

5

Canadian Border
Manual

Procedures

Contents

Topics/Pages

Clearing Seed for Planting	5-3
All Origins	5-3
Canadian Origin With SAC	5-6
Canadian Origin Without SAC	5-7
A List of Agricultural and Vegetable Seed Regulated by the Federal Seed Act	5-17
Sampling Seed	5-41
Equipment Needed to Sample Seed	5-41
Collecting the Sample	5-42
Forwarding the Sample	5-46
Clearing the Seed Shipment	5-48
Boarding Aircraft	5-49
Procedures for Boarding Aircraft	5-49
Boarding Ships	5-51
General Instructions	5-51
Breaking Seals	5-51
Handling Foreign Products	5-53
Procedures for Handling Foreign (other than Canadian) Agricultural Products in Transit	5-53

5

Canadian Border
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Procedures

Clearing Seed for Planting

All Origins

Use the following decision tables to determine what action to take on seed regulated by the **Federal Seed Act (FSA)**. If you have questions about any of the following procedures, contact the Seed Examination Facility (SEF) at (301) 504-8605.



Before following any directions on this page, make sure the shipment is for planting. If it is not, then refer to [Table 3-79](#) in the **Plant** section of this manual behind the green tab.

TABLE 5-1: Seed from All Origins

If the seed is:	And:	Then:
Moving under Departmental Permit (PPQ Form 588)	Conditions of the permit are met	RELEASE
	Conditions of the permit are not met	REFER to a CBP Agriculture Specialist (CBP AS)
Agricultural or vegetable (refer to " A List of Agricultural and Vegetable Seed Regulated by the Federal Seed Act " on page 5-17)	—————▶	GO to Table 5-2
Other than agricultural or vegetable	—————▶	GO to Table 5-3

TABLE 5-2: Agricultural and Vegetable Seed from All Origins

If origin is:	And:	And:	And:	Then:
Canada	Accompanied by a declaration of labeling ¹	Accompanied by the original or a copy of PPQ Form 925, Seed Analysis Certificate, for each lot, a Canadian Seed Analysis Certificate (CFIA Form 5289 ²), or a Seed Export Label (CFIA Form 5309 ³) (See Appendix A)	→	GO to Table 5-4 on page 5-6
		Lacks the above documentation	→	GO to Table 5-5 on page 5-7
	Lacks a declaration of labeling	→	PROHIBIT ENTRY	
United States (returned)	→	→	→	GO to Table 3-88 on page 3-74
Other than Canada or United States	Accompanied by a declaration of labeling ¹	Accompanied by a Canadian Seed Analysis Certificate (CFIA Form 5289), or a Seed Export Label (CFIA Form 5309)	→	RELEASE
		Accompanied by a Phytosanitary Certificate	Port has a CBP AS	REFER to CBP AS for inspection
			Port does not have a CBP AS	USE the procedures for “Sampling Seed” on page 5-41
	Lacks the above documentation	→	PROHIBIT ENTRY	
	Lacks a declaration of labeling	→	→	→

- 1 A declaration of labeling is defined as “a written statement of a grower, shipper, processor, dealer, or importer giving for any lot of seed the kind, variety (if vegetable), lot number, origin, and the use for which the seed is intended.” This is usually the invoice and labeling on the containers. If any seed in the lot has been treated, the label must indicate that the seed has been treated, and the commonly accepted coined, chemical (generic), or abbreviated chemical name is shown. A statement must also be shown on labels of treated seed that the seed is not to be used for food, feed, or oil purposes.
- 2 See [Appendix D](#) for a list of laboratories authorized to issue Seed Analysis Certificates.
- 3 See [Appendix D](#) for a list of exporters authorized to use the seed export label.

TABLE 5-3: Seed OTHER THAN Agricultural or Vegetable from All Origins

If the origin is:	And:	Then:
Canada	—————→	GO to Table 3-86 on page 3-72
Other than Canada	Is accompanied by a Phytosanitary Certificate issued by the country of origin	REFER to CBP AS for inspection
	Is accompanied by a Canadian Seed Analysis Certificate (CFIA Form 5289 ¹) or a Seed Export Label (CFIA Form 5309 ²)	RELEASE
	Lacks the above documentation	PROHIBIT ENTRY

- 1 See **Appendix D** for a list of laboratories authorized to issue Seed Analysis Certificates.
- 2 See **Appendix D** for a list of exporters authorized to use the seed export label.

Canadian Origin With SAC

TABLE 5-4: Canadian Origin Seed Accompanied by a Seed Analysis Certificate (SAC)

If:	And:	And:	And:	Then:
The SAC is issued by an accredited laboratory (refer to “Appendix D” on page D-1)	The information on the declaration of labeling matches the information ¹ on the SAC	The SAC states in Block 18 that the seed meets FSA requirements	→	RELEASE; Send original SAC (if it is with the shipment) and invoice to SEF
		The SAC states that the seed does not meet FSA requirements	The seed is consigned to an approved facility (see “Appendix D” on page D-1)	PROHIBIT ENTRY
			The seed is not consigned to an approved facility	
		The information on the declaration of labeling does not match the information on the SAC	The seed is a mixture of peas and a grain (oats, barley, triticale, etc.)	The seed is accompanied by copies of SACs issued on each of the components of the mixture, and the lot of the mixture is composed of, at least in part, the combined lot numbers of the components
	The shipment does not meet the requirements specified in the cell above			PROHIBIT ENTRY
	The seed is corn seed that is bagged rather than in bulk		The lot is accompanied by a copy of an SAC issued on the bulk lot of corn seed, and the lot number of the corn seed is composed of, at least in part, the lot number of the bulk seed shown on the SAC	RELEASE; Send the copy of the SAC and the invoice to the SEF
			The shipment does not meet the requirements specified in the cell above	PROHIBIT ENTRY
	The seed is neither a pea/ grain mixture nor corn that is bagged rather than in bulk		→	
		→		
The SAC is not issued by an accredited laboratory	→			

1 With respect to kind, variety name, lot number, and treatment labeling.

Canadian Origin Without SAC

TABLE 5-5: Canadian Origin Seed Lacking a Seed Analysis Certificate (SAC)

If shipment is:	And the seed is:	Then:
Consigned to an approved facility (refer to Appendix D)	—————▶	1. FORWARD the shipment to the approved facility under CBP bond. 2. SEND a copy of the invoice to the SEF.
Not consigned to an approved facility	Agricultural ¹	GO to Table 5-6
	Vegetable ¹	GO to Table 5-7

- 1 To determine if the seed is agricultural or vegetable, see “[A List of Agricultural and Vegetable Seed Regulated by the Federal Seed Act](#)” on [page 5-17](#)

TABLE 5-6: Canadian Origin Agricultural Seed for Planting, Lacking an SAC

If the seed in Column A of Table 5-8 is for:	And the weight of the seed lot:	And the shipment:	Then:
Resale or planting by the importer ¹	Exceeds that listed in Column B of Table 5-8	—————▶	PROHIBIT ENTRY
	Does not exceed that listed in Column B of Table 5-8	Is corn or wheat	RELEASE
		Is other than corn or wheat, and is accompanied by a Phytosanitary Certificate, a Canadian Seed Analysis Certificate (CFIA Form 5289) ² , or a Seed Export Label (CFIA Form 5309) ³	RELEASE
Experimental or breeding purposes ¹	Does not exceed that listed in Column C of Table 5-8	Is other than corn or wheat, and lacks a Phytosanitary Certificate, CFIA Form 5289, or CFIA Form 5309	PROHIBIT ENTRY
		Is corn or wheat	RELEASE
	Exceeds that listed in Column C of Table 5-8	—————▶	PROHIBIT ENTRY

- The invoice or label should declare what the grower intends to use the seed for. Read the invoice and label to find out how the seed is to be used. If the invoice, label, or importer fails to declare how the seed is to be used, then regulate the seed as if it were intended for resale or planting by the importer.
- See [Appendix D](#) for a list of laboratories authorized to issue Seed Analysis Certificates.
- See [Appendix D](#) for a list of exporters authorized to use the seed export label.

TABLE 5-7: Canadian Origin Vegetable Seed for Planting, Lacking an SAC

If the seed in Column A of Table 5-9 is for:	And the weight of the seed lot:	And the shipment:	Then:
Resale or planting by the importer ¹	Exceeds that listed in Column B of Table 5-9	—————→	PROHIBIT ENTRY
	Does not exceed that listed in Column B of Table 5-9	Is sweet corn	RELEASE
		Is other than sweet corn, and is accompanied by a Phytosanitary Certificate, a Canadian Seed Analysis Certificate (CFIA Form 5289) ² , or a Seed Export Label (CFIA Form 5309) ³	PROHIBIT ENTRY
Is other than sweet corn, and lacks a Phytosanitary Certificate, CFIA Form 5289, or CFIA Form 5309			
Experimental or breeding purposes ¹	Exceeds that listed in Column C of Table 5-9	—————→	PROHIBIT ENTRY
	Does not exceed that listed in Column C of Table 5-9	Is sweet corn	RELEASE
		Is other than sweet corn, and is accompanied by a Phytosanitary Certificate, a Canadian Seed Analysis Certificate (CFIA Form 5289) ² , or a Seed Export Label (CFIA Form 5309) ³	PROHIBIT ENTRY
Is other than sweet corn, and lacks a Phytosanitary Certificate, CFIA Form 5289, or CFIA Form 5309			

- 1 The invoice or label should declare what the grower intends to use the seed for. Read the invoice and label to find out how the seed is to be used. If the invoice, label, or importer fails to declare how the seed is to be used, then regulate the seed as if it were intended for resale or planting by the importer.
- 2 See **Appendix D** for a list of laboratories authorized to issue Seed Analysis Certificates.
- 3 See **Appendix D** for a list of exporters authorized to use the seed export label.

TABLE 5-8: Maximum Weights of Agricultural Seed

A	B	C
Name of Seed	Maximum weight of seed lot not ordinarily sampled (pounds)	Maximum weight of seed lot permitted for experimental or breeding purposes (pounds)
Agrotricum	100	500
Alfalfa	25	100
Alfilaria	25	100
Alyceclover	25	100
Bahiagrass	25	100
Barrelclover	25	100
Barley	100	500

TABLE 5-8: Maximum Weights of Agricultural Seed (continued)

A Name of Seed	B Maximum weight of seed lot not ordinarily sampled (pounds)	C Maximum weight of seed lot permitted for experimental or breeding purposes (pounds)
Bean, adzuki	100	500
Bean, field	100	500
Bean, mung	100	500
Bean (velvetbean)	100	500
Beet, field	100	500
Beet, sugar	100	1,000
Beggarweed	25	100
Bentgrass, colonial	25	100
Bentgrass, creeping	25	100
Bentgrass, velvet	25	100
Bermudagrass	25	100
Bermudagrass, giant	25	100
Bluegrass, annual	25	100
Bluegrass, bulbous	25	100
Bluegrass, Canada	25	100
Bluegrass, glaucantha	25	100
Bluegrass, Kentucky	25	100
Bluegrass, Nevada	25	100
Bluegrass, rough	25	100
Bluegrass, Texas	25	100
Bluegrass, wood	25	100
Bluejoint	25	100
Bluestem, big	25	100
Bluestem, little	25	100
Bluestem, sand	25	100
Bluestem, yellow	25	100
Bottlebrush-squirreltail	25	100
Brome, field	25	100
Brome, meadow	25	100
Brome, mountain	25	100
Brome, smooth	25	100
Broomcorn	100	500
Buckwheat	100	500
Buffalograss: (burs)	25	100
(caryopses)	25	100
Buffelgrass: (fascicles)	25	100
(caryopses)	25	100

TABLE 5-8: Maximum Weights of Agricultural Seed (continued)

A Name of Seed	B Maximum weight of seed lot not ordinarily sampled (pounds)	C Maximum weight of seed lot permitted for experimental or breeding purposes (pounds)
Burclover, California: (in bur)	100	500
(out of bur)	25	100
Burclover, spotted: (in bur)	100	500
(out of bur)	25	100
Burnet, little	25	100
Buttonclover	25	100
Canarygrass	25	100
Canarygrass, reed	25	100
Carpetgrass	25	100
Castorbean	100	500
Chess, soft	25	100
Chickpea	100	500
Clover, alsike	25	100
Clover, arrowleaf	25	100
Clover, berseem	25	100
Clover, cluster	25	100
Clover, crimson	25	100
Clover, Kenya	25	100
Clover, Ladino	25	100
Clover, Lappa	25	100
Clover, large hop	25	100
Clover, Persian	25	100
Clover, red	25	100
Clover, rose	25	100
Clover, small hop: (suckling)	25	100
Clover, strawberry	25	100
Clover, sub: (subterranean)	25	100
Clover, white	25	100
Corn, field	100	1,000
Corn, pop	100	1,000
Cotton	100	500
Cowpea	100	500
Crambe	25	100
Crested dogtail	25	100
Crotalaria, lance	25	100

TABLE 5-8: Maximum Weights of Agricultural Seed (continued)

A Name of Seed	B Maximum weight of seed lot not ordinarily sampled (pounds)	C Maximum weight of seed lot permitted for experimental or breeding purposes (pounds)
Crotalaria, showy	25	100
Crotalaria, slenderleaf	25	100
Crotalaria, striped	25	100
Crotalaria, Sunn	25	100
Crownvetch	25	100
Dallisgrass	25	100
Dichondra	25	100
Dropseed, sand	25	100
Emmer	100	500
Fescue, Chewings	25	100
Fescue, hair	25	100
Fescue, hard	25	100
Fescue, meadow	25	100
Fescue, red	25	100
Fescue, sheep	25	100
Fescue, tall	25	100
Flax	25	100
Galletagrass: (other than caryopses)	25	100
(caryopses)	25	100
Grama, blue	25	100
Grama, side-oats: (other than caryopses)	25	100
(caryopses)	25	100
Guar	25	100
Guineagrass	25	100
Hardinggrass	25	100
Hemp	100	500
Indiangrass, yellow	25	100
Indigo, hairy	25	100
Japanese lawngress	25	100
Johnsongrass	25	100
Kenaf	100	500
Kochia, forage	25	100
Kudzu	25	100
Lentil	25	100
Lespedeza, Korean	25	100
Lespedeza, sericea or Chinese	25	100
Lespedeza, Siberian	25	100

TABLE 5-8: Maximum Weights of Agricultural Seed (continued)

A Name of Seed	B Maximum weight of seed lot not ordinarily sampled (pounds)	C Maximum weight of seed lot permitted for experimental or breeding purposes (pounds)
Lespedeza, striate	25	100
Lovegrass, sand	25	100
Lovegrass, weeping	25	100
Lupine, blue	100	500
Lupine, white	100	500
Lupine, yellow	100	500
Manilagrass	25	100
Meadow foxtail	25	100
Medic, black	25	100
Milkvetch	25	100
Millet, browntop	25	100
Millet, foxtail	25	100
Millet, Japanese	25	100
Millet, pearl	25	100
Millet, proso	25	100
Molassesgrass	25	100
Mustard, black	25	100
Mustard, India	25	100
Mustard, white	25	100
Napiergrass	25	100
Needlegrass, green	25	100
Oat	100	500
Oatgrass, tall	25	100
Orchardgrass	25	100
Panicgrass, blue	25	100
Panicgrass, green	25	100
Pea, field	100	500
Peanut	100	500
Rape, annual	25	100
Rape, bird	25	100
Rape, turnip	25	100
Rape, winter	25	100
Redtop	25	100
Rescuegrass	25	100
Rhodesgrass	25	100
Rice	100	500
Ricegrass, Indian	25	100
Roughpea	100	500

TABLE 5-8: Maximum Weights of Agricultural Seed (continued)

A Name of Seed	B Maximum weight of seed lot not ordinarily sampled (pounds)	C Maximum weight of seed lot permitted for experimental or breeding purposes (pounds)
Rye	100	500
Rye, mountain	25	100
Ryegrass, annual	25	100
Ryegrass, intermediate	25	100
Ryegrass, perennial	25	100
Ryegrass, Wimmera	25	100
Safflower	100	500
Sagewort, Louisiana	25	100
Sainfoin	100	500
Saltbush, fourwing	25	100
Sesame	25	100
Sesbania	25	100
Smilo	25	100
Sorghum	100	1,000
Sorghum alnum	25	100
Sorghum-sudangrass hybrid	100	1,000
Sorghum	25	100
Sourclover	25	100
Soybean	100	500
Spelt	100	500
Sudangrass	25	100
Sunflower	100	500
Sweetclover, white	25	100
Sweetclover, yellow	25	100
Sweet vernalgrass	25	100
Sweetvetch, northern	25	100
Switchgrass	25	100
Timothy	25	100
Timothy, turf	25	100
Tobacco	1	1
Trefoil, big	25	100
Trefoil, birdsfoot	25	100
Triticale	100	500
Vaseygrass	25	100
Veldtgrass	25	100
Velvetbean	100	500
Velvetgrass	25	100
Vetch, common	100	500

TABLE 5-8: Maximum Weights of Agricultural Seed (continued)

A Name of Seed	B Maximum weight of seed lot not ordinarily sampled (pounds)	C Maximum weight of seed lot permitted for experimental or breeding purposes (pounds)
Vetch, hairy	100	500
Vetch, Hungarian	100	500
Vetch, Monantha	100	500
Vetch, narrowleaf	100	500
Vetch, purple	100	500
Vetch, woolypod	100	500
Wheat, common	100	500
Wheat, club	100	500
Wheat, durum	100	500
Wheat, Polish	100	500
Wheat, poulard	100	500
Wheat x Agroticum	100	500
Wheatgrass, beardless	25	100
Wheatgrass, fairway crested	25	100
Wheatgrass, standard crested	25	100
Wheatgrass, intermediate	25	100
Wheatgrass, pubescent	25	100
Wheatgrass, Siberian	25	100
Wheatgrass, slender	25	100
Wheatgrass, streambank	25	100
Wheatgrass, tall	25	100
Wheatgrass, western	25	100
Wildrye, basin	25	100
Wild-rye, Canada	25	100
Wild-rye, Russian	25	100

TABLE 5-9: Maximum weights of vegetable seed

A Name of seed	B Maximum weight of seed lot not ordinarily sampled (pounds)	C Maximum weight of seed lot permitted for experimental or breeding purposes (pounds)
Artichoke	25	50
Asparagus	25	50
Asparagusbean	25	50
Bean	25	200
garden	100	500
lima	25	200
runner	25	200
Beet	25	50
Broadbean	25	200
Broccoli	5	10
Brussels sprouts	5	10
Burdock, great	10	50
Cabbage	5	10
Cabbage, Chinese	5	10
Cabbage, tronchuda	5	10
Cantaloupe	25	50
Cardoon	25	50
Carrot	5	10
Cauliflower	5	10
Celeriac	5	10
Celery	5	10
Chard, Swiss	25	50
Chicory	5	10
Chives	5	10
Citron	25	50
Collards	5	10
Corn, sweet	25	200
Cornsalad	5	10
Cowpea	25	200
Cress, garden	5	10
Cress, upland	5	10
Cress, water	5	10
Cucumber	25	50
Dandelion	5	10
Dill	5	10
Eggplant	5	10
Endive	5	10
Gherkin, West India	25	50

TABLE 5-9: Maximum weights of vegetable seed (continued)

A Name of seed	B Maximum weight of seed lot not ordinarily sampled (pounds)	C Maximum weight of seed lot permitted for experimental or breeding purposes (pounds)
Kale	5	10
Kale, Chinese	5	10
Kale, Siberian	5	10
Kohlrabi	5	10
Leek	5	10
Lettuce	5	10
Melon	25	50
Mustard, India	25	100
Mustard, spinach	5	10
Okra	25	50
Onion	5	10
Onion, Welsh	5	10
Pak-choi	5	10
Parsley	5	10
Parsnip	5	10
Pea	25	200
Pepper	5	10
Pumpkin	25	50
Radish	25	50
Rhubarb	5	10
Rutabaga	5	10
Sage	25	50
Salsify	25	50
Savory, summer	5	10
Sorrel	5	10
Soybean	25	200
Spinach	25	50
Spinach, New Zealand	25	50
Squash	25	50
Tomato	5	10
Tomato, husk	5	10
Turnip	5	10
Watermelon	25	50

A List of Agricultural and Vegetable Seed Regulated by the Federal Seed Act

How to Use This List

Seed may be invoiced either by scientific or common name – or both. Agricultural and vegetable seed are entered into this list both by their scientific and common names. The scientific name will be italicized; the common name will not. Here are two ways you would find tomatoes listed:

TOMATO (V) (*Lycopersicon esculentum*) and

Lycopersicon esculentum (V) (tomato)

If you do **not** find the seed's name in this list, then that seed is neither agricultural nor vegetable.

Signs Used in This List

An “(A)”

- ◆ An (A) following the seed's name identifies that seed as agricultural.

A “(V)”

- ◆ A (V) following the seed's name identifies that seed as vegetable.

Boldface Type

If an entry is **boldfaced**, then that seed may have additional restrictions. If you didn't already, look up the seed in the “Plant” section of this manual under “Seed for Planting.”

A

***Abelmoschus esculentus* (V) (okra)**

Agropyron

cristatum (A) (fairway crested wheatgrass)
desertorum (A) (standard crested wheatgrass)
elongatum (see *Elytrigia elongata*)
fragile subsp. *sibiricum* (A) (Siberian wheatgrass)
intermedium var. *intermedium* (see *Elytrigia intermedia* ssp. *intermedia*)
intermedium var. *trichophorum* (see *Elytrigia intermedia* ssp. *intermedia*)
riparium (see *Elymus lanceolatus* ssp. *lanceolatus*)
smithii (see *Pascopyrum smithii*)
spicatum (see *Pseudoroegneria spicata*)
trachycaulum (see *Elymus trachycaulus*)

Agrostis

canina (A) (velvet bentgrass)
capillaris (A) (colonial bentgrass)
gigantea (A) (redtop)
stolonifera var. *stolonifera* (A) (creeping bentgrass)

AGROTRICUM (A) (X *Agrotriticum*)

ALFALFA (A) (*Medicago sativa*)

ALFILARIA (A) (*Erodium cicutarium*)

Allium

cepa (V) (onion)
fistulosum (V) (Welsh onion)
porrum (V) (leek)
schoenoprasum (V) (chives)

Alopecurus pratensis (A) (meadow foxtail)

ALYCECLOVER (A) (*Alysicarpus vaginalis*)

Alysicarpus vaginalis (A) (meadow alyceclover)

Andropogon

gerardii var. *gerardii* (A) (big bluestem),
hallii (A) (sand bluestem)

Anethum graveolens (V) (dill)

Anthoxanthum odoratum (A) (sweet vernalgrass)

Apium
graveolens var. *dulce* (V) (celery)
graveolens var. *rapaceum* (V) (celeriac)

***Arachis hypogaea* (V) (peanut)**

Arctium lappa (V) (great burdock)

Arrhenatherum elatius (A) (tall oatgrass)

Artemisia ludoviciana (Louisiana sagewort)

ARTICHOKE (V) (*Cynara cardunculus* ssp. *cardunculus*)

ASPARAGUS (V) (*Asparagus officinalis*)

Asparagus officinalis (V) (asparagus)

ASPARAGUS BEAN (V) (*Vigna unguiculata* subsp. *sesquipedalis*)

Asphodelus fistulosus (onionweed)

Astragalus cicer (A) (milkvetch)

Atriplex canescens (A) (saltbush)

Avena
byzantina (A) (oat)
nuda (A) (oat)
sativa (A) (oat)

Axonopus fissifolius (A) (carpetgrass)

B

BAHIAGRASS (A) (*Paspalum notatum*)

Barbarea verna (V) (upland cress)

BARREL CLOVER (A) (*Medicago truncatula*)

BARLEY (A) (*Hordeum vulgare*)

BEAN,
ADZUKI (A) (*Vigna angularis*)
FIELD (A) (*Phaseolus vulgaris*)
GARDEN (V) (*Phaseolus vulgaris*)
LIMA (V) (*Phaseolus lunatus*)
MUNG (A) (*Vigna radiata*)
RUNNER (V) (*Phaseolus coccineus*)

BEET (V) (*Beta vulgaris* ssp. *vulgaris*)
FIELD (A) (*Beta vulgaris* ssp. *vulgaris*)
GARDEN (V) (*Beta vulgaris* ssp. *vulgaris*)
SUGAR (A) (*Beta vulgaris* ssp. *vulgaris*)

BEGGARWEED (A) (*Desmodium tortuosum*)

BENTGRASS,
COLONIAL (A) (*Agrostis capillaris*)
CREEPING (A) (*Agrostis stolonifera* var. *palustris*)
VELVET (A) (*Agrostis canina*)

BERMUDAGRASS (A) (*Cynodon dactylon* var. *dactylon*)
GIANT (A) (*Cynodon dactylon* var. *aridus*)

Beta
vulgaris ssp. *cicla* (V) (Swiss chard)
vulgaris ssp. *vulgaris* (A) (field beet, sugar beet)
vulgaris ssp. *vulgaris* (V) (Crassa group) (beet)

BLUEGRASS,
ANNUAL (A) (*Poa annua*)
BULBOUS (A) (*Poa bulbosa*)
CANADA (A) (*Poa compressa*)
GLAUCANTHA (A) (*Poa glauca*)
KENTUCKY (A) (*Poa pratensis*)
NEVADA (A) (*Poa secunda*)
ROUGH (A) (*Poa trivialis*)
TEXAS (A) (*Poa arachnifera*)
WOOD (A) (*Poa nemoralis*)

BLUEJOINT (A) (*Calamagrostis canadensis*)

BLUESTEM,
BIG (A) (*Andropogon gerardii* var. *gerardii*)
LITTLE (A) (*Schizachyrium scoparium*)
SAND (A) (*Andropogon hallii*)
YELLOW (A) (*Bothriochloa ischaemum*)

Bothriochloa ischaemum (A) (yellow bluestem)

BOTTLE BRUSH-SQUIRRELTAIL (A) (*Elymus elymoides*)

Bouteloua

curtipendula (A) (side-oats grama)

gracilis (A) (blue grama)

Brachiaria ramosa (A) (browntop millet)

Brassica

juncea (A) (India mustard)

napus, var.

annua (A) (annual rape)

biennis (A) (winter rape)

napobrassica (V) (rutabaga)

pabularia (V) (Siberian kale)

nigra (A) (black mustard)

oleracea, var.

acephala (V) (collards, kale)

alboglabra (V) (Chinese kale)

botrytis (V) (broccoli, cauliflower)

capitata (V) (cabbage, savoy cabbage)

costata (V) (tranchuda cabbage)

gemmifera (V) (Brussels sprouts)

gongylodes (V) (kohlrabi)

pekinensis (V) (Chinese cabbage)

perviridis (V) (spinach mustard)

rapa ssp. *chinensis* (V) (pe-tsai, pak-choi)

rapa ssp. *rapa* (A) (bird rape) (V) (turnip)

rapa ssp. *sylvestris* (A) (turnip rape)

BROADBEAN (V) (*Vicia faba*)

BROCCOLI (V) (*Brassica oleracea* var. *botrytis*)

BROME,

FIELD (A) (*Bromus arvensis*)

MEADOW (A) (*Bromus biebersteinii*)

MOUNTAIN (A) (*Bromus marginatus*)

SMOOTH (A) (*Bromus inermis*)

Bromus

arvensis (A) (field brome)

biebersteinii (A) (meadow brome)

catharticus (A) (rescue grass)

hordeaceus (A) (soft chess)

inermis (A) (smooth brome)

marginatus (A) (mountain brome)

willdenowii (see *Bromus catharticus*)

BROOMCORN (A) (*Sorghum bicolor*)

BRUSSELS-SPROUTS (V) (*Brassica oleracea* var. *gemmifera*)

Buchloe dactyloides (A) (buffalograss)

BUCKWHEAT (A) (*Fagopyrum esculentum*)

BUFFALOGRASS (A) (*Buchloe dactyloides*)

BUFFELGRASS (A) (*Cenchrus ciliaris*)

BURCLOVER,

CALIFORNIA (A) (*Medicago polymorpha*)

SPOTTED (A) (*Medicago arabica*)

BURDOCK, GREAT (V) (*Arctium lappa*)

BURNET, LITTLE (A) (*Sanguisorba minor*)

BUTTONCLOVER (A) (*Medicago orbicularis*)

C

CABBAGE (V) (*Brassica oleracea* var. *capitata*),

TRONCHUDA (V) (*Brassica oleracea* var. *costata*)

CABBAGE, CHINESE (V) (*Brassica rapa* ssp. *pekinensis*)

Calamagrostis canadensis (A) (bluejoint)

CANARYGRASS (A) (*Phalaris canariensis*),

REED (A) (*Phalaris arundinacea*)

CANOLA¹ (A)

CANTALOUPE (V) (*see* MELON)

Cannabis sativa (A) (hemp) (A controlled substance)

Capsicum annuum var. *annuum* (V) (pepper)

CARDOON (V) (*Cynara cardunculus* ssp. *cardunculus*)

¹ Canola is a trademarked acronym for **Canadian oil, low acid**. It can be a cultivar of annual rape, bird rape, turnip rape, or winter rape. Canola is not accepted as a kind name under the Federal Seed Act.

CARPETGRASS (A) (*Axonopus fissifolius*)

CARROT (V) (*Daucus carota* ssp. *sativus*)

Carthamus tinctorius (A) (safflower)

CASTORBEAN (A) (*Ricinus communis*)

CAULIFLOWER (V) (*Brassica oleracea* var. *botrytis*)

CELERIAC (V) (*Apium graveolens* var. *rapaceum*)

CELERY (V) (*Apium graveolens* var. *dulce*)

Cenchrus ciliaris (A) (buffelgrass)

CHARD, SWISS (V) (*Beta vulgaris* ssp. *cicla*)

CHESS, SOFT (A) (*Bromus hordaceus*)

CHICKPEA (A) (*Cicer arietinum*)

CHICORY (V) (*Cichorium intybus*)

CHINESE CABBAGE (V) (*Brassica oleracea* var. *pekinensis*)

CHIVES (V) (*Allium schoenoprasum*)

Chloris gayana (A) (rhodesgrass)

Cicer arietinum (A) (chickpea)

Cichorium
endivia (V) (endive)
intybus (V) (chicory)

CITRON (V) (*Citrullus lanatus* var. *citroides*)

Citrullus
lanatus var. *citroides* (V) (citron, melon)
lanatus var. *lanatus* (V) (watermelon)

CLOVER,

ALSIKE (A) (*Trifolium hybridum*)
ARROWLEAF (A) (*Trifolium vesiculosum*)
BERSEEM (A) (*Trifolium alexandrinum*)
CLUSTER (A) (*Trifolium glomeratum*)
CRIMSON (A) (*Trifolium incarnatum*)
KENYA (A) (*Trifolium semipilosum*)
LADINO (A) (*Trifolium repens*)
LAPPA (A) (*Trifolium lappaceum*)
LARGE HOP (A) (*Trifolium campestre*)
PERSIAN (A) (*Trifolium resupinatum*)
RED, MAMMOTH (A) (*Trifolium pratense*)
RED, MEDIUM (A) (*Trifolium pratense*)
ROSE (A) (*Trifolium hirtum*)
SMALL HOP (SUCKLING) (A) (*Trifolium dubium*)
STRAWBERRY (A) (*Trifolium fragiferum*)
SUB (subterranean) (A) (*Trifolium subterraneum*)
WHITE (A) (*Trifolium repens*)

COLLARDS (V) (*Brassica oleracea* var. *acephala*)

CORN,

FIELD (A) (*Zea mays*)

POP (A) (*Zea mays*)

SWEET (V) (*Zea mays*)

CORNSALAD (V) (*Valerianella locusta*)

Coronilla varia (A) (crownvetch)

COTTON (A) (*Gossypium* spp.)

COWPEA (A or V) (*Vigna unguiculata* subsp. *unguiculata*)

CRAMBE (A) (*Crambe abyssinica*)

Crambe abyssinica (A) (crambe, colewort)

CRESS,

GARDEN (V) (*Lepidium sativum*)

UPLAND (V) (*Barbarea verna*)

WATER (V) (*Rorippa nasturtium-aquaticum*)

CRESTED DOGTAIL (A) (*Cynosurus cristatus*)

CROTALARIA,
LANCE (A) (*Crotalaria lanceolata*)
SHOWY (A) (*Crotalaria spectabilis*)
SLENDERLEAF (A) (*Crotalaria brevidens* var. *intermedia*)
STRIPED (A) (*Crotalaria pallida*)
SUNN (A) (*Crotalaria juncea*)

Crotalaria
brevidens var. *intermedia* (A) (slenderleaf crotalaria)
juncea (A) (sunnhemp)
lanceolata (A) (lanceleaf crotalaria)
pallida (A) (striped or smooth crotalaria)
spectabilis (A) (showy crotalaria)

CROWNVETCH (A) (*Coronilla varia*)

CUCUMBER (V) (*Cucumis sativus*)

Cucumis
anguria (V) (West Indian gherkin)
melo (V) (cantaloupe, melon, or muskmelon)
sativus (V) (cucumber)

Cucurbita spp. (V) (pumpkin, squash)

Cyamopsis tetragonoloba (A) (guar)

Cynara cardunculus ssp. *cardunculus* (V) (cardoon or artichoke)

Cynodon
dactylon (A) (bermudagrass) and its var.
var. *aridus* (A) (giant bermudagrass)

Cynosurus cristatus (A) (crested dogtail)

D

Dactylis glomerata (A) (orchardgrass)

DALLISGRASS (A) (*Paspalum dilatatum*)

DANDELION (V) (*Taraxacum officinale*)

Daucus carota ssp. *sativus* (V) (carrot)

Desmodium tortuosum (A) (Florida beggarweed)

DICHONDRA (A) (*Dichondra repens*)

Dichondra repens (A) (dichondra)

DILL (V) (*Anethum graveolens*)

DROPSEED, SAND (A) (*Sporobolus cryptandrus*)

E

***Echinochloa frumentacea* (A) (Japanese millet)**

EGGPLANT (V) (*Solanum melongena*)

Ehrharta calycina (A) (veldtgrass)

Elymus

canadensis (A) (Canada wild rye)

elymoides (A) (bottlebrush-squirreltail)

juncea (see *Psathyrostacys juncea*)

lanceolatus ssp. *lanceolatus* (A) (streambank wheatgrass)

smithii (A) (Western wheatgrass)

trachycaulus (A) (slender wheatgrass)

Elytrigia

elongata (A) (tall wheatgrass)

intermedia subsp. *intermedia* (A) (intermediate wheatgrass or pubescent wheatgrass)

spicata (A) (beardless wheatgrass)

EMMER (A) (*Triticum dicoccum*)

ENDIVE (V) (*Cichorium endivia*)

Eragrostis,

curvula (A) (weeping lovegrass)

trichodes (A) (sand lovegrass)

Erodium cicutarium (A) (alfilaria)

F

Fagopyrum esculentum (A) (buckwheat)

FESCUE,

CHEWING'S (A) (*Festuca rubra* subsp. *commutata*)

HAIR (A) (*Festuca tenuifolia*)

HARD (A) (*Festuca brevipila*)

MEADOW (A) (*Festuca pratensis*)

RED (A) (*Festuca rubra* subsp. *rubra*)

SHEEP (A) (*Festuca ovina* var. *ovina*)

TALL (A) (*Festuca arundinacea*)

Festuca

arundinacea (A) (tall fescue)

brevipila (A) (hard fescue)

ovina (A) (sheep fescue)

pratensis (A) (meadow fescue)

rubra (A) (red fescue)

rubra subsp. *commutata* (A) (Chewing's fescue)

tenuifolia (A) (hair fescue)

FLAX (A) (*Linum usitatissimum*)

G

GALLETAGRASS (A) (*Hilaria jamesii*)

GHERKIN, WEST INDIA (V) (*Cucumis anguria*)

Glycine max (A) (soybean)

***Gossypium* spp.,**

***hirsutum* (A) (cotton, upland cotton)**

GRAMA,

BLUE (A) (*Bouteloua gracilis*)

SIDE-OATS (A) (*Bouteloua curtipendula*)

GUAR (A) (*Cyamopsis tetragonoloba*)

GUINEAGRASS (A) (*Panicum maximum*)

H

HARDINGGRASS (A) (*Phalaris stenoptera*)

Hedysarum boreale (A) (northern sweetvetch)

Helianthus annuus (A) (sunflower)

HEMP (A) (*Cannabis sativa*) (A controlled substance)

***Hibiscus cannabinus* (A) (kenaf)**

Hilaria jamesii (A) (galletagrass)

Holcus lanatus (A) (velvetgrass)

Hordeum vulgare (A) (barley)

I

INDIANGRASS, YELLOW (A) (*Sorghastrum nutans*)

INDIGO, HAIRY (A) (*Indigofera hirsuta*)

Indigofera hirsuta (A) (hairy indigo)

J

JAPANESE LAWNGRASS (A) (*Zoysia japonica*)

JOHNSONGRASS (A) (*Sorghum halepense*)

K

KALE (V) (*Brassica oleracea* var. *acephala*)

CHINESE (V) (*Brassica oleracea* var. *alboglabra*)

SIBERIAN (V) (*Brassica napus* var. *pabularia*)

KENAF (A) (*Hibiscus cannabinus*)

KOCHIA, FORAGE (A) (*Kochia prostrata*)

Kochia prostrata (A) (forage kochia)

KOHLRABI (V) (*Brassica oleracea* var. *gongylodes*)

KUDZU (A) (*Pueraria montana* var. *lobata*)

Kummerowia striata (A) (striate lespedeza)

L

Lactuca sativa (V) (lettuce)

***Lathyrus hirsutus* (A) (rough pea)**

LEEK (V) (*Allium porrum*)

***Lens culinaris* (A) (lentil)**

LENTIL (A) (*Lens culinaris*)

Lepidium sativum (A) (garden cress)

LESPEDA, ZA,

KOREAN (A) (*Lespedeza stipulacea*)

SERICEA OR CHINESE (A) (*Lespedeza cuneata*)

SIBERIAN (A) (*Lespedeza juncea*)

STRIATE (A) (*Kummerowia striata*)

Lespedeza

cuneata (A) (sericea lespedeza)

juncea (A) (Siberian lespedeza)

stipulacea (A) (Korean lespedeza)

striata (A) (striate lespedeza)

LETTUCE (V) (*Lactuca sativa*)

Leymus cinereus (A) (basin wildrye)

Lolium

x hybridum (A) (intermediate ryegrass)

multiflorum (A) (Italian ryegrass, annual ryegrass)

perenne (A) (perennial ryegrass)

rigidum (A) (Wimmera ryegrass)

Lotus corniculatus (A) (birdsfoot trefoil)

Lotus uliginosus (A) (big trefoil)

**LOVEGRASS,
SAND (A) (*Eragrostis trichodes*)
WEEPING (A) (*Eragrostis curvula*)**

LUPINE,
BLUE (A) (*Lupinus angustifolius*)
WHITE (A) (*Lupinus albus*)
YELLOW (A) (*Lupinus luteus*)

Lupinus,
albus (A) (white lupine)
angustifolius (A) (blue lupine)
luteus (A) (yellow lupine)

Lycopersicon esculentum (V) (tomato)

M

MANILAGRASS (A) (*Zoysia matrella*)

MEADOW FOXTAIL (A) (*Alopecurus pratensis*)

Medicago
arabica (A) (spotted burclover)
lupulina (A) (black medic)
orbicularis (A) (button-clover)
polymorpha (A) (California burclover)
sativa (A) (alfalfa)
truncatula (A) (barrelclover)

MEDIC, BLACK (A) (*Medicago lupulina*)

Melilotus
indicus (A) (sourclover)
albus (A) (white sweet clover)
officinalis (A) (yellow sweet clover)

Melinis minutiflora (A) (molasses grass)

MELON (V) (*Cucumis melo*)

MILKVETCH (A) (*Astragalus cicer*)

MILLET,
BROWNTOP (A) (*Brachiaria ramosa*)
FOXTAIL (A) (*Setaria italica*)
JAPANESE (A) (*Echinochloa frumentacea*)
PEARL (A) (*Pennisetum glaucum*)
PROSO (A) (*Panicum miliaceum*)

MOLASSESGRASS (A) (*Melinis minutiflora*)

Mucuna pruriens var. *utilis* (A) (velvetbean)

MUSKMELON (V) (*Cucumis melo*)

MUSTARD,
BLACK (A) (*Brassica nigra*)
INDIA (A&V) (*Brassica juncea*)
SPINACH (V) (*Brassica perviridis*)
WHITE (A) (*Sinapis alba*)

N

NAPIERGRASS (A) (*Pennisetum purpureum*)

Nasturtium officinale (see *Rorippa nasturtium-aquaticum*)

NEEDLEGRASS, GREEN (A) (*Stipa viridula*)

Nicotiana tabacum (A) (tobacco)

O

OAT (A) (*Avena sativa*, *A. nuda*, *A. byzantina*)

OATGRASS, TALL (A) (*Arrhenatherum elatius*)

OKRA (V) (*Abelmoschus esculentus*)

ONION (V) (*Allium cepa*),
WELSH (V) (*Allium fistulosum*)

Onobrychis viciifolia (A) (sainfoin)

ORCHARDGRASS (A) (*Dactylis glomerata*)

***Oryza sativa* (A) (rice)**

Oryzopsis,
hymenoides (A) (Indian ricegrass)
miliacea (A) (smilgrass)

P

PAK-CHOI (V) (*Brassica rapa* ssp. *chinensis*)

PANICGRASS,
BLUE (A) (*Panicum antidotale*)
GREEN (A) (*Panicum maximum* var. *trichoglume*)

***Panicum* spp. (panicgrass),**
***antidotale* (A) (blue panicgrass)**
***maximum* (A) (guineagrass)**
***maximum* var. *trichoglume* (A) (green panicgrass)**
***miliaceum* (A) (proso millet)**
***virgatum* (A) (switchgrass)**

PARSLEY (V) (*Petroselinum crispum*)

PARSNIP (V) (*Pastinaca sativa*)

Pascopyrum smithii (A) (western wheatgrass)

Paspalum
dilatatum (A) (dallisgrass)
notatum (A) (bahigrass)
urvillei (A) (vaseygrass)

Pastinaca sativa (V) (parsnip)

PEA, (V) (*Pisum sativum*),
FIELD (A) (*Pisum sativum*)

PEANUT (A) (*Arachis hypogaea*)

Pennisetum
***glaucum* (A) (pearl millet)**
***purpureum* (A) (napier grass)**

PEPPER (V) (*Capsicum* spp.)

Petroselinum crispum (V) (parsley)

PE-TSAI (V) (See CHINESE CABBAGE)

Phalaris

arundinacea (A) (reed canary grass)
canariensis (A) (canarygrass)
stenoptera (A) (Hardin grass)

Phaseolus

coccineus (V) (runner bean)
lunatus (V) (lima bean)
vulgaris (field bean (A) or garden bean (V))

Phleum

bertolonii (A) (turf timothy)
pratense (A) (timothy)

Physalis ixocarpa (V) (husk-tomato)

Piptatherum miliaceum (A) (smilo)

Pisum sativum, (pea (V) or field pea (A))

Poa

annua (A) (annual bluegrass)
arachnifera (A) (Texas blue grass)
bulbosa (A) (bulbous bluegrass)
compressa (A) (Canada bluegrass)
glaucantha (A) (glaucantha bluegrass)
nemoralis (A) (wood bluegrass)
nevadensis (A) (Nevada bluegrass)
pratensis (A) (Kentucky bluegrass)
trivialis (A) (roughstalk bluegrass)

PROSO (A) (*Panicum miliaceum*)

Psathyrostachys juncea (A) (Russian wildrye)

Pseudoroegneria spicata (A) (beardless wheatgrass)

Pueraria montana var. *lobata* (A) (kudzu)

PUMPKIN (V) (*Cucurbita pepo*, *C. moschata*, *C. maxima*)

R

RADISH (V) (*Raphanus sativus*)

RAPE,
ANNUAL (A) (*Brassica napus* var. *annual*)
BIRD (A) (*Brassica rapa* ssp. *rapa*)
TURNIP (A) (*Brassica rapa* ssp. *silvestris*)
WINTER (A) (*Brassica napus* var. *biennis*)

Raphanus sativus (V) (radish)

REDTOP (A) (*Agrostis gigantea*)

RESCUEGRASS (A) (*Bromus catharticus*)

Rheum rhabarbarum (V) (rhubarb)

RHODESGRASS (A) (*Chloris gayana*)

RHUBARB (V) (*Rheum rhabarbarum*)

RICE (A) (*Oryza sativa*)

RICEGRASS, INDIAN (A) (*Oryzopsis hymenoides*)

Ricinus communis (A) (castorbean)

Rorippa nasturtium-aquaticum (V) (water cress)

ROUGHPEA (A) (*Lathyrus hirsutus*)

RUTABAGA (V) (*Brassica napus* var. *napobrassica*)

Rumex acetosa (V) (sorrel)

RYE (A) (*Secale cereale*),

MOUNTAIN (A) (*Secale strictum* ssp. *strictum*)

RYEGRASS,

ANNUAL OR ITALIAN (A) (*Lolium multiflorum*)

INTERMEDIATE (A) (*Lolium x hybridum*)

PERENNIAL (A) (*Lolium perenne*)

WIMMERA (A) (*Lolium rigidum*)

S

SAFFLOWER (A) (*Carthamus tinctorius*)

SAGE (V) (*Salvia officinalis*)

SAGEWORT, LOUISIANA (A) (*Artemisia ludoviciana*)

SAINFOIN (A) (*Onobrychis viciifolia*)

SALSIFY (V) (*Tragopogon porrifolius*)

SALTBUSH, FOURWING (A) (*Atriplex canescens*)

Salvia officinalis (V) (sage)

Sanguisorba minor (A) (little burnet)

Satureja hortensis (V) (summer savory)

SAVORY, SUMMER (V) (*Satureja hortensis*)

Schizachyrium scoparium (A) (little bluestem)

Secale

cereale (A) (rye)

strictum ssp. *strictum* (A) (mountain rye)

SESAME (A) (*Sesamum indicum*)

Sesamum indicum (A) (sesame)

SESBANIA (A) (*Sesbania exaltata*)

Sesbania exaltata (A) (sesbania)

***Setaria italica* (A) (foxtail millet)**

SIDE-OATS GRAMA (A) (*Bouteloua curtipendula*)

Sinapis alba (A) (white mustard)

SMILO (A) (*Piptatherum miliaceum*)

Solanum melongena (V) (eggplant)

Sorghastrum nutans (A) (yellow Indiangrass)

SORGHUM (A) (*Sorghum bicolor*)

ALMUM (A) (*Sorghum x almum*)

Sorghum

***x almum* (A) (almum sorghum)**

***bicolor* (A) (broomcorn and sorghum)**

***x drummondii* (A) (Sudangrass or sorghum-sudangrass)**

SORGHUM-SUDANGRASS (A) (*Sorghum x drummondii*)

SORGRASS (A) (Rhizomatous derivatives of a johnsongrass x sorghum cross or a johnsongrass x sudangrass cross)

SORREL (V) (*Rumex acetosa*)

SOURCLOVER (A) (*Melilotus indicus*)

SOUTHERN PEA (See COWPEA)

SOYBEAN (A&V) (*Glycine max*)

SPELT (A) (*Triticum spelta*)

SPINACH (V) (*Spinacia oleracea*),
NEW ZEALAND (V) (*Tetragonia tetragonioides*)

Spinacia oleracea (V) (spinach)

Sporobolus cryptandrus (A) (sand dropseed)

SQUASH (V) (*Cucurbita pepo*, *C. moschata*, *C. maxima*)

Stipa viridula (A) (green needlegrass)

SUDANGRASS (A) (*Sorghum x drummondii*)

SUNFLOWER (A) (*Helianthus annuus*)

SWEET VERNALGRASS (A) (*Anthoxanthum odoratum*)

SWEETCLOVER,
WHITE (A) (*Melilotus albus*)
YELLOW (A) (*Melilotus officinalis*)

SWEETVETCH, NORTHERN (A) (*Hedysarum boreale*)

SWITCHGRASS (A) (*Panicum virgatum*)

T

Taraxacum officinale (V) (dandelion)

Tetragonia tetragonioides (V) (New Zealand spinach)

TIMOTHY (A) (*Phleum pratense*),
TURF (A) (*Phleum bertolonii*)

TOBACCO (A) (*Nicotiana tabacum*)

TOMATO (V) (*Lycopersicon esculentum*),
HUSK (V) (*Physalis pubescens*)

Tragopogon porrifolius (V) (salsify)

TREFOIL,
BIG (A) (*Lotus uliginosus*)
BIRDSFOOT (A) (*Lotus corniculatus*)

TRITICALE (A) (*Triticum aestivum* x *Secale cereale*)

Trifolium
alexandrinum (A) (berseem clover)
campestre (A) (large hop clover)
dubium (A) (small hop clover)
fragiferum (A) (strawberry clover)
glomeratum (A) (cluster clover)
hirtum (A) (rose clover)
hybridum (A) (alsike clover)
incarnatum (A) (crimson clover)
lappaceum (A) (lappa clover)
perenne (mammoth red clover)
pratense (A) (red clover) including vars.
repens (A) (ladino or white clover)
resupinatum (A) (Persian clover)
sativum (medium red clover)
semipilosum (A) (Kenya clover)
subterraneum (A) (sub clover)
vesiculosum (A) (arrowleaf clover)

Triticum

***aestivum* (A) (common wheat)**
***compactum* (A) (club wheat)**
***durum* (A) (durum wheat)**
***polonicum* (A) (Polish wheat)**
***turgidum* (A) (poulard wheat)**
***dicoccon* (A) (emmer)**
***spelta* (A) (spelt)**
***Triticum* x *Agrotriticum* (A) (Wheat x Agrotricum)**

TURNIP (V) (*Brassica rapa* ssp. *rapa*)

V

Valerianella locusta (V) (cornsalad)

VASEYGRASS (A) (*Paspalum urvillei*)

VELDTGRASS (A) (*Ehrharta calycina*)

VELVETBEAN (A) (*Mucuna pruriens*)

VELVETGRASS (A) (*Holcus lanatus*)

VETCH,

COMMON (A) (*Vicia sativa* ssp. *sativa*)

HAIRY (A) (*Vicia villosa* ssp. *villosa*)

HUNGARIAN (A) (*Vicia pannonica*)

MONANTHA (A) (*Vicia articulata*)

NARROWLEAF (A) (*Vicia sativa* ssp. *nigra*)

PURPLE (A) (*Vicia benghalensis*)

WINTER (A) (*Vicia villosa* ssp. *varia*)

WOOLLYPOD (A) (*Vicia villosa* ssp. *varia*)

Vicia

***articulata* (A) (monantha vetch)**

***benghalensis* (A) (purple vetch)**

***faba* (V) (broadbean)**

***pannonica* (A) (Hungarian vetch)**

***sativa* ssp. *sativa* (A) (common vetch)**

***sativa* ssp. *nigra* (A) (narrowleaf or blackpod vetch)**

***villosa* ssp. *villosa* (A) (hairy vetch)**

***villosa* ssp. *varia* (A) (winter or woolly-pod vetch)**

Vigna

***angularis* (A) (adzuki bean)**

***radiata* var. *radiata* (A) (mung bean)**

***unguiculata* ssp. *unguiculata* (A) and (V) (cowpea or southern pea)**

***unguiculata* ssp. *sesquipedalis* (V) (asparagus bean)**

W

WATERCRESS (V) (*Rorippa nasturtium-aquaticum*)

WATERMELON (V) (*Citrullus lanatus* var. *lanatus*)

WHEAT,

COMMON (A) (*Triticum aestivum*)
CLUB (A) (*Triticum compactum*)
DURUM (A) (*Triticum durum*)
POLISH (A) (*Triticum polonicum*)
POULARD (A) (*Triticum turgidum*)
X AGROTRICUM (A) (*Triticum x Agrotriticum*)

WHEATGRASS,

BEARDLESS (A) (*Pseudoroegneria spicata*)
CRESTED OR FAIRWAY CRESTED (A) (*Agropyron cristatum*)
CRESTED OR STANDARD CRESTED (A) (*Agropyron desertorum*)
INTERMEDIATE (A) (*Elytrigia intermedia* subsp. *intermedia*)
PUBESCENT (A) (*Elytrigia intermedia* ssp. *intermedia*)
SIBERIAN (A) (*Agropyron fragile* subsp. *sibiricum*)
SLENDER (A) (*Elymus trachycaulus*)
STREAMBANK (A) (*Elymus lanceolatus* ssp. *lanceolatus*)
TALL (A) (*Elytrigia elongata*)
WESTERN (A) (*Pascopyrum smithii*)

WILD-RYE,

BASIN (A) (*Leymus cinereus*)
CANADA (A) (*Elymus canadensis*)
RUSSIAN (A) (*Psathyrostachys juncea*)

X

x Agrotriticum (A) (*agrotriticum*)

Z

Zea mays ssp. *mays* (corn, popcorn)
field corn (A)
popcorn (A)
sweetcorn (V)

Zoysia

japonica (A) (Japanese lawngrass)
matrella (A) (Manila grass)

5

Canadian Border
Manual

Procedures

Sampling Seed

All Origins

Use the following procedures for these purposes:

- ◆ Sampling non-Canadian origin agricultural and vegetable seed shipments that weigh more than 5 pounds
- ◆ Monitoring Canadian origin seed when requested by APHIS

Occasionally, APHIS may ask you to take samples of Canadian origin seed for monitoring purposes. The Seed Examination Facility (SEF) in Beltsville, Maryland will send a memorandum telling you when to begin and end monitoring. If you do not have a memorandum from the SEF, use the instructions in [Table 3-66](#) (Plant Section) for Canadian origin seed. Here is an overview of the steps to take in sampling seed:

TABLE 5-10: Overview of Steps to Take in Sampling Seed

1. Determine how large a sample to collect.
2. Compute how many subsamples to draw.
3. Sample with a trier.
4. Forward samples.

Equipment Needed to Sample Seed

To collect the seed samples, make sure you have the equipment listed in [Figure 5-1](#) below.

- ◆ A **trier**
- ◆ A **cloth** (something the length of the trier to empty subsamples onto)
- ◆ A **container** (must hold at least a quart of seed)
- ◆ A marking **pen**
- ◆ **Tape** (to close opened containers)
- ◆ A **knife**
- ◆ Protective **gloves** (to prevent skin exposure when sampling dusted seed)
- ◆ A cartridge type **dust mask** (to avoid breathing pesticide if the seed is treated)
- ◆ **PPQ Form 237** (Record of Seed Offered for Importation Under the Federal Seed Act)
- ◆ SEF return address envelope form

FIGURE 5-1: A List of Equipment Needed to Sample Seed

Collecting the Sample

Follow these steps to sample the seed:

Step 1—Determine how large a sample to collect.

Refer to **Table 5-11** as a guide.

TABLE 5-11: Amount of Seed to Collect from Each Lot¹

If the seed is in:	And the seed is categorized as:	Then:
Bags or bulk	Agricultural (A)	1. COLLECT 1 quart of seed 2. CONTINUE to Step 2
	Vegetable (V)	1. COLLECT 1 pint of seed 2. CONTINUE to Step 2
Small packets or hermetically sealed containers	→	CONTACT the Seed Examination Facility (SEF) at (301) 504-8605 for directions on sampling

¹ If two or more different agricultural or vegetable seeds are mixed in a bag or in bulk, treat as one lot for sampling purposes.

Step 2—Compute how many subsamples to draw.

Once you know how much seed to collect for your sample, you must then calculate how many subsamples to draw to ensure a representative sample.

Consequences of failure to take a good sample: To ensure that seed is free from pest risk, you need to examine a representative sample of the shipment. The examination results can be no more accurate than the sample—therefore, the effort you make in sampling will decide the effectiveness of the work done by the SEF.



CRUCIAL: Follow these directions scrupulously! When sampling seed, **return the excess seed to its original container** after you have completed your sampling. Never mix seed from different lots before returning your samples. Be careful not to spill seed.

To compute how many subsamples to draw, you need to determine how the seed is packaged:

TABLE 5-12: Computing Number of Subsamples Based on Seed Packaging

If the seed is in:	Then use Substep:
Bags or other nonhermetically sealed containers	2.A for your computation
Bulk	2.B for your computation

Substep 2.A (seed in bags or other nonhermetically sealed packages)—If the seed is packaged in bags, then use **Table 5-13** to compute how many subsamples to draw. If the number of subsamples you draw does not provide enough seed for an adequate sample, then draw the additional seed you need.

TABLE 5-13: Determining How Many Subsamples to Draw from Seed in Bags

If the number of bags or packages in the shipment is:	Then draw this many subsamples to make your sample:	If the number of bags or packages in the shipment is:	Then draw this many subsamples to make your sample:
1 to 6	5	125 to 134	18
7 to 14	6	135 to 144	19
15 to 24	7	145 to 154	20
25 to 34	8	155 to 164	21
35 to 44	9	165 to 174	22
45 to 54	10	175 to 184	23
55 to 64	11	185 to 194	24
65 to 74	12	195 to 204	25
75 to 84	13	205 to 214	26
85 to 94	14	215 to 224	27
95 to 104	15	225 to 234	28
105 to 114	16	235 to 244	29
115 to 124	17	245 or more	30

Do **not** sample more than 30 bags per lot. If there are fewer than five bags in the lot, you must still draw five subsamples. You must also draw enough seed to fill your sample (1/2 pint, 1 pint, or 1 quart).

Go to **Step 3**.

Substep 2.B (bulk seed)—If the seed is being shipped in bulk (unpackaged or loose), then use this calculation and the preceding table to compute how many subsamples to draw:

1. Determine the weight of the lot.
2. Divide the weight of the lot by 100.
3. Take the result obtained by your division (consider this figure as the “equivalent number of bags”) and go back to the previous Substep (2.A) to determine how many subsamples to draw. For an example, refer to **Table 5-14**.

TABLE 5-14: Example Computation of How Many Subsamples to Draw from Seed in a Bulk Shipment

Example computation:

How many subsamples would you draw from a 2,000 pound bulk shipment of oats?

Treat the shipment as a single lot:

1. The weight of the lot is 2,000 pounds.
2. $2,000 \div 100 = 20$ (the equivalent number of bags).
3. Twenty falls between 15 and 24 on the matrix—which directs you to draw 7 subsamples.

4. Go to Step 3.

Step 3—Sample with a trier.

Knowing how much seed needs to be collected to make a sufficient sample and how many subsamples to draw—now you're ready to sample (for seeds in bags or bulk).

Substep 3.A—Check the label or invoice to learn if the seed was treated. If the seed is brightly colored (blue, orange, or pink for example), then assume it was treated regardless of what the label says.



If you know or believe the seed is treated, then take these precautions:

- ◆ Use plastic gloves and a dust mask.
- ◆ Wear protective coveralls.
- ◆ Wear eye protection.
- ◆ Avoid wiping your mouth or nose with your hands.

Substep 3.B—Determine if the seed is coated, pelleted, or preplanted (anything that would make it impracticable to inspect the seed or tell what it is). This would **not** include seed that is merely dusted or coated with ingredients such as rhizobia, dyes, or pesticides. *Treated seeds are inspectable because you can see the seed through the chemical substance.* Refer to **Table 5-15** as a guide.

TABLE 5-15: Sampling Coated, Pelleted, or Preplanted Seed

If the seed is:	And its origin is:	And:	Then:
Coated, pelleted, or preplanted - making it impossible to examine the seed itself	Canada	Has a seed analysis certificate (PPQ Form 925)	GO to Substep 3.C
		Does not have a Seed Analysis Certificate	PROHIBIT ENTRY
	A country other than Canada	Is accompanied by a Phytosanitary Certificate, a Canadian Seed Analysis Certificate (CFIA Form 5289), or a Seed Export Label (CFIA Form 5309 ¹) and an officially drawn and sealed sample taken before the seed was coated	Take a small random sample of coated seed; send the official sample and the sample of uncoated seed to the SEF. GO to Step 4.
		Is not accompanied by one of the above forms and an official sample of uncoated seed	PROHIBIT ENTRY
Naked or merely dusted or treated	—————▶		GO to Substep 3.C

1 See [Appendix D](#) for a list of exporters authorized to use the seed export label.

Substep 3.C—Draw your subsamples randomly. If sampling a bulk shipment, then draw your subsamples at equal intervals throughout the shipment.

Substep 3.D—If you’re sampling a single bag, don’t make more than a single hole with the trier; merely move the trier in different directions to collect the seed.

Substep 3.E—Insert the trier (with the holes down and closed) into the seed. It’s better to enter the bag near its top to prevent spillage. If the seed is too large, does not flow freely, or the trier cannot penetrate the container then sample by hand.

Substep 3.F—Rotate the inner sleeve of the trier to open the holes.

Substep 3.G—Lightly move the trier back and forth to get the seed into the trier.

Substep 3.H—Rotate the inner sleeve of the trier to close the holes.

Substep 3.I—Remove the trier from the bag or bulk seed.

Substep 3.J—Close the holes in the bag made by the trier. If a burlap or cloth bag, then close the hole by moving the tip of the trier over the weave. If a paper bag, then close the hole with a pressure sensitive label or masking tape.

Substep 3.K—Combine the seed in a plastic bag or other container large enough to hold all the subsamples.

Substep 3.L—Mix the seed thoroughly to blend the subsamples. Collect enough seed to have a sufficient amount to analyze (computed in **Step 1**).

Substep 3.M—If the seed is treated, wipe off the trier and then wash your hands, face, and arms with soap and water.

Forwarding the Sample

Here are directions for packaging and mailing:

Step 1—Bag the sample.

Pour the seed sample into a plastic bag. Put samples from different **lots** and different **kinds** of seed into separate bags.

Step 2—Tie the bag.

Secure the plastic bag with a string or rubber band. **NEVER USE STAPLES!**

Step 3—Double-bag the sample.

Put each plastic bag inside a **separate** cloth bag.

Step 4—Refer to Table 5-16 for further instructions.

The origin of the seed will determine how to forward the sample.

TABLE 5-16: Forwarding Seed Samples

If the seed is of:	Then:
Non-Canadian origin	<ol style="list-style-type: none"> 1. Complete a PPQ Form 237, <i>Record of Seed Offered for Importation Under the Federal Seed Act</i>. 2. Put the completed pink copy (Part 3) of PPQ Form 237, declaration of labeling (copy of the label and invoice), and Phytosanitary Certificate, Canadian Seed Analysis Certificate (CFIA Form 5289), or Seed Export Label (CFIA Form 5309¹) into the cloth bag.² 3. Secure the outer cloth bag by tying the mailing tag. 4. Send the sample by PRIORITY MAIL to: Seed Examination Facility PPQ-APHIS-USDA Building 580 BARC-E Beltsville, MD 20705 5. Give the completed yellow copy (Part 4) of PPQ Form 237 to the consignee or the consignee's agent. 6. Mail the remaining white copies (Parts 1 and 2) of the completed PPQ For 237 to the SEF in a separate envelope. Mail these copies the same day as you send the sample-but separate from the sample. 7. GO to Table 5-17. Request additional forms, bags, and tags (if needed) from the SEF at the above address.
Canadian origin for monitoring purposes	<ol style="list-style-type: none"> 1. Place a copy of the seed analysis certificate (PPQ Form 925) and declaration of labeling into the cloth bag. 2. Secure the outer cloth bag by tying the mailing tag. 3. Send the sample by PRIORITY MAIL to: Seed Examination Facility PPQ-APHIS-USDA Building 580 BARC-E Beltsville, MD 20705 4. Request additional forms, bags, and tags (if needed) from the SEF at the above address.
Canadian origin, lacking a seed analysis certificate (SAC), consigned to an approved facility	<ol style="list-style-type: none"> 1. Place the sample and a copy of the invoice into the shipping packaging supplied by the importer. 2. Using an address label provided by the importer, send the sample to a Canadian seed testing laboratory designated by the importer (the importer is responsible for paying to send the sample to the Canadian laboratory). The laboratory must be authorized to issue Seed Analysis Certificates (see Appendix D). 3. Request additional labels and shipping packaging (if needed) from the importer.

- 1 See **Appendix D** for a list of exporters authorized to use the seed export label.
- 2 When forwarding samples of treated seed, be sure to put the papers in the outer cloth bag.



WARNING! If the seed is treated, make sure that you put the paperwork in the cloth bag outside the plastic bag - never put the paperwork in the plastic bag containing the treated seed. **If you put the paperwork in with the treated seed, you create a risk of exposing personnel at the seed examination facility to pesticides.** Note that pesticide absorption through the skin is the most common cause of poisoning in agricultural workers.

Clearing the Seed Shipment

Refer to [Table 5-17](#) as a guide.

TABLE 5-17: Clearing Non-Canadian Origin Seed Shipments

If the importer:	Then:
Has posted a performance bond	ALLOW the seed to go forward to the owner's premise pending release by the SEF
Has not posted a performance bond	HOLD the seed until released by the SEF

5

Canadian Border
Manual

Procedures

Boarding Aircraft

Procedures for Boarding Aircraft

Flight's Origin

Determine if the flight originated in Canada or some other foreign country, Hawaii, or a U.S. offshore territory.

Canadian Flights

If the flight originated in Canada, examine the stores. If you can confirm that any agricultural product was grown in either the United States or Canada, release the material. This would include citrus fruit stenciled with the brand of a U.S. grower (see **“Evidence of Origin”** on **page 3-23**). Collect meats, fruits, and vegetables of other than Canadian or continental U.S. Origin.

Precleared Flights

If the flight originated in a foreign country other than Canada, Hawaii, or any U.S. offshore territory; check to see if the flight was precleared by PPQ. Assume that all scheduled flights (and some charters) from Nassau or Freeport, Bahamas or Bermuda are precleared. RELEASE precleared flights.

Foreign Arrivals *not* Precleared

If the foreign, Hawaiian, or U.S. territorial flight was not precleared, then board the aircraft, clear its passengers, cargo, and crew:

1. Examine stores (including box lunches), and storage for produce, meats, and other agricultural items. Use the references in this manual to decide the appropriate action to take on intercepted items. Collect all inadmissible material (where you are directed to prohibit entry) for later incineration or sterilization.
2. Remove all garbage and food waste (including unused meals) for incineration or sterilization.

3. Examine baggage and question passengers and crew to learn if they are carrying agricultural items. Use the references in this manual to decide the appropriate action to take on intercepted items. Collect all inadmissible material (where you are directed to prohibit entry) for later sterilization or incineration. If the owners of intercepted material object to the seizure and request action by CBP, then REFER to a CBP Agriculture Specialist (CBP AS) for directions. Check the manifest to see if live animals and organisms are manifested. If the aircraft is carrying live animals or organisms, use the references in this manual to decide the appropriate action to take.
4. Observe if there is infestation, soil, plant, or animal contamination (principally blood, manure, or straw). If you detect infestation or contamination, secure the aircraft and/or cargo, then immediately REFER to CBP AS.
5. Incinerate or sterilize all garbage, refuse, and those prohibited items you collected. Officers of the Canadian Food Inspection Agency (CFIA) have agreed to assist in this incineration.

5

Canadian Border
Manual

Procedures

Boarding Ships

General Instructions

1. Determine if the ship is plying only between continental United States and Canadian ports or has visited other foreign ports.
2. If the ship was plying only between continental United States and Canadian ports, no further action is necessary.
3. If the ship visited other foreign ports besides Canada, verify whether or not a CBP Agriculture Specialist (CBP AS) has been notified. If a CBP AS was not notified, contact them.
4. In the absence of a CBP AS, make sure that no meat, stores, or animals are discharged. Do not allow any garbage to be removed or dumped overboard.

Breaking Seals

Foreign meats in sea stores of vessels plying the Great Lakes/St. Lawrence Seaway are sealed in freezer compartments by the Canadian Food Inspection Agency (CFIA). Although these seals are to remain intact while the vessel is in the Seaway or Great Lakes, in an emergency (like a failure in the refrigeration system) the seals can be broken by Federal officers. If you are asked by CFIA to break seals in sea stores, and you judge that there is a real emergency, then supervise the breaking of the seals and resealing of the stores by following this procedure:

1. **Record** the serial numbers of the seals that are broken.
2. **Replace** the seals that were broken.
3. **Record** the serial numbers of the new seals.
4. **Contact** a CBP AS immediately. The CBP AS will notify the Canadian Food Inspection Agency.



Procedures

Handling Foreign Products

Procedures for Handling Foreign (other than Canadian) Agricultural Products in Transit¹

■ REFER to a CBP Agriculture Specialist (CBP AS).

1 In transit includes products moving from Canada and passing through the United States on their way back into Canada; or passing through the United States to reach another foreign country.

