I. BASIC INFORMATION

Region:	Regional
TC Title:	Integrated management of New World Screwworm (*Cochliomyia hominivorax)* in Latin America
TC Number:	5690-00
Team Leader:	Eugenia Saini (FONTAGRO), Angel García (FONTAGRO), Macarena Mouriño (FONTAGRO), Martin Oesterheld (FONTAGRO),
Hemispheric Action Programa:	Innovation and the Bioeconomy
TC Authorization Date:	Acta de la XXIV Reunión Extraordinaria del CD. 10 de julio de 2026. San Jose, Costa Rica. (Tema II).
Executing Agency	Inter-American Institute for Cooperation on Agriculture (IICA).
Administrative Agency	Fundación ArgenINTA de Argentina
Co-executing agencies – beneficiaries (countries or entities participating in the technical cooperation):	Argentina: Instituto Nacional de Tecnología Agropecuaria (INTA) Uruguay: Instituto Nacional de Investigación Agropecuaria (INIA) Colombia: Corporación Colombiana de Investigación Agropecuaria - Agrosavia Venezuela: Instituto Nacional de Investigaciones Agrícolas (INIA).
Donors providing financing:	FONTAGRO (RFA)
Requested Financing (US$):	250.000
Local Counterpart (US$):	300.000 (in kind)
Total Financing (US$)	550.000
Implementation Period (months):	42 months
Disbursement Period (months):	48 months
Required Start Date (*):	November 2026
PMP 2025–2030 - Flagship Program	Flagship Program 2: Transformation of livestock and animal protein systems: productive efficiency with a lower environmental environmental footprint.
PMP 2025–2030 Strategic Line:	Integrated management of livestock pests and diseases
Indicators	Annex III

II. EXECUTIVE SUMMARY

2.1 The New World Screwworm (NWS) *Cochliomyia hominivorax,* besides its zoonotic importance, has interest due to its significant impact on the health and productivity of domestic animals. The NWS in the Americas presented several epidemiological scenarios that could occur seasonally, during rainy periods, or in summer, as epizootic or enzootic waves. Not all countries have official control programs and surveillance records of the epidemiological situation. Actually, the NWS continues to pose a serious and re-emerging transboundary threat to livestock production, rural livelihoods, and animal welfare across the Americas. Despite historic successes in regional suppression through coordinated action and the *Sterile Insect Technique*, recent outbreaks in Central America, Mexico and EE.UU. underscore persistent vulnerabilities in detection, preparedness, and response systems. The absence of preventive vaccines, the high cost of treatment, emerging concerns around chemical resistance, and the potential effects of climate change further intensify the urgency of coordinated regional action.

2.2 This project proposes a collaborative, applied, and regionally coordinated initiative to reduce the incidence, severity, and economic impact of NWS in participating countries of Latin America and the Caribbean. Building on existing infrastructure, scientific expertise, and institutional partnerships, the project integrates three complementary pillars. First, it strengthens training and capacity building for producers, veterinarians, and extension services to improve early detection, reporting, and on-farm management. Second, it advances applied research and development on on-animal chemical treatments, wound management technologies, and trapping systems. Third, it enhances regional preparedness, knowledge management, and policy coordination through shared learning, technical guidance, and engagement with animal health authorities.

2.3 By linking producer-level action with validated technical tools and science-based policy dialogue, the project aims to generate scalable solutions that can be adapted across diverse production systems. The expected outcomes include improved capacity for producer response, validated integrated pest management tools, and strengthened regional coordination mechanisms to support medium- and long-term suppression efforts. Ultimately, the initiative seeks to safeguard livestock productivity, food security, and trade while reinforcing collective preparedness against a persistent transboundary animal health threat across the Western Hemisphere.

III. ABSTRACT IN SPANISH AND IN ENGLISH

3.1 La mosca de la bichera, también llamada gusano barrenador del Nuevo Mundo (*Cochliomyia hominivorax*), sigue siendo una de las amenazas parasitarias más dañinas para el ganado en las Américas, causando graves impactos en el bienestar animal, pérdidas de productividad y dificultades económicas para los productores de pequeña y mediana escala. Aunque los esfuerzos regionales de erradicación y supresión han demostrado su viabilidad técnica, los brotes recientes ponen de manifiesto importantes vacíos en la preparación, la vigilancia, el monitoreo, la participación de los productores y el acceso a herramientas eficaces de manejo y control. Este proyecto aborda estas brechas mediante un enfoque regional coordinado, con énfasis en América Latina y el Caribe. La iniciativa combina capacitación y fortalecimiento de capacidades para productores y servicios de sanidad animal, investigación aplicada sobre tratamientos químicos administrados a los animales y tecnologías emergentes de control, así como el fortalecimiento de la coordinación regional y la gestión del conocimiento. Las actividades incluyen la capacitación de productores y veterinarios en detección y manejo de heridas, el desarrollo de herramientas que mejoren y amplíen el uso de drogas terapéuticas, alternativas farmacológicas, la validación de herramientas de manejo integrado de plagas, tecnologías de vigilancia y monitoreo, y el desarrollo de orientaciones relevantes para las políticas públicas que respalden la toma de decisiones a nivel nacional y regional.

3.2 The New World screwworm fly (*Cochliomyia hominivorax*) remains one of the most damaging parasitic threats to livestock production in the Americas, causing severe impacts on animal welfare, productivity losses, and economic hardship for small- and medium-scale producers. Although regional eradication and suppression efforts have demonstrated technical feasibility, recent outbreaks have highlighted significant gaps in preparedness, surveillance, monitoring, producer engagement, and access to effective management and control tools. This project addresses these gaps through a coordinated regional approach focused on Latin America and the Caribbean. The initiative combines capacity building and training for producers and animal health services, applied research on treatments administered directly to animals and on emerging control technologies, and strengthened regional coordination and knowledge management. Activities include producer and veterinarian training in wound detection and management; developing tools to improve and expand the use of therapeutic drugs and pharmacological alternatives; validating integrated pest management tools and surveillance and monitoring technologies; and developing policy-relevant guidance to support decision-making at both national and regional levels. By aligning short-term producer needs with medium- and long-term innovation, the project seeks to reduce the incidence and impact of New World Screwworm while reinforcing regional preparedness and cooperation. The outcomes will contribute to more resilient livestock systems, improved animal health governance, and sustained progress toward regional suppression of this transboundary agricultural threat.

IV. BACKGROUND, JUSTIFICATION, AND OBJECTIVE OF THE TECHNICAL COOPERATION

4.1 The impact of cutaneous myiasis by *Cochliomyia hominivorax* (Diptera: Calliphoridae) on animal health and livestock production systems in the New World is widely recognized (Köbrich Grüebler 2020; WOAH 2024). Females of *C. hominivorax* lay their eggs on wounds or natural body orifices of wild and domestic mammals, and of humans. The resulting larvae invade living tissues and feed on them. Particularly in cattle production systems, many of the wounds on which *C. hominivorax* oviposits result from management practices such as castration, dehorning, or the application of ear tags, but other infestations commonly begin in natural wounds, in lacerated tissues in the vulval area of post parturient females, or in the unhealed navels of newborn animals (e.g. calves or lambs).

4.2 The genus *Cochliomyia* includes two species whose natural distribution is restricted to the American continent, *C. macellaria* and *C. hominivorax*. The first of these species typically develops its larval stages in cadavers or carcass remains and only occasionally acts as a secondary invader or facultative agent of myiasis, feeding on necrotic tissue at the margins of wounds (Denno and Cothran, 1975; Hall, 1991). In contrast, *C. hominivorax* is an obligate parasite of homeothermic vertebrates that feeds on living tissue through biophagous behavior. Despite its zoonotic importance, interest in this insect is primarily veterinary due to its marked impact on the health and productivity of domestic animals, in which it causes reductions in the production of meat, milk, and wool, increases in secondary infections, and, in severe cases, mutilations and death of heavily parasitized animals. The negative impact of this insect on wildlife may be even greater due to the difficulty of implementing specific treatments, which results in high per se mortality rates, as well as increased vulnerability of infested animals to predators and contributes to the dispersal of diptera into new scenarios (Woodford, 1992).

4.3 The original distribution of this insect included the central and southern United States, Mexico, Central America, the Caribbean islands, and South America (James, 1947). The successful eradication program based on the sterile insect technique (Knipling, 1960) has allowed the United States, Mexico, and much of Central America and the Caribbean to become free of this dipteran. The program, based on the use of X-rays, was one of the greatest achievements in veterinary history and one of the least well-known peaceful uses of atomic energy (Bowman, 2006). Technically, it consists of the mass rearing of insects, sexual sterilization through radiation, and their release into infested areas. This produces a gradual reduction of natural populations which, together with monitoring and the control and treatment of animal movements, results in the eradication of this insect. However, this technology remains underdeveloped and unproven in some countries, such as Colombia. In recent years, the re-emergence of *C. hominivorax* across the region from Panama to Mexico has renewed the geographic impact of this parasite and underscores the need for additional control strategies.

4.4 Although the biological barrier maintained by The Panama–United States Commission for the Eradication and Prevention of Screwworm Infestation in Livestock (COPEG) in the Darién region limits northward dispersal, endemic transmission persists across Colombian territories, particularly in high-mobility livestock corridors such as Antioquia and Magdalena Medio. In these regions, small- and medium-scale producers face disproportionate losses due to heterogeneous management conditions, limited access to integrated pest management (IPM), and the absence of structured epidemiological intelligence. Myiasis incidence is strongly associated with preventable risk factors, including inadequate husbandry practices such as those mentioned above that generate traumatic injuries, and insufficient neonatal and post-partum inspection. However, Colombia lacks a high-resolution epidemiological baseline that can differentiate incidence by production scale, agroecological zone, and seasonality. This data vacuum limits evidence-based decision-making, weakens early-warning capacity, and perpetuates reactive rather than preventive sanitary responses. Considering that Colombia is a natural corridor for this fly, the establishment of control strategies in this country helps limit its dispersion in Central and South American countries.

4.5 Despite early specific treatment preventing mortality, myiasis can also have a significant direct negative impact on animal production. For example, in calves, pre-weaning myiasis (such as that produced

following the application of ear tags) significantly affected growth rate and weight gain at weaning. Prevention and treatment also represent economic impact factors for this pest due to the costs of insecticides and, fundamentally, the number of workdays and labor hours required to monitor wounds that are susceptible to infestation or already infested (Muchiut et al, 2025). The recent outbreaks highlight critical gaps in preparedness, surveillance, producer engagement, and access to effective management tools. This project addresses these gaps through a coordinated regional approach focused on Latin America and the Caribbean. The initiative combines training and capacity building for producers and animal health services, applied research on on-animal treatments and emerging control technologies, and strengthened regional coordination and knowledge management. Activities include producer and veterinarian training on detection and wound management, validation of integrated pest management tools and surveillance technologies, developing tools that improve and expand the use of therapeutic drugs, and the development of policy-relevant guidance to support national and regional decision-making. By aligning short-term producer needs with medium- and long-term innovation, the project seeks to reduce the incidence and impact of NWS while reinforcing regional preparedness and cooperation. The outcomes will contribute to more resilient livestock systems, improved animal health governance, and sustained progress toward regional control of this transboundary agricultural threat.

4.6 The **general objective** of this project is to generate tools that improve the effectiveness and sustainability of the control of *C. hominivorax,* combining training and capacity building for producers and animal health services, applied research on chemical treatments, and strengthened regional coordination and knowledge management. This project contains three **specific aims**: i) Training on methods of surveillance and control of the *C. hominivorax* for technical staff and official veterinary services of different Latin American countries; ii) To develop an *in vitro* system to evaluate the susceptibility of *C. hominivorax* larvae to different chemical groups of insecticides, and to compare their biological response with that of *C. macellaria; and iii)* Innovative trapping systems for early detection of New World Screwworm. The integrated control approach for *C. hominivorax* adopted in this project involves a coordinated strategy to develop tools for epidemiological surveillance, early detection of the parasite, chemical control, preventive animal management, and evidence-based decision-making.

4.7 A strategy for the transference and dissemination of the results obtained is proposed, consisting not only of publishing the results in scientific journals related to the topic and presenting them at conferences, but also through a training and continuing education program for animal health extension professionals, in collaboration with other institutions. This could be implemented through partnerships with other groups within the scientific and technological system and may also include stakeholders from the private sector. The proposal includes the implementation of a training capacity program for animal health extension professionals, with the objective of reducing the gap between existing knowledge and the knowledge generated within this project. General information will be managed in countries with lower expertise in this area. Through this initiative, the project aims to directly reach the key stakeholders (veterinarians and producers) responsible for implementing control strategies and insecticide treatments in livestock production systems. The program content will focus on facilitating the adoption of the process technologies generated during this project by the various actors in the beef and dairy production systems. In addition, the generation of information on the management strategies and performance of different chemical groups will allow optimization of control strategies so that they remain sustainable over time, and so that these strategies, including the *in vitro* drug evaluation platform, can be adopted in different countries. The subject of this project is of interest to different stakeholders within the livestock sector in Latin America (farmers, professionals and technical advisors, diagnostic laboratories, pharmaceutical companies, regulatory agencies, technological and advisory organizations), as well as to governments through public animal health policies.

4.8 The methodological approach focused on digital citizen-science surveillance by using open-source tools and instant messaging systems to transform passive field observations into a validated epidemiological database. Through a structured “train-the-trainer” strategy, local technicians and producer leaders will validate low-cost, welfare-oriented husbandry protocols in demonstration units, on wound prevention, early detection, and precision treatment. These multipliers will extend validated protocols to producers

through established regional cattle committees and digital extension channels, institutionalizing preventive practices at the farm level. By digitizing baseline data, the project is expected to increase the geographic resolution of sanitary information by a critical hub for national cattle movement, thereby strengthening preparedness and early-detection indicators under the PMP 2025–2030 framework.

4.9 **Potential impact.** Fundamental information will be obtained to develop input and process technologies that will allow the implementation of different sanitary strategies for the control of *C. hominivorax*. Alliances could be established with the industrial sector (e.g. pharmaceutic), science and technology groups, public sanitary authorities, and private sector actors. All the information generated will have a significant impact on animal health and production, with the results being disseminated and discussed with regulatory bodies and partner organizations. Estimates of economic losses based on survey data allow a primary focus on impacts in ruminants; however, they do not capture other effects that are difficult to assess or quantify. These include mortality in wildlife, loss of animal welfare, and the occurrence of myiasis in humans. Within South America, with the exception of Argentina; Brazil and Uruguay, there is limited information on the economic impact of *C. hominivorax* on animal production. In Brazil, partial estimates focused on umbilical myiasis in newborn calves indicate losses associated with mortality in this category reaching approximately USD 310 million (Grisi et al., 2014). Uruguay, in contrast, has conducted three estimations over the past 23 years (1998, 2006, and 2019) addressing direct and indirect economic losses in sheep and cattle production systems, with values ranging between USD 37 and 43 million (Kobrich, 2020; Fresia et al., 2021). In Argentina, the losses (only considering beef cattle) were estimated at about USD 60 million. Although it is difficult to rigorously estimate the actual economic impact that this project may have in reducing these losses, the magnitude of the economic and sanitary impact of parasitism by *C. hominivorax* on livestock production clearly indicates the potential economic significance of implementing effective process and input technologies to improve the control of this pest.

4.10 **Beneficiaries**. Direct beneficiaries: beef cattle producers in pilot sites distributed among Argentina, Uruguay, and Colombia and Costa Rica, as well as beef cattle producers from the countries associated with the project. Professionals will be trained to promote control measures. Finally, other actors in the beef cattle sector, other institutions, and public health policymakers will benefit indirectly.

4.11 **The business model** to be validated focuses on the adoption of scientifically validated input- or process-based technologies developed in this project by implementers of *C. hominivorax* control or eradication programs, whether individual livestock producers or public or private entities involved in the sanitary management of myiasis caused by this pest. It is also expected to generate human resources with the technical capacity to support the dissemination and adoption of the available technologies.

4.12 The project is consistent with the Flagship Programs of FONTAGRO's Medium-Term Plan (PMP) 2025–2030: The project is primarily aligned with the action line "*Transformation of livestock and animal protein systems: productive efficiency with a lower environmental* " under Flagship Program 2, and belonging to the action area *"Integrated management of livestock pests and diseases*", through the validation of surveillance systems, trapping methods and chemical treatments for the prevention and control of myiasis caused by *C. hominivorax*, also promoting practices for wound prevention, routine inspection, and timely treatment.

V. COMPONENTS, ACTIVITIES, AND BUDGET

COMPONENT 1. TRAINING ON METHODS OF SURVEILLANCE AND CONTROL OF THE *C. HOMINIVORAX* FOR TECHNICAL STAFF AND OFFICIAL VETERINARY SERVICES OF DIFFERENT LATIN AMERICAN COUNTRIES. The aim of this component is to strengthen regional capacities for surveillance, diagnosis and preparedness applied to control of the NWS through technical training, transfer of operational experience, development of harmonized technical materials, and regional coordination among participating countries and institutions. Activities will be implemented primarily in Uruguay, leveraging existing infrastructure and facilities specifically developed for NWS rearing, diagnosis, and research. The participants will be from Uruguay, Argentina, Venezuela, and Colombia.

Activity 1.1: Organization of biennial regional training courses/workshops on NWS surveillance and integrated control. This activity will support the organization and implementation of a biennial one-week intensive training course and workshops to be held in Uruguay. The courses will serve as a regional platform to transfer technical knowledge and hands-on experience to participants from countries invited by FONTAGRO, strengthening capacities for NWS preparedness and management. The training will combine theoretical and practical activities and facilitate the transfer of institutional experience, technical tools, and operational knowledge to countries in South, Central and North America that request support to strengthen their capacities for the surveillance and integrated management of the NWS. The workshop program will include the following core components: I) Epidemiology, economic impact, and institutional frameworks for NWS control programs; II) Field surveillance systems: sampling, trapping, and monitoring of larvae and adult flies; III)Taxonomic and molecular diagnostic methods for NWS identification; IV) Differentiation of NWS from other blowfly species of veterinary importance; IV) Use of surveillance data for risk assessment, early warning, and decision-making; V) Regional coordination mechanisms and cross-border response strategies. The training will include on-site visits to facilities dedicated to the maintenance and production of *C. hominivorax* colonies operating under ACL2+ conditions, including INIA's production facility in Uruguay, where high biosecurity standards for arthropod rearing and containment are applied.

Product 1. Technical Note containing the expected results: Surveillance systems and institutional preparedness for New World screwworm strengthened and harmonized across the region. Indicator: Number of trained scientific-technical personnel/ Number of technical guides. Cross-cutting impacts: Positive social impact.

Activity 1.2: Elaboration of standardized technical materials, operational protocols, and training guidelines. This activity will support the preparation, harmonization, and dissemination of technical materials and operational tools related to NWS surveillance, diagnosis, preparedness, and integrated management. Materials will include training and technical guidelines, species diagnostic protocols, educational resources, and practical reference documents generated from the experience accumulated by participating institutions. The materials developed under this activity will support both the in-person training activities and the future replication of training and technical assistance efforts by participating countries and institutions. Standardized materials will contribute to strengthening regional harmonization of surveillance and response approaches for the NWS.

Product 2. Technical Note containing the expected results: Development and dissemination of standardized training materials, protocols, and technical guidelines. Indicator: Number of technical guides and protocols. Cross-cutting impacts: Positive social impact

Activity 1.3: Regional coordination, networking, and technical exchange among participating institutions and trained professionals. This activity will support the establishment and consolidation of a regional network of institutions and trained professionals involved in NWS surveillance, preparedness, diagnosis, and integrated management. The activity will facilitate technical exchange, communication, coordination, and follow-up interactions among participating countries through virtual and in-person mechanisms. The network will promote long-term collaboration among institutions from endemic and at-risk regions, facilitating knowledge exchange, technical consultation, dissemination of experiences, and regional coordination strategies for the surveillance and control of the NWS. The activity 1.3. will include validation of control protocols**.** We captured the epidemiological risk of myiasis using a monitoring app, considering three prioritized regions of Colombia (Middle Magdalena, Eastern Plains, and Antioquia). We will visit the farms with records, collecting larvae from myiasis and adult flies for morphological and molecular identification, with confirmation by sequencing and phylogeny. On the included

farms, through field research, the project will conduct controlled comparisons of wound-prevention practices, neonatal inspection frequencies, and precision treatment protocols to reduce *C. hominivorax* infestations and decrease neonatal mortality rates in pilot production units. The activity will integrate innovation validation, producer participation, and knowledge transfer processes to facilitate the adoption and scaling of best management practices. Demonstration and validation activities will be implemented under real production conditions, generating technical and economic evidence to support decision-making by producers and animal health services.

Product 3. Technical Note containing the expected results: Strengthening of regional capacities and establishment of a network of trained professionals for coordination and knowledge exchange and validated and regionally adapted methods for the prevention and control of *C. hominivorax* infestations in livestock systems, including evidence-based recommendations on wound prevention, neonatal inspection routines, and precision treatment practices implemented under field conditions in demonstration farms. Indicator: Number of technical guides and protocols/Number of trained scientific-technical personnel. Cross-cutting impacts: Positive social impact/ Increase in area or number of producers adopting the technology.

COMPONENT 2. TITLE: TO DEVELOP AN IN VITRO SYSTEM TO EVALUATE THE SUSCEPTIBILITY OF C. HOMINIVORAX LARVAE TO DIFFERENT CHEMICAL GROUPS OF INSECTICIDES AND ESSENTIAL OILS COMPARING ITS BIOLOGICAL RESPONSE WITH THAT OF C. MACELLARIA. This component aims to develop and validate in vitro and in vivo systems to evaluate the susceptibility of *C. hominivorax* larvae to different insecticide compounds, and to compare its biological response with that of *C. macellaria*. The study will be conducted in Argentina and Colombia.

Activity 2.1: In the first instance, the in vitro systems will be calibrated by using doramectin and ivermectin as model drugs. The relationship between concentrations of doramectin (DRM) and ivermectin (IVM) achieved in blood of the infested wound of treated calves, and within *C. hominivorax* larvae, will be obtained following the methods described in Muchiut et al. (2025). In a second part, the lethal doses for *C. hominivorax* larvae exposed to culture media containing different concentrations of DRM and IVM will be obtained. The effects of the different concentrations of DRM and IVM will be determined, and dose–response curves will be constructed using Prism software (GraphPad). In addition, the concentrations of DRM and IVM achieved within the larvae will be measured, which will allow the establishment of a pharmacokinetic–pharmacodynamic model for these drugs. In this experiment, third-instar larvae (L3) obtained from control animals will be incubated in the laboratory to allow them to reach the pupal stage and subsequently emerge as adults. The adults will be fed and allowed to oviposit on fresh tissues maintained in an incubator to obtain larvae. These larvae will be fed on culture media containing blood with different concentrations of DRM and IVM. In Colombia, in addition to testing the active ingredient, ivermectin, under in vitro conditions, a methodology will be developed to evaluate organophosphates for topical use, as this is the primary control method used by livestock farmers. Adult flies will be captured, and oviposition will be encouraged under the conditions described below. L1 or L2 larvae will then be collected and placed in contact with strips impregnated with ointment at different concentrations (dichlorvos) to determine mortality and the average time of mortality. The WAAVP guidelines regarding the number of larvae and replicates in the experiment will be followed (Holdsworth et al, 2022).

Product 4. Technical Note containing the expected results: Standardized experimental platform established to evaluate susceptibility of *C. hominivorax* to different insecticidal compounds. Indicator: Number of scientific publications. Cross-cutting impacts: Increase in productivity.

Activity 2.2: In order to validate the in vitro test, the result obtained with this method will be contrasted (by chosen representative populations) with in vivo trials. These filed trials will compare the level of infestation in exposed wounds of animals treated versus untreated animals (controls). On the day the trial begins, surgical procedures such as castration, tail docking, among others, will be performed to generate wounds susceptible to environmental challenges by *C. hominivorax*. This procedure will be carried out on all animals in different groups (20 calves per group), and those assigned to specific treatment will receive it on the same day, which will be considered day 0. Wounds will then be examined on days 3, 7, and 14 post-surgery/treatment, and the number of infested animals in each group will be recorded. Subsequently, the level of protection achieved by each treatment will be determined by comparing the number of infested animals in each treatment group with those infested in the

control group. Animal procedures will be performed according to the Animal Welfare Policy of the Committee for the Care and Use of Research Animals (Approval No. 040/2022) of the National Institute of Agricultural Technology, Santa Fe Regional Centre (CICUAE-CERSAN).

Product 5. Technical Note containing the expected results: Preventive and therapeutic protocols aimed at improving control methods validated under commercial production conditions. Indicator: Number of scientific publications. Cross-cutting impacts: Increase in productivity.

Activity 2.3: This activity includes developing high-throughput, rigorous efficacy essays for novel chemistries that can be translated between both *C. hominivorax* and *C. macellaria*. The system developed in activity 1.1 will be replicated with novel chemistries, and the phenotypic response of both *C. hominivorax* and *C. macellaria*, in terms of larvae mortality, will be comparatively analysed. For in vitro evaluation of essential oils will be performed based on the methodology reported by Medeiros et al. (2023) filter paper discs will be impregnated with each essential oil and transferred to Petri dishes. Ten larvae (L1-L3) will be added to each dish and incubated in climate-controlled chambers at 28 ± 1 ºC and 75 ± 10 % relative humidity for 24 and 48 hours. Mortality will be assessed based on the absence or change in larval movement, as observed under a stereomicroscope. At least two plants with previously documented insecticidal activity should be evaluated using the essential oil extracted from the leaves. Extraction of Essential Oil by Steam Distillation: After washing, cleaning, and drying in the shade, the plant material (leaves) is cut into 1–3 cm pieces and placed in the extraction chamber to form a loose bed (50–100% of the chamber's usable volume). Fill the flask with water, seal the system, and generate saturated steam (~100 °C) by regulating the flow rate to the minimum for continuous distillation (1–3 h) to minimize the loss of polar compounds. The vapours will be condensed and decanted to separate the oily phase from the aqueous phase; the essential oil will be dried with anhydrous sodium sulfate and stored in a sealed vial under an argon atmosphere at -20 °C

Product 6. Technical Note containing the expected results: Information to determine whether *C. hominivorax* and *C. macellaria* exhibit the same phenotypic response to a chemical compound, to assess whether *C. macellaria* can be used as a model species for evaluating insecticidal drugs against *C. hominivorax*. This would allow the degree of concordance between the dose–mortality responses of the two species to be estimated across different chemical groups, making it possible to identify which chemical groups exhibit similar responses and which do not. Indicator: Number of scientific publications. Cross-cutting impacts: Increase in productivity.

COMPONENT 3. TITLE: *INNOVATIVE TRAPPING SYSTEMS FOR EARLY DETECTION OF NEW WORLD SCREWWORM.*
This component aims to develop and validate innovative trapping systems for the early detection of *C. hominivorax*. Different trap designs and attractants will be evaluated to standardize trapping protocols and optimize deployment strategies under field conditions. The activities of this component will be performed in Uruguay and Venezuela.

Activity 3.1: Experimental design and standardization of trapping protocols. This activity will define and standardize the experimental framework for evaluating trapping systems for *C. hominivorax*. A limited number of trapping systems (one to two) selected based on prior evidence and operational feasibility (e.g., Sticky trap, Nzi trap, or Gator-type trap), will be chosen for field evaluation. The activity will include the preliminary field trials for selection and optimization of trap design, attractants, and deployment strategies, as well as the development of standardized field protocols for installation, monitoring, and data collection. Key performance indicators—such as capture rate, species specificity, sensitivity, and operational feasibility—will be defined to ensure robust comparison across sites and environmental conditions.

Product 7. Technical Note containing the expected results: Trapping systems for early detection validated in endemic and at-risk areas. Indicator: Number of advanced and validated technologies. Cross-cutting impacts: Increase in productivity

Activity 3.2: Field evaluation of trapping systems in endemic and at-risk areas. Field trials will be conducted in selected locations representing endemic and at-risk scenarios. Traps will be deployed and monitored over time to assess their effectiveness under real conditions. Data collected will include the number of captures, species identification, temporal dynamics, and environmental variables. Performance indicators such as capture rate,

species specificity, sensitivity, and operational feasibility will be established to ensure comparability across sites and conditions. This activity will generate robust evidence on the performance and reliability of trapping systems for NWS surveillance.

Product 8. Technical Note containing the expected results: Trapping systems for early detection validated in endemic and at-risk areas. Indicator: Number of advanced and validated technologies. Cross-cutting impacts: Increase in productivity.

Activity 3.3: Data analysis, scientific publications, validation, and development of technical recommendations. Data will be analyzed to compare trap performance and identify optimal configurations. Results will be integrated with epidemiological early-warning tools.

Product 9. Technical Note containing the expected results: Trapping systems for early detection validated in endemic and at-risk areas. Indicator: Number of advanced and validated technologies/ Number of scientific publications. Cross-cutting impacts: Increase in productivity

Product 10. Final Report. Final Technical Report in accordance with the template proposed by FONTAGRO. Be sure to include the indicators from Annex III of this document.

5.1 **Relevance of the research topic to the national priorities of the participating countries**. Despite *C. hominivorax* has zoonotic importance, interest in this insect is primarily veterinary due to its significant impact on the health and productivity of domestic animals, in which it causes reductions in meat, milk, and wool production, an increase in secondary infections, and, in severe cases, mutilations and death of heavily parasitized animals. Due to this reason this insect constitutes one of the major pests of livestock in American countries, with a significant economic impact. Also, The New World Screwworm continues to pose a serious and re-emerging transboundary threat to livestock production, rural livelihoods, and animal welfare across the Americas. Despite historic successes in regional suppression through coordinated action and the Sterile Insect Technique, recent outbreaks in Central America and Mexico underscore persistent vulnerabilities in detection, preparedness, and response systems. The absence of preventive vaccines, the high cost of treatment, emerging concerns around chemical resistance, and the potential effects of climate change further intensify the urgency of coordinated regional action.

5.2 **Ex ante economic, environmental, and social impact assessment:** Efforts will be made to establish new partnerships with companies and stakeholders from the industrial sector that have demonstrated production capabilities and are interested in continuing a collaborative project. In this way, the development and market introduction of products incorporating the most promising active ingredients—based on the results of the present project—will be facilitated, enabling their implementation by producers in both countries. Collaboration is also expected with officials from public health agencies and livestock producer associations.

5.3 **Technical capacity of the platform and validated scientific evidence.** Instituto Nacional de Tecnología Agropecuaria (INTA) in Argentina, Instituto Nacional de Investigación Agropecuaria (INIA) in Uruguay, AGROSAVIA in Colombia, and Instituto Nacional de Investigaciones Agricolas (INIA) in Vebezuea, are public institutions focused on agricultural research whose mission is to generate scientific knowledge and develop agricultural technologies through research, technology adaptation, transfer, and advisory services. Their goal is to improve production competitiveness, promote equitable distribution of the benefits of technology, ensure sustainable use of natural resources, and strengthen the scientific and technological capacities of their respective countries. All four institutions have experience in the management and evaluation of ectoparasites, as well as strong human resources, equipment, and infrastructure, and maintain well-established links with the pharmaceutical industry, livestock producer associations, and public health authorities. In this context, the four institutions complement each other very well for the implementation of this project

5.4 **Business model and description of market potential.** Regarding the beneficiary market, countries in Latin America and the Caribbean (LAC) supply beef and beef-derived products both to their domestic markets and to the global market through exports. Therefore, the direct beneficiaries will be livestock producers, if the results of this project succeed in improving current control methods for *C. hominivorax*, as the deleterious

effects of this parasite will be mitigated. In addition, the pharmaceutical industry will also benefit, as it may potentially incorporate new active chemical compounds into antiparasitic products that can be adopted by the veterinary market.

5.5 **Scaling and sustainability strategy.** The scaling up of the most promising alternative will be carried out jointly with a company or industry partner with experience in the industrial production of insecticide formulations. This will enable production at a level that ensures access for producers. It will also be important to coordinate with public health authorities to promote input technologies and control processes.

5.6 **Contribution to human resource development:** This Technical Cooperation will make a direct and concrete contribution to human resource development through a structured capacity-building strategy focused on strengthening technical and professional skills for the surveillance and control of NWS in the Americas. The core activity will be the implementation of an annual one-week intensive training course and workshop in Uruguay, targeting technical professionals from beneficiary countries. The training will combine theoretical modules with hands-on practical activities, delivered in specialized facilities for NWS rearing under high biosecurity conditions (ACL2+). This approach will ensure not only knowledge transfer, but also the development of operational competencies applicable in real-world surveillance and control programs. The training program will address key areas including epidemiology, field surveillance systems, taxonomic and molecular diagnostics, species differentiation, and integrated control strategies such as SIT, as well as the use of surveillance data for risk assessment and decision-making. Participants will also be exposed to institutional frameworks and regional coordination mechanisms, strengthening their capacity to design, implement, and evaluate national and cross-border control programs. In addition, the project will generate and disseminate standardized training materials, protocols, and technical guidelines, which will remain available to participants and institutions beyond the duration of the course, contributing to sustained capacity development. As a result, the project will (i) train a critical mass of professionals with practical and technical expertise in NWS management, (ii) strengthen institutional capacities in participating countries, and (iii) establish a regional network of trained professionals to facilitate continuous knowledge exchange, coordination, and collaborative response to NWS risks.

5.7 **FONTAGRO**, as a regional cooperation mechanism, promotes the implementation of operations through regional R&D&I consortia, with the aim of ensuring that the resulting benefits have a positive impact on all participating countries and generate regional public goods. For this initiative, the consortium will be composed of the following organizations:

As Administrative Unit:

Fundación ArgenINTA, hereinafter ArgenINTA, is an organization created by the National Institute of Agricultural Technology of Argentina (INTA) in 1993 as a nonprofit institution to help achieve the objectives of INTA Argentina and to promote access to funding opportunities for project implementation. ArgenINTA will act as a administratrative unit with the role of managing project funds, carrying out the complete fiduciary, financial, and operational management of the project, and being responsible for the procurement of goods, services, and consulting contracts as outlined in the Procurement Plan for each of the co-implementing organizations with a technical role.

As Technical Co-executing agencies:

i. **National Institute of Agricultural Technology of the Argentine Republic (INTA Argentina).** The National Institute of Agricultural Technology (INTA Argentina) is a decentralized and autonomous agency of the National Government, established under Decree-Law No. 21,680/56, and operating under the authority of the Ministry of Agriculture, Livestock and Fisheries. Its governance structure consists of a National Board of Directors and the Regional Center and Research Center Councils, while its executive and matrix organizational structure comprises the National Directorate, 15 Regional Centers, 6 Research Centers, and a series of National Programs and Networks. These programs and networks are strategic instruments organized either by scientific discipline or by agricultural value chains. The matrix management structure enables the

identification and assessment of sectoral demands, supports the allocation of available resources, and facilitates the planning and development of institutional capacities and future requirements over the medium and long term. INTA Argentina will be responsible for the overall technical implementation of the project, as well as for carrying out the activities assigned to Argentina under the project's results matrix and logical framework. It will also be responsible for preparing and submitting the committed technical deliverables and for providing its institutional counterpart contribution to the project. The funds allocated to this co-executing organization will be administered by Fundación ArgenINTA.

ii. **National Institute for Agricultural Research of Uruguay (INIA Uruguay).** The National Institute for Agricultural Research (INIA Uruguay) is a non-state public institution established under Law No. 16,065, affiliated with the Ministry of Livestock, Agriculture and Fisheries (MGAP), and endowed with technical, administrative, and financial autonomy. Its governance is entrusted to a Board of Directors composed of representatives from both the public and private sectors under a public-private partnership model aimed at generating and transferring knowledge and technologies for Uruguay's agricultural and agro-industrial sectors. INIA carries out its activities through a nationwide research system comprising experimental stations, national research programs, and technological platforms, promoting an interdisciplinary and territorial approach to address sector demands and contribute to the sustainable development of Uruguayan agriculture. INIA Uruguay will serve as a co-executing institution and will be responsible for implementing the technical activities assigned to it under the project's results matrix and logical framework, as well as for preparing and submitting the corresponding technical deliverables and providing its institutional counterpart contribution. In addition, it will coordinate the technical and institutional collaboration activities associated with its participation in the project.

iii. **Colombian Agricultural Research Corporation (AGROSAVIA).** The Colombian Agricultural Research Corporation (AGROSAVIA) is a decentralized public entity with mixed public-private participation, of a scientific and technical nature and operating on a non-profit basis. It was established on January 25, 1993, pursuant to Decree-Laws No. 130 of 1976 and No. 393 of 1991, and operates in coordination with the policies of the Ministry of Agriculture and Rural Development of Colombia. Its governance structure is headed by a National Board of Directors, which serves as the highest strategic decision-making body, while its executive and operational structure comprises the Executive Directorate, regional Research Centers located across the country's different ecoregions, and specialized innovation networks organized by scientific disciplines, agricultural value chains, and strategic crop and livestock programs. This operational infrastructure includes 14 Research Centers, 8 local offices, and 2 experimental farms, strategically distributed throughout Colombia's five natural regions. Its matrix organizational structure enables the identification and assessment of research demands, supports the allocation of research resources, and facilitates the planning and development of technological capacities required over the medium and long term. AGROSAVIA will be responsible for implementing the technical activities assigned to Colombia under the project's results matrix and logical framework, as well as for preparing and submitting the committed technical deliverables and providing its assigned counterpart contribution.

iv. **National Institute of Agricultural Research of Venezuela (INIA Venezuela).** The National Institute of Agricultural Research (INIA Venezuela) is an autonomous public institution with legal personality and its own assets, affiliated with the Ministry of People's Power for Productive Agriculture and Lands (MPPAPT). It is the official national institution responsible for basic and applied agricultural research, scientific and technological innovation, technology development and transfer, capacity building, and rural development in Venezuela. Its mission is to promote technological innovation to enhance productivity within the national agri-food system and contribute to the sustainable and competitive development of the country's agricultural, livestock, forestry, fisheries, and rural sectors. INIA has more than 60 years of experience implementing projects aimed at improving the sustainability and competitiveness of agricultural production systems throughout Venezuela. Its operational network comprises 18 Research Centers and Experimental Stations strategically located across the country's main agricultural regions, bringing together multidisciplinary teams of researchers, technical specialists, field personnel, and administrative staff. The Institute has also made significant contributions to the training of agricultural producers and technical professionals through the dissemination of technologies designed to improve agricultural production processes. INIA has substantial experience collaborating with

FONTAGRO, having participated in several previous regional consortia addressing highly relevant topics, including Sustainable Dairy Intensification, Livestock Production and Climate Change, and the Impact of Technologies for the Propagation of Plantain and Banana.

As Associated Organizations of the project:

v. **Brasil (EMBRAPA)**: The Brazilian Agricultural Research Corporation (Embrapa) is Brazil's leading public agricultural research institution, linked to the Ministry of Agriculture and Livestock. Embrapa conducts research, innovation, and technology development to enhance the productivity, sustainability, and competitiveness of Brazilian agriculture. Its activities encompass crop and livestock production, forestry, natural resource management, biotechnology, and climate-smart agriculture, while also supporting technology transfer and scientific collaboration at both national and international levels.

vi. **Costa Rica (INTA)**: The National Institute for Agricultural Innovation and Technology Transfer (INTA) is Costa Rica's public institution responsible for promoting agricultural research, innovation, and technology transfer to improve the productivity, sustainability, and competitiveness of the agricultural sector. Operating under the Ministry of Agriculture and Livestock (MAG), INTA develops and validates technologies for crop and livestock production, conserves agricultural genetic resources, and supports farmers through research, extension, and capacity-building programs aimed at fostering sustainable rural development.

vii. **EEUU. (University of Florida):** The Department of Entomology and Nematology at the University of Florida is a leading academic and research institution dedicated to the study of insects, nematodes, and other arthropods of agricultural, veterinary, medical, and ecological importance. As part of the University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS), the department conducts research, education, and extension programs focused on pest management, vector biology, biological control, invasive species, and sustainable agricultural systems. It also provides undergraduate and graduate training while collaborating with national and international partners to address emerging challenges in agriculture, public health, and environmental conservation.

viii. **Mexico (INIFAP)**: The National Institute for Forestry, Agricultural and Livestock Research (INIFAP) is Mexico's leading public agricultural research institution, operating under the Secretariat of Agriculture and Rural Development (SADER). INIFAP conducts scientific research and technological innovation to improve the productivity, sustainability, and resilience of the agricultural, livestock, and forestry sectors. Its activities include the development of improved crop varieties and animal production systems, natural resource conservation, climate adaptation, and the transfer of technologies and knowledge to producers and other stakeholders across Mexico.

ix. **Uruguay (Ministry of Livestock, Agriculture and Fisheries)**: The Ministry of Livestock, Agriculture and Fisheries (MGAP) is Uruguay's government authority responsible for formulating and implementing policies for the agricultural, livestock, forestry, and fisheries sectors. MGAP promotes sustainable production, animal and plant health, food safety, natural resource conservation, and rural development. The Ministry also supports agricultural innovation, regulates sanitary and phytosanitary standards, and works to enhance the competitiveness and international market access of Uruguay's agri-food sector.

x. **Directorate of Agricultural Science and Technology, (DICTA) of Honduras**. Established in 1992, it is a public agency that is decentralized technically, financially, and administratively, and reports to the Honduran Ministry of Agriculture and Livestock. DICTA is further subdivided into the area of agricultural and livestock technology development and the area of technology transfer, covering crop and livestock production as well as business management. To this end, it has staff dedicated to research, extension, and advisory services across its 15 offices and 10 experimental stations distributed throughout different regions of the country. This enables it to promote agricultural development in each area by providing support to producers in various crop sectors through technical assistance, research projects, and training.

xi. **Peru's National Institute for Agricultural Innovation (INIA).** It is an agency under the Ministry of Agrarian Development and Irrigation, focused on conducting research, technology transfer, the conservation and use of genetic resources, as well as the production of sedes, seedlings, and breeding stock of high genetic value. It coordinates and regulates research, development, and innovation (R&D&I) aimed at competitiveness, food

security, and adaptation to climate change. It formulates, proposes, and implements the national policy and plan for agricultural innovation.

5.8 The total amount of the operation is US$ 550.000, of which FONTAGRO will finance a total of US$ 250.000 from its own funds. The remaining funds, US$ 300.000, correspond to in-kind counterpart contributions from the participating institutions.

Consolidated Budget by component (in US$)

Recursos financiados por:	FONTAGRO							COUNTERPART					TOTAL
	IICA	Fundacion ArgenINTA	INTA AR	INIA UR	INIA VE	AGROSAVIA	Subtotal	INTA AR	INIA UR	INIA VE	AGROSAVIA	Subtotal	
Component 1			5,000	41,000	10,000	15,000	71,000	50,000	42,982	10,000	60,000	162,982	233,982
Component 2			50,000	-	-	10,000	60,000	20,000	44,444	20,000	40,000	124,444	184,444
Component 3			6,000	59,000	12,000	2,000	79,000		12,574			12,574	91,574
Administrative Fees	9,302	7,708					17,010						17,010
Contingencies		12,500					12,500						12,500
Auditing		10,490					10,490						10,490
Total	9,302	30,698	61,000	100,000	22,000	27,000	250,000	70,000	100,000	30,000	100,000	300,000	550,000

Table of Maximum Allowable Amounts (in US$)

Categoría de Gasto	Hasta:	Máximo Admitido	Máximo de su Proyecto
01. Consultores y Especialistas	60%	150,000.00	47,000
02. Bienes y Servicios	30%	75,000.00	35,000
03. Materiales e Insumos	40%	100,000.00	66,000
04. Viajes y Viáticos	30%	75,000.00	39,000
05. Capacitación	30%	75,000.00	23,000
06. Gestión del Conocimiento y Comunicaciones	30%	75,000.00	-
07. Gastos Administrativos	8,1	20.250,00	17,010
08. Imprevistos	5%	12,500.00	12,500
09. Auditoria	5%	12,500.00	10,490

VI. EXECUTING AGENCY AND IMPLEMENTATION STRUCTURE

6.1 **Executing agency**. The Executing Agency (EA) will be the Inter-American Institute for Cooperation on Agriculture (IICA). IICA is an international organization affiliated with the Organization of American States (OAS). At the request of the FONTAGRO Board of Directors (BoD), IICA serves as the executing agency for all FONTAGRO operations approved after July 4, 2025, in accordance with the provisions of the Minutes of the 22nd Extraordinary FONTAGRO Meeting held on July 2 and 4, 2025 (Item 5, Section i), and the Minutes of the 29th Annual FONTAGRO Meeting held on October 7–9, 2025 (Item III). Both decisions were adopted under a financial management model whereby the Inter-American Development Bank (IDB) transfers the funds to IICA at the request of the Board of Directors. The administrative and financial management of the project will be carried out by the EA in accordance with IICA and IDB policies, the FONTAGRO Operations Manual (OM), and the resolutions of the Board of Directors as recorded in its meeting minutes. As part of this management process, IICA will establish technical co-execution agreements with co-executing organizations, through which the transfer of the corresponding in-kind contributions specified in the project's Procurement Plan, or in any subsequent amendments thereto duly authorized, will be formalized.

6.2 **Financial Management, Monitoring, and Internal Control System**. The Executing Agency (EA) shall maintain internal controls designed to ensure that: (i) Project resources are used exclusively for the agreed purposes, with particular attention to the principles of economy and efficiency; (ii) Project transactions, decisions, and activities are duly authorized and carried out in accordance with the applicable regulations and procedures; and (iii) all transactions are properly documented and recorded to enable the timely preparation of reliable financial statements and progress reports. Financial management shall be governed by the IICA Financial Management Guidelines for Projects Financed by the Inter-American Development Bank (IDB) (OP-273-12), the FONTAGRO Operations Manual (OM), and the decisions adopted by the FONTAGRO Board of Directors through its official meeting minutes. The EA shall be responsible for the supervision and monitoring of the Technical Cooperation (TC) operation throughout its implementation period. Project monitoring and supervision will enable continuous tracking of progress toward the achievement of the outputs established in the results matrix presented in the previous section. Monitoring, supervision, and reporting will be conducted in accordance with the Bank's policies, the FONTAGRO Operations Manual (OM), and other applicable FONTAGRO guidelines.

6.3 **IICA Single Bank Account**. IICA operates an accounting and financial management system based on the SAP platform. Through its Grants Management module, the system provides comprehensive financial management of projects and ensures the segregation of financial information for each grant received from different donors, including the generation of financial reports and the monitoring of available balances. The accounting and financial information for each project is reconciled on a monthly basis, providing full traceability of individual transactions. Accordingly, IICA manages all project funds through a single institutional bank account. This account allows transactions to be allocated by cost center, enabling each individual project to be identified and managed independently. This financial management arrangement has previously been accepted by the Bank for other FONTAGRO Technical Cooperation operations.

6.4 **Roles**. The Executing Agency (EA), represented by IICA, shall be responsible for the administrative, legal, and financial management of the project, as well as for its monitoring and oversight throughout the implementation period. The EA shall administer the funds provided by the IDB on behalf of FONTAGRO and shall transfer the necessary financial or in-kind resources to the co-executing organizations to enable them to carry out the activities included in their respective annual work plans. As an exception and specifically for this project, ArgenINTA, as the administrative unit, will be responsible for the overall fiduciary, financial, and operational management of the project, including the administration of funds from the co-implementers. IICA will receive the FONTAGRO Contribution funds directly from the IDB and will transfer them to ArgenINTA in accordance with the disbursement schedule and method established in this Agreement, so that ArgenINTA may execute them in accordance with the approved Annual Operating Plan (AOP) and Procurement Plan (PP).

6.5 **Recovery of Indirect Costs (RCI).** In this operation, ArgenINTA participates as administrative unit and serves as the project’s fund administrator; therefore, the 8.1% administrative expenses will be allocated as follows:

4.1% to ArgenINTA and 4% to IICA. An exception is made for the funds allocated to the National Institute for Agricultural Research (INIA) of the Bolivarian Republic of Venezuela, which will be administered and executed by the Inter-American Institute for Cooperation on Agriculture (IICA). For this service, IICA will receive an RCI equivalent to 8.1% of the amount of funds allocated to INIA Venezuela and executed by IICA under the Project.

6.6 Technical Co-executing agencies with a technical role will be responsible for implementing the technical activities and delivering the outputs and results committed to in the project. INTA Argentina assumes the role of technical leader and is responsible for technical coordination and implementation in each participating country, as well as for ensuring compliance with the agreed-upon outputs and results. Information regarding each participating institution is provided in Annex I.

6.7 **Procurement**. The EA and/or the administrative unit with the role of managing project funds, shall be responsible for managing the procurement of goods and services required by the co-executing organizations, in strict accordance with the IICA Procurement Policy, Section II of the FONTAGRO Operations Manual (OM), and, where applicable, the IDB Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (GN-2349-15). The selection and contracting of consultants shall be carried out in accordance with the IICA Policy for the Selection and Contracting of Consultants, complemented, where appropriate, by the IDB Policies for the Selection and Contracting of Consultants (GN-2350-15). Whenever IICA, acting as the EA, transfers IDB resources to the co-executing organizations, it shall supervise and ensure that those entities properly apply the procurement policies referred to above, thereby ensuring full compliance with the applicable procurement requirements throughout the entire procurement process.

6.8 **Annual Planning and Disbursements.** In accordance with FONTAGRO regulations, the project's technical implementation period will be 42 months, while the disbursement period will extend over 48 months. The first disbursement will be made once the procedures established in Section II of the FONTAGRO Operations Manual (OM) and the conditions set forth in the agreement to be signed with IICA have been fulfilled. The first year of implementation shall commence upon the signing of the co-execution agreements and shall conclude on December 31 of the same calendar year. During this period, the project team shall request the first disbursement, corresponding to the funds required to implement the activities planned for that year. No later than November 30, the project team shall prepare and submit the Annual Operating Plan (AOP) and the Procurement Plan (PP) for the following year, thereby enabling the request for the second disbursement. The second disbursement shall be made only if the project has justified at least 80% of the funds received under the first disbursement, has submitted the Annual Technical and Administrative Progress Report (ISTA) for the first year, and has delivered the outputs and results committed for that reporting period. Subsequent disbursements shall follow the same procedures established for the second year of implementation.

6.9 **Exchange Rate**. The exchange applicable for the reimbursement of expenses incurred in the local currency of each co-executing agency’s country shall be the exchange rate in effect on the date on which the Executing Agency (EA) or any other individual or legal entity to which the authority to incur expenses has been delegated makes the respective payments to the contractor, supplier, or beneficiary.

6.10 **Project Technical Reports**. INTA Argentina, is responsible for the technical implementation of the project, including the activities of the co-executing agencies. During the project's disbursement period, IICA, acting as the Executing Agency (EA), shall submit to the Bank, through the FONTAGRO Technical and Administrative Secretariat (TAS), all committed project outputs as well as any additional reports requested by the Bank. All committed outputs shall be accompanied by an official endorsement letter issued by the institution submitting the deliverable. This endorsement letter shall certify that the corresponding product has undergone the institution's internal peer-review process, thereby confirming that it has been prepared in accordance with appropriate standards of transparency and scientific and technical rigor. Throughout the project's disbursement period, annual technical progress reports, as of December 31 of each year, shall be submitted in the format established by FONTAGRO. These reports are referred to as Annual Technical Monitoring Reports (ISTAs). Upon completion of the project, INTA Argentina shall submit to the Bank, through the TAS, all outputs committed in the results matrix for each initiative described in the Annexes, together with a Final Technical Report summarizing the project's principal achievements and outcomes, and a database containing the associated technical performance indicators. The lead researcher representing the consortium,

or a designated representative, shall participate annually in the FONTAGRO Technical Monitoring Workshops, where the annual technical progress of the project's work plan will be presented.

6.11 Reasonable Assurance Report on Project Expenditure Execution. From the outset of the project, ARGENINTA shall contract an Independent Audit Firm (IAF) to perform a Reasonable Assurance Engagement on Project Expenditure Execution, in accordance with the specific Terms of Reference provided by the FONTAGRO Technical and Administrative Secretariat (TAS) and using one of the audit firms authorized by the Bank for the country of ArgenINTA. The Reasonable Assurance Engagement shall cover the total value of the operation, including both the FONTAGRO contribution and the local counterpart funding. During the implementation period, annual Reasonable Assurance Reports on Project Expenditures, as of December 31 of each year and on a cumulative basis, shall be submitted using the reporting formats established by FONTAGRO. Upon completion of the project, ArgenINTA, acting as administrative unit with the role of managing project funds, shall submit to the Bank, through the TAS, a Final Reasonable Assurance Report on Project Expenditure Execution, no later than 90 days after the closing date of the project's disbursement period.

VII. REQUIRED ANNEXES

Annex I. Deliverables Matrix
Annex II. Indicators Matrix
Annex III. Procurement Plan (PP)
Annex IV. Letters of Commitment from Participating Organizations

Annex I. Deliverables Matrix

Components							Financial Plan				
Product	**P**	**Y1**	**Y2**	**Y3**	**Y 4**	**Total**	**Y1**	**Y2**	**Y3**	**Y 4**	**Total**
COMPONENT 1.											
Product 1	3	1	1	1	1	4	60,000				60,000
Product 2		1	1	1	1	4			6,000		6,000
Product 3		1	1	1	1	4	5,000				5,000
COMPONENT 2.											-
Product 4			1			1	5,000	15,000			20,000
Product 5			1			1	20,000				20,000
Product 6			1			1		20,000			20,000
COMPONENT 3.											-
Product 7			1	1	1	3			35,000		35,000
Product 8			1	1	1	3			16,000		16,000
Product 9			1	1	1	3			28,000		28,000
Administrative Fees IICA							4,010	1,646	3,646		9,302
Administrative Fees Fundacion ArgenINTA							3,280	1,189	3,239		7,708
Contingencies							12,500				12,500
Auditing							2,623	2,623	2,623	2,623	10,490
Costo Total							**112,413**	**40,458**	**94,508**	**2,623**	**250,000**

Annex II. Indicators Matrix

Producto	Categoría de indicador	Indicador	Meta / valor comprometido	Unidad
Producto 1	Indicador propio del proyecto	Número de cursos regionales de capacitación en vigilancia y manejo integrado del gusano barrenador, y de personal técnico-científico capacitado	2 cursos regionales bienales; ~40 profesionales capacitados	# cursos / # personas
Producto 2	Indicador propio del proyecto	Número de guías técnicas y protocolos operativos estandarizados elaborados y difundidos	3 guías/protocolos técnicos	# guías técnicas
Producto 3	Indicador propio del proyecto	Número de protocolos validados para prevención y control de C. hominivorax y personal capacitado en la red regional establecida	1 red regional establecida; 2 protocolos validados en campo	# protocolos
Producto 4	Indicador propio del proyecto	Número de publicaciones científicas derivadas de la plataforma experimental in vitro	1 publicación científica	# publicaciones
Producto 5	Indicador propio del proyecto	Número de publicaciones científicas sobre protocolos preventivos/terapéuticos validados en condiciones comerciales	1 publicación científica	# publicaciones
Producto 6	Indicador propio del proyecto	Número de publicaciones científicas comparando la respuesta fenotípica de C. hominivorax y C. macellaria a compuestos químicos	1 publicación científica	# publicaciones
Producto 7	Indicador propio del proyecto	Número de tecnologías (sistemas de trampeo) avanzadas y validadas para detección temprana	1-2 sistemas de trampeo estandarizados	# tecnologías validadas
Producto 8	Indicador propio del proyecto	Número de tecnologías de trampeo validadas en campo en áreas endémicas y de riesgo	1-2 sistemas de trampeo validados en campo	# tecnologías validadas
Producto 9	Indicador propio del proyecto	Número de tecnologías validadas y publicaciones científicas sobre desempeño de los sistemas de trampeo	1 publicación científica; recomendaciones técnicas finales	# publicaciones/tecnologías
Producto 1	Indicador corporativo de resultado	Número de personal científico-técnico capacitado		
Producto 1	Indicador corporativo de impacto	Impacto social favorable		
Producto 2	Ejemplo de resultado (línea de acción)	Protocolos estandarizados de bioseguridad y vigilancia por especie/territorio.		
Producto 2	Indicador corporativo de impacto	Impacto social favorable		
Producto 3	Ejemplo de resultado (línea de acción)	Protocolos estandarizados de bioseguridad y vigilancia por especie/territorio.		
Producto 3	Indicador corporativo de resultado	Número de personal científico-técnico capacitado		
Producto 3	Indicador corporativo de impacto	Impacto social favorable		
Producto 3	Indicador corporativo de impacto	Incremento de superficie o número de productores que adoptan la tecnología		
Producto 4	Indicador corporativo de resultado	Número de publicaciones científicas y/o registros de propiedad		
Producto 4	Indicador corporativo de impacto	Incremento en productividad		
Producto 5	Indicador corporativo de resultado	Número de publicaciones científicas y/o registros de propiedad		
Producto 5	Indicador corporativo de impacto	Incremento en productividad		
Producto 6	Indicador corporativo de resultado	Número de publicaciones científicas y/o registros de propiedad		
Producto 6	Indicador corporativo de impacto	Incremento en productividad		
Producto 7	Indicador corporativo de resultado	Número de tecnologías avanzadas y validadas, salto de TRL		
Producto 7	Indicador corporativo de impacto	Incremento en productividad		
Producto 8	Indicador corporativo de resultado	Número de tecnologías avanzadas y validadas, salto de TRL		
Producto 8	Indicador corporativo de impacto	Incremento en productividad		
Producto 9	Indicador corporativo de resultado	Número de tecnologías avanzadas y validadas, salto de TRL		
Producto 9	Indicador corporativo de resultado	Número de publicaciones científicas y/o registros de propiedad		
Producto 9	Indicador corporativo de impacto	Incremento en productividad		

Annex III. Procurement Plan (PP)

PLAN DE ADQUISICIONES - TOTAL							
Número del Proyecto: 5690-00 Integrated management of New World Screwworm (Cochliomyia hominivorax) in Latin América							
Período del Plan: 2027-2030							
Componente	**Actividad**	**Producto**	**Descripción del gasto**	**Organización, país**	**Costo (US$)**	**Método de Adquisición**	**Año de ejecución**
			Consultores:				
I	**1,1**	**1**	**Consultor para la actividad 1.1**	**INIA Uruguay**	**15.000**	**CCIN**	**Año 1 y 3**
III	**3,1**	**7**	**Consultor para la actividad 3.1**	**INIA Uruguay**	**17.000**	**CCIN**	**Año 2 y 3**
III	**3,3**	**9**	**Consultor para la actividad 3.3**	**INIA Uruguay**	**9.000**	**CCIN**	**Año 4**
III	**3,3**	**9**	Consultor para la Actividad 3.3	INTA-Argentina	2.000	**CCIN**	Año 3
III	**3.3**	**9**	Consultor para la Actividad 3.3	INIA Venezuela	2.000	**CCIN**	Año 3
III	**3.3**	**9**	Consultor para la Actividad 3.3	Agrosavia-Colombia	2.000	**CCIN**	Año 3
			Subtotal Consultores		**47.000**		
			Bienes:				
III	**3,2**	**8**	**Servicios externos y asesorías**	**INIA Uruguay**	**2.000**	**CP**	**Año 2 y 3**
III	**3,3**	**9**	**Servicio tercerizado para análisis de datos**	**INIA Uruguay**	**3.000**	**CP**	**Año 4**
			Subtotal Bienes		**5.000**		
			Servicios:				
I	**1,1**	**1**	**Gastos asociados a ejecución del curso**	**INIA Uruguay**	**5.000**	**CP**	**Año 1 y 3**
II	**2.1**	**4**	Dietas y pupas para prueba in vitro	INTA-Argentina	5.000	**CP**	Año 1
II	2.2	5	Dietas y pupas para prueba in vitro	INTA-Argentina	10.000	**CP**	Año 1
II	2.3	6	Dietas y pupas para prueba in vitro	INTA-Argentina	10.000	**CP**	Año 2
			Subtotal Servicios		**30.000**		
			Materiales e Insumos				
I	**1,1**	**1**	**Trampas, atrayentes e insumos para material del curso**	**INIA Uruguay**	10.000	**CP**	**Año 1 y 3**
I	**1,2**	**2**	**Elaboración de material técnico**	**INIA Uruguay**	6.000	**CP**	**Año 4**
III	**3,1**	**7**	**Trampas, atrayentes, insumos para cría de moscas, consumibles de laboratorio**	**INIA Uruguay**	**10.000**	**CP**	**Año 2 y 3**
III	**3.3**	**9**	**Materiales para trampas de captura de moscas**	**INIA Venezuela**	**5.000**	**CP**	**Año 3**
II	**2.1**	**4**	Materiales para captura, establecimiento y prueba in vitro	Agrosavia-Colombia	5.000	**CP**	Año 2,3
III	**3,2**	**8**	**Trampas, atrayentes, insumos para cría de moscas, consumibles de laboratorio**	**INIA Uruguay**	**5.000**	**CP**	**Año 2 y 3**
II	**2.1**	**4**	Reactivos consumibles de laboratorio	INTA-Argentina	10.000	**CP**	Año 1
II	2.2	5	Reactivos consumibles de laboratorio. Alimento para bovinos para ensayos. Drogas	INTA-Argentina	10.000	**CP**	Año 2
II	2.3	6	Materiales para validación de aceites esenciales	Agrosavia-Colombia	5.000	**CP**	Año 3,4
			Subtotal Materiales e Insumos		**66.000**		
			Viajes y viáticos				
I	**1,1**	**1**	**Movilidad y viáticos para muestreo y trampeo**	**INIA Uruguay**	**5.000**	**SN**	**Año 1 y 3**
III	**3,1**	**7**	**Movilidad y viáticos para muestreo y trampeo**	**INIA Uruguay**	**5.000**	**SN**	**Año 2 y 3**
III	**3,2**	**8**	**Movilidad y viáticos para muestreo y trampeo**	**INIA Uruguay**	**5.000**	**SN**	**Año 2 y 3**
II	2.3	6	Movilidad y viticos para muestreos y evaluaciones de campo	INTA-Argentina	5.000	**SN**	Año 2
III	3,3	9	Viáticos para muestreos de campo	INIA Venezuela	5.000	**SN**	Año 2
I	1.1	1	Viáticos para asistencia a los cursos	INTA-Argentina	5.000	**SN**	Año 1

III	3.2	8	Movilidad y viáticos para trampeos	INTA-Argentina	4.000	**SN**	Año 3
1	1.3	3	Movilidad para verificación de riesgo y escuelas de campo	Agrosavia-Colombia	5.000	**SN**	Año 2
			Subtotal Viajes y viáticos		**39.000**		
			Capacitación				
I	1.1	1	Capacitación en cursos y talleres regionales	Agrosavia-Colombia	10.000	**CP**	Año 1
I	1.1	1	Capacitación en cursos y talleres regionales	INIA Venezuela	10.000	**CP**	Año 1
III	**3,1**	**7**	**Capacitación de personal**	**INIA Uruguay**	**3.000**	**CP**	**Año 2**
			Subtotal Capacitación		**23.000**		
			Gestión del Conocimiento y Comunicación				
			Subtotal Servicios		**0**		
			Gastos Administrativos IICA		9.302		
			Gastos Administrativos ArgenINTA		7.708		
			Imprevistos		12.500		
			Auditoria Externa		10.490	SBMC	
Total					**250.000**	**Preparado por:**	

Annex IV. Letters of Commitment from Participating Organizations

República Argentina - Poder Ejecutivo Nacional
Año de la Grandeza Argentina

Nota

Número: NO-2026-99705832-APN-CD#INTA

CIUDAD DE BUENOS AIRES
Martes 13 de Octubre de 2026

Referencia: Carta de Aporte de Contrapartida. Proyecto: "Integrated management of New World Screwworm (Cochliomyia hominivorax) in Latin America"

A: Dra. Eugenia Saini (Secretaria Ejecutiva, FONTAGRO),

Con Copia A: Santiago Nava (EEARA#INTA),

De mi mayor consideración:

Por medio de la presente, confirmamos la participación del Instituto Nacional de Tecnología Agropecuaria (INTA) de Argentina en calidad de organismo coejecutor del proyecto "Integrated management of New World Screwworm (Cochliomyia hominivorax) in Latin America", cuyo tema de investigación se encuentra plenamente alineado con el plan de trabajo institucional del INTA.

Asimismo, hacemos constar que el Ing. Nicolás Bronzovich, presidente del INTA, no presenta objeciones a la participación de esta institución en la plataforma. El investigador del INTA vinculado directamente al desarrollo y ejecución científica de esta iniciativa será el Dr. Santiago Nava. La institución se compromete a aportar una contrapartida en especie por un monto total de USD 70.000 dólares estadounidenses, desglosada según el siguiente detalle:

Categorías de Gasto	
01. Consultores	USD 70.000
02. Bienes y servicios	
03. Materiales e insumos	
04. Viajes y viáticos	
05. Capacitación	
06. Gestión del conocimiento y Comunicaciones	
Total	**USD 70.000**

Dado el Régimen de Transparencia en la función pública, se adjuntan los accesos al Sistema de información de la República Argentina donde podrán visualizar los documentos que legalizan y permiten presentar la actual Carta de Aporte de Contrapartida, a saber:

a) Decreto de creación del INTA (https://www.argentina.gob.ar/normativa/nacional/decreto_ley-21680-1956-77763/texto),

b) Presupuesto INTA (https://www.argentina.gob.ar/inta/transparencia/presupuesto),

c) Decreto de designación de la máxima autoridad del INTA (https://www.boletinoficial.gob.ar/detalleAviso/primera/331789/20250923).

Sin otro particular saluda atte.

Digitally signed by GESTION DOCUMENTAL ELECTRONICA - GDE
Date: 2025.10.13 18:00:29 -03:00

Nicolas Bronzovich
Presidente
Consejo Directivo
Instituto Nacional de Tecnología Agropecuaria

Montevideo, 9 de septiembre de 2026
DN-0159-2026

Asunto: Carta de Aporte de Contrapartida. Proyecto: Integrated management of New World Screwworm (Coclhiomyia hominivorax) in Latin America.

Sr./Sra
Eugenia Saini
Secretario Ejecutivo, FONTAGRO

Estimada Dra. Eugenia Saini,

Por medio de la presente, confirmamos la participación de Instituto Nacional de Investigación Agropecuaria (INIA) en calidad de organismo co-ejecutor del proyecto ***"Integrated management of New World Screwworm (Coclhiomyia hominivorax) in Latin America"***, cuyo tema de investigación se encuentra plenamente alineado con el plan de trabajo institucional de INIA.

Asimismo, hacemos constar que Gerardo Marchesini, en calidad de Director Nacional no presenta objeciones a la participación de esta institución en la plataforma. La institución se compromete a aportar una contrapartida en especie por un monto total de **USD 100.000** (dólares americanos), referidos a horas técnicas de consultores, materiales e insumos, desglosado de acuerdo con el siguiente detalle:

Categorías de Gasto	
01. Consultores	USD 100.000
02. Bienes y servicios	
03. Materiales e insumos	
04. Viajes y viáticos	
05. Capacitación	
06. Gestión del conocimiento y Comunicaciones	
Total	**USD 100.000**

Gerardo Marchesini
Director Nacional
Instituto Nacional de Investigación Agropecuaria

INIA Dirección Nacional
Tel: (+598) 26056021
Av. Italia 6201 Ed. Los Guayabos
Parque Innovación Latu
Montevideo - Uruguay

@INIA_UY
@INIAUruguayVideos
www.inia.uy

AGROSAVIA
Corporación colombiana de investigación agropecuaria

03/09/26

Subject: Counterpart Contribution Commitment Letter. Project *"Integrated Management of New World Screwworm (Cochliomyia hominivorax) in Latin America"*

Dr. Eugenia Saini
Executive Secretary
FONTAGRO

Dear Dr. Saini,

Through this letter, we hereby confirm the participation of the La Corporación Colombiana de Investigación Agropecuaria – AGROSAVIA as a co-executing institution in the project **"Integrated Management of New World Screwworm (*Cochliomyia hominivorax*) in Latin America."** The research topic is fully aligned with AGROSAVIA's institutional work plan and with Colombia's national priorities. We also confirm our institution's participation in the consortium established with the other co-executing and associated institutions.

AGROSAVIA commits to providing an in-kind counterpart contribution of **ONE HUNDRED THOUSAND UNITED STATES DOLLARS (USD 100,000)** through personnel assigned under the consultant category.

Categorías de Gasto	
01. Consultores	**100.000**
02. Bienes y servicios	
03. Materiales e insumos	
04. Viajes y viáticos	
05. Capacitación	
06. Gestión del conocimiento y Comunicaciones	
Total	**100.000**

Sincerely,

Miguel Serrano López
Executive director
La Corporación Colombiana de Investigación Agropecuaria – AGROSAVIA

Ministerio del Poder Popular para la
AGRICULTURA

VENEZUELA
PRESIDENCIA

INIA Instituto Nacional de Investigaciones Agrícolas

OFICIO N° 00366/2026

Maracay, 02 de septiembre del 2026

Asunto: Carta de Aporte de Contrapartida. Proyecto [Integrated management of New World Screwworm (*Coclhiomyia hominivorax*) in Latin America]

Sra.
Eugenia Saini
Secretaria Ejecutiva, FONTAGRO

Estimada Dra. Eugenia Saini,

Por medio de la presente, confirmo la participación del **Instituto Nacional de Investigaciones Agrícolas (INIA) de Venezuela** en calidad de **organismo coejecutor** del proyecto **Integrated management of New World Screwworm (*Coclhiomyia hominivorax*) in Latin America**, cuyo tema de investigación se encuentra plenamente alineado con el plan de trabajo institucional del **INIA**. Asimismo, hago constar que yo, **Margaret Gutiérrez Mulas, Presidenta del INIA Venezuela,** no presento objeciones a la participación de esta institución en la plataforma. Esta Institución se compromete a aportar una contrapartida en **especie** por un monto total de **Treinta mil dólares estadounidenses [$30.000 USD]**, desglosada según el siguiente detalle:

Categorías de Gasto	
01. Consultores	**$30.000 USD**
02. Bienes y servicios	
03. Materiales e insumos	
04. Viajes y viáticos	
05. Capacitación	
06. Gestión del conocimiento y Comunicaciones	
Total	**$30.000 USD**

Sin otro particular al cual hacer referencia,

Atentamente,

Margaret Gutiérrez
Presidenta del INIA
Según Decreto Presidencial N° 5.099 de fecha 05/03/2025
Según Gaceta Oficial N° 43.080 de fecha 05/03/2025

REPÚBLICA BOLIVARIANA DE VENEZUELA INSTITUTO NACIONAL DE INVESTIGACIONES AGRÍCOLAS INIA PRESIDENCIA

Embrapa Gado de Corte

Carta nº 6/2026-CNPGC/CHGE

Campo Grande, 21 de setembro de 2026.

Ms. Eugenia Saini

Executive Secretary, FONTAGRO

Subject: Request to Join as an Associated Organization. Project **Integrated management of New World Screwworm (*Cochliomyia hominivorax*) in Latin America**

Dear Dr. Eugenia Saini

We hereby confirm the interest of **Embrapa Beef Cattle** in participating as an **associated organization** in the project **Integrated management of New World Screwworm (*Cochliomyia hominivorax*) in Latin America**, whose research topic is fully aligned with the institutional work plan of **Embrapa Beef Cattle**. We also confirm that Embrapa's President, Dra. Silvia Massruhá has no objection to this institution's participation in the project.

The institution declares that it is participating in the project **solely as an associated organization**, without committing financial contributions — monetary or in-kind — and **without requesting funding from FONTAGRO** to carry out its activities.

Sincerely,

Mariana de A. Pereira

Head of Embrapa Beef Cattle

Documento assinado eletronicamente por **Mariana de Aragão Pereira**, **Chefe-Geral**, em 21/09/2026, às 16:49, conforme art. 6º, parágrafo 1º do Decreto 8.539, de 8 de outubro de 2015.

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Referência: Processo nº 21177.001523/2026-79 SEI nº 14140883

INSTITUTO
NACIONAL DE INNOVACIÓN
Y TRANSFERENCIA EN
TECNOLOGÍA AGROPECUARIA
GOBIERNO DE COSTA RICA

DIRECCIÓN EJECUTIVA

14 de setiembre de 2026
CARTA-INTA-DE-446-2026

Señora
Eugenia Saini
Secretaría Técnico-Administrativa
FONTAGRO

Asunto: *Solicitud de Incorporación como Organización Asociada. Proyecto PC NWS, "Manejo integrado del gusano barrenador del ganado (Cochliomyia hominivorax) en América Latina"*

Estimada Dra. Saini:

Por medio de la presente, confirmamos el interés de **Instituto Nacional de Innovación y Transferencia en Tecnología Agropecuaria INTA Costa Rica** en participar en calidad de organización asociada del proyecto PC NWS, **"Manejo integrado del gusano barrenador del ganado (*Cochliomyia hominivorax*) en América Latina"**, cuyo tema de investigación se encuentra plenamente alineado con el plan de trabajo institucional de INTA Asimismo, hacemos constar que Liliana Chaves Fallas no presenta objeciones a la participación de esta institución en el proyecto.

La institución declara su participación en el proyecto **exclusivamente en calidad de organización asociada**, sin comprometer aportes financieros —monetarios ni en especie— y **sin solicitar financiamiento de FONTAGRO** para el desarrollo de sus actividades.

Sin más por el momento, se despide,

Cordialmente,

MSc. Liliana Chaves Fallas
Directora Ejecutiva
Instituto Nacional de Innovación y Transferencia en Tecnología Agropecuaria

ALLAN ALFREDO VILLEGAS LOAIZA (FIRMA)
Firmado digitalmente por ALLAN ALFREDO VILLEGAS LOAIZA (FIRMA)
Fecha: 2026.09.14 17:14:39 -06'00'

Allan Villegas Loaiza
Jefatura Unidad Pecuaria del Trópico Húmedo CIA Diamantes
Instituto Nacional de Innovación y Transferencia en Tecnología Agropecuaria

C: Archivo.

UF | UNIVERSITY of FLORIDA

College of Agricultural and Life Sciences
Entomology and Nematology Department

Steinmetz Hall, Bldg. 970
1881 Natural Area Drive
P.O. Box 110620
Gainesville, FL 32611-0620

June 12, 2026

Subject: Counterpart Participation Letter. Integrated management of New World Screwworm (*Coclhiomyia hominivorax)* in Latin America

Dr. Eugenia Saini

Executive Secretary, FONTAGRO

Dear Dr. Saini,

By means of this letter, we confirm the participation of **University of Florida Institute for Food and Agricultural Sciences** as **an associated organization** in the project Integrated management of New World Screwworm (*Coclhiomyia hominivorax*) in Latin America, whose research topic is fully aligned with the institutional work plan of **UF/IFAS.** We also state that **Dr. J. Scott Angle, Senior Vice President for Agriculture and Natural Resources,** has no objections to this institution's participation in the platform.

Our faculty have strong expertise in a variety of areas related to New World Screwworm, including pesticide development, sterile insect technique, risk and distribution modelling, and online education. We are pleased to join with you to assist in combating this threat.

Sincerely,

Dr. Andrew Short
Chair, Entomology and Nematology Department
Institute for Food and Agricultural Sciences
University of Florida

The Foundation for The Gator Nation
An Equal Opportunity Institution

Agricultura
Secretaría de Agricultura y Desarrollo Rural

inifap



Dirección General

N° de Oficio JAG.100.- 000710 -2026

Ciudad de México a 22 de septiembre de 2026

Asunto: Solicitud de Incorporación como Organización Asociada.

M SRA. EUGENIA SAINI
SECRETARIA EJECUTIVA DE FONTAGRO
PRESENTE

Por medio de la presente, confirmamos el interés de Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP) en participar en calidad de organización asociada del proyecto **"Manejo integrado del gusano barrenador del ganado (*Cochliomyia hominivorax*) en América Latina"**, cuyo tema de investigación se encuentra plenamente alineado con el plan de trabajo institucional del INIFAP. Asimismo, hago constar que no existe objeción alguna para la participación de este Instituto en el proyecto.

El INIFAP declara su participación en el proyecto exclusivamente en calidad de organización asociada, sin comprometer aportes financieros —monetarios ni en especie— y sin solicitar financiamiento de FONTAGRO para el desarrollo de sus actividades.

Sin otro particular por el momento, agradezco de antemano la atención brindada a la presente y quedo atento a sus comentarios.

Atentamente
El Director General Interino del INIFAP

Dr. Alejandro Espinosa Calderón

C. c. e. p. ING. COLUMBA JAZMÍN LÓPEZ GUTIÉRREZ. - SECRETARIA DE AGRICULTURA Y DESARROLLO RURAL. Presente
DR. ANTONIO TURRENT FERNÁNDEZ. - TITULAR DE LA UNIDAD DE GESTIÓN ESTRATÉGICA. Presente
DRA. CONSUELO LÓPEZ LÓPEZ. -ENCARGADA DEL DESPACHO DE LOS ASUNTOS CORRESPONDIENTES A LA COORDINACIÓN DE INVESTIGACIÓN, INNOVACIÓN Y VINCULACIÓN. Presente
DR. CRUZ ALFREDO TAPIA NARANJO. - ENCARGADO DEL DESPACHO DE LOS ASUNTOS CORRESPONDIENTES A LA COORDINACIÓN DE PLANEACIÓN Y DESARROLLO. Presente
DR. OMAR GUTIÉRREZ ALONSO. - DIRECTOR DE INVESTIGACIÓN Y VINCULACIÓN. Presente

AEC/CLL/OGA/DGPA



2026 año de Margarita

AENOR GESTIÓN DE LA CALIDAD IQNET

Ministerio de Ganadería, Agricultura y Pesca | Dirección General de Servicios Ganaderos

Montevideo, 03 de noviembre de 2026

Dra. Eugenia Saini
Secretaria Ejecutiva, FONTAGRO
Presente

Asunto: *Solicitud de Incorporación como Organización Asociada. Proyecto "Manejo integrado del gusano barrenador del ganado (Cochliomyia hominivorax) en América Latina".*

Estimada Dra. Saini:

Por medio de la presente, confirmamos el interés de la Dirección General de Servicios Ganaderos del Ministerio de Ganadería, Agricultura y Pesca (MGAP) de Uruguay en participar en calidad de organización asociada del proyecto "Manejo integrado del gusano barrenador del ganado (Cochliomyia hominivorax) en América Latina" (TC No. 5690-00), cuyo tema de investigación se encuentra plenamente alineado con el plan de trabajo institucional del MGAP. Asimismo, hacemos constar que el Dr. Marcelo Rodríguez, Director General de Servicios Ganaderos, no presenta objeciones a la participación de esta institución en el proyecto.

La institución declara su participación en el proyecto exclusivamente en calidad de organización asociada, sin comprometer aportes financieros —monetarios ni en especie— y sin solicitar financiamiento de FONTAGRO para el desarrollo de sus actividades.

Atentamente,

Dr. MARCELO RODRÍGUEZ
DIRECTOR GENERAL DE
SERVICIOS GANADEROS

www.gub.uy/mgap - dgsg@mgap.gub.uy
Tel. (+598) 22204000
Ruta Nacional Nº8, Brig. Juan Antonio Lavalleja – km 17.

GOBIERNO DE LA REPÚBLICA DE HONDURAS

DIRECCIÓN DE CIENCIA Y TECNOLOGÍA AGROPECUARIA (SAG-DICTA)

Nota DE –259-2026

Tegucigalpa, Honduras, C.A. 20 de agosto, 2026

Sra.

Eugenia Saini

Secretaria Ejecutiva, FONTAGRO

Asunto: Solicitud de Incorporación como Organización Asociada. Proyecto Integrated management of New World Screwworm (Cochliomyia hominivorax) in Latin America,

Estimada Dra Eugenia Saini

Por medio de la presente, confirmamos el interés de la **Dirección de Ciencia y Tecnología Agropecuaria (DICTA), Honduras,** en participar en calidad de **organización asociada** del proyecto **Integrated management of New World Screwworm (Cochliomyia hominivorax) in Latin America,** cuyo tema de investigación se encuentra plenamente alineado con el plan de trabajo institucional de la **Dirección de Ciencia y Tecnología Agropecuaria (DICTA), Honduras.** Asimismo, hacemos constar que **el Ing. Jose Virgilio García Aldana, Director Ejecutivo de la Dirección de Ciencia y Tecnología Agropecuaria (DICTA),** no presenta objeciones a la participación de esta institución en el proyecto.

La institución declara su participación en el proyecto **exclusivamente en calidad de organización asociada**, sin comprometer aportes financieros, monetarios, ni en especie y **sin solicitar financiamiento de FONTAGRO** para el desarrollo de sus actividades.

La institución propone como punto Focal del proyecto al Ing. Emanuel Vicente Hernández Ventura y al Dr. Luis Fonseca, para que acompañe las actividades del mismo.

Atentamente,

Ing. José Virgilio García
Director Ejecutivo

Col. Loma Linda Norte, Ave. la FAO, Tegucigalpa, M.D.C., Honduras C.A.
Teléfonos: Dirección: (504) 2232-4096, Sub Dirección: (504) 2239-7723.
Central Telefónica: (504) 2231-6111, (504) 2235-6025, RRHH: (504) 2231-1059.
www.dicta.gob.hn

"Decenio de la Igualdad de oportunidades para mujeres y hombres"
"Año de la Esperanza y el Fortalecimiento de la Democracia".

La Molina, 22 de setiembre 2026

CARTA N° 057 -2026-MIDAGRI-INIA/OPP

Señora Dra.
Eugenia Saini
Secretario Ejecutivo, FONTAGRO
Presente.-

Asunto: Solicitud de Incorporación como Organización Asociada. Proyecto Integrated management of New World Screwworm (Cochliomyia hominivorax) in Latin America.

De mi consideración

Por medio de la presente, confirmamos la participación del Instituto Nacional de Innovación Agraria (INIA) en calidad de organización asociada del proyecto *"Integrated management of New World Screwworm (Cochliomyia hominivorax) in Latin America"*, cuyo tema de investigación se encuentra plenamente alineado con el plan de trabajo institucional del INIA.

Asimismo, en mi calidad de Director General de la Oficina de Planeamiento y Presupuesto del Instituto Nacional de Innovación Agraria – INIA, manifiesto la conformidad con la participación de nuestra institución en el referido proyecto.

En ese sentido, el Instituto Nacional de Innovación Agraria – INIA declara su participación en el proyecto exclusivamente en calidad de organización asociada, sin comprometer aportes financieros —monetarios ni en especie— y sin solicitar financiamiento de FONTAGRO para el desarrollo de sus actividades.

Cordialmente,

INIA Instituto Nacional de Innovación Agraria

Firmado digitalmente por:
CAYO SARAVIA Johnny Cesar FAU 20131365994 soft
Fecha: 22/09/2026 14:57:33

CPC. JOHNNY CESAR CAYO SARAVIA
Director General de la Oficina de Planeamiento y Presupuesto
Instituto Nacional de Innovación Agraria

Av. La Molina 1981, La Molina
Central Telefónica: 240-2400 Anexo 161
www.gob.pe/inia
www.gob.pe/midagri

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