

Call for Research Proposals on a New FAO/IAEA CRP D42019: Contribution to the Research on Advancing Surveillance and Control Techniques Against the New World Screwworm

The IAEA is launching a new five-year Coordinated Research Project (CRP) aimed at coordinating the design and implementation of a series of research studies to enhance the response to the ongoing New World Screwworm (NWS), *Cochliomyia hominivorax*, emergency affecting Central America, Mexico and the United States.

The NWS reinfestation in Central America, Mexico and the United States, despite National efforts to respond to the emergency, has created a significant challenge for which the countries are not fully prepared. Since the Sterile Insect Technique (SIT)—a method involving the release of sterilised flies to reduce pest populations— which in the past has been successfully used in the containment and eradication of the NWS, is now a limited option due to the insufficient production of sterile flies to curb the current spread through Central America, Mexico and the United States. Given this situation Member States will have to focus on strengthening the surveillance and implementing suppression strategies — such as targeted insecticide application, treatment of livestock, or enhanced surveillance—as sterile fly production is scaled up to cover the needs in the infested countries.

The SIT is recognised for its effectiveness; nevertheless, there are opportunities to optimise its implementation by addressing specific areas of uncertainty. Resolving these issues would enhance process efficiency, particularly concerning the procedures that facilitate the application of this technique.

CRP Overall Objectives

The main objective of this CRP is contributing to enhancing the response to the ongoing NWS emergency affecting Central America, Mexico and the United States and the continuous support to the NWS management in endemic countries in South America and the Caribbean. To research on advancing surveillance and control techniques including SIT against the NWS, special emphasis will be made on increasing the sensitivity of surveillance methods through development and testing of more potent attractants, developing novel mating compatibility and sterility induction measurement techniques, including the artificial wound, and assessing alternative irradiation methods.

Specific research objectives

The specific research objectives for this CRP will include:

- a. To improve cost-effectiveness of mass-rearing.
- b. To colonize, domesticate, generate and/or manage NWS strains
- c. To enhance NWS handling and release.
- d. To study mating behaviour, compatibility and competitiveness
- e. To improve surveillance and the artificial wound technique
- f. To enhance control techniques for wild fly population suppression
- g. To evaluate alternative irradiation methods for sterilizing NWS in mass-rearing.

For more information on the new CRP, an IAEA Press Release was issued on 19 June 2026 <https://www.iaea.org/newscenter/pressreleases/project-launched-on-use-of-nuclear-technique-to-target-new-world-screwworm-outbreak-in-central-america-mexico-and-the-united-states>.

How to join this CRP

Research organizations interested in joining the CRP must submit their Proposal for Research Contract or Agreement by email, no later than **21 September 2026** to the IAEA's Research Contracts Administration Section (research.contracts@iaea.org), using the appropriate template on the CRA web portal (<https://www.iaea.org/services/coordinated-research-activities>). The IAEA is committed to gender equality and to promoting a diverse workforce. Applications from qualified women and candidates from developing countries are strongly encouraged.

For further information related to this CRP, potential applicants should use the contact form under the CRP page (<https://www.iaea.org/projects/crp/d42019>).