & Crop Production

Based on the Sclerotinia Initiative Strategic Plan, the following are priorities for FY25 funding:

- 1. Identify new sources of resistance in plant germplasm.
- 2. Use of interspecific resources to transfer resistance genes into cultivated plant germplasm.
- 3. Generate high-density genetic maps with validated markers for quantitative trait loci (QTL) that confer resistance to Sclerotinia.
- 4. Pyramid white mold resistance in plant germplasm and release germplasm/cultivars with enhanced resistance.
- 5. Characterize migration/population structure and ecological variability of genotypes.

USDA

FY2025 ARS Call for National Sclerotinia Initiative Research Project Plans

- 6. Characterize virulence/aggressiveness within the population, identify isolates for use in screening, and monitor durability of host resistance.
- 7. Identify environmental and genetic factors involved in myceliogenic and carpogenic germination of sclerotia.
- 8. Identify genes that are functional at specific growth and infection stages of Sclerotinia.
- 9. Identify and verify candidate genes involved in Sclerotinia pathogenicity.
- 10. Optimize fungicide application programs.
- 11. Develop bio-control alternatives for disease management.
- 12. Develop disease-warning systems to optimize management of *S. sclerotiorum*.
- 13. Optimize cultural practices for disease management.

A single PI may submit multiple plans of work; however, each plan (i.e., proposed project) will be handled as a distinct, autonomous and complete submission. Submitted plans of work should be for a finite duration in time, typically 3 to 5 years as the Steering Committee encourages the conceptual development of multi-year projects to address long-term research needs. However, funds will only be distributed to cooperators for 12 month periods. Funding decisions for the continuation of multi-year projects will be based on progress made as defined in the following section, on fund availability and scientific priorities, as well as the current Status-of-Funds (Federal Financial Status Report prepared by the institution's accounting office) of any prior NSI award(s) to the receiving project. The long-range goal of the Steering Committee is to make the Initiative an annually funded program based on need to ensure multi-year project continuity. During the FY25 cycle, new Non-Assistance Cooperative Agreement (NACA's), those receiving funds for the first time in FY25, will be in effect July 1, 2025 through December 31, 2026, and, where applicable, existing NACA's receiving additional funds in FY25 will be in effect July 1, 2025 through December 31, 2026 t

SUBMISSION DEADLINE and REVIEW PROCESS - The deadline for submitting plans of work (Application Packet) is January 31, 2025. Plans of work received on or before that date will be initially reviewed by the Administrative Office (ARS, Fargo, ND) of the National Sclerotinia Initiative and then will be forwarded to an independent Scientific Review Panel and to Affiliated Group review committees from each participating commodity organization. Funding recommendations will be made following the review process identified in the Sclerotinia Initiative By-laws, which can be accessed through the following link: https://www.ars.usda.gov/plains-area/fargo-nd/etsarc/docs/national-sclerotinia-initiative/ Current and previous research projects and funding levels can also be found at the same link.

The Scientific Review Panel will judge each submitted plan of work using the following criteria:

- 1. **Scientific Merit, Conceptual Adequacy & Innovation** is the work well conceived? Is the planned work novel? Does it include an innovative approach to answering the objectives? Are the methods and procedures appropriate? Are hypotheses and objectives clearly delineated? Is the work feasible as defined? What is the probability that the described research will be completed within stated time frames? Does the work duplicate existing or previously conducted research?
- 2. **Institutional Qualifications** are the researchers qualified to conduct the proposed study? Are researchers aware of current literature on the proposed area of study? Are available facilities, instrumentation, equipment, personnel, and existing funding adequate to provide proper augmentative



FY2025 ARS Call for National Sclerotinia Initiative Research Project Plans

support of the proposed study? Is the amount of requested dollars adequate, excessive, or too low to complete the study?

3. **Relevance and/or Progress** – does the proposed study address the prioritized needs of the Initiative based on guidance provided by the Sclerotinia Initiative Steering Committee? Does the study directly relate to action items determined from the Initiative Strategic Plan? Will the work lead to development of new knowledge or new technology to manage the disease? Is reasonable progress being made if the submitted plan of work is a continuation of a previously funded study? (Plans of Work funded for three consecutive years must show quantitative progress before additional funding will be considered. Examples of progress include: germplasm release, publications, patents, etc.)

If you have any questions regarding the submission process, forms, etc., please contact: Annette Fischer

For questions regarding Non-Assistance Cooperative Agreement (NACA's), please contact: Stephen Fedorkowicz, USDA-ARS, Ft. Collins, CO; 970-492-7024; stephen.fedorkowicz@usda.gov

Please note that plans of work will be regarded as confidential documents. Distribution will be limited to parties involved with the review process.

To be considered for FY25 funding, an electronic copy (submitted as a Word file via email) of each complete plan of work must be received no later than January 31, 2025. It should be emailed to Annette Fischer (Annette fischer@usda.gov).

A confirmation email will be sent upon receipt of the submission.

Please note that FY25 templates MUST be used. Potential principal investigators (PIs) should carefully read the instructions, etc. and ensure that their plans of work conform exactly to the described format.