Biological Control Program

Last Modified:

Biological control (biocontrol) involves the reduction of pest populations through the use of natural enemies such as parasitoids, predators, pathogens, antagonists, or competitors to suppress pest populations.

Biological control is a practical option for suppressing pest populations because:

- It is easy and safe to use.
- It is a very cost effective and environmentally sound method of pest control, especially compared to the use of broad-spectrum pesticides.
- It reduces the use of conventional pesticides.
- It can be implemented as part of an Integrated Pest Management (IPM) program.
- Once established, populations are self-sustaining.
- It is target specific.

APHIS' Biocontrol Program

Goal

The goal of biological control activities within APHIS Plant Protection and Quarantine (PPQ) is to safeguard America's agricultural production and natural areas from

significant economic losses and negative impacts caused by insects, other arthropods, nematodes, weeds, and diseases of regulatory significance to the federal government, state departments of agriculture, tribal governments, and cooperators within the continental United States and on American territories through the use of biological control agents.

Mission

The mission of the Biological Control Program within PPQ is to work with cooperators to import, screen, develop, release, implement, monitor, and transfer biological control technologies to prevent the establishment, slow the spread, and manage pests of significant economic, environmental or regulatory importance, including the development and implementation of biological control technologies offshore against pests that could potentially be introduced into the continental United States and cause damage. This is fulfilled by funding in-house activities of PPQ scientists and external projects through Cooperative Agreements.

Program Management and Coordination

Responsibility for development, implementation and coordination of biological control program is shared by the three core functional areas of APHIS PPQ: 1) Policy and Management, 2) Field Operations, and 3) Science and Technology. A representative from each core area forms a cross functional Working Group for APHIS to assess program needs, set priorities and review progress of PPQ biological control activities. Current representatives are:

- Ron Weeks, Emergency and Domestic Programs
- Keith Colpetzer, Field Operations
- Ignacio Baez, Science and Technology
- Kirsten Dyer, Pest Exclusion and Import Programs

There are many types of biological control activities supported by PPQ either at APHIS Center Plant Health Science and Technology laboratories, or through cooperative agreements with Universities and other State and federal agencies. These APHIS PPQ funded activities include investigating and evaluating potential new agents against plant pests or noxious weeds, developing techniques to enable successful establishment, implementing the release and distribution of these agents, and conducting post release monitoring and evaluation. The cross functional working

group works to increase coordination, cooperation, and facilitation of these activities.

- Biological Control Strategic Plan (403.38 KB)
- Biological Control Program Annual Report Fiscal Year 2024 (2.02 MB)
- Biological Control Program Annual Report Fiscal Year 2023 (596.91 KB)
- Regulated Domestic Pest Program Evaluation Committee Recommendations for the Biological Control Program (136.16 KB)
- Noxious Weeds Program
- Technical Advisory Group for Biological Control Agents of Weeds

PPQ is committed to safe and effective biological control including monitoring and evaluation as integral parts of all implementation projects. This approach is crucial for the success and future of biological control as a management strategy and is consistent with PPQ's safeguarding mission.

Related Resources

Stakeholder Consultation for Proposed Environmental Release of Novel Biological Control Agents

Review and comment on project summaries for proposed releases of novel biological control agents to support APHIS' evaluation and permitting process.

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