

Standard Operating Procedures for Phytosanitary Inspection and Plant Quarantine Clearance of Plants/ Plant Products & other Regulated Articles



Government of India
Ministry of Agriculture
(Department of Agriculture & Cooperation)
Directorate of Plant Protection, Quarantine & Storage
N.H.IV., Faridabad-121001
May 2015

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Control of Document

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Control of Document

1. Document issue and revision

The issue and revision of this document is controlled by the Directorate of Plant Protection, Quarantine & Storage (NPPO), N.H.IV., Faridabad-121001 (Tel: 0129-2413985; Fax:2412125; e-mail: ppa@nic.in). As and when a section of this document is revised, the revised section is issued in its entirety together with a revision number, identifying the new issue status and the issue date of each section. The revised sections are automatically issued to each of this document copy holders mentioned in Section 2 of 'Control of Document':

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8.	Preparation & Issue of Import Release Order	1	-do-		
9.	Monitoring/Reporting import inspection & Plant Quarantine clearance	1	-do-		
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2. Document distribution

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1.1. Scope/Purpose:

This document provides guidance and prescribes the standard operating procedures for a national system for import inspection and plant quarantine clearance for plants/plant products and other regulated articles notified under the Plant Quarantine (Regulation of import into India) Order, 2003 issued under the Destructive Insects and Pests Act, 1914.

The purpose of this document is to provide guidance for an operation of a national import regulatory system and prescribe standard operating procedures to ensure effective and credible clearance for import of consignments of plants/plant products and other regulated articles with an objective to safeguard India's bio-security and also to fulfill the international obligations entrusted under the International Protection Convention (1997) and WTO-SPS Agreement.

1.2. Definitions & Terms:

Additional declaration	A statement that is required by an importing country to be entered in Phytosanitary Certificate and which provides specific additional information pertinent to the phytosanitary condition of a consignment.
Authorised Officer	A technical officer of state/central government organisation authorised to issue Plant quarantine clearance.
Biological control agent	A natural enemy, antagonist, competitor or other organism used for pest control
Bulbs & Tubers	A commodity class for dormant underground parts of plant intended for planting (includes corms and rhizomes).
Certificate	An official document which attests to the phytosanitary status of any consignment affected by phytosanitary regulations.
Commodity	A type of plant, plant product, or other article being moved for trade or other purpose.
Compliance procedure	Official procedure used to verify that a consignment complies with stated phytosanitary requirements.
Consignment	A quantity of plants, plant products and/or other regulated articles being moved from one country to another and covered by a single phytosanitary certificate (a consignment may be composed of one or more lots).
Consignment in transit	A consignment that is not imported into a country but passes through it to another country, subject to official procedures which ensure that it remains enclosed, and is not split up, not combined with other consignments nor has its packaging changed.
Country of origin (of a Consignment of plant products)	Country where the plants from which the plant products are derived were grown.
Country of origin (of a consignment of plants)	Country where the plants were grown.
Country of Origin (of regulated articles other than plants and plant products)	Country where the regulated articles were first exposed to contamination by pests.

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Country of re-Import	Country into which a consignment of plants, plant products, or other regulated articles have been imported and was stored, split up, had its packaging changed or was otherwise exposed to contamination by pests, prior to a third country.
Cut flowers and branches	A commodity class for fresh parts of plants intended for decorative use and not for planting.
Devitalization	A procedure rendering plants or plant products incapable of germination, growth or further reproduction
Dunnage	Wood packaging material used to secure or support a commodity but which does not remain associated with the commodity.
Field	A plot of land with defined boundaries within a place of production on which a commodity was grown.
Fruits and vegetables	A commodity class for fresh parts of plants intended for consumption or processing and not for planting.
Fumigation	Treatment with a chemical agent that reaches the commodity wholly or primarily in gaseous stage.
Germplasm	Plants and plant material intended for use in breeding or conservation programmes
Grain	A commodity class for seeds intended for processing or consumption and not for planting.
Import	An act of bringing into any part or place of territory of Republic of India any kind of seed, plant or plant product and other regulated article from a place outside India either by sea, land, air or across any customs frontier;
Import Permit	Official document authorizing importation of a commodity or of a biological control agent in accordance with specified phytosanitary requirements.
Inspection	Official visual examination of plants, plant products or other regulated articles to determine if pests are present and/ or to determine compliance with phytosanitary regulations.
Inspection Authority	An authority specified in Part I of Schedule XI or an officer of the Directorate of Plant Protection, Quarantine and Storage duly authorized by the Plant Protection Adviser for the purpose of approval and certification of Post-Entry Quarantine facilities and inspection of growing plants in such facilities in accordance with the guidelines issued by the Plant Protection Adviser and for any specified purpose, an authority specified in Part II of the said Schedule.
Inspector	A trained technical staff assigned with the responsibility of inspection/sampling of consignments of plants/plant products and other regulated articles for phytosanitary certification or a person authorised by the Dte of PPQS (NPPO) to discharge its functions.
IPPC	International Plant Protection Convention, as deposited in 1951 with FAO in Rome and as subsequently amended.
International Standard for Phytosanitary Measures (ISPM)	An international standard adopted by the conference of FAO, the interim commission on phytosanitary measures or the commission on phytosanitary measures established under IPPC.
Issuing authority	Any officer notified by the Government of India in the Gazette, for the purpose of issuance of Plant quarantine clearance.

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National Plant Protection Organization (NPPO)	Official service established by a government to discharge the functions specified by the IPPC.	
Notification	A notification published in the official Gazette and the expression “notifies” shall be construed accordingly.	
Noxious weeds	Any weed harmful or hazardous or unwholesome to human beings, animal life or parasitic on plant species.	
NSPM	National standard for phytosanitary measures established by Dte of PPQS	
Official	Established, authorized or performed by a National Plant Protection Organisation.	
Packing material	Any kind of material of plant origin used for packing of goods.	
Pest	Any species, strain or biotype of plant, or pathogenic agent, injurious to plants or plant products.	
Plant Protection Adviser	The Plant Protection Adviser , Directorate of Plant Protection, Quarantine and Storage.	
Point of entry	Any sea port, airport, or land-border check-post or rail station, river port, foreign post office, courier terminal, container freight station or inland container depot notified as specified in Schedule-I or Schedule-II or Schedule-III as the case may be.	
Post-entry quarantine	Growing of imported plants in confinement for a specified period of time in a glass house, screen house, poly house or any other facility, or isolated field or an off-shore island that is established in accordance with guidelines/standards and are duly approved and certified by an inspection authority notified under the PQ Order, 2003.	
Phytosanitary Certificate	Certificate patterned after the model certificates of IPPC.	
Plant quarantine clearance	Use of phytosanitary procedures leading to the issue of a Plant quarantine clearance.	
Phytosanitary regulation	Official rule to prevent the introduction and/ or spread of quarantine pests or to limit the economic impact of regulated non-quarantine pests including establishment of procedures for phytosanitary certification.	
Plant products	Unmanufactured material of plant origin (including grain) and those manufactured products that, by their nature or that of their processing, may create a risk for the spread of pests.	
Plants	Living plants and parts thereof, including seeds and germplasm.	
Quarantine Pest	A pest of potential economic importance to the area endangered and not yet present there, or present but not widely distributed and being officially controlled.	
Regulated article	Any plant, plant product, storage place, packaging, conveyance container, soil and any other organism, object or material capable of harbouring or spread of pests deemed to require phytosanitary measures, particularly, where international transportation is involved.	

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Regulated quarantine pest	A non quarantine pest whose presence in plants for planting affects the intended use of those plants with an economically unacceptable impact and which is therefore regulated within the territory of the importing contracting party.
Seeds	Seeds for planting or intended for planting and not for consumption or processing.
Soil	Earth, sand, clay, silt, loam, compost, manure, peat or sphagnum moss, litter, leaf waste or any organic media that support plant life and shall include ship ballast or any organic medium used for growing plants.
Stored product	Un-manufactured plant product intended for consumption or processing stored in a dried form.
Treatment	Official procedure for the killing, inactivation, or removal of pests or for rendering pests infertile or for devitalization.
Visual Examination	The physical examination of plants, plant products, or other regulated articles using the unaided eye, lens, stereoscope or microscope to detect pests or contaminants without testing or processing.

1.3. References:

The Plant Quarantine (Regulation of import into India) Order, 2003

Glossary of Phytosanitary Terms, ISPM 5 (2006), FAO, Rome.

Guidelines for Inspection, ISPM 23 (2005), FAO, Rome.

International Plant Protection Convention, 1997, FAO, Rome.

1.4 Requirements:

1.4.1. Legal Authority:

The Import Unit of Plant Quarantine (PQ) Division of Dte of PPQS (NPPO) will have legal mandate and administrative authority for control and issuance of Import Permits (IP) and Import Release Orders (IRO) by the authorized officers of Plant Quarantine Stations (PQSs). The Import Unit will bear the legal power for its actions and implement safeguards against conflicts of interest and fraudulent use/issue of Import Permits and Import Release Orders. The Import Unit will also have the statutory power to prevent the entry of any import of consignments, which do not meet India's Plant Quarantine import regulations and to take appropriate actions such as deportation/destruction/reporting of nonconformities to the NPPO of the exporting country and to fulfill the international obligations under the IPPC and WTO-SPS Agreement.

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1.4.2. Management Responsibility:

The Dte of PPQS (NPPO) will be overall responsible for:

- management of national import regulatory system that ensures that all the requirements including import clearance specifications, legislative and administrative requirements are met with;
 - will designate a senior level technical officer to head the Import Unit;
 - identify the duties and line of communication of all personnel of the Dte. PPQ&S to issue Import Permits, Import Release Orders and treatment supervision responsibilities etc.;
 - identify the duties such as inspection and drawl of samples etc., line of communication of any other personnel authorized by the Plant Protection Advisor as per clause 3(15) of Chapter II of PQ Order, 2003;
 - ensure that adequate trained and skillful personnel and resources are available with the offices of PQSs entrusted with the responsibility of PQ import clearance for undertaking following functions:
 - maintenance of information on India's current import regulatory system;
 - production of operational guidelines/procedures/instructions to ensure India's import regulations are fulfilled;
 - inspection and testing of consignments and other regulated articles;
 - identification of pests found during inspection of consignments and other regulated articles;
 - verification of the authenticity and integrity of phytosanitary procedures;
 - completion and issuance of Import Permits and Import Release Orders.;
 - document storage and retrieval;
 - training;
 - dissemination of import related information;
 - providing technical information for conducting Pest Risk Analysis (PRA) and developing bilateral phytosanitary protocols, if necessary.

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1.5. Resources:

1.5.1 Trained & Qualified Staff:

The National Import Unit at PQ Division, DPPQS (NPPO) will have adequate skilled and trained manpower to efficiently handle the volume of consignments being processed for import inspection and plant quarantine clearance. The National Import Unit will decide the number of technically trained/qualified manpower to be required at each place, periodically review the requirements of human resources, refresher courses for the inspectors and also specialized trainings for technical experts managing laboratories of Entomology, Plant Pathology, Nematology & Seed-health testing and Weed Science. The Import Unit of Dte.of PPQS will impart training and need based customized training as well, for upgrading the skills and technical competency of their officials as well as officials of other departments for capacity building.

The Dte of PPQS will undertake regular review of existing authorized Plant Quarantine Officers/Officials at the PQSs and other authorized Stations and evaluate their technical capacities and infrastructure facilities for undertaking import inspection and clearance and make appropriate recommendations to the Ministry of Agriculture (Department of Agriculture & Cooperation) for their strengthening for effective implementation of these SOPs.

1.5.2. General Facilities:

The general facilities for the Import Unit of Dte of PPQS will include office space for the head of the unit and the administrative secretariat with telephone, fax, computer with internet facility and a dedicated server for management of national phytosanitary database.

The general facilities for the PQSs authorized for import clearances include an exclusive office space for authorized officer, which is provided with dedicated telephone, fax, computer with internet facility for import clearance activity, an inspection area with well lighted inspection table with white surface, a sample storage room for keeping the samples, a record room and an adequate laboratory space for carrying out laboratory testing for diagnosing pests intercepted in the import consignments and optional fumigation/treatment facility for carrying out phytosanitary treatments, if required.

Besides these, incubation/growth room facilities with automatic lighting/humidity/temperature controls are required for seed-health testing/grow-out tests for import inspection of seed consignments and molecular diagnostic facilities for import inspection of tissue cultured plants.

1.5.3. National Phytosanitary Database (Plant Quarantine Information System)

The Import Unit of PQ Division of Dte of PPQS (NPPO) will provide all the PQS office (entrusted with import clearance activities) with the requisite software, i.e. Plant Quarantine Information System (PQIS) with the assistance of National Informatics Centre (NIC) for the computerized issuance of import permits and import release order and establish network links with PQIS for reporting activities related to PQ import inspection & clearance activities. All the inspectors of PQSs and the officials of other authorized agencies will be trained to familiarize with the software application of PQIS .

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The PQIS database will contain effective communication links with all the authorized PQSs and also with Customs Department's EDI system to share the data related to phytosanitary inspection and PQ import clearances. The PQIS will also contain the information on India's current import regulations, i.e. the Plant Quarantine (Regulations of import into India) Order, 2003, Quarantine Pests (QP) / other regulated pests of concern to India, pests diagnostic manuals, treatment protocols etc., for the use of the stakeholders.

1.5.4. Equipments:

1.5.4.1. Office Equipments:

The offices of PQS will have the following essential equipments for office work

- Telephone (dedicated)
- Fax
- Computer with Internet Facility (broadband connectivity/leased line)
- UPS (Inverter)
- Printer
- Scanner
- Pen Drive
- Digital Web Camera

1.5.4.2. Inspection/Sampling Equipments:

The essential inspection/sampling equipments include:

- Illuminating magnifiers (hand-held/table mounted)
- Dissection kit (knives, forceps, needles, camel hair brush, razor blade)
- Steriobinocular microscope
- Compound binocular microscope
- Microscopic slides & Cover slips
- Sampling triers (Slotted tube sampler/Nobbe sampler/Deep bin probes)
- Sieves and white enamel plate/or tray
- Specimen vials/markers/labels/plastic bags (self-sealing type)/paper bags/seals
- Safety helmets, Aprons & Gloves (disposable)
- Weighing balance
- Moisture meter
- Refrigerator

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1.5.4.3. Equipments for Laboratory Testing:

In addition the following equipment is required for laboratory testing for pest diagnosis.

Entomology

- Insect storage cabinets/mounting boards
- Soft X-ray Scanner & Film Developer
- Steriobinocular microscope fitted with Image grabber

Nematology

- Nematode Extraction Unit
- Fenwick can
- Baerman funnel
- Sieve set
- Steriobinocular microscope
- Compound Binocular Microscope

Weed Science

- Weed Seeds storage cabinets
- Digital Camera
- Steriobinocular microscope fitted with Image grabber
- Magnifiers

Plant Pathology:

- Laminar flow
- BOD Incubator
- Autoclave
- Hot air oven
- Digital top pan balance
- Analytical Balance
- Hot Plate with Magnetic Stirrer
- Table top centrifuge
- Wrist action shaker
- pH meter
- Blender
- Thermometer/Temperature Probes
- Haemocytometer

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- Inoculation loop or needle
- UV fluorescent lamp
- Distilled Water Unit
- Deep freezer (-20C)
- Compound trinocular microscope fitted with Photomicrographic Equipment
- Digital camera
- Vacuum cleaner
- A set of laboratory chemicals (for preparation of media/stains/reagents etc.)
- A set of laboratory glassware (beakers, conical flasks, measuring cylinders, pipettes, Petri dishes, test tubes, etc.)

Special Equipments for Molecular Diagnosis of Bacteria/Viruses

- Micropipettes (varying volumes)
- Micro plates (for ELISA Test)
- ELISA kit (reader, washer, reagents)
- Immuno-diagnostic reagents (Specific Antisera/Enzymes/substrate/buffers)
- Nitrocellulose membrane (for DIBA)
- PCR
- PCR Tubes
- Horizontal Gel Electrophoresis Unit with power pack
- Hybridization Oven
- Gel Documentation Unit with printer
- Microcentrifuge with Eppendorf tubes
- Nucleic Acid Chemicals (Specific Primers/TAQ DNA Polymerase/C-DNA probes/buffers/stains etc)
- Rnase Kit

1.5.4.4. Treatment Equipments:

In addition the following essential equipments are required for undertaking fumigation/disinfestations/disinfection treatment and supervision of fumigation treatments, where appropriate.

- Atmospheric/vacuum fumigation chambers
- Gas monitoring equipment
- Gas leak detector
- Gas proof covers/sand snakes
- Gas Storage cylinders/cans
- Respirator with canister
- Spraying Equipments

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2.1. Receipt of Application

- 2.1.1. The technical staff assigned with duty at the registration counter will receive the prescribed application (Annexure-2A) for quarantine inspection and clearance of imported plants and plant products and other regulated articles and attached documents as specified there under from the importer through on-line .

2.2. Verification of Application

- 2.2.1. He will verify the correct and completeness of application and the attached documents viz., import permit, where applicable; phytosanitary certificate, DAC approval for import, where applicable; letter of credit/trade agreement; invoice/packing list; bill of entry/air way bill; bill of lading, fumigation/treatment certificate, post entry quarantine facility certificate, where applicable and any other relevant documents in the online submission.
- 2.2.2. He will communicate through online with the Customs Department/ Importer if there are any deficiencies in the application and ensure that appropriate corrections are incorporated in the application or deficient documents are produced prior to scrutiny of application for further necessary action.
- 2.2.3. If the application is made in respect of commodities, whose import is prohibited under schedule – IV of the PQ Order, 2003 or not covered under any schedule of the PQ Order, 2003, the same will be withheld and brought to the notice of the concerned authorized officer/ Customs Department. Dte of PPQS (NPPO) will provide notifications for import regulations on the list of plants/plant products and other regulated articles, whose import is prohibited under the PQ Order, 2003 and list of India’s regulated pests ; and schedule- wise list of plant species covered under PQ Order,2003 to all authorized PQ officers/Customs Department for guidance and compliance.
- 2.2.4. Also if the application is made in respect of processed products, such as juices/pulp/concentrates/ pickles/jams/jellies and other preserved/frozen/vacuum packed food products, NOC (No Objection Certificate) will be issued, as the same does not come under the purview of plant quarantine unless otherwise its requirement is technically justified. A list of all such products will be compiled by Dte of PPQS (NPPO) and circulated from time to time to all authorized officers of PQS/ Customs Department for guidance and compliance.

2.3. Registration of Application & Realization of fees

- 2.3.1. The importer will register at Customs office through online system and the same will be forwarded to Plant Quarantine Station in case of agricultural commodities. The technical staff assigned with scrutiny work will carry out the scrutiny of the documents received through online and assess the inspection fees, as prescribed in Schedule IX of the PQ Order, 2003.
- 2.3.2. He will advise the importer to tender the exact amount of fees online in favour of concerned Pay and Accounts Officer, Department of Agriculture & Cooperation. The import inspection fee shall be collected in accordance with Schedule IX of the PQ Order 2003.
- 2.3.3. He will verify the payment of prescribed fees by the importer and appropriate entries in the application.

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2.4. Plant Quarantine Inspection

The scrutinized application after prescribed payment of import inspection fee will be forwarded to the Duty Officer for allotment of inspection duty. The importer will arrange for inspection of the consignment. The PQ Inspector will verify the identity of the consignment imported as per the document received through online and carry out Plant Quarantine inspection. During the inspection the Inspector will draw sample and after labeling it properly shall submit to the duty officer for laboratory investigation. It is also the responsibility of the PQ Inspector to submit online inspection report (Ref: Annexure 4A) in the prescribed format on the same day of inspection to the duty officer. Upon receipt of the inspection report and labeled sample from the inspector, the duty officer shall forward the same to the concerned laboratory for re-inspection and further laboratory testing. After completion of the laboratory re-inspection/testing, the laboratory in-charge submits report to the duty officer through online. Subsequent to the laboratory clearance, the duty officer shall forward his recommendation for the release of the consignment to the signing authority for approval. After approval of the signing authority the Import Release Order generated through PQIS shall be sent to customs department/importer for intimation.

Note: For those agricultural commodities listed under Low Pest Risk category (168 agricultural commodities provided under **Annexure 10A**) shall be tagged in customs EDI system and only system identified 5% consignments are subjected to PQ inspection.

**Application for Quarantine Inspection and Clearance of Imported Plants/Plant Products and Others
(Cargo).**

To _____ _____ _____	For PQ Office's use:	
	Receipt No.	Registration No.
	Date of Receipt	Date of Registration
<p>In accordance with the provisions of Clause 3 (18) of the Plant Quarantine Regulations of Import into India) Order, 2003 issued under Destructive Insects and Pests Act, 1914 (2 of 1914), I/We, file herewith an application for Plant Quarantine inspection/treatment and clearance of the imported plants/ plant products and others as described below:</p>		
Description of Consignment:		
1. Name & address of importer	2. Name & address of Exporter	<input type="checkbox"/> Import Permit No: _____ dt _____ <input type="checkbox"/> Phytosanitary Certificate No: _____ dt _____ <input type="checkbox"/> Fumigation Certificate, if any <input type="checkbox"/> Certificate of origin, if any <input type="checkbox"/> Bill of Entry No: _____ dt _____ <input type="checkbox"/> Shipping/Airway bill <input type="checkbox"/> Invoice/packing list N.B.: Tick out the documents enclosed.
3. Consignment (Common/botanical name)	4. Quantity (Wt./vol.)	
5. No. of pieces/ packages/ containers	6. Distinguishing marks	
6. Nature of packing material	8. Country of origin & port of shipment	
Means of conveyance & date of arrival	10. Point of entry	
11. Date and place of inspection	12. Shipping/Airway Bill No. & Date	
13. Value of the Commodity	14. Purpose of import	For PQ Office Use: The above documents submitted to this office have been scrutinised and found in order/not in order Date:

	Sowing/ planting/ consumption	Signature of PQ staff
Declaration		
1) I/we hereby declare that to the best of the knowledge and belief, the particular given above are true and correct.		
(2) I/We abide by the provisions of the Plant Quarantine (Regulation of Import into India) Order, 2002 and the instructions issued by the officer authorized by Plant Protection Adviser Date: _____ Place: _____		
		(Signature of Importer/Authorised Agent)

N.B: Application should be submitted by the importer/his authorised agent in duplicate duly filled and completed.; Duplicate copy to be returned to the importer/his authorised agent after endorsing the quarantine order and receipt of payment; Payments should be made by bank draft or pay order drawn in favour of the concerned Pay & Accounts Officer.

For P Q Office Use:			
Assessment of fees:			Receipt of payment:
Commodity	Wt. (Kg)/ No. of pieces	Particulars of fees (in Rs)	Received from M/s. _____ an amount of Rs. _____
		1. PEQ fees: _____	(Rs. _____)(in words)
		2. Inspection: Fees _____	by cash /DD /BC /PO /T.R.No. _____ Dt: _____
		3. Others: _____	drawn on _____ (Name of the bank & branch) towards inspection fees.
TOTAL:			
(Rupees _____)			
(In words)			Date:
Date:	Assessed by	Checked by	_____
_____	_____	_____	Sign. of Cashier Sign. of DDO/
	Sign. of staff	Sign. of S/O	Accountant

Quarantine Order

- (1) The goods listed on this Plant Quarantine Entry form are ordered into Quarantine and are to be forwarded to this office under escort by Customs for inspection/treatment and further orders.
- (2) The importer/authorized agent of the importer is hereby directed to present the goods/containers/vessel lying at _____ for inspection/sampling on _____ and at _____ by the following designated staff/officers viz. _____ and arrange necessary facilities for the above purpose.
- (3) The importer/authorized agent of the importer is advised to produce original copy of IP/PSC on or before _____ to this office for record.
- (4) The importer/authorized agent of importer is advised to contact this office after _____ day(s) for further orders.

Date: _____

Place: _____

(Sign. and Designation of Authority)

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Section-3

Inspection & Sampling of Consignments

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3.1. Seeds for Propagation:

3.1.1. Inspection and sampling of seed consignments will be carried out by an inspector authorized by PPA under clause 3(15) of chapter II of PQ Order, 2003 at the port of entry from properly identifiable bagged seed lots or packets.

3.1.2. The sampling of the seed for propagation will be in accordance with the sampling procedures prescribed by International Seed Testing Association (ISTA) Rules, 1976.

3.1.3. The maximum size of seed lot for agricultural and horticultural crops is 20 metric tones (MTs) for seeds of the same size of wheat or larger. However for small size seeds the lot size is 10 MTs. For tree species with seeds of the size of *Fagus* species or larger, the maximum is 5 MTs.

3.1.4. The sampling regime for seed lots in bulk will be as follows:

Lot size	No. of primary samples required to be drawn
Up to 500 kg.	At least five primary samples.
501 to 3000 kg.	One primary sample for each 300 kg. but not less than 5 samples
3001 to 20,000 kg.	One primary sample for each 500 kg but not less than 10 samples

3.1.5. The sampling regime for seed lots in bags or containers of uniform size will be as follows:

Lot size	Samples required to be drawn
Up to 5 containers	Sample from each container.
6 -30 containers	Sample in every 3 containers but not less than 5 samples are drawn
31 or more containers	sample in 1 of every 5 containers but not less than 10

3.1.6. Sampling is usually carried out by the slotted tube sampler or Nobbe sampler in case of bagged cargo and in case of sampling of seed in bulk from storage bins a deep bin probe is used. Sampling by hand is carried out in case of lighter seeds or from air-tight containers and the containers will be re-sealed immediately after sampling. Each of the primary samples, will be mixed to form a composite sample, which is divided to get appropriate size of sample for submission to laboratory testing as indicated in 3.1.7

Note: - The required quantity of primary sample to be drawn depends upon number of primary samples to be drawn in each lot and the size of submitted samples. Only small quantities of primary sample (2.5-100g) at random following random table to represent the lot will be drawn and mixed to form a composite sample.

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3.1.7 The minimum weight of submitted samples for various crop species, as prescribed under ISTA Rules, is given below:

Minimum weight of submitted samples	Crop species
1000 g	<i>Avena sativa</i> (oat), <i>Cajanus cajan</i> (pigeon pea), <i>Cicer arietinum</i> (chick pea), <i>Cucurbita</i> spp., <i>Dolichos lablab</i> (lablab bean), <i>Fagus sylvatica</i> (common beech), <i>Glycine max</i> (soybean), <i>Gossypium</i> spp (cotton)., <i>Hordeum vulgare</i> (barley), <i>Leucaena leucocephala</i> (Leucaena), <i>Phaseolus</i> spp (beans)., <i>Pinus pinea</i> (stone pine), <i>Pisum sativum</i> (pea) <i>Secale cereale</i> (rye), <i>Vigna unguiculata</i> (cowpea), <i>Triticum aestivum</i> (wheat), <i>Vicia</i> spp (broad bean & vetches)., <i>Zea mays</i> (maize)
900 g	<i>Prunus avium</i> (sweet cherry), <i>Sorghum vulgare</i> (Sorghum)
500 g	<i>Beta vulgaris</i> (beet root), <i>Prunus serotina</i> (black cherry)
400 g	<i>Oryza sativa</i> (rice), <i>Calopogonium mucunoides</i> (Calopogonium)
250 g	<i>Sorghum sudanense</i> (Sudan grass), <i>Spinacea oleracea</i> (spinach), <i>Trifolium subterraneum</i> (subterranean clover)
200 g	<i>Sinapis alba</i> (white mustard)
150 g	<i>Capsicum</i> spp., (chillies/bell pepper) <i>Cucumis melo</i> (musk melon), <i>Cucumis sativus</i> (cucumber), <i>Linum usitatissimum</i> (linseed or flax), <i>Lycopersicon esculentum</i> (tomato), <i>Pennisetum typhoides</i> (pearl millet), <i>Solanum melongena</i> (brinjal)
100 g	<i>Brassica napus</i> (rape), <i>Brassica oleracea</i> (cabbage & cauliflower), <i>Brassica rapa</i> (turnip), <i>Pinus caribaea</i> (caribbean pine)
80 g	<i>Allium cepa</i> (onion), <i>Stylosanthes</i> spp (stylosanthes).
70 g	<i>Allium porum</i> (leek), <i>Sesamum indicum</i> (sesamum).
60 g	<i>Cuminum cyminum</i> (cumin), <i>Trifolium alexandrinum</i> (berseem)
50 g	<i>Allium fistulosum</i> (welsh onion), <i>Cichorium intybus</i> (chicory), <i>Malus</i> spp., (apple) <i>Medicago lupulina</i> (black medick), <i>Medicago sativa</i> (alfalfa or lucerne), <i>Melilotus</i> spp., (white clover) <i>Rosa</i> spp., (Rose), <i>Trifolium pretense</i> (clover)
40 g	<i>Brassica chinensis</i> (chinese cabbage), <i>Brassica nigra</i> (black mustard) <i>Cichorium endivia</i> (endive), <i>Picea abies</i> (Picea)
30 g	<i>Daucus carota</i> (carrot), <i>Lactuca sativa</i> (lettuce), <i>Ulmus</i> spp., (elm)
25 g	<i>Apium graveolens</i> (celery), <i>Nicotiana tabacum</i> (tobacco),

3.1.8 In case of smaller size seed lots, than indicated above, a representative sample of seed will be drawn for each species/variety, which is just sufficient enough for carrying out required seed health testing. In case of germplasm, which is imported in small packets, each individual packet of seed will be inspected.

3.1.9 The samples of seed will be submitted in a sealed polythene bag with appropriate labeling as per section 3.9 for laboratory testing.

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3.2. Nursery stock & other propagating plant material:

- 3.2.1. The inspection of nursery stock and other planting material will be carried out at the port of entry upon arrival by an inspector either generally or in association with a technical expert or authorized officer depending upon import requirements specified under PQ Order, 2003. During inspection the approval and validity of the certificate of approval of the post entry quarantine facility must be verified. Also, during inspection it is necessary to check growing media used in the imported plants/plant materials and appropriate action must be taken as per the provisions of the PQ Order, 2003.
- 3.2.2 Each variety/species of the plant inspected separately and it should be ensured that each individual plant or pot or the package is adequately labeled to ensure correct identity of plant species/variety.
- 3.2.3. The sampling regime for nursery stock and other propagating plant material (cuttings/grafts/bud wood) will be as under:

Number of plants in a lot	Number of plants to be inspected
Less than 10	Inspect all plants
11-100	20 % plants subject to a minimum of 10 Nos
101-1000	10% plants subject to a minimum of 20 Nos
1001-10000	5% plants subject to a minimum of 100 Nos
10001-100000	1% of plants subject to a minimum of 500 Nos

- 3.2.4. Inspection of sampled plants/planting material will be carried out to ensure free from soil contamination and the roots are examined for freedom from infestation/infection by nematodes, crown gall, root rots and wilts. The sampled plants are examined to ensure free from infestation by quarantine pests of concern to India and to the extent possible for freedom from non-quarantine pests such as thrips, aphids, mealy bugs, scales, etc. Also the packing material/growing media/containers are examined for insect infestation.
- 3.2.5. The samples of plants/plant parts are packed in ventilated cartons/paper bags and labeled and the specimens of insect pests, if any are collected in sealed vials and labeled and submitted for laboratory testing for pest diagnosis and identification.

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3.3. Tissue culture plants for propagation:

- 3.3.1. The tissue culture plants will be inspected/sampled and subjected to virus testing by the accredited testing laboratories as per the diagnostic protocols established under National Certification Programme for Tissue Culture Plants by the Department of Biotechnology of Ministry of Science & Technology
- 3.3.2. The ex-agar plants will be inspected /sampled and will be gently washed to remove the entire agar adhering to the roots and blot dry to ensure whether ex-agar or not.
- 3.3.3. The following scale of sampling will be adopted for sampling of tissue culture plants at random for each batch in respect of each plant species for virus testing by the testing laboratory accredited by the Department of Biotechnology of Ministry of Science & Technology

Lot size	Number of tissue culture plants to be sampled
Up to 1000 Nos	1% plants subject to a minimum of 10 Nos
1001 to 10000 Nos	0.5% of plants subject to a minimum of 10 Nos
10001 to 100000 Nos	0.1% of plants subject to a minimum of 50 Nos

- 3.3.4. The samples of tissue culture plants are packed in thermo-cool boxes kept with icepack, which are appropriately sealed and labeled before forwarding to accredited laboratory for virus testing.

3.4. Bulbs/tubers/corms/rhizomes and other underground roots for propagation:

- 3.4.1. The inspection of bulbs/tubers/corms/rhizomes and other underground roots of flowers and other ornamental plant species will be carried out by an inspector generally or in association with technical expert or authorized officer at the port of entry, upon arrival.
- 3.4.2. The sampling regime for the bulbs/tubers/corms/rhizomes etc., will be as under:

Quantity in a lot (Nos)	Amount of sample to be inspected
Less than 100	Inspect all the bulbs
101-1000	Inspect 25%, subject to a minimum of 100 Nos
1001-10000	Inspect 10%, subject to a minimum of 250 Nos
10001-100000	Inspect 2 %, subject to a minimum of 1000 Nos

- 3.4.3. The inspection of bulbs/tubers/corms/rhizomes etc., will be carried out to ensure free from soil contamination, nematodes and bulb/tuber/corm rots.
- 3.4.4. The samples of bulbs/tubers/ corms/rhizomes are appropriately packed in paper cartons, sealed and labeled for submission to laboratory testing

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3.5. Grain/Pulses and other seeds for Consumption:

3.5.1. The inspection of grain/pulses and other seeds for consumption/industrial use will be inspected by an inspector at the port of entry.

3.5.2. The sampling of grain/pulses and other seeds for consumption/industrial use will be carried out as per the sampling procedures established by the Bureau of Indian Standards, which is described as follows

3.5.3. The sampling regime for bagged cargo of grain/pulses and other seeds for consumption/industrial use will be as follows:

Lot size	No. of bags to be sampled
Up to 100 bags	20
101 to 300 bags	32
301 to 500 bags	50
501 to 1000 bags	80
1001 and above	125

3.5.4. The sampling regime for bulk grain/pulses and other seeds for consumption/industrial use will be as follows:

Lot size	No. of primary samples to be drawn
Up to 300 MT	30
301 to 1000 MT	50
1001 and above	100

3.5.5. The sampling regime for containerized cargo is as follows:

Total No of containers	No of containers to be sampled
Up to 10 containers	Sample at least 2 containers
11 to 25 containers	Sample at least one for every five containers.
Above 26 containers	Sample at least one for every eight containers subject to a minimum of six containers

3.5.6. Sampling of grain/pulses and other seeds for consumption/industrial use will be drawn at random from bags with the help of a slotted tube sampler or by the Nobbe sampler in case of large size seed as that of maize, pea, beans and gram etc. At least 10-15 bags are sampled for each container in case of containerized cargo per each container.

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- 3.5.7. Sampling of the grain/pulses and other seeds for consumption/industrial use from the bins will be carried out by a deep bin probe or thermo-sampler.
- 3.5.8. Sampling of grain/pulses and other seeds for consumption/industrial use will be carried out by automatic sampling device fitted on to the conveyor prior to bagging at the processing facility or grain elevator or a mill.
- 3.5.9. Each of the primary samples (small quantities ranging from 10-100 g depending on lot size and size of submitted sample) drawn shall be thoroughly mixed to constitute a homogeneous composite sample. From the composite sample, two sample of each of the following quantities of samples are drawn and submitted in sealed polyethylene bag with appropriate labeling for laboratory testing.
- 3.5.10. The size of submitted sample for stored products including grain will be as follows:

S.No.	Type of Commodity	Minimum weight of submitted sample/ No of samples
1	Grains (wheat/rice/maize) other large size seeds	1 kg X 2
2.	Pulses (beans/chick pea/pea/cow pea etc) whole/split	1 kg X 2
3.	Milletts (sorghum, pearl millet, finger millet etc)	0.5 kg X 2
4.	Small size seeds (mustard, rape, sesame, coriander etc)	0.25 kg X 2
5.	Cashew kernels/dry fruits & nuts	0.25 kg X 2
6.	Turmeric finger/zinger rhizomes/garlic or onion bulbs etc	0.5 kg X 2
7.	Flours (wheat/rice/maize/chick pea etc)/meals/malt/feeds	0.5 kg X 2*
8.	Powdered Condiments (Chillies/Turmeric/Coriander etc)	0.25 kg X 2*
9.	Whole spices & condiments (cloves/cinnamomum/cardamomum/cumin/fennel etc)	0.1 kg X 2*
10.	Any other stored products	0.25 kg X 2*

* incase of consignment packed in small consumer packets, 2 packets will be sampled at random and submitted.

- 3.5.11. The samples of grain/pulses other stored products will be submitted in a sealed polythene bag with appropriate labeling as per section 3.9., for laboratory testing.

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3.6. Milled Products for Consumption:

- 3.6.1. The inspection/sampling of milled products such as wheat flour (maida), rice flour, dhal (split pulse), gram flour, malt, feeds, oilseed extracts, meals, grounded spices etc., will be inspected by an inspector at the port of entry.
- 3.6.2. The inspection will involve the packaging materials & container cleanliness besides the inspection of finished product to ensure it is free from insect infestation and regular disinfestations measures are followed to reduce insect infestation in container and storage structures and hygienic practices are adopted to minimize microbial contamination.
- 3.6.3. In the case of commodities packed in consumer pack in cartons, 2 packets are randomly picked up for each product and labeled for laboratory testing. If the consignment is loosely packed in HDP bags such as wheat/rice flour, at least three bags randomly sampled and opened to collect the specified quantity of submitted sample (refer to section 3.5.10 above) either by hand using disposable gloves or with a clean scoop or measuring can and the opened bags will be immediately be sealed or stitched in the presence of inspector to avoid contamination and /or spillages. The sample will be collected into a clean polythene bag and sealed and labeled for laboratory testing.
- 3.6.4. The lots of milled products should be surface inspected for insect infestation at the sims/edges and also for any wet damage leading to the development of mould growth and the date of packing of the milled product as products stored for sufficient time or old lots may likely to develop infestation.

3.7. Fresh Fruits, Berries & Vegetables for consumption:

- 3.7.1. The inspection of fresh fruits/berries/vegetables will be carried out by an inspector at the port of entry, upon arrival depending upon specific import regulations notified under PQ Order,2003.
- 3.7.2. The sampling regime for the fresh fruits/berries/vegetables will be as under:

Total No. of Packages in the shipment	No of packages to be sampled
< than 10	All packages
11-100	20 % of packages subject to a minimum of ten packages
101-1000	5% packages subject to a minimum of 20 packages
>1000	2 % packages subject to a minimum of 50 packages

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3.7.3. The packages are sampled at random using a random table. The entire fruits of sampled packages are surface inspected for the pests of quarantine concern to India and to the extent possible for non-quarantine pests in an air-conditioned inspection facility with all openings fitted with insect-proof screen. Any suspected fruit will be cut open and examined for fruit fly infestation/fruit or nut borer. If apparently healthy, at least 1% of the fruits will be cut open and examined for fruit fly/fruit (pod) & seed (nut) borer infestations.

3.7.4. The specimens of affected fruits/insect specimens collected during inspection will be appropriately labeled and packed and submitted to laboratory testing for pest diagnosis and identification.

3.8. Cut Flowers, branches & Foliage for decorative purpose:

3.8.1. The inspection of cut-flowers/branches/foliage will be carried out at the port of entry.

3.8.2. The sampling regime for cut flowers/branches/foliage will be as under:

Total No. of packages in the shipment	Number of plants to be inspected
Less than 10	Inspect all packages
11 – 100	20 % of packages, subject to a minimum of 10 packages
101 – 1000	5 % of packages subject to a minimum of 20 packages
More than 1000	2 % of packages subject to a minimum of 50 packages

3.8.3. The packages are sampled at random using a random table. The entire bundles of cut flowers/branches/ foliage of sampled packages will be surface inspected for the pests of quarantine concern to India and to the extent possible for non-quarantine pests in an air-conditioned inspection facility. For this purpose the cut-flowers/branches/foliage will be shaken or gently tapped on white surface of inspection table to dislodge the live insect infestation such as thrips, aphids and early instar larvae of Lepidopteron insects (bud borers/cutworms). Also tight buds are closely examined for the damage by bud borers and the leaves are examined for leaf mining insects/galls/scales/mealy bugs/stem and bulb nematode infestation, fungal/bacterial/viral infection.

3.8.4. The specimens of affected plant parts/insect specimens collected during inspection will be appropriately labeled and packed and submitted to laboratory testing for pest diagnosis and identification.

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3.9. Inspection & sampling of potatoes

3.9.1. The inspection of fresh potatoes is carried out by an inspector at the port of entry.

3.9.2. The certified seed potatoes are sampled as per ISTA Rules, 1976 and the following scale of sampling is used:

Sampling of certified seed potato in bags (50 kg/bag)

Less than 50 MTs	5 bags	200 tubers
50 - 200 MTs	1 bag per 10 MTs	200 tubers
More than 200 MTs	1 bag per 20 MTs	1 tuber per MTs

3.9.3. The sampling regime for warehouse potatoes Imported for table purpose/industrial processing will include:

Sampling of table/warehouse potatoes in bags (25 kgs/bag)

Number of bags in consignment	Number of bags to be sampled
Less than 10	All bags
11 – 100	20 % bags subject to a minimum of 10 bags
More than 100	5%, bags subject to a minimum of 20 bags

Sampling of table/ware house potatoes in bulk

Quantity in lot (MTs)	Number of sub-samples/total quantity of material sampled
Less than 10	5 sub-samples, 1 litre
11-50	8 sub-samples, 1,5 litre
51 - 100	10 sub-samples, 5 litre
More than 100	15 sub-samples, 10 litre

3.9.4 Samples of 200 tubers shall be first surface examined for dry/wet rots, warts, tubercles, soil sticking to the tubers. The suspected tubers showing bacterial oozing are cut in two halves by knife to verify characteristic symptoms/signs of brown rot (*Ralstonia solanacearum*)/soft rot (*Erwinia caratovora*). For this purpose at least 200 tubers shall be cut from each lot. If brown rot infection is suspected, the samples are taken for laboratory testing. The soil adhering to the tubers and tuber brushings will be examined for nematode analysis. The samples of certified seed potatoes are further tested for freedom from viruses and other quarantine pests of concern to India.

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Section-4	Inspection of Regulated Articles
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4.1. Growing Media:

4.1.1. The consignments of growing media such as soil/compost or other organic media will be inspected for soil borne-insects/nematodes/weed seeds and root rot and wilt causing fungi

4.2. Packaging Material:

4.2.1. The packaging material will be inspected for hitchhiking pests. If solid wood packing material used it shall be ensured that the wood packing material is appropriately treated and marked in compliance with *ISPM 15 (2002) with modification to Annex-I (2006): Guidelines for regulating wood packaging material in international trade, FAO, Rome.*

4.3. Cargo containers:

4.3.1 The cargo containers will be inspected at the port of entry to ensure it is from insect infestation.

4.4. Ships & Other Vessels:

4.4.1 The holds of ships and other vessels will be inspected to ensure they are cleaned and thoroughly washed to remove extraneous matter and free from live insect infestation .

4.5. Biological control agents/other Beneficial Organisms & Pests

4.5.1 Ministry of Agriculture (Department of Agriculture) in consultation with Dte of PPQS (NPPO) may notify an authority with appropriate competencies for the purpose of Import inspection and clearance of biological control agents & other beneficial organisms as per the guidelines established under *ISPM 3 (2005): Guidelines for the Import, shipment, import & release of biological control agents and other beneficial organisms*

4.5.2 The specially notified authorities will undertake inspection of biological control agents to ensure correct identity of species and free from hyperparasites and other natural enemies and microbial contamination of the agents as per the provisions of PQ Order,2003.

4.5.3 The specially notified authorities will undertake inspection of beneficial organisms to ensure they are free from natural enemies and microbial contamination as per the regulations specified under PQ Order,2003.

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5.1. Entomological Examination:

- 5.1.1. The technical expert specialized in entomology will be responsible for correct identity of the pest. He will consult pest diagnostic keys, where available and endemic pest datasheets for correct identification of the insect/mite pests. Where new pest is encountered for the first time, the same will be get authentically identified by a specific taxonomical expert or national insect repository. Also specific taxonomic skills will be required for identification of fruit fly pests.
- 5.1.2. The laboratory technician attached to the entomological laboratory will record the samples of plants/plant products received for testing or specimens received for identification in a laboratory work book. He will consult the laboratory manual for entomology regarding collection and preservation of insect specimens, mounting and labeling of insect specimens and storage of insect specimens and mailing of insects for taxonomical identification, where applicable.
- 5.1.3. The X-ray technician will be responsible for carrying out X-ray test. He will record the samples received for X-ray examination in an X-ray register and the results of x-ray examination and preserve the X-ray films for future reference.
- 5.1.4: The entomological tests are described as under:

5.1.4.1. Visual Examination

Visual examination of samples/specimens received at the laboratory will be carried out with the help of illuminated magnifier to detect live insect infestation. Milled products are subject to sieving to detect insect infestation.

5.1.4.2. X-ray test

X-ray tests will be carried out by a trained X-ray technician. X-ray test is used for the detection of hidden infestation in seeds of leguminous crops. For this purpose a working sample of 50 (large size)-100 (small size) seeds will be selected at random and mounted on a card board or placed in a paper tray and examined under fluorescent screen of X-ray scanner (Soft X-ray type) to reveal internal damage. The seeds showing internal damage will be split open to record live infestation and the specimens are collected and further examined under microscope to characterize the pest species. Also the X-ray radiography will be carried out by exposing the film. For this purpose the film will be loaded into thick dark card board casket and the sealed casket will be kept on the top of seed tray and exposed to the X-rays and the exposed film is further developed in dark room to reveal internal infestation. The internal damage will be indicated by darker regions in the seed. Also X-ray test is used to detect internal infestation/ infection in bulbs and tubers to detect bulb rots/nematode/bulb fly infestation. X-ray techniques are as well used for the detection of internal damage by fruit/nut borers and also detection of budworms in un-opened cut flowers (tight buds).

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5.1.4.3. Microscopic Examination

Stereomicroscope fitted with image grabber is used to capture the images of insect, which can be stored/retrieved through a computer.

- 5.1.5. The results of entomological examination will be entered in laboratory work book and the particulars of pest detected will be recorded in the inspection report (Annexure-6A) and submitted to the authorized officer .

5.2. Plant Pathological Examination:

- 5.2.1. The technical expert specialized in plant pathology is responsible for correct diagnosis and identification of plant pathogenic organisms such as fungi, bacteria & viruses.
- 5.2.2. The laboratory technician attached to the plant pathology laboratory will record the samples of plants/plant products received for testing or affected plant specimens received for identification in a laboratory work book. He will consult the laboratory manual for plant pathology regarding preparation of slide mounts for microscopic examination including permanent mounts, and labeling of microscopic slides and preservation of affected plant specimens (both wet/dry preservation) including colour preservation, preparation of media, isolation techniques for fungi/bacteria, preservation/ mailing of fungal and bacterial cultures for identification including long term preservation (lyophilization).
- 5.2.3. Plant pathological examinations are described as under:

5.2.3.1. Visual Examination

Visual examination of samples of affected plant material received at the laboratory will be carried out with the help of illuminated magnifier to detect mould growth, fungal fructifications, bacterial ooze/root galls and characteristic virus symptoms

5.2.3.2. Microscopic Examination

Slide preparations suitably stained in lactophenol or cotton blue are examined under high power magnification of compound binocular research microscope for identification and characterization of fungi. The photomicrographs of fungi will be taken with the help of compound microscope fitted with photomicrographic equipments. Also permanent slide mounts made in glycerol will be sealed with nail polish and appropriately labeled and stored in slide box for future reference. The bacterial infections will be characterized by examining for ooze at the cut surface and the bacterial smears are stained in crystal violet or methylene blue or basic fuchsine for microscopic examination using oil immersion objective

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5.2.3.3. *Incubation test*

In case of latent infections, the affected plant material is incubated in moisture chambers over night and examined for fungal growth. Alternatively the affected leaf tissue after surface sterilization with alcohol inoculated on to suitable agar media (potato dextrose agar) for isolation of fungi or crushed in sterile water and streaked on nutrient agar in plates for isolation of bacteria

5.2.3.4. *Special diagnostic tests for plant pathogenic bacteria & viruses*

Special diagnostic tests such as isolation on selective media coupled with serological tests (ELISA/DIBA) will be used for characterization of bacteria and viruses. Molecular diagnostic tests such as NASH or RT-PCR or C-DNA probes are used for characterization of virus infection. Electron microscopy is used to characterize virus particles

- 5.2.4. The results of plant pathological examination will be entered in laboratory work book and the particulars of pathogen detected will be recorded in the inspection report (Annexure-6A) and submitted to the authorized officer .

5.3. Nematological Examination:

- 5.3.1. The technical expert specialized in nematology is responsible for correct diagnosis and identification of plant parasitic nematodes
- 5.3.2. The laboratory technician attached to nematology laboratory will record the samples of plants/plant products received for testing or affected plant specimens received for identification in a laboratory work book. He will consult the laboratory manual for nematology regarding extraction of nematodes from soil or infested plant material, preparation of slide mounts for microscopic examination including permanent mounts, and labeling of microscopic slides and preservation of affected plant specimens (both wet/dry preservation) including colour preservation, mailing of specimens for identification.
- 5.3.3. The nematological tests are described as under:

5.3.3.1. Visual examination:

Visual examination of samples of affected plant material received at the laboratory will be carried out with the help of illuminated magnifier to detect root lesions/root knots caused by nematodes and cysts adhering to the roots and also bulb rots

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5.3.3.2. Washing and sieving test

The soil adhering to the roots washed thoroughly and the root washings are sieved through a set of nematode sieves and the nematode trapped on finer sieve is extracted in small quantities of water and placed in a cavity slide examined under microscope

5.3.3.3. Floatation test

The soil collected from potato tuber brushings is suspended in sufficient quantity of acetone/water mixture (1:4) in wide mouthed enamel dish. The cysts floated at the top of dish is stained in cotton blue and examined under the microscope to characterize the nematodes

5.3.3.4. Baerman funnel test:

In this test, small bits of affected plant tissue are kept on a top of tissue paper supported by fine aluminium mesh resting on the top of a funnel and filled with water up to the neck, which is connected to a rubber tube clamped at the end left overnight under fine mist chamber. The water decanted from the neck of funnel examined for the presence of nematodes

5.3.3.5. Microscopic Examination

Slide preparations suitably stained in lactophenol or cotton blue are examined under high power magnification of compound binocular research microscope for identification and characterization of nematodes. The photomicrographs of nematodes will be taken with the help of stereobinocular/compound microscope fitted with photomicrographic equipments. Also permanent slide mounts made in glycerol will be sealed with nail polish and appropriately labeled and stored in slide box for future reference.

- 5.3.3. The results of nematological examination will be entered in laboratory work book and the particulars of nematodes detected will be recorded in the inspection report (Annexure-6A) and submitted to the authorized officer .

5.4. Weed Seed Examination:

- 5.4.1. The technical expert specialized in Weed Science is responsible for correct diagnosis and identification of quarantine weeds as specified under schedule-VIII of the PQ Order,2003 from the intercepted weed seeds with seeds/grains/pulses .

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5.4.2. The laboratory technician attached to weed laboratory will record the samples of plants/plant products received for testing for weed seed contamination or specimens of weed seeds received for identification in a laboratory work book. He will consult the laboratory manual for segregation, collection and preservation of weed seeds for identification and future reference, preparation of slide mounts for microscopic examination including permanent mounts for minute seeds, and labeling of microscopic slides and present to weed specialist for identification. He will arrange for mailing of un-identified weed seed specimens for identification to a Weed Taxonomist.

5.4.3. Weed seed examination tests are described as under:

5.4.3.1. Visual Examination

Visual examination of entire quantity of sample of seeds/grains/pulses will be carried out with the illuminated magnifier or magnoscope (10 X magnification) to record seeds of any weed species. Alternatively sieving is done to remove minute seeds of parasitic weed species:

5.4.3.2. Sieving/Gravity Separation

The samples are sieved to collect the minute weed seeds or lighter weed seeds through gravity separation.

5.4.3.2. Microscopic Examination

Microscopic examination of weed seeds carried out under stereobinocular microscope/compound binocular microscope to characterize the weed species by studying their morphological characteristics of seed appendages and seed-coat ornamentation

5.4.4. The results of weed seed examination will be entered in laboratory work book and the particulars of weed seed detected will be recorded in the inspection report (Annexure-6A) and submitted to the authorized officer .

5.5. Seed health testing:

5.5.1. The technical expert specialized in seed pathology/plant pathology is responsible for correct diagnosis and identification of seed-borne pathogens.

5.5.2. The technician trained in seed health testing will record the samples of seed received for seed health testing in a laboratory work book. He will conduct the tests as per procedures described in “Seed-health testing manual” which are summarised below:

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Section-5	Laboratory Testing	
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5.5.2.1. Microscopic examination

The examination is carried out either by direct examination of seed under a stereobinocular microscope for seed coat abnormalities or oospore encrustation or other fungal fructifications or seed discolourations. Slide preparations suitably stained in lactophenol or cotton blue are examined under high power magnification of compound binocular research microscope for identification and characterization of fungi. The photomicrographs of fungi will be taken with the help of stereobinocular/compound microscope fitted with photomicrographic equipments.

Also permanent slide mounts made in glycerol will be sealed with nail polish and appropriately labeled and stored in slide box for future reference. The bacterial infections will be characterized by examining for ooze at the cut surface and the bacterial smears are stained in crystal violet or methylene blue or basic fuchsine for microscopic examination using oil immersion objective.

5.5.2.2. Incubation test (blotter/agar plate method)

The seed samples are subject to blotter test/agar plate test for detection of seed-borne fungi. The seeds are tested in lots of 400 seeds by plating on moist blotters kept in transparent plastic Petri dishes or alternatively plated in seed germination boxes and are incubated for 7 days at 25-30°C under 12 hr. NUV or day light fluorescence/darkness cycles for revealing specific fungal infection. The plates are examined by a trained laboratory technician under stereobinocular microscope to detect specific fungi by habit characteristics of fungi and further confirmed by microscopic examination of slide mounts.

5.5.2.3. Washing test

A working sample of 200 seeds is used for carrying out washing test. The samples of seed is soaked in 20 ml of water in 250 ml conical flask and flasks are shaken for 10 min in wrist action type shaker and then the seed suspension is subject to low speed centrifuge for 15 minutes. After which, the supernatant is thrown out and the sediment is suspended in small quantities of water or stain and examined by a placing a drop of the aliquot on microscopic slide and examined under the microscope or alternatively a haemocytometer is used for making spore counts. The washing test is employed usually for the detection of oospores of downy mildews, rust, bunt and smut spores.

Internally seed-borne nematode infestation such as *Ditylenchus angustus* detected by soaking seeds in water for 24 hours and examining the seed suspensions for nematodes under a compound microscope.

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5.5.2.5. *Grow out test*

The seeds are subjected to grow out test to detect for the presence of any latent infection especially that of seed borne bacteria, viruses and downy mildews. For this purpose at least 400 seeds are usually sown in sterile peat or sand or vermiculite in multi pot trays and incubated in controlled light and temperature growth chambers or insect-proof screen house or glass house for a period of 3-4 weeks and examined for the characteristic symptoms of the disease. The plants showing virus symptoms are inoculated to a sensitive indicator host such as *Chenopodium quinoa*, which produce typical local lesions characteristic of virus infection.

5.5.2.6. *Special tests for seed-borne bacteria & viruses*

Special diagnostic tests such as isolation on selective media coupled with serological tests (ELISA/DIBA) will be used for characterization of bacteria. Molecular diagnostic tests such as C-DNA Probe, NASH or RT-PCR are used for characterization of virus infection. Electron microscopy is used to characterize virus particles

- 5.5.3. The results of seed-health testing will be entered in laboratory work book and the particulars of seed-borne pathogens detected will be recorded in the inspection report (Annexure-6A) and submitted to the authorized officer .

6.1. Reporting of Results of Inspection/Testing

- 6.1.1. The inspector at the end of inspection/sampling will report the results of inspection to the authorized officer in the format prescribed at Annexure-4A, giving particulars of commodity inspected, Lot Number or Marks, if any, date/time and place of inspection and number of samples drawn and the quantity along with inspection, remarks if any.
- 6.1.2. He will submit the inspection report along with samples drawn and specimens, if any collected, to the authorized officer for laboratory testing
- 6.1.3. The technical expert of concerned laboratory, at the end of testing, will complete the rest of the report indicating the type of tests carried out, plant species/variety examined, plant parts examined and name of pest detected, if any and the degree of infestation/infection and quarantine status of the pest noticed along with recommendations, if any, and submit to the authorized officer.

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Section-6

**Reporting of Results of Inspection/Testing
& Action Taken**

May 2015

6.2. Action to be taken:

- 6.2.1. The authorized officer, immediately after the receipt of inspection/testing report will verify with concerned laboratory expert, the identity of pest detected and its status.
- 6.2.2. If any quarantine pest is detected, the consignment will be recommended for deportation/destruction and the importer or his agent will be communicated the action taken in prescribed format (Annexure-5A) under intimation to Customs/port authorities concerned to prevent its import.
- 6.2.3. If any regulated non-quarantine pest or non-quarantine pest is noticed, the consignment will be subject to fumigation/disinfestations/disinfection treatment by an accredited fumigation agency or at an approved and certified treatment facility under the supervision of authorized officer and the consignment will be reinserted after fumigation/disinfestations/disinfection treatment to ensure free from infestation before issue of import release order.
- 6.2.4. If no pest infestation is detected in the consignment, import release order will be issued.

INSPECTION REPORT

Ref. No.:			Date of Reporting:			
Commodity (Common/Scientific Name)	Variety	Type of material	Quantity (MTs/Nos)	Origin	Packed in	Container No, if any
Marks/Lot/Batch No	No of samples drawn	Sample size	Sample Code No, if any	Date/time of Sampling	Place of inspection	Sampled in the presence of
Inspection Remarks, if any:			Re-inspection, if any:			
_____ (Sign of inspector)			_____ Sign of verifying officer			
Laboratory Testing (Tick out appropriate (√))						
() Entomological; () Plant Pathological; () Nematological; () Seed health Testing; () Weed Seed Examination						
Microscopy:	<input type="checkbox"/> Yes / <input type="checkbox"/> No	Washing test:	<input type="checkbox"/> Yes / <input type="checkbox"/> No	Special tests:	<input type="checkbox"/> Yes / <input type="checkbox"/> No	
X-ray :	<input type="checkbox"/> Yes / <input type="checkbox"/> No	Incubation test: (Blotter/Agar)	<input type="checkbox"/> Yes / <input type="checkbox"/> No	_____ (Specify test)		
Fluoroscopy :	<input type="checkbox"/> Yes / <input type="checkbox"/> No	Grow-out test:	<input type="checkbox"/> Yes / <input type="checkbox"/> No	_____ (Specify test)		
Host (Scientific Name)/Variety	Pest (Scientific Name)	Taxon[@]	Life Stage*	Intensity	Risk Category[§]	
Recommendation for Treatment (if any):						
			1. _____ (Sign/Name of Technical Expert/Lab-incharge)			
			2. _____ (Sign/Name of Technical Expert/Lab-incharge)			
Treatment Type() Fumigation	() Spray/Dip	() Hot-Water	() Vapour Heat	() Irradiation	() _____	
Chemical:	Dosage:	Duration:				
Temperature:	NAP:	Vaccuum:				
Post-treatment inspection, Remarks			Post-treatment inspection by:			
			_____ (sign of inspector)			
Final Recommendation:			_____ Name & Signature of Authorised Officer with date & seal:			

[@]Taxon: Family & Order. *Life stages in case of insect pests eg: Egg; Larva; Adults. In case of fungi: asexual (zoosporangia/conidia/pycnidia/acervulai/sclerotia); Sexual (Oospores/Asci & Ascospores/Pycnia/Aecia/Telia/Basidia)

(Emblem)
Government of India
Ministry of Agriculture
Department of Agriculture & Cooperation
Directorate of Plant Protection, Quarantine & Storage

DEPORTATION/DESTRUCTION ORDER

No. _____

Dated _____

In accordance with the provisions of Clause 3 (16) of the Plant Quarantine (Regulation of Import into India) Order, 2003 issued under the Sub-section (1) of Section 3 of the Destructive Insects & Pests Act, 1914 (2 of 1914), the following consignment of plants/plant products has been ordered for deportation/destruction as the same was imported in violation of the provisions of the above said Order. The details are as under: description of Consignment

1. Name of the Commodity (Common/botanical name)	
2. Quantity (Wt./nos.)	
3. Number of packages/containers	
4. Country of origin & foreign port of shipment	
5. Distinguishing marks, if any	
6. Means of conveyance & date of arrival	
7. Point of entry	
8. Bill of entry no./shipping or airway bill no. & date	
9. Date of sampling/inspection/fumigation or treatment	

Nature of Non-Compliance

() Consignment has been imported without valid Import Permit or Phytosanitary Certificate (Clause 3 (1)/3 (20) of the PQ Order, 2002 or both.

() Consignment on inspection found to be infested/infected with a quarantine pest notified under Schedule-V and VI, viz. _____

() Consignment on inspection found to be contaminated with quarantine weed species specified in Schedule VIII, viz. _____

() Consignment is prohibited entry as per item no. _____ of Schedule -IV.

() Consignment found to be substantially contaminated with soil.

() Consignment found packed with objectionable package material

() Any other reason (specify): _____

Note: Tick-out, which ever applicable.

SOP for Phytosanitary Inspection and Plant Quarantine Import Clearance

Section-7	Fumigation/disinfestations/disinfection of consignments	
May 2015		

7. Fumigation/Disinfestation/Disinfection of Consignments

- 7.1. Where fumigation/disinfestation/disinfection treatment is recommended, consequent to inspection/testing and /or made mandatory to meet India's import regulations, i.e. PQ Order, 2003, it shall be carried out under the supervision of inspector by an accredited fumigation agency or treatment facility duly approved and certified by the Dte of PPQS (NPPO) as per the guidelines established by the Dte of PPQS.
- 7.2. Where fumigation/disinfestations/disinfection treatment ordered, the importer shall complete and submit an Undertaking for Fumigation of Agricultural Commodities/Containers/Vessel by or under the supervision of Plant Quarantine Authority (Appendix-6A) and will pay the supervision charges at the prescribed rates assessed by the inspector.
- 7.3. The authorized officer will issue a quarantine order directing the accredited technical expert to supervise the fumigation/disinfestation/disinfection treatment at the specified place by an accredited fumigation agency or at certified treatment facility, as the case may be.
- 7.4. All the fumigation treatment of consignments will be carried out as per the treatment schedules approved by the Dte of PPQS (NPPO). The fumigation treatments will be monitored by an accredited technical expert to ensure that the correct dosage of chemical is applied and right gas concentrations are monitored through out the fumigation in the gas-tight enclosures and right exposures are maintained as per the guidelines/procedures prescribed under *NSPM 11 (2005) Quarantine Treatments and Application Procedures: Methyl Bromide Fumigation*.
- 7.5. At the completion of fumigation, the consignment will be reinspected by the accredited technical expert to ensure the fumigation is effective and the fumigation check sheet will be completed. The fumigation certificates issued by the accredited fumigation agencies will be endorsed, where required.
- 7.6. Where treatments other than fumigation are applied to the consignment such as heat/cold treatments, the treatments given will be verified through temperature recordings/charts and irradiation treatments through dosimetry/dose mapping studies and the treatments will be endorsed on the phytosanitary certificate to meet the phytosanitary requirements of India.

From:
M/s.

To:

Undertaking For Fumigation/Disinfestation/Disinfection Treatment of Agricultural Commodities/ Containers/ Vessel under the Supervision of Plant Quarantine Authority

I / We, on behalf of M/s. _____ give the following undertaking for fumigation/disinfestations/disinfection treatment by/under the supervision of Plant Quarantine Authority for a consignment of _____ weighing _____ and/ or container(s)/vessel lying at _____ and agree to the following with reference to my/our application Reg. No. _____ dated _____.

- (1) to carry out fumigation/disinfestations/disinfection treatment by you/by any accredited fumigation agency and or treatment facility approved by the Plant Protection Adviser to the Government of India under the supervision of officer duly authorised by him.
- (2) to provide all facilities including labour/transport facilities for PQ officers nominated for undertaking/supervising fumigation/disinfestations/disinfection treatment of consignment/container/vessel at our cost.
- (3) to pay the fumigation/treatment fees, if any and or/supervision charges as prescribed towards fumigation/disinfestations/disinfection treatment and or/ supervision of fumigation/disinfestations/disinfection treatment of the said consignments/containers/vessel, as the case may be.
- (4) to pack the consignment/load the containers in such a manner to facilitate proper fumigation/disinfestations/disinfection and follow necessary instructions/guidelines issued by PQ officer nominated for this purpose.
- (5) to arrange fumigation of consignments/container(s) in an approved site/godown under gas proof covers/fumigation chamber or vessel at mooring and to follow all safety measures related to fumigation
- (6) to not to move/transport any part of the goods/containers/vessel, while under fumigation and /or without degassing and written clearance from PQ authority and to seal the containers immediately after completion of fumigation to prevent cross-infestation...
- (7) to abide by the decision taken by Plant Quarantine Authority either to approve or disapprove a fumigation at any point of time if the treatment is or will not be safe or effective or if any of the terms and conditions outlined here are not met with or refumigation or .rejection of consignment on technical grounds.

Date : _____

Station: _____

*Signature of Importer/ Authorised Agent

Assessment of fees:				Receipt of payment:
				Received from M/s. _____ _____ an amount
Commodity / Container	Wt. / Vol.	Particulars.	Amount (Rs)	of Rs. _____ (in figures)
		1. Fumigation/ Treatment Charges		(Rs. _____) (in words)
		2. Supervision Charges		by cash /DD /BC /PO /T.R.No. _____ dt: _____
		Total		drawn on _____ (Name of the bank & branch) towards fumigation/disinfestations/ disinfection charges and or supervision charges.
(Rupees _____) Date: _____ Assessed by _____ Checked by _____ (In words)				Date: _____ * Sign. of Cashier *Sign. of DDO
* Sign. of staff		* Sign. of S/O		
Quarantine Order No. _____				
Permitted to undertake fumigation/disinfestations/disinfection treatment of consignment/containers/vessel at _____ on _____ at by us or by accredited fumigation agency) or approved treatment facility under the supervision of _____ as per approved fumigation/disinfestations/disinfection (Name of Staff) treatment schedule indicated below: Chemical _____ Dosage: _____ Temperature _____ Duration of exposure: _____ Date: _____ : _____ Place: _____ *(Name/Signature of Authorised Officer)				

*Signature is not required in case of on-line registration but name is required to be printed.

SOP for Phytosanitary Inspection and Plant Quarantine Import Clearance

Section-8

Preparation & Issue of Import Release Order

May 2015

8.1. Format of Import clearance (Import Release Order):

8.1.1. The Plant quarantine clearance for import of consignments will be prepared online in the format prescribed in PQ Form 16 of PQ Order, 2003 (Annexure-7A) .

8.2. Control over Issuance of Release Order (Manual/Electronic):

8.2.1. The plant quarantine clearance will be issued through soft ware (PQIS) and computerized printed. The headings of different columns will be pre-printed bilingual (English & Hindi)

8.2.2. If plant quarantine clearance are issued in pre-printed format, the unutilized release orders will be securely held under the custody of authorized officer to prevent tampering of release orders and also the seals and stamps used on the release orders

8.3. Authorization of Officer for Issue:

8.3.1. Dte of PPQS (NPPO) will maintain an up-to-date list of authorized officers notified by the Ministry of Agriculture (Department of Agriculture & Cooperation) together with the name, designation & signature for future reference.

8.3.3. The Import Unit of PQ Division of Dte of PPQS (NPPO) will maintain a list of such notified officers for plant quarantine clearance in the PQIS data base along with the name/designation of authorized officer and the specimen signature for reference and future verification in case of fraudulent issue of clearance certificates.

8.3.4. If there is any change of authorized officer on account of transfer/retirement, it should be brought to the immediate notice of Dte of PPQS (NPPO) for updating the data base.

8.4. Completion & Issue of Plant Quarantine Clearance Certificate:

8.4.1. The plant quarantine clearance certificate should be verified before issue to ensure it is correct and complete and the information provided therein is adequate to meet the current phytosanitary requirements in accordance with PQ Order, 2003.

8.4.2 The plant quarantine clearance certificate will be issued in “original” to the Importer and/or his authorized agent in respect of each consignment and the “office copy” will be filed along with case folder. Also ‘customs copy’ will be issued for the purpose of customs department intimation.

8.5. Correction Attestation:

8.5.1 All the corrections/overwriting made in the plant quarantine clearance should be clearly attested by a signature, and seal of authorised officer

8.6. Name/Signature/Affixing Seal/Stamp on Certificate:

8.6.1. The plant quarantine clearance certificate will bear the name of authorised officer, either typed or printed in clear capital letters and also the date indicating the day/month/year and proper signature of authorised officer as reflected in electronic database of authorised officers for issue of plant quarantine clearance maintained by Dte of PPQS (NPPO) and that the certificates will not be issued pre-dated or post-dated or issued after dispatch of the consignment unless bilaterally agreed.

(Emblem)
Government of India
Ministry of Agriculture
Department of Agriculture & Cooperation
Directorate of Plant Protection, Quarantine & Storage

RELEASE ORDER

Ref. No. _____
issue _____

Date of _____

In accordance with provisions of Clause 3 (16) of the Plant Quarantine (Regulation of Import into India) Order, 2003, issued under Sub-section (1) of Section 3 of the Destructive Insects & Pests Act 1914 (2 of 1914), the following consignment of plants/plant products referred to this station has been inspected/fumigated or treated and the same has been accorded quarantine clearance/ provisional quarantine clearance* for growing in an approved post entry quarantine facility, as detailed below:

Description of Consignment

Name of the consignment (Common/botanical name)	
2. Quantity (Wt./nos.)	
3. Number of packages/containers and mode of packing	
4. Country of origin/re-export and foreign port of shipment	
5. Distinguishing marks	
6. Means of conveyance & date of arrival	
7. Point of entry	
Name and address of importer	
9. Bill of entry no./shipping or airway bill no. and date	
10. Date of sampling/inspection/ fumigation or treatment	
Date: _____ Place: _____	Name Signature (PQ authority)

Copy to:

(i) Collector of Customs: _____

(ii) Inspection Authority _____

*Strike out not applicable

9. Monitoring/Reporting of Import Inspection Activities

- 9.1 The Import Unit of Dte of PPQS (NPPO) will closely monitor the import inspection/issue of plant quarantine clearance through an on-line reporting system established under National Phytosanitary Data Base(PQIS). Where appropriate software programme is installed, the authorized officer will upload the data on case to case basis immediately after the issuance of Import Release Order.
- 9.2 Where there is no on-line reporting system installed in the computer or computer facilities are not immediately available, the authorized officer will submit the reports on import inspection and plant quarantine clearance in the format prescribed in Annexure-8A at fortnightly intervals to the Import Unit of PQ Division of Dte of PPQS (NPPO) by fax/e-mail/post.
- 9.3 The Import Unit, immediately upon the receipt of the reports, will verify the reports for further necessary action.

SOP for Phytosanitary Inspection and Plant Quarantine Import Clearance

Section-10	Timeline for various PQ activities	
	May 2015	

- 10.1 The authorized officers entrusted with the responsibilities of plant quarantine inspection, sampling, laboratory testing, issuance of import clearance, issuance of import permit etc. shall strictly adhere the time frames provided in the Annexure 11A of this SOP. The same has also hosted in the PQ official website (www.plantquarantineindia.nic.in)
- 10.2 The above time frame for import inspection/ plant quarantine import clearance excludes the delay in presentation of the consignment for inspection, delay in arrangement for fumigation/ treatment, delay in submission of essential documents etc. by the importers.

SOP for Phytosanitary Inspection and Plant Quarantine Import Clearance

Section-11	Documentation Management & Record Control	
May 2015		

11.1. Documentation Management:

- 11.1.1 The Plant Quarantine Import Clearance Authorities will adopt the standard formats prescribed herewith for import inspection and plant quarantine import clearance and follow the standard operational procedures established by the Dte of PPQS (NPPO) for uniform clearance.
- 11.1.2 The Plant Quarantine Import Clearance Authorities will maintain a technical folder to receive and file all the technical information received from the Dte of PPQS (NPPO) related to import inspection and plant quarantine clearance, list of import prohibited items; list of quarantine pests concerned to India and list of accredited fumigation agencies/certified treatment facilities etc.
- 11.1.3 If any changes to the Standard Operating Procedures or revision of document considered necessary, the required changes will be communicated by the Plant Quarantine Import Clearance Authorities to the Dte of PPQS (NPPO) along with technical justification for necessary approval and adoption. The Plant Quarantine Import Clearance Authorities will not make any changes to the document or introduce new sections without the written approval of Competent Authority.
- 11.1.4 As and when any modifications/amendments/revision of documents is brought out, the Dte of PPQS will promptly communicate to all the authorized officers of Plant Quarantine Import Clearance Authorities concerned and ensure their replacement. The authorized officer should ensure that the obsolete documents are promptly replaced by the revised documents together with revision number to keep it up-to-date. The obsolete documents will be cancelled and filed separately in “obsolete document” folder to prevent confusion or misuse.
- 11.1.5 The authorized officer will ensure that this document is easily accessible to inspectors/laboratory technicians/technical expert’s in-charge of laboratory to facilitate compliance with the Standard Operating Procedures for phytosanitary inspection and plant quarantine clearance..

SOP for Phytosanitary Inspection and Plant Quarantine Import Clearance

Section-11

Documentation Management & Record Control

May 2015

11.2. Record Control:

- 11.2.1 The Plant Quarantine Import Clearance Authorities will maintain all the records of all activities related to import inspection & clearance in each folder in respect of each consignment.
- 11.2.2 Each folder should contain the original application received from the importer and /or his agent and attached documents (letter of credit, invoice, bill of entry, bill of lading, packing list, import permit, etc); an operational checklist duly completed and signed by the concerned technical staff associated with each activity; an inspection/sampling/testing report; an undertaking given by the importer and /or his agent for supervising fumigation/disinfestations/disinfection of treatment; a copy of treatment certificate issued by an accredited fumigation agency and /or certified treatment facility and any other relevant records.
- 11.2.3 Each folder should be arranged registration number-wise for easy retrieval. Also the records of destruction/deportation of consignments for import and issue of import clearance..
- 11.2.4 The records of pest interception in consignments offered for import inspection and clearance and their identification including digital images, microphotographs and X-ray films etc.
- 11.2.5 The records related to import inspection and clearance will be maintained for a period of at least one year and should be able to be retrieved when required. Besides this import inspection register; sample register, X-ray register and laboratory work books are maintained up to date, serially numbered and duly certified by the authorized officer.

SOP for Phytosanitary Inspection and Plant Quarantine Import Clearance

Section-12	Training	
May 2015		

12. Training:

- 12.1 The Plant Quarantine Import Clearance Authorities through management review will identify and record the training needs of the technical personnel in undertaking import inspection and clearance.
- 12.2 He will identify internal/external training needs after taking into account resources available and prepare training programme and request the Dte of PPQS (NPPO) for organizing the training.
- 12.3 Dte of PPQS (NPPO) will develop appropriate training modules through the consultancy of external expert.
- 12.4 The Dte of PPQS (NPPO) will identify human resources (trainers/training coordinator) and prepare training schedule (Title of Training Work-Shop, Place, Dates (From/To, Trainers & Contact Address of Training Coordinator) for conducting training and budget plan for organizing training workshops.
- 12.5 The selected place of training workshop should have comfortable room with sitting chairs with tables/desks for 15-20 trainees and the trainers, LCD Projector and screen for power point presentations and computer facility and printer and white board with marker pens and with drinking water facilities and the space is adequately lighted. Also provided with necessary equipment facilities for organizing practical demonstrations. The nominated trainers will organize training workshop on scheduled dates and venue as per the training modules approved by the Dte of PPQS (NPPO).
- 12.6 All the personnel with responsibilities of inspection/sampling of consignments for phytosanitary certification, with proper qualifications will be given a basic level operational training on all activities related to import clearance and those entrusted with laboratory work given specific trainings related to Entomology, Plant Pathology, Nematology, Virology, Seed-Health Testing & Weed Science based on Laboratory Manuals. The technical experts/laboratory-in-charges will be given specialized training in developing skills in Fruit fly Taxonomy, Storage Entomology, Seed Pathology & Molecular Diagnostics.
- 12.7 The basic level operational training/laboratory trainings will be of minimum of one week duration and is a must for all new entrants entrusted with operational activity responsibilities (inspection/certification) and the laboratory responsibilities (pest diagnosis/identification) respectively. The specialised training programmes will be tailor made depending upon level of training & taxonomical competency, which may be 2-4 weeks duration as may be decided by the recognised institute which is offering the training.
- 12.8 The nominated trainers will distribute training material and exercises and at the end evaluate the trainees and qualified trainees will be issued a training certificate by the Dte of PPQS (NPPO). The authorized officer for import clearance will maintain up-to-date record of all those personnel who underwent training.

SOP for Phytosanitary Inspection and Plant Quarantine Import Clearance		
Section-13	Communication, Auditing & Review	
May 2015		

13.1. Communication:

13.1.1. The Dte of PPQS (NPPO) will establish appropriate procedures for timely communication to relevant personnel and to the industry concerning changes in:

- Notifications for the import regulations;
- Quarantine pests and other regulated pests list;
- operational procedures

13.1.2. The Dte of PPQS (NPPO) will:

- liaise with the nominated representatives of NPPO of relevant contracting party to discuss the phytosanitary requirements/issues;
- establish contact point for the NPPO to report cases of non-compliance and communicate emergency action.
- liaise with the relevant Regional Plant Protection Organization and other international organizations to facilitate the harmonization of phytosanitary measures and the dissemination of technical and regulatory information.

13.2. Technical Auditing:

13.2.1 The Import Unit of Dte of PPQS (NPPO) will establish a panel of technical experts (both internal and external) for auditing of import inspection and plant quarantine clearance activities performed by the various authorized PQSs and other authorized officials as per the *NSPM 5 (2002): Guidelines for Auditing of Plant Quarantine Activities, Dte of PPQS, Faridabad.*

13.2.2 The Head of Import Unit will establish a schedule of audit and nominate at least two experts from the auditing panel for carrying out the technical audit of import inspection and phytosanitary activities and intimate the concerned experts and the import clearance authorities at least one month in advance to facilitate making travel arrangements. The scheduled audits will be carried out once in every year.

13.2.3 Besides the above, unscheduled audits will be organized at least once in a year at a short notice without intimating the concerned import clearance authorities to ensure compliance with the standard operation procedures for undertaking import inspection & clearance and work instructions.

SOP for Phytosanitary Inspection and Plant Quarantine Import Clearance		
Section-13	Communication, Auditing & Review	
May 2015		

- 13.2.4 Surveillance audits will be carried out at least once in six months or at such intervals as may be decided to ensure corrective actions are taken and preventive measures are implemented subsequent to scheduled auditing.
- 13.2.5 Such audit inspections will involve the verification of records, verification of inspection and sampling/testing procedures actually practiced verification of treatments, verification of action taken on previous audits and testing skill competency of technical staff and verification of nonconformities with import clearance etc.
- 13.2.6 At the end of each audit, an audit report in prescribed format (Annxure-9A) will be prepared by the auditors in consultation with concerned import clearance authority and submitted to the head of Import Unit. The audit report should indicate the non-conformities observed and corrective/preventive action to be taken and time by which the measures are implemented to improve the functioning.
- 13.2.7 Dte of PPQS (NPPO) will review the audit report and communicate corrective/preventive actions to be taken and time schedule for their implementation to the authorized officer of concerned import clearance.
- 13.2.8 The concerned import clearance authority will submit the corrective action/preventive measures taken report (Annexure- 9 B) to the Dte of PPQS (NPPO), which will be reviewed by the auditors at the time of surveillance auditing and further report it to the Head of Import Unit of Dte of PPQS (NPPO)..

13.3. Review:

- 13.3.1 The Dte of PPQS (NPPO) will periodically review the effectiveness of all aspects of its import inspection and plant quarantine clearance system in consultation with various stake holders and implement changes to the system, if required.

Audit (Scheduled) Report

1	Name & Address of PQ Station/ Authorized import inspection agency:		
	Auditees (Name & Designation)		
	2.1 Authorized Officer:		
2.	2.2 Technical Officer/Staff responsible for concerned activity		
3.	Auditing related to the period of		
4.	Date (s) of Auditing:	From:	To:
5.	List of records Audited/documents verified		
6.	Audited by (Name & Designation):		
7.	Details of Auditing reported :		
7.1	General Comments		
7.2	Specific non-conformities observed :		
Sl. No.	Type of non-conformities observed	Frequency	Corrective action/preventive
8.	Signature/Name, Designation of Auditee (Authorized officer) with date	Signature/Name/Designation of Auditors with date 1..... 2.....	

Audit (Surveillance) Report

1	Name & Address of PQ Station/ Authorized import inspection agency:		
2.	Date of auditing (surveillance):		
3.	Audited by (Name/Designation):		
4.	Details of audit (surveillance) carried out:		
S. No.	Type of non-conformity/ observation made by previous audit	Corrective Action / prevent measures undertaken	Remarks of Auditor
	_____ (Officer-in-Charge)	_____ (Auditor)	

PLANTS/PLANTING MATERIALS LISTED UNDER THE LIKELIHOOD OF COMPARATIVELY LOWER PHYTOSANITARY RISKS, WHERE IMPORTS ARE PERMISSIBLE ON THE BASIS OF PHYTOSANITARY CERTIFICATE ISSUE BY THE EXPORTING COUNTRY AND RANDOM INSPECTION SHALL BE CONDUCTED BY INSPECTION AUTHORITY AND FUMIGATION, IF REQUIRED, INCLUDING ALL OTHER GENERAL CONDITIONS.

S · N o	Plants and Plant Material	S. No. specified under Schedule VII of the PQ Order, 2003
1.	<i>Abies Canadensis</i> – Hemlock spruce bark (dried) for medicinal use	1
2.	<i>Agave sisalana</i> - Sisal fibres	10
3.	<i>Alpinia officinarum</i> - Gallangal Roots	12
4.	<i>Anacyclus pyrethrum</i> -(Anthemis Pellitory roots)(dried) for medicinal use	15
5.	<i>Anemone hepatica</i> - Hepatica whole plants (dried) for medicinal use	16
6.	<i>Angelica archangelica</i> - European Angelica roots (dried) for medicinal use	17
7.	<i>Angelica glauca/ Angelica spp</i> - Gandh Roots/ Angelica roots dried for consumption	18
8.	<i>Anthemis nobilis</i> - Roman Chamomile flower head (dried) for medicinal use	22
9.	<i>Apocynum cannabinum</i> - Black Indian Hemp Roots (dried) for medicinal use	24
10.	<i>Arachis spp.</i> – Peanut (roasted) for consumption.	26
11.	<i>Aralia racemosa</i> - Spikenard roots (dried) for medicinal use	27
12.	<i>Arctium lappa</i> - Batweed whole plants (dried) for medicinal use	28
13.	<i>Arctostaphylos sp.</i> - Uva-Ursi leaves (dried) for medicinal use	29

14.	<i>Argemone maxicana</i> - Prickly poppy whole plant (dried) for medicinal use	31
15.	<i>Arnica Montana</i> - Celtic Nard whole plants (dried) for medicinal use	32
16.	<i>Artemisia spp.</i> - Artemisia leaves (dried) for medicinal use	33
17.	<i>Aspalathus lineraris</i> – Rooibos tea (fermented) for consumption	34
18.	<i>Aspidosperma spp.</i> - Quebracho blanco bark (dried) for medicinal use	35
19.	<i>Atropa belladonna</i> - Deadly nightshade leaves/roots (dried) for medicinal use	36
20.	<i>Berberis sp.</i> - Barberries roots (dried) for medicinal use	41
21.	<i>Baptisia tinctoria</i> – Wild Indigo bark/roots (dried) for medicinal use	40
22.	<i>Borago officinalis</i> - Gauzban/ Borage dried leaves/ flowers for medicinal use.	42
23.	<i>Bryonia alba</i> - Wild Hops roots (dried) for medicinal use	43
24.	<i>Calmia latifolia</i> - leaves (dried) for medicinal use	46
25.	<i>Camellia sinensis</i> - Tea Seed Powder/green tea	48
26.	<i>Cannabis sativa</i> - Hemp fibres	49
27.	<i>Carduus sp.</i> - Blessed Thistle whole plants (dried) for medicinal use	52
28.	<i>Catalpa bignoniodes</i> - Catalpa roots (dried) for medicinal use	57
29.	<i>Ceanothus amaranus</i> - leaves (dried) for medicinal use	58
30.	<i>Ceiba pentandra</i> - Kapok fibre (lint) for consumption.	60
31.	<i>Centella asiatica</i> - Centella leaves (dried) for medicinal use	61
32.	<i>Cephaelis ipecacuanha/psychotria</i> - Ipecacuanha roots (dried) for medicinal use	62
33.	<i>Chamaemelum nobile</i> - Chamomile flowers (dried) for consumption	64
34.	<i>Cheiranthus cheiri</i> - Common wall flower whole plants (dried) for medicinal use	65
35.	<i>Chelidonium majus</i> - Calandine whole Plants (dried) for medicinal use	66
36.	<i>Chionanthus virginica</i> – Fringe Tree bark (dried) for medicinal use.	67

37.	<i>Cinchona</i> spp – Cinchona bark (dried) for medicinal use	69
38.	<i>Cinnamomum camphora</i> - Bay leaf	70
39.	<i>Clematis erecta</i> - Upright virgin's bower leaves/ stem (dried) for medicinal use	72
40.	<i>Cochlearia armoracia</i> - Horse Radish roots (dried) for medicinal use	73
41.	<i>Cocos nucifera</i> - Coconut fibre /powder /Copra kernel dried for consumption	74
42.	<i>Corchorus capsularis</i> -Jute fibres	75
43.	<i>Coffea arabica</i> -Roasted Coffee beans	77
44.	<i>Collinsonia canadensis</i> - Stone Root roots (dried) for medicinal use	78
45.	<i>Commiphora wightii</i> - Guggal	79
46.	<i>Crocus sativus</i> – Saffron (dried) flowers for consumption	81
47.	<i>Croton</i> sp.- Cascarella Bark (dried) for medicinal use	82
48.	<i>Cynara</i> spp. - Artichoke leaves (dried) for medicinal use	88
49.	<i>Digitalis</i> spp. - Digitalis leaves (dried) for medicinal use	91
50.	<i>Dioscorea villosa</i> - Colic root roots/bulbs (dried) for medicinal use	92
51.	<i>Duboisia</i> spp. - Duboisia leaves (dried) medicinal use	97
52.	<i>Elaeis guineensis</i> - Oil Palm cake Dried for consumption	99
53.	<i>Equisetum arvense</i> - Field Horsetail leaves (dried) for medicinal use	102
54.	<i>Eriodictyon glutinosum</i> - Yerba santa leaves (dried) for medicinal use	103
55.	<i>Eryngium</i> spp. - Button snake root roots (dried) for medicinal use	104
56.	<i>Eupatorium</i> sp.- Indian sage whole plants (dried) for medicinal use	106
57.	<i>Euphrasia officinalis</i> - Eye-bright whole plants (dried) for medicinal use	107
58.	<i>Eurycoma longifolia</i> – Tongkat Ali roots/bark (dried)for medicinal use	108
59.	<i>Fucus vesiculosus</i> - Bladder Wrack whole Plants (dried) for medicinal use	114
60.	<i>Garcinia combojia</i> - Garcinia	115

61.	<i>Garcinia mangostana</i> – Mangosteen (dried fruit rind) for medicinal use	116
62.	<i>Gaultheria procumbens</i> - Winter green leaves (dried) for medicinal use	117
63.	<i>Gentiana</i> sp.- Bitterwort roots (dried) for medicinal use	118
64.	<i>Geranium</i> sp. - Alumroot whole plants/ root (dried) for medicinal use	119
65.	<i>Geum urbanum</i> - Herb Bennet roots (dried) for medicinal use	120
66.	<i>Ginkgo</i> sp. - Ginkgo leaves (dried) for medicinal use	121
67.	<i>Glycyrrhiza glabra</i> - Liquorice/ Mulati	123
68.	<i>Guaiacum officinalis</i> - Guaiacum whole plants (dried) for medicinal use	127
69.	<i>Guazuma ulmifolia</i> -Rudraksha	128
70.	<i>Hamamelis virginica</i> – Witch Hazel bark (dried) for medicinal use	130
71.	<i>Harpagophytum</i> - Devil's Claw roots (dried) for medicinal use	131
72.	<i>Hexandrum</i> sp. - Podophyllum rhizome/roots (dried) for medicinal use	133
73.	<i>Hibiscus sabdariffa</i> - Hibiscus flowers (dried) for consumption	134
74.	<i>Humulus lupulus</i> - Hop pellets/hop leaves (dried) for medicinal use	136
75.	<i>Hydrangea arobrescens</i> - Seven Barks roots/ rhizomes (dried) for medicinal use	137
76.	<i>Hypericum perforatum</i> - St. Johnswort whole plants (dried) for medicinal use	139
77.	<i>Ignatia</i> sp. - St. Ignatius Bean cut (dried) for medicinal use	140
78.	<i>Ipomoea</i> spp. - Scammony roots (dried) for medicinal use.	143
79.	<i>Jateorrhiza palmate</i> - Colombo roots (dried) for medicinal use	145
80.	<i>Juglans</i> spp. - walnut shell (crushed/powdered) (dried) for consumption	146
81.	<i>Juncus effuses</i> - Rush rhizome (dried) for medicinal use	147
82.	<i>Juniperus communis/ Juniperus</i> sp. – Howbar/ Sabina twig (dried) for medicinal use	148
83.	<i>Krameria</i> sp.- Ratanhia roots (dried) for medicinal use	151

84.	<i>Laburnum anagyroides</i> - Golden Chair leaves/flowers (dried) for medicinal use	152
85.	<i>Lactuca virosa</i> - Lactuca whole plants (dried) for medicinal use	153
86.	<i>Lagerstroemia speciosa</i> - Banaba	154
87.	<i>Laminum album</i> - Blind Nettle leaves/ flowers (dried) for medicinal use	155
88.	<i>Laurus nobilis</i> –Laurel	156
89.	<i>Lavandula angustifolia</i> - Lavender flowers (dried) for consumption	157
90.	<i>Ledum</i> spp. - Marsh-Tea whole Plants (dried) for medicinal use	158
91.	<i>Lemna</i> spp. - Common Duckweed whole plants (dried) for medicinal use	160
92.	<i>Liatris spicata</i> - Gayfeather roots (dried) for medicinal use	161
93.	<i>Luffa</i> spp. - Lufo fruits (dried) for medicinal use	165
94.	<i>Menispermum canadense</i> - Common Monseed roots (dried) for medicinal use	168
95.	<i>Mentha spicata</i> -Spearmint	169
96.	<i>Myrica cerifera</i> – Wax-Myrtle roots/bark (dried) for medicinal use	175
97.	<i>Myristica</i> spp – bark (dried) for medicinal use	176
98.	<i>Nuphar lutea</i> - Yellow Pond-lily rhizomes (dried) for medicinal use	177
99.	<i>Ocimum basilicum/ Ocimum</i> spp - Basil leaves/ Tukmaria fruits (dried) for consumption	178
100.	<i>Oenothera biennis</i> - whole plants (dried) for medicinal use	180
101.	<i>Okoubaka</i> sp.- Okoubaka roots (dried) for medicinal use	181
102.	<i>Oreganum vulagre</i> – Oreganum	183
103.	<i>Origanum majorana</i> - Majorana whole plants/herbs (dried) for consumption/ medicinal use	184
104.	<i>Orthosiphon</i> sp. - Orthosiphon leaves (dried) for medicinal use	186
105.	<i>Oryza sativa</i> – Rice bran/husk dried for processing.	187

106.	<i>Panax quinquefolius</i> - Ginseng roots/ Korean Gensing roots (dried) for medicinal use	190
107.	<i>Pausinystalia yohimbe</i> – Yohimbe Bark (dried) for medicinal use	194
108.	<i>Perilla spp.</i> leaves (dried) for medicinal use	196
109.	<i>Persea spp</i> – Persea bark – bark (dried) for medicinal use	197
110.	<i>Petraselinum crispum</i> – Parsley plants/herbs (dried) for consumption	198
111.	<i>Peumos boldus</i> - Boldina leaves (dried) for consumption	199
112.	<i>Phytolacca spp.</i> Berries/ roots (dried) for medicinal use	200
113.	<i>Pilocarpus sp.</i> - Jaborandi leaves (dried) for medicinal use	201
114.	<i>Pinus gerardiana</i> - Pine-nut/Chilgozah roasted seed for consumption	203
115.	<i>Piper methysticum</i> - Kava Roots	206
116.	<i>Pogostemon cablin</i> - Patchouli dried leaves for consumption.	210
117.	<i>Polygala senega</i> - Senega roots (dried) for medicinal use	211
118.	<i>Populus spp.</i> - Balm of Gilead bud (dried) for medicinal use	213
119.	<i>Pothos spp.</i> - Skunk Cabbage roots (dried) for medicinal use	214
120.	<i>Preira brava</i> - Velvet leaf roots (dried) for medicinal use	215
121.	<i>Prunus spp.</i> – Cherry – Laurel leaves/Pygeum Bark (dried) for medicinal use	216
122.	<i>Pulsatilla sp.</i> (Anemone) - Windflower whole plants (dried) for medicinal use	218
123.	<i>Rauwolfia vomitoria</i> - <i>Rauwolfia</i> root bark (dried) for medicinal use	221
124.	<i>Rhaponticum carthamoides</i> - Rhodiola	223
125.	<i>Rhus spp.</i> - Kakkar singhi (dried) for consumption.	224
126.	<i>Rhus toxicodendron</i> - Poisoin Ivy leaves (dried) for medicinal use	225
127.	<i>Rosa spp.</i> - Damask Rose flower (dried) for medicinal use	226
128.	<i>Rubia spp.</i> - Manjith roots (dried) for consumption	228
129.	<i>Ruta graveolens</i> - Bitter Herb whole plants (dried) for medicinal use	229

130.	<i>Sabal serrulata</i> - Saw Palmetto fruit (dried) for medicinal use	230
131.	<i>Salvia officinalis</i> - Clary sage leaves/plants/herbs (dried) medicinal/consumption use	233
132.	<i>Scammonia sp.</i> - roots (dried) for medicinal use	236
133.	<i>Schoenocaulon sp.</i> - Sabadilla crushed seeds (dried) for medicinal use	237
134.	<i>Scrophularia sp.</i> - Figwort whole plants (dried) for medicinal use	238
135.	<i>Scrophulariaceae sp.</i> - Picrorhiza roots (dried) for medicinal use	239
136.	<i>Scutellaria spp</i> - Helmet Flower whole plants (dried) for medicinal use	240
137.	<i>Sedum spp.</i> - Wall Pepper whole plants (dried) for medicinal use	242
138.	<i>Sempervivum sp.</i> - House leek leaves (dried) for medicinal use	243
139.	<i>Smilax sp.</i> - Smilax rhizomes/roots (dried) for medicinal use	246
140.	<i>Stevia rebaudiana</i> –Stevia leaves (dried) for medicinal use	247
141.	<i>Symphytum officinale</i> - Comfrey roots (dried) for medicinal use	248
142.	<i>Syzygium jambos</i> - Rose Apple fruits (dried) for medicinal use	250
143.	<i>Tanacetum vulgare</i> - Tansy whole plants (dried) for medicinal use	252
144.	<i>Taxus baccata</i> - English Yew dried leaves for medicinal use.	253
145.	<i>Teucrium marum</i> - Cat Thyme whole plants (dried) for medicinal use	257
146.	<i>Theobroma cacao</i> - Cocoa powder	258
147.	<i>Thuja occidentalis</i> - Eastern arborvitae leaves/twigs (dried) medicinal use	259
148.	<i>Tribulus terrestris</i> - Caltrop whole plants (dried) for medicinal use	262
149.	<i>Turnera sp.</i> - Damiana whole plants (dried) for medicinal use	266
150.	<i>Tussilago petasites</i> - Butter Burr whole plants (dried) for medicinal use	267
151.	<i>Urtica dioica</i> - Nettle roots (Dried) for medicinal use	269
152.	<i>Usnea barbata</i> - Bearded usnea whole plants (dried) for medicinal use	270
153.	<i>Vaccinium myrtillus</i> - Common bilberry leaves (dried) for medicinal use	271
154.	<i>Valeriana officinalis</i> - Common valerian roots (dried) for medicinal use	272

155.	<i>Veronica spp.</i> roots (dried) for medicinal use	274
156.	<i>Viburnum sp.</i> - Black Haw barks (dried) for medicinal use	275
157.	<i>Vinca minor</i> - Common Periwinkle whole plants (dried) for medicinal use	276
158.	<i>Vincetoxicum spp.</i> Leaves (dried) for medicinal use	277
159.	<i>Zea mays</i> - Corn cob ground without grain /Corn leaf pallets (dried) for consumption	282
160.	<i>Eschscholzia californica</i> (Californis poppy) (dried) whole plants except seeds for processing	284
161.	<i>Lycium barbarum</i> fruits (dried) for medicinal use/processing	285
162.	<i>Melissa officinalis</i> (Lemon balm leaves) (dried) for processing.	286
163.	<i>Ruscus aculeatus</i> (butcher's broom roots) (dried) for processing.	287
164.	<i>Cotinus sp.</i> whole plant (without seed) (dried) for consumption.	288
165.	<i>Thymus sp.</i> whole plant (without seed) (dried) for processing.	289
166.	<i>Malus domestica</i> – Dehydrated apples for consumption.	290
167.	<i>Malus domestica</i> (Dried apple pieces – sulphite treated)	291
168.	<i>Malus domestica</i> (dried apple puffed chips – cinnamon dusted)	292

Time line for Plant Quarantine activities for import/export of plants/plant materials

Activity	Item	Time frame
Issuance of Import Permit	Plants/plant materials for consumption & propagation;	Within 2 working days
Import Release Order	a. Tissue culture and mushroom spawn culture;	4-6 hrs
	b. Cut flowers and fresh fruits;	4-6 hrs
	c. Plant material for consumption;	1-2 working days except those requiring fumigation will be issued after 3 working days
	d. Plants and planting material requiring Post Entry Quarantine, Viz., Bulbs/Tubers/Cuttings/Saplings/Bud wood etc.;	12-24 hrs
	e. Seeds for sowing	8-10 days (where fungal and bacterial additional declaration are verified); 30-35 days (where addition declaration for viruses are verified)
Phytosanitary Certification	Sowing/propagating materials	Minimum of 8-10 days
	Perishable commodities such as nursery plants, tissue cultures, fresh fruits, cut flowers etc.,	24-48 hrs
	Plant material for consumption;	1-2 working days except those requiring fumigation will be issued after 3 working days