

# Sample Preparation and Submission to the Plant Pest Diagnostics Branch Seed Science Laboratory – Seed Identification



# PPDB Meadowview Facility

There are five laboratories at the Plant Pest Diagnostics Center (PPDC).

To avoid delays in identification, please be sure to submit samples to the appropriate lab.

Samples submitted to an incorrect lab will be subject to delays to determine the appropriate lab for sample analysis.



Botany



Entomology



Nematology



Plant Pathology



Seed Science

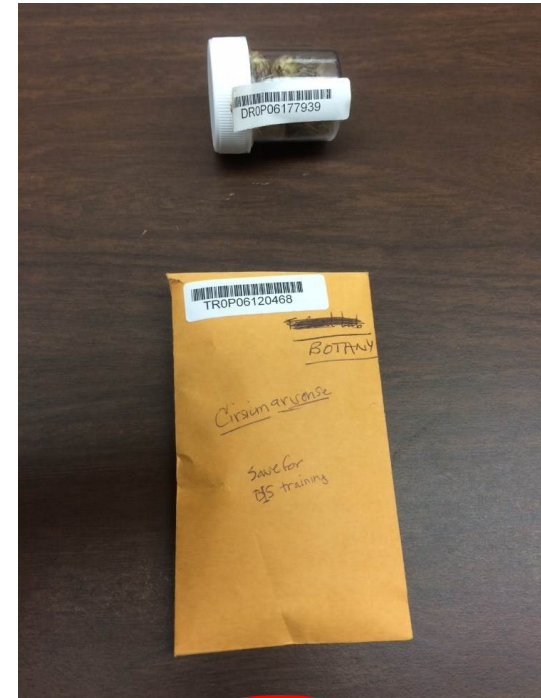
# Seeds and Fruits for Identification

- Please send as many seeds/fruits as possible as well as any other plant parts that may be available.
- Please handle seeds with care, trying not to damage or crush the samples when collecting or processing specimens.
- Don't cram and jam specimens into tiny containers. Use a container of appropriate size. Specimens damaged in transit will be difficult to identify, and delay the identification.



# Sample Preparation and Submission

- Do not wrap seeds in wet paper towels!
- If the sample is moist, wrap it in a dry paper towel and then place it in a container.
- Do not put seeds in alcohol for shipment!
- To prevent seeds/fruits from getting crushed during shipment.
  - Place seeds in a paper envelope, plastic vial, or plastic bag (please avoid using glass vials).
  - Pack in a box with padding or use a padded envelope with extra padding for mailing to the lab.
  - Do not send specimens in an unpadded envelope.





# What Form to Use for Sample Submission

**For seed identification samples from private collectors, researchers, and other seed labs:**

- Use the Seed Laboratory Service Sample Request Form (68-010) to clearly state the types of tests requested.
- This form is available from the CDFA website.

**For seed identification samples related to Phytosanitary Certification of commodities for export (other than seed lots):**

- Use the CDFA Pest and Damage Record (PDR) Form (65-020). This form must be submitted with the sample if the results are to be sent to the county that will issue the phyto certificate.
- Use program code **QPHYT**

**The following slides will describe how to fill out these forms for each type of sample.**

Note: For regulatory related seed identification submissions (from counties and border stations for programs other than QPHYT), please use the CDFA Pest and Damage Record (PDR) Form (65-020).

# Form 68-010

## Important Information

Applicant/Billing Address  
 Contact Person  
 Email and/or Phone Number

Sample information:  
 Please include a unique identifying name or number on each specimen and include the origin of the seed/fruit submitted for identification (name of state or foreign country where grown) under the miscellaneous information box.

Check the box for:  
 Seed Identification – Morphological  
 or Seed Identification – Molecular

Note: if the specimens are from different origins, please use separate submission forms.

### SEED LABORATORY SERVICE SAMPLE REQUEST

68-010 (Rev. 10-2016)

APPLICANT: (please print)	MAIL RESULTS TO: (if different than applicant)
Company:	Company:
Mailing/Billing Address:	Mailing Address:
Contact Person:	Contact Person:
Phone Number:	Phone Number:
Email Address:	Email Address:

**SAMPLE IDENTIFICATION:** This information will appear on the report of analysis (please print)

Kind of Seed:	Variety Name:
Lot Number:	Seed Count:
Lot Size:	Treatment Name(s):
Miscellaneous:	Miscellaneous:

**SAMPLER:** This information will appear on the report of analysis (please print)

County/State:	Inspector's ID:	Date Sampled:
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**CHECK TESTS DESIRED:** (check as many as needed)

<input type="checkbox"/> Purity Analysis	<input type="checkbox"/> Germination Test
<input type="checkbox"/> California Noxious Weed Seed Exam	<input type="checkbox"/> Tetrazolium Viability Test
<input type="checkbox"/> All States & Federal Noxious Weed Seed Exam	<input type="checkbox"/> Seed Moisture Test
<input type="checkbox"/> Federal Noxious Weed Seed Exam	<input type="checkbox"/> Ryegrass Fluorescence Test
<input type="checkbox"/> Foreign Noxious Weed Seed Exam – list country:	<input type="checkbox"/> X-ray Analysis
<input type="checkbox"/> Undesirable Grass Seed (UGS)	<input type="checkbox"/> Seed Vigor Test – list test type:
<input type="checkbox"/> Canadian Noxious Weed Seed Exam	<input type="checkbox"/> Seed Identification – morphological
<input type="checkbox"/> Bulk Exam for Seeds of Other Plant Species (AOSA)	<input type="checkbox"/> Seed Identification – molecular
<input type="checkbox"/> Other Seeds by Number Determination (ISTA)	<input type="checkbox"/> Digital Image <u>Rh</u> otomicroscopy
<input type="checkbox"/> <u>Scirtozia</u> check	<input type="checkbox"/> Livestock Feed Exam
<input type="checkbox"/> Soil Check	<input type="checkbox"/> Bird Seed Exam
<input type="checkbox"/> Dodder ( <u>Cuscuta</u> ) Check (500 gram)	<input type="checkbox"/> <u>Thermo</u> Gradient Germ – list type below
<input type="checkbox"/> <u>Orphanche/Striga</u> Check	
<input type="checkbox"/> Clean-out Test	<input type="checkbox"/> Other – please list

**TESTING METHODS REQUESTED:** (check one)

<input type="checkbox"/> AOSA (Association of Official Seed Analysts – Rules for Testing Seeds)
<input type="checkbox"/> FSA (Federal Seed Act Regulations)
<input type="checkbox"/> ISTA (International Seed Testing Association – Rules for Seed Testing)
<input type="checkbox"/> CFIA M&P (Canadian Methods and Procedures for Testing Seed)

**SUBMIT SAMPLE TO:**  
 California Department of Food & Agriculture  
 Plant Pest Diagnostics Center – Seed Laboratory  
 3294 Meadowview Road  
 Sacramento, California 95832-1448  
 Phone: (916) 262-1100 FAX (916) 262-1190

# What Form to Use for Sample Submission

## PDR Form (65-020)

- **Please use the PDR form only for seed identification samples for phytosanitary certification of commodities other than seed.** Examples include weed seeds found on table grapes or other fresh fruit for export.
- The following PDR example form will walk you through the relevant fields that should be included when completing a PDR form for a seed identification sample submission to the Seed Science Laboratory.
- Properly completed PDR forms are essential to providing you with the accurate and timely service you need.
- Please be sure to provide us with the appropriate contact information for where to send the invoice for services rendered.

# Sample Submission to PPDC – PDR Basics

- Enter PDR information electronically into all relevant fields as indicated on the next slide. In particular, please fill out all fields marked in red and green.
- Attach a PDR bar code sticker to the sample container and submit a PDR hard copy with the seed sample.
- Provide any additional information in the submitter's remarks section. This should include the country of destination.
- For Service Samples, **ALWAYS** indicate “Service Sample (99)” for the Activity Code.
- For Service Samples, **ALWAYS** fill in the Billing Address in the fields for “Quarantine shipper/broker”





# Seed Science Laboratory

STATE OF CALIFORNIA  
DEPARTMENT OF FOOD AND AGRICULTURE  
PLANT HEALTH AND  
PEST PREVENTION SERVICES

PEST AND DAMAGE RECORD  
65-020 (11/2005)

**PDR NUMBER**

Lab  ENTO  PLANT PATH  NEMA  
 SEED  BOTANY  VERT

NOR Number:

Number of samples:

Collector

Affiliation F S C E U O Describe other

Quarantine shipper/broker

Name

Address

City State Zip code

Phone Fax Latitude Longitude

Quarantine origin (where host grown)

City County State/Country Zip code

Carrier (ground/air/maritime)

Business name Flight number

Shipment size (include units) Program license plate License state Tail/ship number

Submitter remarks

General or Plant Pathology

Number of  plants  acres involved:  
 Number  Percent of plants affected.

Plant distribution:  Limited  Scattered  Widespread  Eradicated

Plant parts affected

Bark  Bulbs or corms  Leaves, upper surface  
 Blossoms  Fruit or nuts  Petiole  Stem  
 Branches, large  Growing tips  Rootlets  Trunk  
 Branches, terminal  Large roots  Seeds  Tubers  
 Buds  Leaves, lower surface

Plant symptoms

Limited  General

Canker  Gumming  Malformation  Slow decline  
 Die back  Internal discoloration  Marginal burn  Stunting  
 Fruit rot  Leaf fall  Root rot  Sudden collapse  
 Fruit spot  Leaf mottling  Rough bark  Wilting  
 Galls  Leaf spot  Shot hole  Yellowing

Determination

Rating

Very important!  
List the host and size and number of containers sampled.

Host/crop name

Common name Type (plants, fruit, seeds)

Scientific name Quantity Units

Variety Container size and units

Nema field block: commercial foundation increase

**PDR NUMBER**

Determined by: Date:

PDR number (auto-generated)

Date, time, and check SEED lab

"RUSH" if a true Rush

1 sample per PDR for seed identification samples related to phytosanitary certification is preferred.

Collector and affiliation

This is a critical field! SERVICE SAMPLES MUST indicate the BILLING ADDRESS in these fields

INDICATE PROPER PROGRAM CODE - For example, if a QPHYT sample is not properly indicated, it would be treated as a non-phyto sample

Leave this BLANK

County code (for sample)

Activity code (for sample). SERVICE SAMPLES MUST USE CODE 99

Situation code (for sample)

All relevant information for sample origin

Destination country

Where host was grown

This is a critical field! Please indicate any additional information here

If you want the identification results, this must be filled out, including email address

Very important! List the host and size and number of containers sampled.

# Where to Send Specimens

Since there are five laboratories at the PPDC, please include the laboratory name in the address so that your package is directed to the correct laboratory.

 **CDFA Plant Pest Diagnostics Center  
c/o Seed Science Laboratory  
3294 Meadowview Rd.  
Sacramento, CA 95832-1448**

# PPDB Designated Lab Contact List

## Seed Science Laboratory

Dr. Robert Price (916-738-6700)

Environmental Program Manager II (Branch Chief)

Dr. Umesh Kodira (916-738-6664)

Environmental Program Manager I (Botany & Entomology)

Dr. Stephen Gaimari (916-738-6671)

Environmental Program Manager I (Nematology, Plant Pathology & Seed Science)

Dr. Cheryl Blomquist (916-738-6707)

