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# Microbial Organisms Used to Control Invertebrate Plant Pests and Plant Pathogens

Last Modified:

Under the authority of the [Plant Protection Act of 2000](#) (129.47 KB), APHIS Plant Protection and Quarantine (PPQ) 526 permits are required for the importation, interstate movement, and environmental release of biological control organisms and biopesticides for plant pests, diseases, and weeds.

Often the organisms are not plant pathogens, but their potential effects on beneficial organisms could indirectly affect plant health. This policy refers to biopesticide microbial organisms that control invertebrate plant pests and microbial plant diseases (pathogens).

APHIS-Biotechnology Regulatory Service (BRS) regulates and issues permits for genetically engineered microorganisms. For more information or to contact BRS for guidance go to the [BRS website](#).

APHIS no longer issues PPQ526 permits for the importation of EPA registered biopesticides or EPA registered microbial isolates being imported for formulation or quality control activities. Contact the nearest [EPA regional office](#) for what is required to import these articles.

Importation of EPA registered microbial isolates that are being used for off-label research will require a PPQ526 permit.

#### Movement of microorganisms for research

Research includes lab work, plant inoculations in growth chambers and greenhouses, and field releases of less than ten acres. APHIS regulates the movement of these organisms into, within, and through the United States, and containment may be required to safeguard against unauthorized movement into the environment. National Environmental Policy Act and the Endangered Species Act risk analyses are required before APHIS issues permits for environmental releases and/or field trials.

#### Importation of EPA registered products

APHIS no longer issues PPQ526 permits for the importation of EPA registered biopesticides or for EPA registered microbial isolates being imported for formulation or quality control activities.

Contact the nearest [EPA regional office](#) for what is required to import these articles.

Importation of EPA registered microbial isolates that are being used for off-label research will require a PPQ526 permit.

#### Importation of EPA registered microorganisms

The importation of EPA registered microbial isolates for formulation into a final product or for quality control activities is regulated by EPA. Contact the nearest [EPA regional office](#) for what is required to import these articles.

The importation of EPA registered microbial isolates for off label research will require a PPQ526 permit.

#### Foreign microbial strains

PPQ 526 permits are required for the importation, interstate movement or release into the environment of plant pathogens, plant parasitic or entomopathogenic nematodes, and potential microbial biological control organisms of foreign origin.

#### Soil, or other environmental samples, to isolate microorganisms

A PPQ 526 permit is required for the importation and interstate movement of soil, or other environmental samples, for isolating organisms used in biocontrol/biopesticide research. Organisms must be identified to species level for plant inoculations in the greenhouse or in field work. Additionally for field work, data must be provided that the species is found in the state where the field work will be done.

Contact [pest.permits@usda.gov](mailto:pest.permits@usda.gov) for more information.

#### Domestically isolated microbial strains

PPQ 526 permits are required for the importation, interstate movement or release into the environment of plant pathogens, plant parasitic or entomopathogenic nematodes, and potential microbial biological control organisms. Recent revisions to the regulations in Title 7 of the U.S. Code of Federal Regulations (CFR), Part 330 removed permit requirements for certain low-risk organisms moving interstate within the United States. Consult the [Revised Regulations](#) webpage for more details.

#### Importation of products containing live microorganisms

In order for us to determine if a PPQ526 permit is needed for the importation of products containing live microorganisms we must have a complete list of the organisms identified by species name. Additionally we must have a complete list of the other ingredients in the product. While some species of microorganisms may not require a permit for importation additional ingredients in the product such as animal manure, soil, plant parts, etc. may be denied entry.

#### Mycorrhizal fungi

In general the movement of mycorrhizal fungal species for research purposes do not require a PPQ526 permit. However it is strongly encouraged that an application be submitted for importation of these species as shipments are still subject to inspection at ports of entry. A letter obtained through the application process may streamline the inspection process. Unidentified/unnamed species, or organisms listed at the genus level or higher will require a permit

Importation of mycorrhizal fungal inoculum for incorporation into a final product may be denied based on the production technique of the inoculum.

Importation of products containing mycorrhizal fungi may be denied based the production technique of the fungal inoculum or on other ingredients included in the product.

Contact [pest.permits@usda.gov](mailto:pest.permits@usda.gov) for more information.

Movement of organisms that may not be plant pathogens, biopesticides, or biocontrol organisms

PPQ 526 permits may also be required for some microorganisms not yet determined to be plant pathogens, or there are no current claims that they are potential microbial biological control organisms, if they are closely related to plant pathogens or potential microbial biological control organisms that are regulated under the authority of APHIS. This would also include organisms listed only at the genus level or above.

Questions for field releases of less than 10 acres

Responses to these questions and other information will support the determination that further detailed analysis and consultation is not needed, or to identify the situations and conditions when such analysis or consultation may need to be conducted. These determinations must be made prior to approving your proposed field research. View the following link for details:

- [Questions for Field Releases less than 10 Acres](#)

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