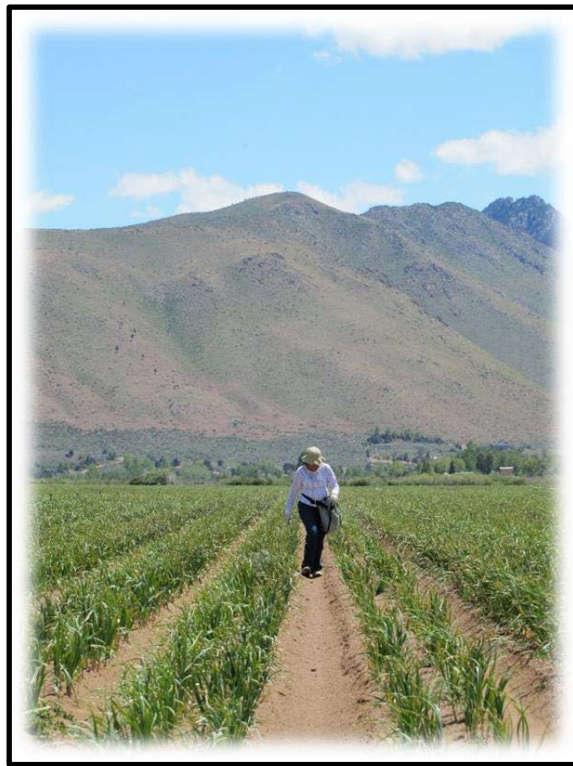


# County Procedural Training Manual

## PHYTOSANITARY FIELD INSPECTION



**Revised April 2022**

**California Department of  
Food and Agriculture**

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## INTRODUCTION

The California Department of Food and Agriculture (CDFA) and County Agricultural Commissioners maintain a program for the field inspection of mother plants to meet most of the seed import requirements of other countries. The United States Department of Agriculture Animal and Plant Inspection Service (USDA-APHIS) has overall responsibility for regulating the export of commodities to other countries. APHIS accredits qualified individuals to issue phytosanitary certificates. The import requirements must be met as stated in import permits, the USDA Phytosanitary Certificate Issuance and Tracking (PCIT) database, or official communications from the country authorities.

Many microorganisms that cause plant disease are of concern to countries and states. Field inspections involve inspection of field crops for apparent signs or symptoms of plant disease. Inspection and collection of symptomatic plant tissues coupled with supportive pest diagnostics provide a more complete method of detection. Crops can be inspected for several pests of quarantine and regulatory importance at the same time.

A list of pests is provided for each crop. This list consists of the pests of concern to other countries with a possible seed pathway in the associated crop. Field inspectors are trained to generally inspect for all plant disease and specifically trained to inspect for the organisms in the lists. Any signs or symptoms of plant disease which may be caused by a regulated pest are collected and sent to the CDFA Plant Pest Diagnostics (PPD) lab for pathogen diagnosis. For all crops, in addition to the listed pathogens, the statement: '**No symptoms or signs of pests were observed, including (pests of concern)**'; can be entered appropriately in the field inspection report. In the tables, superscript \* indicates record in CA and N indicates no record in CA.

The sections below are excerpted from the CDFA County Procedural Training Manual.

### 3.3.1 CERTIFICATION OF SEEDS

#### 3.3.2.1 FIELD INSPECTION PROGRAM

Persons or firms desiring phytosanitary certification of seed to countries or states requiring field inspections during crop growth should apply for the inspection through the California Department of Food and Agriculture, Pest Exclusion. Upon acceptance, Pest Exclusion will issue a serial number to each application and send copies to the applicant and to the County Agricultural Commissioner office.

## **Responsibility of the Applicant**

Applicant must comply with the following conditions when submitting applications to CDFA Pest Exclusion:

1. Communication must be maintained with the County Agricultural Commissioner prior to submitting the application. Applicant shall work closely with the commissioner and with the grower regarding harvesting, seed separation, and pesticides. The grower or the seed company representative shall contact the commissioner and schedule dates for inspection. A field cannot be inspected if it is being irrigated, or if entry is prohibited because of pesticide treatments.
2. An application must be submitted to the Pest Exclusion office prior to or at time of planting. Failure to submit applications on time may result in rejection of applications. Plants may be too mature to inspect for diseases of concern or the commissioner's office may be unable to adjust workload to inspect on short notice. It is recommended that the seed company send a copy of the application to their local representative.
3. The applicant must submit 3 copies of application for "Phytosanitary Field Inspection of Seed" Form 66-085

[https://www.cdfa.ca.gov/plant/pe/nsc/docs/seed/Form66\\_085.pdf](https://www.cdfa.ca.gov/plant/pe/nsc/docs/seed/Form66_085.pdf)

and 3 copies of a map of the field location to:

**California Dept. of Food and Agriculture  
PEST EXCLUSION BRANCH  
1220 N Street, Room 200  
Sacramento, CA 95814**

**Email: [CDFA\\_PHPPS\\_PEB\\_PFIS@cdfa.ca.gov](mailto:CDFA_PHPPS_PEB_PFIS@cdfa.ca.gov) (916) 654-0312**

4. All problems relating to field inspection, including late applications, failure to notify county commissioners of time to inspect, inability of inspector to enter field due to irrigation or pesticides, etc., must be resolved by communications between the applicant and the county commissioners.
5. Pest Exclusion lists plant pathogens of phytosanitary concern based on the best information available from official agencies. The seed company should check this list to determine that it includes all diseases of concern for export. If there are diseases of concern that are not on the list, then the seed company must submit a copy of the import permit or regulations from the importing country verifying that inspection for or freedom from the disease is an official request from the regulatory agency of the importing country.
6. Applicants must research and obtain the current requirements for exporting

to the possible receiving countries. Pest Exclusion staff will review requests.

7. Upon receiving a copy of the application, the applicant shall identify each field or plot to be inspected with a suitable stake or placard bearing the serial number assigned by Pest Exclusion. This identification shall be maintained during the growing season.

## **Results of Field Inspection**

The field inspection report will indicate all phytosanitary significant pathogens found that are listed by Pest Exclusion.

### **3.3.2.2 INSPECTION FOR SEED MOVEMENT**

#### **Responsibility of the Applicant**

The assigned serial number must be maintained on all containers during harvest, processing, and after placement into bags or containers.

Prior to moving any lot of seed for processing and/or from one location to another, including interstate, the applicant shall immediately notify the agricultural commissioner of the county from which the seed is to be moved.

#### **Responsibility of the County/State**

The serial number of the seed field is recorded on the Form 66-088 Inspection Report. Movement of seed between counties is also recorded on the form. The agricultural commissioner at origin shall send copies of the record of field inspection to the consignor, consignee, and the agricultural commissioner at destination. The information on the report may be utilized to meet export requirements of other countries.

If requested, Form 66-088 "Inspection Report" may be issued as an addition to either the Federal or State Phytosanitary Certificate.

#### **Bean Seed to Idaho:**

Issue Form 66-095 "Bean Field Inspection Report". One copy must accompany the shipment and one copy is to be given to the seed company.

#### **Identification Numbers Assigned to California Counties**

The county identification number will be used when assigning a 9-digit serial number to the Phytosanitary Field Inspection application. The first two digits of the serial number will identify the county of origin. The next four digits will be the production year. The remaining digits will identify the order in which the number were assigned for that county that year. Example: 012004001

County	#	County	#	County	#	County	#
Alameda	01	Kings	16	Placer	31	Sierra	46
Alpine	02	Lake	17	Plumas	32	Siskiyou	47
Amador	03	Lassen	18	Riverside	33	Solano	48
Butte	04	Los Angeles	19	Sacramento	34	Sonoma	49
Calaveras	05	Madera	20	San Benito	35	Stanislaus	50
Colusa	06	Marin	21	San Bernardino	36	Sutter	51
Contra Costa	07	Mariposa	22	San Diego	37	Tehama	52
Del Norte	08	Mendocino	23	San Francisco	38	Trinity	53
El Dorado	09	Merced	24	San Joaquin	39	Tulare	54
Fresno	10	Modoc	25	San Luis Obispo	40	Tuolumne	55
Glenn	11	Mono	26	San Mateo	41	Ventura	56
Humboldt	12	Monterey	27	Santa Barbara	42	Yolo	57
Imperial	13	Napa	28	Santa Clara	43	Yuba	58
Inyo	14	Nevada	29	Santa Cruz	44		
Kern	15	Orange	30	Shasta	45		

### 3.3.2.4 GUIDLINES FOR PHYTOSANITARY FIELD INSPECTION OF SEED

Guidelines for Phytosanitary Field Inspections of Seed are based on:

1. Scientific reports available.
2. Professional expertise.
3. Official requirements of the importing countries made available to CDFA.

Food and Agricultural Code Section 5205 mandates certification meeting the requirements stated in the laws and/or official import permits of the importing country. The validity of the requirements of the importing country is based on the best judgment of the officials of the importing countries. The jurisdiction for changing these requirements lies with the importing country even though some of these requirements, in effect, place an embargo on California grown seed.

The finding of one or more diseases listed below under each crop does not prevent the writing of a valid phytosanitary certificate provided the seed is going to a country that does not restrict the specific disease(s). For example: only one country expresses concern over *Diaporthe phaseolorum* on mother plants in pepper seed fields.

To accommodate seed companies who list "all countries" for "the state or country of destination" thus enabling market expansion after seed has been harvested, the requirements placed on vegetable seed were compiled in accordance with the USDA Manual 353-A 'Summaries of Plant Quarantine Requirements of Foreign Countries', quarantine regulations of other states, and the official import permits that were made available to this office.

## Important Note

Should a seed company receive an official import permit listing either a disease or a crop other than those listed below, it is ***the responsibility of the seed company*** to forward these documents to the following address:

**California Dept. of Food and Agriculture  
PEST EXCLUSION BRANCH  
1220 N Street, Room 325  
Sacramento, CA 95814**

Only the official notices of importing states or countries give CDFA Pest Exclusion legal authorization to expend the time and labor necessary to provide training and training aids needed by county inspectors. Applications for inspection of crops not officially requiring inspection will be returned.

Records of applications and field inspections are maintained for three years after seed has been harvested.

The ***inspection timing*** and the ***number of inspections*** suggested for each crop listed below is considered adequate. It will not be necessary to inspect more often than the recommended number of times unless an unseasonable rain occurs after routine inspections have been completed. In the event of rain, the field should be reinspected ten (10) days after rainfall to confirm cleanliness.

### 3.3.2.4 FIELD INSPECTION POLICY AND PROCEDURES

#### Seasonal Employees

The use of seasonal employees for field inspections is acceptable to the USDA with the following provisions:

1. Seasonal employees are college graduates or are making satisfactory progress in major areas such as agronomy, botany, plant pathology or closely related areas.
2. The seasonal employees are required to have annual training prior to performing field inspections. Training should involve both classroom and field instruction by a qualified plant pathologist. If a qualified plant pathologist is not available with the county staff, please contact CDFA Pest Exclusion or Pest Detection District Pathologist. Seasonal staff should not be used until they demonstrate they can competently identify symptoms and diseases caused by significant quarantine pathogens in the field.



3. Field identifications need to be confirmed by a qualified plant pathology laboratory. Normally, the California Department of Food and Agriculture's Plant Pathology Laboratory at the Plant Pest Diagnostic Center in Sacramento will confirm pathogen diagnostics. Properly staffed and equipped county or federal laboratories may also be used.
4. Seasonal employees must work under the supervision of a full-time, permanent county biologist.
5. Regular training in the detection of target pathogens is essential to maintain the quality of inspection regardless of the field inspection walking pattern used. Annual employee refresher classes are encouraged. A pre-season class for seasonal employees is mandatory under USDA standards.

### **National Seed Health System accreditation option**

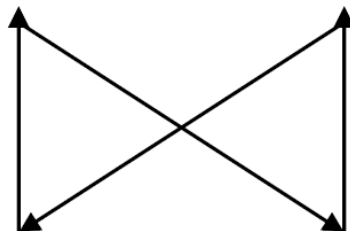
Companies/exporters may be accredited by the National Seed Health System to conduct their own field walks and lab testing for pathogens. Accredited entities will be listed on the National Seed Health System website: <http://seedhealth.org>.

#### 3.3.2.3 FIELD INSPECTION WALKING PATTERNS

##### **1. Cereal Crops**

The pattern for walking cereal crops is similar to the letter X. Start in one corner of the field and inspect plants along one edge of the field. At the end of the field, diagonally cross through the center to the opposite corner. Then walk the edge of the field (opposite from where you started) to the corner. Finally, diagonally cross the field again to finish at the corner where you began.

Walking through the two edges of the field increases the probability of finding ergot along those edges that are adjacent to uncontrolled wild grasses and volunteer cereals during the third field inspection.



## 2. Other Crops

A statistical method is used to walk fields. The accuracy of this method is based on the number of plants observed compared to the number of plants in the field. This method provides a minimum of 95% confidence in detecting an infection of 0.1%. In most crops, the confidence level will be greater than 95%.

### 3.3.2.7 STATISTICAL METHOD OF FIELD WALKING FOR NON-CEREAL CROPS

To determine how to conduct field inspections on crops other than cereals, inspectors must first know the number of acres in the field. This information is found in the application for Phytosanitary Field Inspection of Seed. Then, the inspector needs to determine the minimum number of passes required for each field using the chart below.

1. Select the minimum number of field passes from the table below based on the number of acres in the field. For example, a 30-acre field calls for a minimum of 17 passes according to our table.
2. Estimate the length of the field borderline. Figures should be close, but they do not need to be exact. (For this example, use 1,100 feet.)
3. Equally space the passes along a field borderline ( $1,100 \text{ feet} / 17 \text{ passes} = 65 \text{ feet per pass.}$ )
4. Walk the passes including the field borders at the end of the pass. If the last scheduled pass does not reach to the field border, continue to walk additional passes. When walking at the edge of the field, the inspector should walk approximately 10 feet inside the field to maximize the number of plants examined.

Minimum number of field passes for each field.

Minimum # of Acres in Field	Field Passes	Minimum # of Acres in Field	Field Passes
0-1.0	6	50.1-100.0	20
1.1-5.0	9	100.1-200.0	24
5.1-10.0	11	200.1-500.0	30
10.1-20.0	13	500.1-1000	36
20.1-50.0	17		

# PHYTOSANITARY FIELD INSPECTION



## **ALFALFA**

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### ALFALFA SEED FIELD INSPECTION AND NOTIFICATION PROTOCOL

1. The applicant must submit the phytosanitary field inspection application prior to any inspection. Submittal of the application must occur no later than March 10th.
2. The seed company is required to notify the county when the field is at the correct growth stage and condition for inspection. Three working days prior notice is required to allow for inspection scheduling.
3. COUNTY RESERVES THE RIGHT TO REJECT INSPECTION DUE TO:
  - Poor condition of the alfalfa field
  - Inaccessible field
  - Poorly defined directions to production field or inaccurate site diagram
  - Inadequate notification

**Two inspections are required for phytosanitary certification of alfalfa.**

- 1) Field Inspection: When the plant is 8 to 12 inches high (Late winter or early spring).
- 2) Field Inspection: At full bloom and/or early seed set (Late spring or early summer).

### PESTS OF CONCERN FOR ALFALFA

Inspect for:	
<b>Alfalfa mosaic virus*</b> (Genus: <i>Alfamovirus</i> )	Alfalfa mosaic
<b>Ascochyta medicaginicola*</b> (syn. <i>Phoma medicaginis</i> )	Spring black stem
<b>Clavibacter insidiosus*</b> (syn. <i>Corynebacterium insidiosum</i> )	Bacterial wilt
<b>Cuscuta* spp.</b>	Dodder
<b>Ditylenchus dipsaci*</b>	Stem and bulb nematode
<b>Physoderma alfalfa*</b> (syn. <i>Urophlyctis alfalfae</i> )	Alfalfa wart
<b>Sclerotinia trifoliorum*</b> (syn. <i>Sclerotinia ciboriodes</i> )	Sclerotinia crown and stem rot
<b>Verticillium albo-atrum*</b> (syn. <i>V. alfalfae</i> )	Verticillium wilt
<b>Xylella fastidiosa subsp. fastidiosa*</b>	Alfalfa dwarf

# PHYTOSANITARY FIELD INSPECTION



## ARTICHOKE

One inspection is required for phytosanitary certification of artichoke

1) Field Inspection: After bud formation-walk every 4th row.

### PESTS OF CONCERN FOR ARTICHOKE

Inspect for:	
<i>Botrytis cinerea</i> * (teleo. <i>Botryotinia fuckeliana</i> )	Gray mold
<i>Verticillium dahlia</i> *	Verticillium wilt



## BARLEY

Two inspections are required for phytosanitary certification of barley.

1) Field Inspection: At tillering to pre-boot stage.

2) Field Inspection: At head emergence into full bloom.

### PESTS OF CONCERN FOR BARLEY

Inspect for:	
<b>Barley stripe mosaic virus</b> * (Genus: <i>Hordeivirus</i> )	Barley stripe mosaic
<i>Bipolaris sorokiniana</i> * (syn. <i>Helminthosporium sativum</i> )	Spot Blotch
<i>Claviceps purpurea</i> * (syn. <i>Spacelia segetum</i> )	Ergot
<i>Fusarium</i> * spp.	Scab or head blight
<i>Gaeumannomyces graminis</i> * ( <i>Gaeumannomyces graminis</i> var. <i>tritici</i> )	Take all
<i>Hymenula cerealis</i> <sup>N</sup> (syn. <i>Cephalosporium gramineum</i> )	
<i>Pseudomonas syringae</i> pv. <i>atrofaciens</i> <sup>N</sup>	Basal glume rot
<i>Pseudomonas syringae</i> pv. <i>syringae</i> *	Basal kernel rot
<i>Pyrenophora teres</i> * (syn. <i>Helminthosporium teres</i> )	Barley stripe
<i>Rathayibacter tritici</i> <sup>N</sup> (syn. <i>Clavibacter tritici</i> )	Spike blight
<i>Rhynchosporium secalis</i> *	Scald
<i>Septoria</i> * spp.	Leaf and glume blotch
<i>Ustilago avenae</i> * (syn. <i>Ustilago nigra</i> )	Semi-loose smut
<i>Ustilago nuda</i> * (syn. <i>Ustilago tritici</i> )	True loose smut
<i>Xanthomonas translucens</i> pv. <i>translucens</i> *	Bacterial leaf stripe

# PHYTOSANITARY FIELD INSPECTION



## BEAN (COMMON, ADZUKI, MUNG)

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Three inspections are required for phytosanitary certification of common, adzuki, and mung bean.

- 1) Field Inspection: At seedling stage. Walk every eighth row (critical for halo blight).
- 2) Field Inspection: At mature vine with green pods stage. Walk every eighth row.
- 3) Field Inspection: Windrow. Walk every other windrow (required for Idaho and Washington).

### PESTS OF CONCERN TO BEAN (COMMON, ADZUKI, MUNG)

Inspect for:	
<i>Ascochyta</i> * spp. (syn. <i>Boeremia diversispora</i> , <i>Diaporthe phaseolorum</i> )	
<b>Bean common mosaic virus*</b> (Genus: <i>Potyvirus</i> )	Bean western mosaic
<b>Bean common mosaic necrotic virus*</b>	Common bean mosaic necrosis
<i>Boeremia exigua</i> var. <i>exigua</i> * (inc. <i>Phyllosticta phaseolina</i> )	
<i>Cercospora</i> * spp.	Cercospora leafspot
<i>Colletotrichum lindemuthianum</i> * (syn. <i>Glomerella lindemuthiana</i> )	Anthrachnose
<b>Cucumber mosaic virus*</b> (Genus: <i>Cucumovirus</i> )	Cucumber mosaic
<i>Curtobacterium flaccumfaciens</i> pv. <i>flaccumfaciens</i> <sup>N</sup>	Bacterial wilt
<i>Macrophomina phaseolina</i> *	Charcoal rot
<i>Pseudocercospora griseola</i> <sup>N</sup>	
<i>Pseudomonas syringae</i> pv. <i>phaseolicola</i> *	Halo blight
<i>Pseudomonas syringae</i> pv. <i>syringae</i> *	Brown spot blight
<i>Rhizoctonia solani</i> * (syn. <i>Thanatephorus cucumeris</i> )	
<i>Sclerotinia</i> * spp.	
<b>Southern bean mosaic virus*</b> (Genus: <i>Sobevirus</i> )	Bean southern mosaic
<b>Tobacco streak virus*</b> (Genus: <i>Ilarvirus</i> )	Tobacco streak virus
<i>Xanthomonas campestris</i> pv. <i>phaseoli</i> *	Common bacterial blight
<i>Xanthomonas phaseoli</i> pv. <i>fuscans</i> *	Fuscous blight

# PHYTOSANITARY FIELD INSPECTION



## **BEAN (LIMA)**

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**Two inspections are required for phytosanitary certification of lima bean.**

- 1) Field Inspection: At seedling stage. Walk every eighth row (critical for halo blight).
- 2) Field Inspection: At mature vine with green pods stage. Walk every eighth row.

### PESTS OF CONCERN FOR LIMA BEANS

<b>Inspect for:</b>	
<b>Bean common mosaic virus*</b> (Genus: <i>Potyvirus</i> )	Bean western mosaic
<b><i>Colletotrichum dematium</i> f. sp. <i>truncatum</i><sup>N</sup></b> (syn. <i>C. villosum</i> )	Anthracnose
<b><i>Colletotrichum lindemuthianum</i>*</b>	Bean anthracnose
<b><i>Curtobacterium flaccumfaciens</i> pv. <i>flaccumfaciens</i><sup>N</sup></b>	Bacterial Wilt
<b><i>Elsinoe phaseoli</i><sup>N</sup></b>	Lima bean scab
<b><i>Pseudomonas syringae</i> pv. <i>phaseolicola</i>*</b>	Halo blight
<b><i>Pseudomonas syringae</i> pv. <i>syringae</i>*</b>	Brown spot blight
<b><i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i>*</b>	Common bacterial blight
<b><i>Xanthomonas axonopodis</i> pv. <i>fuscans</i>*</b>	Fuscous blight

# PHYTOSANITARY FIELD INSPECTION



## **BROADBEAN (FAVA OR FABA BEAN)**

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Two inspections are required for phytosanitary certification of broadbean.

- 1) Field Inspection: At early pod stage. Walk every eighth row.
- 2) Field Inspection: When pods are beginning to mature. Walk every eighth row.

### PESTS OF CONCERN FOR BROADBEANS

Inspect for:	
<i>Ascochyta fabae</i> <sup>N</sup> (syn. <i>A. boltschauseri</i> , <i>Didymella fabae</i> )	Ascochyta blight
<i>Broadbean mottle virus</i> <sup>N</sup> (Genus: <i>Bromovirus</i> )	Broad bean mottle
<i>Colletotrichum dematum</i> f. sp. <i>truncatum</i> <sup>N</sup> (syn. <i>C. villosum</i> )	Anthracnose
<i>Curtobacterium flaccumfaciens</i> pv. <i>flaccumfaciens</i> <sup>N</sup>	Bacterial wilt
<i>Orobanche</i> * spp.	Broomrape
Pea early-browning virus <sup>N</sup> (Genus: <i>Tobravirus</i> )	Pea early browning
<i>Peronospora viciae</i> *	Downy mildew
<i>Pseudomonas syringae</i> pv. <i>lisi</i> *	Bacterial blight
Red clover vein mosaic virus* (Genus: <i>Carlavirus</i> )	
<i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> *	Common bacterial blight

# PHYTOSANITARY FIELD INSPECTION



## **BEETS (BEET, SUGARBEET, SWISS CHARD)**

One inspection is required for phytosanitary certification of beets.

1) Field Inspection: When plants begin to bolt (Spring). Walk every sixth row.

### PESTS OF CONCERN FOR BEETS

Inspect for:
<b>Beet necrotic yellow vein virus*</b> (Genus: <i>Benyvirus</i> ) Rhizomania
<b>Beet yellows virus*</b> (Genus: <i>Closterovirus</i> ) Beet yellows
<b><i>Cercospora beticola*</i></b> Cercospora leaf spot
<b><i>Colletotrichum dematium</i> f. sp. <i>spinaceae*</i></b> (syn. <i>C. dematium</i> )
<b><i>Curtobacterium flaccumfaciens</i> pv. <i>betae</i><sup>N</sup></b> Silvering disease
<b><i>Neocamarosporium betae*</i></b> (syn. <i>Pleospora bjorlingii</i> , <i>Phoma betae</i> ) Black rot
<b><i>Peronospora farinose*</i></b> ( <i>P. effusa</i> , <i>P. schachtii</i> ) Downy mildew
<b><i>Pseudomonas syringae</i> pv. <i>aptata*</i></b> (syn. <i>P. aptata</i> ) Bacterial blight
<b>Tomato black ring virus<sup>N</sup></b> (Genus: <i>Nepovirus</i> ) Tomato black ring
<b><i>Verticillium dahliae*</i></b> Verticillium wilt



## **BERMUDA GRASS**

One inspection is required for phytosanitary certification of bermuda grass.

1) Field Inspection: In spring when plants begin to bolt. Walk every sixth row.

### PESTS OF CONCERN FOR BERMUDA GRASS

Inspect for:
<b><i>Cirsium arvense*</i></b> Canada thistle
<b><i>Striga</i><sup>N</sup> spp.</b> Witchweed



# PHYTOSANITARY FIELD INSPECTION



## CARROT

One inspection is required for phytosanitary certification of carrot.

1) Field Inspection: At early flowering stage when tops are still green. Walk every sixth row.

### PESTS OF CONCERN FOR CARROT

Inspect for:	
<i>Alternaria porri</i> f. sp. <i>dauci</i> * (syn. <i>A. dauci</i> )	Leaf blight
<i>Alternaria radicina</i> * ( <i>Stemphylium radicinum</i> )	Black rot, Root rot
<i>Cercospora carotae</i> *	Carrot <i>Cercospora</i> leaf blight
<i>Xanthomonas campestris</i> pv. <i>hederae</i> *	Bacterial blight



Pixabay, no attribution required

## CELERY

One inspection is required for phytosanitary certification of celery.

1) Field Inspection: Prior to the end of the last complete cycle of vegetative growth.

### PESTS OF CONCERN FOR CELERY

Inspect for:	
<i>Cercospora apii</i> *	Early blight
<i>Pseudomonas syringae</i> pv. <i>apii</i> * (syn. <i>P. apii</i> , <i>P. jaggeri</i> )	Bacterial leaf spot
<i>Septoria apiicola</i> *	Celery late blight
<i>Subplenodomus apiicola</i> * (syn. <i>Phoma apiicola</i> )	

# PHYTOSANITARY FIELD INSPECTION



## CHICORY

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**One inspection is required for phytosanitary certification of chicory.**

1) Field Inspection: Prior to the end of the last complete cycle of vegetative growth.

### PESTS OF CONCERN FOR CHICORY

Inspect for:
<i>Albugo candida</i> * White rust
<i>Microbotryum cichorii</i> <sup>N</sup> (syn. <i>Ustilago cichorii</i> ) Smut
<i>Erwinia rhapontici</i> * (syn. <i>Pectobacterium rhapontici</i> )



## CORIANDER (CILANTRO)

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**One inspection is required for phytosanitary certification of coriander.**

1) Field Inspection: When plants are just beginning to flower and tops are still green.

### PESTS OF CONCERN FOR CORIANDER (CILANTRO)

Inspect for:
<i>Alternaria porri</i> f.sp. <i>dauci</i> * (syn. <i>A. dauci</i> ) Leaf blight
<i>Alternaria radicina</i> * (syn. <i>Stemphylium radicinum</i> ) Black rot, Root rot
<i>Pseudomonas syringae</i> pv. <i>coriandricola</i> *
<i>Xanthomonas campestris</i> pv. <i>carotae</i> * ( <i>X. hortorum</i> pv. <i>carotae</i> )

# PHYTOSANITARY FIELD INSPECTION



## CORN

Two inspections are required for phytosanitary certification of corn.

- 1) Field Inspection: Two weeks prior to three weeks after tassel emergence.
- 2) Field Inspection: After pollination, when silks are dry and kernels become fully developed and just begin to harden. Walk around each planting and make one pass through the field at each inspection.

### PESTS OF CONCERN FOR CORN

Inspect for:	
<i>Bipolaris maydis</i> <sup>N</sup>	Southern corn leaf blight
<i>Bipolaris zeicola</i> <sup>N</sup> (syn. <i>Cochliobolus carbonum</i> )	<i>Helminthosporium</i> leaf spot
<i>Cephalosporium zea-maydis</i> <sup>N</sup> and <i>C. acremonium</i> <sup>N</sup>	
<i>Clavibacter michiganensis</i> subsp. <i>nebraskensis</i> <sup>N</sup>	Nebraska bacterial wilt
<i>Erwinia stewartia</i> * (syn. <i>Erwinia stewartii</i> )	Stewart's wilt of corn
<i>Exserohilum turcicum</i> *	Northern leaf blight
<i>Magnaporthiopsis maydis</i> <sup>N</sup> (syn. <i>Cephalosporium maydis</i> )	Late wilt
Maize dwarf mosaic virus* (Genus: <i>Potyvirus</i> )	Maize dwarf mosaic
<i>Peronospora</i> * spp.	Downy mildew
<i>Sclerospora</i> * spp. (syn. <i>Sclerospora</i> spp.)	Downy mildew
<i>Sporisorium reilianum</i> *	Head smut
<i>Stenocarpella macrospora</i> <sup>N</sup>	Dry rot
<i>Ustilago maydis</i> * (syn. <i>Ustilago maydis</i> )	Corn smut

# PHYTOSANITARY FIELD INSPECTION



## COTTON

One inspection is required for phytosanitary certification of cotton.

1) Field Inspection: Prior to the end of the last complete cycle of vegetative growth.

### PESTS OF CONCERN FOR COTTON

Inspect for:	
<i>Colletotrichum gossypii</i> <sup>N</sup> (Teleo. <i>Glomerella gossypii</i> )	Cotton anthracnose
Cotton leaf crumple virus* (Genus: <i>Begomovirus</i> )	Cotton leaf crumple
<i>Xanthomonas campestris</i> pv. <i>malvacearum</i> *	Bacterial blight



## CRUCIFERS

One inspection is required for phytosanitary certification of crucifers.

1) Field Inspection: At early bolting. Walk every sixth row.

### PESTS OF CONCERN FOR CRUCIFERS

Inspect for:	
<i>Albugo candida</i> *	White rust
<i>Alternaria brassicae</i> * (also <i>A. japonica</i> )*	Alternaria gray leaf spot
<i>Alternaria brassicicola</i> *	Alternaria black leaf spot
<i>Giberella avenacea</i>	
<i>Hyaloperonospora parasitica</i> * (syn. <i>Peronospora parasitica</i> )	
<i>Leptosphaeria maculans</i> * (syn. <i>Plenodomus lingam</i> )	Black leg
<i>Pseudomonas syringae</i> pv. <i>maculicola</i> *	
<i>Pyrenopeziza brassicae</i> <sup>N</sup> ( <i>Cylindrosporium concentricum</i> )	
<i>Sclerotinia sclerotiorum</i> *	Sclerotinia stem rot and watery soft rot
Turnip yellow mosaic virus <sup>N</sup> (Genus: <i>Tymovirus</i> )	
<i>Xanthomonas campestris</i> pv. <i>armoraciae</i> *	Xanthomonas leaf spot
<i>Xanthomonas campestris</i> pv. <i>raphanin</i> *	Xanthomonas leaf spot

# PHYTOSANITARY FIELD INSPECTION



## CUCURBITS

Two inspections are required for phytosanitary certification of cucurbits.

- 1) Field Inspection: During bloom and early fruit (critical for viruses).
- 2) Field Inspection: At preharvest (mature fruit). Walk every sixth row with some modification depending on the density of crop.

### PESTS OF CONCERN FOR CUCURBITS

Inspect for:
<i>Acidovorax avenae</i> subsp. <i>citrulli</i> <sup>N</sup> Bacterial fruit blotch
<i>Cladosporium cucumerinum</i> *
<i>Colletotrichum lagenaria</i> * (syn. <i>Colletotrichum orbiculare</i> ) Anthracnose
Cucumber green mottle mosaic virus <sup>N</sup> (Genus: <i>Tobamovirus</i> )
<i>Fusarium oxysporum</i> f. sp. <i>cucumerinum</i> * Cucumber wilt
<i>Fusarium oxysporum</i> f. sp. <i>melonis</i> * Melon wilt
<i>Fusarium oxysporum</i> f. sp. <i>cucurbitae</i> * Squash and pumpkin crown and foot rot
<i>Fusarium oxysporum</i> f. sp. <i>niveum</i> * Watermelon wilt
<i>Macrophomina phaseolina</i> *
Melon necrotic spot virus* (Genus: <i>Gammacarmovirus</i> ) Melon necrotic spot
<i>Pseudomonas syringae</i> pv. <i>lachrymans</i> *
Squash mosaic virus* (Genus: <i>Comovirus</i> ) Squash mosaic
<i>Stagonosporopsis cucurbitacearum</i> <sup>N</sup> (syn. <i>Mycosphaerella melonis</i> )
<i>Verticillium albo-atrum</i> * Verticillium wilt
Watermelon mosaic virus* (Genus: <i>Potyvirus</i> ) Watermelon mosaic
<i>Xanthomonas cucurbitae</i> *



## EGGPLANT

- 1) Field Inspection: At fruit maturity. Walk every sixth row.

### PESTS OF CONCERN FOR EGGPLANT

Inspect for:
<i>Diaporthe vexans</i> * Phomopsis blight
Eggplant mosaic virus <sup>N</sup> (Genus: <i>Tymovirus</i> , <i>Brinjal mosaic virus</i> ) Eggplant mosaic
Potato spindle tuber viroid <sup>N</sup> (Genus: <i>Pospiviroid</i> ) Potato spindle

# PHYTOSANITARY FIELD INSPECTION



## LETTUCE

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**One inspection is required for phytosanitary certification of lettuce.**

1) Field Inspection: When plants begin to bolt and prior to much branching, walk every eighth row.

### PESTS OF CONCERN FOR LETTUCE

Inspect for:	
<i>Bremia lactucae</i> *	Downy mildew
<i>Fusarium oxysporum</i> f. sp. <i>lactucae</i> *	Fusarium wilt
<i>Lettuce mosaic virus</i> * (Genus: <i>Potyvirus</i> )	Lettuce mosaic
<i>Pseudomonas cichorii</i> * (incl. <i>P. endiviae</i> , <i>P. papaveris</i> )	Tarnish spot of lettuce
<i>Septoria lactucae</i> *	Septoria leafspot
<i>Verticillium dahlia</i> *	Verticillium wilt
<i>Xanthomonas axonopodis</i> pv. <i>vitians</i> *	Bacterial leaf spot



## OATS

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**Two inspections are required for phytosanitary certification of oats.**

- 1) Field Inspection: Tillering to pre-boot stage.
- 2) Field Inspection: Head emergence to full bloom.

### PESTS OF CONCERN FOR OATS

Inspect for:	
<i>Barley stripe mosaic virus</i> * (Genus: <i>Hordeivirus</i> )	Barley stripe
<i>Bipolaris victoriae</i> * (syn. <i>Helminthosporium victoriae</i> )	Helminthosporium leafspot

# PHYTOSANITARY FIELD INSPECTION



## ONION

**One inspection per commodity is required for phytosanitary certification of onion.**

### Seed Production:

1) Inspection: At 50% flowering until green seed form, while plants are still vigorous.  
Inspection Procedure: walk every eighth row and every variety.

### Bulbs:

1) Inspection: After bulbs form but while plants are still green and vigorous.  
Inspection Procedure: walk every eighth row and every variety.

### Consumption:

1) Inspection Procedure: Must certify that product originates in county free of smut

SPECIAL NOTE: When submitting samples to the diagnostic laboratory, please indicate the type of inspection (i.e., seed crop, commodities for Australia, seed bulbs for Idaho) under remarks on the Pest and Damage Report.

### PESTS OF CONCERN FOR ONION

Inspect for:	
<i>Alternaria porri</i> * (syn. <i>Macrosporium porri</i> , <i>Alternaria allii</i> )	Purple blotch
<i>Aspergillus niger</i> *	
<i>Botrytis</i> * spp.	Botrytis neck rot
<i>Cladosporium allii-cepae</i> * (syn. <i>Mycosphaella allii-cepae</i> )	
<i>Colletotrichum gloeosporoides</i> * (syn. <i>Glomerella cingulata</i> )	
<i>Fusarium proliferatum</i> *	
Onion yellow dwarf virus* (Genus: <i>Potyvirus</i> )	Onion yellow dwarf
<i>Pantoea ananatis</i> * (syn. <i>Erwinia ananas</i> , incl. <i>E. uredovora</i> )	Center rot
<i>Peronospora destructor</i> *	Downy mildew
<i>Puccinia allii</i> *	Rust
<i>Stemphylium vesicarium</i> * (syn. <i>P. herbarum</i> )	
<i>Urocystis colchici</i> *	Smut
<i>Xanthomonas axonopodis</i> pv. <i>allii</i> *	Bacterial blight

# PHYTOSANITARY FIELD INSPECTION



## PARSLEY

One inspection is required for phytosanitary certification of parsley.

1) Field Inspection: Inspect at budding or early flowering.

### PESTS OF CONCERN FOR PARSLEY

Inspect for:
<i>Pseudomonas syringae</i> pv. <i>apii</i> *
<i>Pseudomonas syringae</i> pv. <i>coriandricola</i> *
<i>Septoria petroselini</i> * Septoria blight



## PEA

Two inspections are required for phytosanitary inspections of pea.

1) Field Inspection: At mid-pod set. Walk every eighth row.

2) Field Inspection: When plants are senescing but before they are dry.

### PESTS OF CONCERN FOR PEA

Inspect for:
<i>Ascochyta</i> * spp. Ascochyta blight
<i>Cladosporium cladosporioides</i> f. sp. <i>pisicola</i> * Cladosporium blight
<i>Curtobacterium flaccumfaciens</i> pv. <i>flaccumfaciens</i> <sup>N</sup> Wilt of pea
<i>Orobanche</i> * spp. Broomrape
Pea early browning virus <sup>N</sup> (Genus: <i>Tobravirus</i> ) Pea early browning
Pea seed-borne mosaic virus* (Genus: <i>Potyvirus</i> ) Pea frizzletop, Pea mosaic
<i>Pseudomonas syringae</i> pv. <i>psi</i> * Bacterial blight



# PHYTOSANITARY FIELD INSPECTION



## PEPPER

Two inspections are required for phytosanitary certification of pepper.

- 1) Field Inspection: At bloom/early fruit. Walk every sixth row.
- 2) Field Inspection: At 20-30% fruit maturity (3-4 weeks before harvest). Walk every sixth row.

### PESTS OF CONCERN FOR PEPPER

Inspect for:	
<b><i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i>*</b>	Bacterial canker
<b><i>Colletotrichum</i>* spp.</b>	Anthraco
<b><i>Columnea latent viroid</i><sup>N</sup> (Genus: <i>Pospiviroid</i>)</b>	
<b>Cucumber mosaic virus*</b> (genus: <i>Cucumovirus</i> )	Cucumber mosaic
<b><i>Diaporthe phaseolorum</i>*</b> (syn. <i>Phomopsis phaseoli</i> )	Fruit rot
<b>Pepper mild mottle virus*</b> (Genus: <i>Tobamovirus</i> )	Pepper mild mottle
<b><i>Phytophthora capsica</i>*</b>	Phytophthora blight
<b>Potato spindle tuber viroid<sup>N</sup> (genus: <i>Pospiviroid</i>)</b>	
<b><i>Pseudomonas syringae</i> pv. <i>tomato</i>*</b> ( <i>Pseudomonas punctulans</i> )	Bacterial speck
<b><i>Pseudomonas solanacearum</i>*</b> (syn. <i>Ralstonia solanacearum</i> )	Bacterial wilt
<b>Tobacco mosaic virus*</b> (Genus: <i>Tobamovirus</i> )	Tobacco mosaic
<b>Tomato apical stunt viroid<sup>N</sup> (Genus: <i>Pospiviroid</i>)</b>	
<b>Tomato brown rugose fruit virus<sup>N</sup> (Genus: <i>Tobamovirus</i>)</b>	
<b>Tomato chlorotic dwarf viroid<sup>N</sup> (Genus: <i>Pospiviroid</i>)</b>	
<b>Tomato mosaic virus*</b> (Genus: <i>Tobamovirus</i> )	Tomato mosaic
<b>Tomato plant macho viroid<sup>N</sup> (Genus: <i>Pospiviroid</i>)</b>	
<b><i>Xanthomonas vesicatoria</i>*</b> (syn. <i>X. euvesicatoria</i> , <i>X. gardneri</i> )	Bacterial spot

## POTATO

Inspect for:
see National Harmonization Plan for Potatoes <a href="https://ccia.ucdavis.edu">https://ccia.ucdavis.edu</a> .

# PHYTOSANITARY FIELD INSPECTION



## RADISH

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One inspection is required for phytosanitary certification of radish.

1) Field Inspection: At early flowering stage.

### PESTS OF CONCERN FOR RADISH

Inspect for:	
<i>Alternaria brassicicola</i> *	Alternaria black leaf spot
<i>Alternaria japonica</i> * (inc. <i>A. matthiolae</i> , <i>A. raphani</i> )	Black pod spot
<i>Colletotrichum graminicola</i> *	Anthraxnose
<i>Plenodomus lingam</i> * (syn. <i>Leptosphaeria maculans</i> )	Black leg
<i>Xanthomonas campestris</i> pv. <i>raphani</i> *	Bacterial leaf spot



## RICE

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Two inspections are required for phytosanitary certification of rice.

1) Field Inspection: At seedling stage.

2) Field Inspection: Before grain filling and maturation stage. Inspect when the plant is full size but before the flowers have been fertilized.

### PESTS OF CONCERN FOR RICE

Inspect for:	
<i>Alternaria padwickii</i> <sup>N</sup>	Rice stackburn
<b>Barley stripe mosaic virus</b> * (Genus: <i>Hordeivirus</i> )	Barley stripe
<b>Rice hoja blanca virus</b> <sup>N</sup> (Genus: <i>Tenuivirus</i> )	Rice hoja blanca
<i>Xanthomonas campestris</i> pv. <i>oryzae</i> <sup>N</sup> (syns. <i>Pseudomonas oryzae</i> , <i>X. campestris</i> pv. <i>oryzae</i> )	

# PHYTOSANITARY FIELD INSPECTION



## SAFFLOWER

One inspection is required for phytosanitary certification of safflower.

- 1) Field Inspection: At the beginning of blooming.

### PESTS OF CONCERN FOR SAFFLOWER

Inspect for:	
<i>Cirsium arvense</i> *	Canada thistle
<i>Fusarium oxysporum</i> f. sp. <i>carthami</i> *	Fusarium wilt
<i>Orobancha</i> * spp.	Broomrape
<i>Pseudomonas syringae</i> pv. <i>syringae</i> * (syn. <i>P. syringae</i> )	Bacterial leaf blight
<i>Puccinia calcitrapae</i> var. <i>centareae</i> *	Safflower rust
<i>Septoria carthami</i> <sup>N</sup>	Septoria leaf spot



## SORGHUM

Two inspections are required for phytosanitary certification of sorghum.

- 1) Field Inspection: During the "boot" stage (after first three whorls but before it heads out).
- 2) Field Inspection: During "head" or maturity stage.

### PESTS OF CONCERN FOR SORGHUM

Inspect for:	
<i>Colletotrichum graminicola</i> *	Anthraxnose
<i>Fusarium moliniforme</i> * (Teleo. <i>Giberella fujikuroi</i> )	Stalkrot
<i>Helminthosporium</i> * spp.	<i>Helminthosporium</i> leaf spot
<i>Periconia circinate</i> *	Periconia root rot
<i>Peronosclerospora sorghi</i> <sup>N</sup>	Downy mildew
<i>Pseudomonas syringae</i> pv. <i>syringae</i> * (syn. <i>P. syringae</i> )	Leaf spot
<i>Pseudomonas andropogonis</i> * (syn. <i>Burkholderia andropogonis</i> )	Leaf stripe
<i>Sclerospora</i> * spp. (inc. <i>S. macrospora</i> )	Downy mildew (including Crazy Top)
<i>Sphacelotheca</i> * and <i>Sporisorium</i> * spp.	Smuts

# PHYTOSANITARY FIELD INSPECTION



## SPINACH

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Two inspections are required for phytosanitary certification of spinach.

- 1) Field Inspection: Before flowering and before foliage canopy completely closes over.
- 2) Field Inspection: After flowering and approximately 3 weeks before seed harvest.

### PESTS OF CONCERN FOR SPINACH

Inspect for:	
<i>Cladosporium variable</i> *	
<i>Colletotrichum dematium</i> f. sp. <i>spinaceae</i> *	Colletotrichum leaf spot
Cucumber mosaic virus* (Genus: <i>Cucumovirus</i> )	Cucumber mosaic
<i>Diaporthe</i> * spp.	
<i>Fusarium oxysporum</i> f. sp. <i>spinaciae</i> *	Fusarium wilt
<i>Peronospora farinosa</i> f. sp. <i>spinaciae</i> *	Downy mildew
<i>Stemphylium botryosum</i> * (syn. <i>Pleospora herbarum</i> )	
<i>Verticillium dahlia</i> *	Verticillium wilt



## STOCK

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One inspection is required for phytosanitary certification of stock.

- 1) Field Inspection: at early flowering.

### PESTS OF CONCERN FOR STOCK

Inspect for:	
<i>Cercospora insulana</i> *	Statice leaf spot
<i>Xanthomonas campestris</i> pv. <i>incanae</i> *	Bacterial blight

# PHYTOSANITARY FIELD INSPECTION



## SUNFLOWER

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Two inspections are required for phytosanitary certification of sunflower.

- 1) Field Inspection: During pre-bud formation (important for virus inspection).
- 1) Field Inspection: From full bloom to seed maturity.

### PESTS OF CONCERN FOR SUNFLOWER

Inspect for:	
<i>Alternaria zinnia</i> *	
<i>Botrytis</i> * spp.	
<i>Diaporthe</i> * spp.	Phomopsis stem canker
<i>Orobanche</i> * spp.	Broomrape
<i>Phoma herbarum</i> var. <i>herbarum</i> <sup>N</sup>	(syn. <i>P. MacDonaldi</i> , <i>Leptosphaeria lindquistii</i> )
<i>Plasmopara halstedii</i> *	Downy mildew
<i>Pseudomonas cichorii</i> *	(and <i>P. endiviae</i> , <i>P. papaveris</i> ) Bacterial spot
<i>Pseudomonas helianthi</i> <sup>N</sup>	Sunflower bacterial leaf spot
<i>Pseudomonas syringae</i> pv. <i>helianthi</i> <sup>N</sup>	( <i>P. helianthi</i> ) Bacterial leaf spot
<i>Sclerotinia</i> spp.*	Sclerotinia wilt; Basal stem rot; Head rot
Sunflower mosaic virus <sup>N</sup>	(Genus: <i>Potyvirus</i> ) (Helianthus mosaic virus)
<i>Verticillium</i> * spp.	Verticillium wilt

# PHYTOSANITARY FIELD INSPECTION



## TOMATO

Two inspections are required for phytosanitary certification of tomato.

- 1) Field/Protected structure Inspection: At bloom and young fruit. Walk every 6th row.
- 2) Field/Protected structure Inspection: At 20%-30% fruit maturity (3-4 weeks before harvest). Walk every 6th row.

### PESTS OF CONCERN FOR TOMATO

Inspect for:
<b><i>Alternaria solani</i>*</b>
<b><i>Boeremeia lycopersici</i></b> <sup>N</sup> (syn. <i>Phoma lycopersici</i> ) Didymella stem and fruit rot
<b><i>Clavibacter michiganensis subsp. michiganensis</i>*</b> Bacterial canker
<b><i>Colletotrichum coccodes</i>*</b> (syn. <i>C. phomoides</i> ) Anthracnose
<b>Columnea latent viroid</b> <sup>N</sup> (Genus: <i>Pospiviroid</i> )
<b>Cucumber mosaic virus*</b> (Genus: <i>Cucumovirus</i> ) Cucumber mosaic
<b><i>Fusarium falsiforme</i>*</b> ( <i>Neocosmospora falciformis</i> ) Foot rot and wilt
<b><i>Fusarium oxysporum</i> f. sp. <i>lycopersici</i>*</b> Fusarium wilt
<b>Pepino mosaic virus*</b> (Genus: <i>Potexvirus</i> ) Pepino mosaic
<b><i>Pseudomonas corrugata</i>*</b> Pith necrosis
<b><i>Pseudomonas syringae</i> pv. <i>tomato</i>*</b> (syn. <i>P. punctulans</i> ) Bacterial speck
<b>Potato spindle tuber viroid</b> <sup>N</sup> (Genus: <i>Pospiviroid</i> )
<b><i>Ralstonia solanacearum</i>*</b> (syn. <i>Pseudomonas solanacearum</i> ) Bacterial wilt
<b><i>Remotididymella destructive</i></b> <sup>N</sup> Phoma rot
<b>Tobacco mosaic virus*</b> (Genus: <i>Tobamovirus</i> ) Tobacco mosaic
<b>Tomato apical stunt viroid</b> <sup>N</sup> (Genus: <i>Pospiviroid</i> )
<b>Tomato black ring virus</b> <sup>N</sup> (Genus: <i>Nepovirus</i> )
<b>Tomato brown rugose fruit virus</b> <sup>N</sup> (Genus: <i>Tobamovirus</i> )
<b>Tomato chlorotic dwarf viroid</b> <sup>N</sup> (Genus: <i>Pospiviroid</i> )
<b>Tomato mosaic virus*</b> (Genus: <i>Tobamovirus</i> ) Tomato mosaic
<b>Tomato plant macho viroid</b> <sup>N</sup> (Genus: <i>Pospiviroid</i> )
<b><i>Verticillium</i>* spp.</b> Verticillium wilt
<b><i>Xanthomonas vesicatoria</i>*</b> ( <i>X. gardenri</i> , <i>X. perforans</i> ) Bacterial spot

# PHYTOSANITARY FIELD INSPECTION



## VETCH

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One inspection is required for phytosanitary certification of vetch.

1) Field Inspection: When vetch is in full bloom and the oat nurse crop is headed out.

### PESTS OF CONCERN FOR VETCH

Inspect for:	
<b>Barley stripe mosaic virus*</b>	(Genus: <i>Hordeivirus</i> ) (syn. Oat stripe mosaic virus)
<b><i>Claviceps purpurea*</i></b>	Ergot
<b><i>Tilletia*</i> spp.</b>	Smut

# PHYTOSANITARY FIELD INSPECTION



## WHEAT

Three inspections are required for phytosanitary certification of wheat.

- 1) Field Inspection: At tillering to preboot stage.
- 1) Field Inspection: During bloom.
- 1) Field Inspection: When seed head is mature.

### PESTS OF CONCERN FOR WHEAT

Inspect for:
<b><i>Alternaria</i>* spp.</b> Alternaria leaf spot
<b><i>Athelia rolfsii</i>*</b> Southern blight
<b><i>Bipolaris sorokiniana</i>*</b> (syn. <i>Helminthosporium sativum</i> ) Spot blotch
<b><i>Blumeria graminis</i> f. sp. <i>tritici</i>*</b> Powdery mildew
<b><i>Claviceps purpurea</i>*</b> Ergot
<b><i>Fusarium</i>* spp.</b>
<b><i>Gaeumannomyces graminis</i> var. <i>tritici</i>*</b> (syn. <i>Ophiobolus graminis</i> ) Take all
<b><i>Helminthosporium</i>* spp.</b>
<b><i>Hymenula cerealis</i><sup>N</sup></b> Cephalosporium stripe
<b><i>Monographella nivalis</i>*</b> (syn. <i>Calonectria nivalis</i> ) Snow mold
<b><i>Pseudomonas</i>* spp.</b> Pseudomonas leaf spots
<b><i>Pseudoseptoria donacis</i>*</b> Halo spot
<b><i>Rathayibacter tritici</i>*</b> (syn. <i>Clavibacter michiganensis</i> subsp. <i>tritici</i> ) Spike blight
<b><i>Sclerophthora macrospora</i>*</b> Crazy top, Downy
<b><i>Sclerotinia sclerotiorum</i>*</b> Sclerotinia wilt
<b><i>Stagnospora</i>* spp.</b> (Teleo: <i>Phaeospaeria</i> spp.) Stagnospora blotch
<b><i>Tilletia indica</i><sup>N</sup></b> Karnal bunt
<b><i>Tilletia</i>* spp.</b> Wheat bunts
<b><i>Urocystis</i>* spp.</b> Flag smut
<b><i>Ustilago</i>* spp.</b>
<b><i>Xanthomonas</i>* spp.</b> Bacterial stripe
<b><i>Zymoseptoria tritici</i>*</b> (syn. <i>Mycosphaerella graminicola</i> )



# PHYTOSANITARY FIELD INSPECTION

## Lists of Additional Organisms that can be Requested for Field Inspection by Crop

ALFALFA--Approved Additional Requests
<i>Fusarium oxysporum</i> f. sp. <i>medicaginis</i> *
<i>Orobanche</i> * spp.
Peanut stunt virus*
<i>Pyrenopeziza medicaginis</i> *
<i>Xanthomonas campestris</i> pv. <i>alfalfae</i> <sup>N</sup>

BEAN--Approved Additional Requests
Alfalfa mosaic virus*
<i>Ascochyta</i> * spp.
Bean yellow mosaic virus* (only fava beans and lentil)
<i>Colletotrichum truncatum</i> <sup>N</sup>
Cucumber mosaic virus*
<i>Macrophomina phaseolina</i> *
Pea early browning virus <sup>N</sup>
Pea enation mosaic virus* (fava beans)
Peanut mottle virus <sup>N</sup>
Beet necrotic yellow vein virus* (Rhizomania)
Pea seed-borne mosaic virus* (lentils, chickpea)
<i>Peronospora</i> * spp.
<i>Phoma exigua</i> *
<i>Phytophthora phaseoli</i> <sup>N</sup>
<i>Pseudomonas savastanoi</i> pv. <i>phaseolicola</i> *
Red clover vein mosaic virus <sup>N</sup>
<i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> *

BEET--Approved Additional Requests
<i>Phymatotrichopsis omnivorum</i> *
<i>Phoma betae</i> *
<i>Ramularia beticola</i> *
<i>Uromyces beticola</i> * (syn. <i>U. betae</i> )

# PHYTOSANITARY FIELD INSPECTION

## CARROT--Approved Additional Requests

Aster yellows phytoplasma (*Candidatus Phytoplasma asteris*)\*

*Mycocentrospora acerina*\*

## CORN--Approved Additional Requests

High plains virus <sup>N</sup>

Maize chlorotic mottle virus <sup>N</sup>

*Pantoea stewartii* subsp. *stewartii*\*

*Peronosclerospora philippinensis* <sup>N</sup>

*Peronosclerospora sorghi* <sup>N</sup>

*Peronosclerospora spontanea*<sup>N</sup>

*Sclerophthora macrospora*\*

*Sclerophthora rayssiae* var. *zeae* <sup>N</sup>

Sugarcane mosaic potyvirus\*

## CRUCIFER--Approved Additional Requests

*Alternaria dauci*\*

*Alternaria japonica*\*

*Candidatus phytoplasma asteris*\*

Cauliflower mosaic virus\*

*Colletotrichum higginsianum* <sup>N</sup>

*Plasmodiophora brassicae*\*

*Pseudomonas chichorii*\*

*Pseudomonas syringae* pv *alisalensis*\*

*Pseudomonas viridiflava*\*

Turnip mosaic virus\*

*Verticillium*\* spp.

# PHYTOSANITARY FIELD INSPECTION

CUCURBITS--Approved Additional Requests
<i>Alternaria cucumerina</i> <sup>N</sup>
<i>Aspergillus niger</i> *
<i>Choanephora cucurbitarum</i> <sup>N</sup>
Cucumber leaf spot virus <sup>N</sup> (cucumber)
Cucumber mosaic virus*
<i>Didymella bryoniae</i> *
<i>Erwinia</i> * spp.
<i>Erysiphe cichoracearum</i> *
<i>Golovinomyces cichoracearum</i> *
Papaya ringspot virus*
<i>Phomopsis sclerotioides</i> <sup>N</sup>
<i>Physalospora rhodina</i> * ( <i>Lasiodiplodia theobromae</i> )
<i>Phytophthora cactorum</i> *
Prunus necrotic ringspot virus*
<i>Pseudomonas syringae</i> pv. <i>syringae</i> *
<i>Pseudoperonospora cubensis</i> *
<i>Pseudomonas viridiflava</i> *
<i>Septoria cucurbitacearum</i> <sup>N</sup>
Squash leaf curl virus*
<i>Thanatephorus cucumeris</i> *
Tobacco ringspot nepovirus <sup>N</sup>
Watermelon chlorotic stunt virus <sup>N</sup>
Watermelon curly mottle virus <sup>N</sup>
<i>Xanthomonas campestris</i> pv. <i>campestris</i> *
<i>Xanthomonas cucurbitae</i> <sup>N</sup>
<i>Xanthomonas melonis</i> <sup>N</sup>
Zucchini yellow mosaic virus*

# PHYTOSANITARY FIELD INSPECTION

LETTUCE--Approved Additional Requests
Alfalfa mosaic virus*
Impatiens necrotic spot virus*
Mirafiori lettuce big vein virus*
Lettuce infectious yellows virus*
<i>Pseudomonas cichorii</i> *
Tobacco rattle virus*
Tomato spotted wilt virus*

ONION--Approved Additional Requests
<i>Erwinia rhapontici</i> *
<i>Pantoea ananatis</i> *
<i>Pseudomonas marginalis</i> pv. <i>marginalis</i> *
<i>Pseudomonas allicola</i> * ( <i>Burkholderia gladioli</i> pv. <i>allicola</i> )
<i>Pyrenochaeta terrestris</i> *
<i>Sclerotium cepivorum</i> *
<i>Stemphylium botryosum</i> *
Tobacco rattle virus*
<i>Urocystis cepulae</i> *
<i>Xanthomonas axonopodis</i> pv. <i>alli</i> *

## PHYTOSANITARY FIELD INSPECTION

PEPPER--Approved Additional Requests
Alfalfa mosaic virus*
Beet curly top virus*
<i>Choanephora cucurbitarum</i> <sup>N</sup>
<i>Diaporthe phaseolorum</i> *
<i>Erwinia carotovora</i> subsp. <i>carotovora</i> * (syn. <i>E. carotovora</i> )
Pepino mosaic virus*
Pepper chat fruit viroid <sup>N</sup>
Pepper mottle potyvirus*
<i>Phytophthora</i> * spp.
<i>Pseudomonas</i> * spp.
Tobacco etch virus*
Tobacco rattle virus*
Tomato bushy stunt virus*
Tomato infectious chlorosis virus*
Tomato spotted wilt virus*
Tomato yellow leaf curl virus*
<i>Xanthomonas campestris</i> pv. <i>vesicatoria</i> *
<i>Xanthomonas vesicatoria</i> *

SORGHUM--Approved Additional Requests
Maize chlorotic dwarf virus <sup>N</sup>
Maize dwarf mosaic virus*
Sorghum stunt mosaic virus*
Sugarcane mosaic virus*

## PHYTOSANITARY FIELD INSPECTION

SUNFLOWER--Approved Additional Requests
<i>Alternaria helianthi</i> <sup>N</sup> <sub>i</sub>
<i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i> *
<i>Phoma oleracea</i> var. <i>helianthi-tuberosi</i> <sup>N</sup>
<i>Phymatotrichopsis omnivorum</i> *
<i>Pseudomonas syringae</i> pv. <i>aptata</i> *
<i>Pseudomonas tagetis</i> <sup>N</sup>
<i>Sclerotinia sclerotiorum</i> *
<i>Septoria helianthi</i> <sup>N</sup>
Tobacco streak virus*

TOMATO--Approved Additional Requests
Alfalfa mosaic virus*
Arabis mosaic virus <sup>N</sup>
<i>Clavibacter michiganensis</i> subsp. <i>sepedonicus</i> *
<i>Colletotrichum gloeosporioides</i> *
<i>Didymella lycopersici</i> <sup>N</sup>
<i>Erwinia carotovora</i> sp. <i>carotovora</i> *
Pelargonium zonate spot virus*
<i>Phoma andigena</i> <sup>N</sup>
<i>Pseudomonas</i> * spp.
<i>Thanatephorus cucumeris</i> *
Tobacco mild green mosaic tobamovirus*
Tobacco ringspot nepovirus*
Tobacco streak virus*
Tomato bushy stunt virus*
Tomato infectious chlorosis virus*
Tomato spotted wilt virus*
Tomato stolbur phytoplasma <sup>N</sup> ( <i>Candidatus</i> Phytoplasma solani)
Tomato yellow leaf curl virus*

# PHYTOSANITARY FIELD INSPECTION

ALL HOSTS--Approved Additional Requests
<i>Cirsium arvense</i> *
<i>Lolium</i> * spp.
<i>Orobanche</i> * spp.
<i>Pseudomonas viridiflava</i> *
<i>Rhodococcus fascians</i> *
<i>Striga</i> <sup>N</sup> spp.
Tobacco ringspot virus*
Tomato ringspot virus*