

August 20, 2024

Dr. Douglas D. Buhler  
Michigan State University  
Associate Vice President  
Office of Research and Innovation

Dear Dr. Buhler,

On behalf of the IR-4 Project please find the renewal proposal for the NRSP-4 Project, October 1, 2025 to September 30, 2030. We appreciate the positive feedback from the NRSP Review Committee (RC) during the Midterm Review when the NRSP-RC “commends NRSP4 for the extraordinary and tremendously impactful work being done.”

The proposal has been drafted in response to the recommendation of the midterm review that funding for NRSP-4 be reduced by 15%. While we are willing to accept this reduction, we have included additional justification to support funding at the previous amount of \$481,182. The reasoning behind this request is that unprecedented changes and challenges are occurring in crop protection/pest management in specialty crops. These challenges are bringing great uncertainty to pest management programs. These challenges include:

- Climate change continues to result in unpredictable high temperatures, heavy precipitation in some areas, and drought in others at a higher frequency. This is making established pest management programs subject to failure. Climate change is expanding the area where pests can overwinter and become a significant problem. New pest management strategies are needed to help assist in the resiliency of existing crops to climate change.
- Due to multiple court decisions involving the Endangered Species Act, the U.S. Environmental Protection Agency (EPA) is making serious efforts to implement mitigations that impact new and existing pesticide uses. EPA has established mitigation strategies that significantly modify what and how crop protection products (including chemical and bio-based) can be used.
- U.S. EPA continues to reassess pesticides for hazards. Registration review measures various factors including: effects to pollinators, endocrine disruption, PFAS and other human health concerns such as offsite movement into ground or surface waters, etc. Use mitigations has greater potential to adversely impact specialty crops than they do on major row crops.
- The European Union (EU) assesses pesticides differently than the EPA and many other countries. Assessment in the EU is based on hazard assessment. The EPA uses a risk-based approach. The hazard assessment approach in the EU is resulting in elimination/reduction of maximum residue levels allowed in imported crops. This has become a trade barrier as US grower can legally use a pesticide in the US but is prohibited from exporting the treated crop to the EU. This results in the EU standards becoming the de facto US standard for crop exports. Over the last 12 months, the pace at which the EU is removing products and impacting the uses in the US is rapidly increasing.
- Similar to the EU, the State of California is going above and beyond EPA risk assessment and focusing on hazards to eliminate pesticide uses the state regulatory authority classifies as high-risk. California has

recently started to implement its Sustainable Pest Management Roadmap and has prioritized the developments of alternatives to high risk pesticides. There is an expectation by many that IR-4 will be able to help develop alternatives to replace product uses no longer allowed in California.

- While not a new factor, there are seeming more common occurrences of invasive pests (e.g. Citrus Greening, Spotted Wing Drosophila, Brown Marmorated Stink Bug, Spotted Lanternfly, Basil Downy Mildew, Cucumber Downy Mildew, Palmer Amaranth, etc.), impacting the production of crops and the environment. These pests often have no natural enemies and not much is known about their biology with little to no effective crop protection product registrations.
- Also seeming more common is the situation when crop protection lose their ability to manage pests. They are no longer being effective because the pests have evolved and developed resistance to the technology.
- The United States Supreme Court recently ruled that the Chevron Deference that gave regulatory authorities such as EPA the ability to develop regulations to implement laws. While it is uncertain how this Supreme Court ruling will impact the availability of pesticides, there is great concern that this will result in loss of additional critically important uses.

I would also like to point out a misunderstanding in the midterm review. In the review letter it was stated that IR-4 has received “*recent infusion of \$4 million*” from Congressional appropriations. In fact, IR-4 funding was increased by \$2.6 million in FY2022 with a \$0.5 million increase in FY2023 for a total of \$3.1 million. While this increase is substantial, this must be viewed in context. The funding increases in FY 2022 and FY 2023, were the first increase in over a decade. Associated with the funding increase was the approval by USDA NIFA to allow the host institutions to collect 10% indirect costs. While IR-4 was supportive of the modification to allow indirect costs, approx. 50% of the new funds were allocated to indirect costs.

Specialty crop agriculture is under unprecedented stress from many factors. The resiliency of the specialty crop community to provide healthy foods is threatened. IR-4, with the contributions from NRSP and other partners has the ability to provide relief to the uncertainty. The \$72,177 reduction in NRSP-4 funds may not seem like a huge amount but its loss will have a profound impact on IR-4’s ability to support specialty crop agriculture. **We respectfully request that NRSP support to IR4 be renewed for another five years and that it will continue to be funded at \$481,182 per year.**

Thank you and please let me know if you have any questions or need additional information.

Sincerely,



Jerry Baron, Ph.D  
Executive Director  
The IR-4 Project