

How To Submit Specimens To APHIS PPQ For Official Confirmation of a Preliminary Identification

Version 1.00 (April 4, 2018)

Why Federal Coordination

USDA APHIS PPQ will coordinate the official confirmation of samples which have a preliminary identification from a state or competent private entity. In discharging this function we sometimes also make identifications, but we do not identify unsorted material. If you need material sorted or screened contact your State Department of Agriculture. The instructions here are entirely for specimens or survey material where the identity of the suspects is probable or certain.

The main reason for federal coordination is to guarantee that an identification is “official;” i.e. one that can be used for new state or county record in the National Agricultural Pest Information System (NAPIS) or in another federally-recognized database, and to authorize official action (i.e. expenditure of money) by the federal government.

How to Get a Suspect Pest Confirmed

To start the process, contact the NIS Domestic Diagnostic Coordinator (DDC) at: PPQ.Domestic.Diagnostic.Coordinator@aphis.usda.gov. Please use the capitalization in the email address as it may be necessary in some cases for the email not to bounce. The instructions the DDC gives you for submitting specimens will vary depending on whether you are submitting a nematode, insect or mite, mollusk, or suspect weed specimen, or disease sample. For insects, instructions also will vary based on the type of insect. Instructions also will vary depending on whether the official confirmation is normally morphological or molecular.

What to Submit Physically

1. Specimen(s) and/or DNA extract(s)
2. Print-out of PPQ Form 391
3. Inland Beyond Port (IBP) Record – for SEL submissions ONLY

Specimen(s) and/or DNA Extract(s)

As there are a wide variety of potential pests organisms that could be shipped, we cannot go into the details of packing and shipping for an overview document such as this. See [Sample Submission Guidance](#) for more detail. In general, we require fresh specimens, especially of plant material. For diseases, DNA extracts may be submitted in addition to symptomatic plant tissue.

Insect larvae should be killed in boiling water, allowed to cool, and then placed in 70% ethyl alcohol prior to shipping. Mites, snails, and nematodes should also be shipped in 70% alcohol.

Insect adults should be submitted dry in vials. In cases with large specimens, cotton or a similar material should be placed into the vial to prevent damage during shipping.

There should be one set of records (391 or IBP record) for each collection—that is, for each combination of locality, date, collector, etc. Samples should always be clearly labelled so they can be correlated with the corresponding 391 or IBP record. A collection number is the best way to do this.

Ship vials in a well-padded box. Use a courier service. Be aware that some courier services may have restrictions on shipping alcohol by air. If you are PPQ contact your Safety Coordinator for details.

If you have questions on how to ship, contact the PPQ Domestic Diagnostic Coordinator at PPQ.Domestic.Diagnostic.Coordinator@aphis.usda.gov for specific instructions.

The PPQ Form 391 and/or IBP Record

PPQ Form 391—The [PPQ Form 391](#) is a fillable PDF formatted form. It can be downloaded from the [PPQ Forms webpage](#). When you have completed this form, print it out and then include the print out with the physical specimens to be submitted for official confirmation. Include one form for each set of collection data. **For insect or mite specimens** that are to be submitted to the Systematic Entomology Laboratory (SEL) for confirmation, do NOT use PPQ Form 391. Instead, include a print out of the IBP record.

IBP Record— An IBP (“Inland Beyond Port”) record is a digital APHIS Agricultural Quarantine Activity System (AQAS) entry. The portion of AQAS used for keeping track of identifications is known as “Pest ID.” IBP records in Pest ID must be created by the appropriate APHIS PPQ personnel. When you receive a confirmatory report it will include an IBP record for each positive disease sample tested molecularly, and for any record, positive or negative, belonging to other groups where the identification is morphological.

With one exception, either the National Specialists or the staff at headquarters will create an IBP record from the PPQ Form 391 you submit. That exception is our National Specialists at the Systematic Entomology Laboratory (SEL). For specimens of insects and mites submitted to the SEL, you will need to have the IBP record created **before** you submit the specimens. You will have to include a print out of the IBP record with the specimens when they are submitted. You also will need to attach an electronic copy of the record as a PDF file in your cover email (see the email section below for details).

How to Get an IBP Record Created for You if You Do Not Have Access to PEST ID

The State Plant Regulatory Official (SPRO) may request the State Plant Health Director (SPHD) to get a local Area Identifier or Pest Survey Specialist to create a record in Pest ID, and then

provide you with an electronic PDF file that can be printed. If this is not possible, contact the Domestic Diagnostic Coordinator at PPQ.Domestic.Diagnostic.Coordinator@aphis.usda.gov. He will make the record for you and send you a PDF file that you can print. Do NOT submit the specimens until you have received a PDF file of the IBP record(s) back from the DDC, to include with them.

Since the IBP record includes about the same information as the PPQ Form 391, and you have a copy of the latter, it is easiest to fill out the Form 391, and then use it to convey the information to either the local Area Identifier, Pest Survey Specialist, or Domestic Diagnostic Coordinator to use in creating the electronic IBP record.

For insect or mite submission destined to SEL, two of the fields of the IBP record **MUST** be filled out as follows: “*Priority*” must be set to “**Urgent**” and “*Forward to*” must be set to “**SEL**.” Otherwise, your specimen is very likely to be misplaced or lost.

What to Submit by Email, and to Whom

When you mail or ship the physical specimens, notify the PPQ Domestic Diagnostic Coordinator (DDC) by email at PPQ.Domestic.Diagnostic.Coordinator@aphis.usda.gov. In the email, include an explanation of what you are sending, as well as a PDF file of your completed PPQ Form 391 and/or the IBP record that you had created from the information on the Form 391. Also include the tracking number. Copy (cc) the following people as appropriate:

For Insects/Mites to NIS/SEL

cc: mary.j.burns@aphis.usda.gov
andrew.carmichael@aphis.usda.gov
michele.touchet@ars.usda.gov

For Gypsy Moth

cc. yunke.wu@aphis.usda.gov

For Fruit Flies and Select Other Insects for Molecular Identification (ask first)

cc. norman.b.barr@aphis.usda.gov

For Snails & Slugs

cc. david.g.robinson@aphis.usda.gov
francisco.j.borrero@aphis.usda.gov

For Nematodes

cc. zafar.handoo@ars.usda.gov

For Weeds

cc. david.f.bitzel@aphis.usda.gov

mark.thurmond@aphis.usda.gov

For Fungi

cc. megan.k.romberg@aphis.usda.gov

john.mckemy@aphis.usda.gov

aaron.h.kennedy@aphis.usda.gov

For Molecular Diagnostics of Diseases

cc. aphis-ppqcphstbeltsvillesamplediagnostics@we.aphis.gov

aaron.h.kennedy@aphis.usda.gov

Where to Mail the Specimen(s)

Scale Insects, Psyllids, Thrips, and Mites (Morphological)

MAIL TO:

Communication & Taxonomic Services Unit (CTSU)
USDA-ARS-Systematic Entom. Lab
Building 005, Room 137, BARC-West
10300 Baltimore Avenue
Beltsville, MD 20705

(Use UPS or FedEx; NEVER USPS)

Gypsy Moth (Molecular)

MAIL TO:

CPHST Otis Laboratory
Yunke Wu
Molecular Diagnostics Group
USDA, APHIS, PPQ
1398 West Truck Road
Buzzards Bay, MA 02542

Other Insects (Morphological)

MAIL TO:

Location Leader
URGENT
National Museum of Natural History
Systematic Entomology Lab, USDA
c/o National Museum of Natural History
NHB 168 10th & Constitution Ave., NW
Washington, DC 20004

Fruit Flies and Select Other Insects for Molecular Identification (ask first)

MAIL TO:

Dr. Norman Barr
USDA-APHIS-PPQ, CPHST
Moore Air Base Bldg., S-6414
22675 N. Moorefield Rd.
Edinburg, TX 78541

Snails and Slugs (Morphological)

MAIL TO:

Dr. Francisco Borrero / Dr. David Robinson
Malacology Identification Specialist
URGENT
USDA-APHIS-PPQ
Academy of Natural Sciences
1900 Benjamin Franklin Parkway
Philadelphia, PA 19103

Nematodes (Morphological)

MAIL TO:

Dr. Zafar Handoo
URGENT
USDA-ARS Nematology Laboratory
Bldg. 010A, Room 111, BARC-West
10300 Baltimore Ave.
Beltsville, MD 20705-2350

Weeds (Morphological)

MAIL TO:

Dr. David Bitzel/Dr. Mark Thurmond
URGENT
USDA-APHIS-PPQ-NIS
Bldg. 308, Room 319, BARC-East
10300 Baltimore Ave.
Beltsville, MD 20705

Fungi (Morphological and Molecular)

MAIL TO:

Dr. John McKemy / Dr. Megan Romberg / Dr. Aaron Kennedy
URGENT, USDA-APHIS-PPQ
Bldg. 010A, Rm. 327, BARC-West
10300 Baltimore Ave.
Beltsville, MD 20705-2350

Other Diseases (Molecular)

MAIL TO:

Sample Diagnostics
URGENT
USDA-APHIS-PPQ-CPHST
B-580, BARC-East
Powder Mill Road
Beltsville, MD 20705-2350

How Will You Be Notified of the Results?

The SPHD & SPRO of the state concerned will be notified simultaneously by an email from the PPQ Pest Detection and Emergency Programs (PDEP) staff according to the posted [Pest Identification Notification to States](#) protocol. The notification of confirmed identifications will include a PDF file of the IBP record, negative determinations generally will not. Submitted insects and mites usually will be returned if requested. Do NOT contact the specialist or the SEL for information; contact the Domestic Diagnostic Coordinator instead.