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Post: Hanoi

MARD Releases new guidance on Pest Risk Analysis Procedure

Report Categories:

Fresh Fruit

Vegetables

Pest/Disease Occurrences

Planting Seeds

Sanitary/Phytosanitary/Food Safety

Approved By:

Mark Dries

Prepared By:

Nguyen Huong and Michael Ward

Report Highlights:

On October 31, 2014, the Ministry of Agriculture and Rural Development (MARD) released Circular 36/2014/TT-BNNPTNT publishing the Regulation on Pest Risk Analysis (PRA) Procedures for regulated articles subject to Pest Risk Analysis before being imported into Vietnam. This Circular will enter into force on January 1, 2015.

Summary:

On October 31, 2014, the Ministry of Agriculture and Rural Development (MARD) released Circular 36/2014/TT-BNNPTNT publishing the Regulation on PRA Procedures for regulated articles subject to Pest Risk Analysis before being imported into Vietnam. This new Circular will enter into force on January 1, 2015.

Article 1, Chapter I of Circular 36/2014/TT-BNNPTNT outlines the Scope of Application for all regulated articles subject to PRA before importing into Vietnam. The regulated articles subject to PRA before being imported into Vietnam are listed in Article 2 of Circular 30/2014/TT-BNNPTNT, dated September 5, 2014. Please refer to Post voluntary GAIN report [VM4057](#).

Point 9, Article 2, Chapter I of this Circular mentions Quarantine Pests (currently Vietnam has identified 114 Quarantine Pests), which are listed in Circular 35/2014/TT-BNNPTNT, dated October 31, 2014. Please refer to Post voluntary GAIN report [VM4067](#).

Chapter II regulates the PRA procedures for all regulated articles. Based on that procedure, the National Plant Protection Office (NPPO) of the exporting country needs to provide information relating to regulated articles, that are for export to Vietnam, regarding the PRA process as regulated in the Appendixes of this Circular. Appendix 1 is the PRA form for plant and plant products. Appendix 2 is the PRA form for biological agents imported for plant protection. Appendices 1 and 2 are the format the exporting country’s NPPO must follow in preparing their PRAs. Appendices 3-7 are related to MARD/Plant Protection Department’s evaluation and finalization of a PRA. Circular 36/2014 does not stipulate a timeline for the completion and review of a PRA. The timeline enforced is still the timeline laid out in Decision 48/2007 which stipulates a 1-3 year timeline for PRA review and approval.

The draft of Circular 36/2014/TT-BNNPTNT was notified to the World Trade Organization (WTO) Sanitary and Phytosanitary Committee as G/SPS/N/VNM/53 on May 23, 2014.

Should U.S. exporters of plant and plant origin products have any questions regarding this new Circular, please email: aghamoi@fas.usda.gov with questions.

An unofficial English translation of Circular 36/2014/TT-BNNPTNT follows:

**MINISTRY OF AGRICULTURE AND RURAL
DEVELOPMENT**

No:36/2014/TT-BNNPTNT

**SOCIALIST REPUBLIC OF
VIETNAM
Independent – Freedom -
Happiness**

Hanoi, October 31, 2014

CIRCULAR

For publishing Regulation on Pest Risk Analysis Procedure for regulated articles subject to Pest Risk Analysis before importing into Vietnam

Pursuant to Plant Protection and Quarantine Law No. 41/2013/QH13;

Pursuant to Decree 199/2013/ND-CP on November 26, 2013 of Government stipulating mission, power and structure for Ministry of Agriculture and Rural Development;

At the proposal of the Director General of the Plant Protection Department;

Hereafter is the Circular issued by the Minister of Agriculture and Rural Development for publishing Circular on pest risk analysis procedure for regulated articles subject to Pest Risk Analysis before importing into Vietnam.

CHAPTER I GENERAL REGULATION

Article 1. Scope of application

1. This Circular regulates on pest risk analysis (PRA) procedure for regulated articles subject to pest risk analysis before importing into Vietnam (Hereafter called articles subject to PRA).
2. This Circular shall apply to the Plant Protection Department (PPD) responsible to organized and implement pest risk analysis, review all earlier PRA reports or evaluate a risk to be weed for regulated articles subject to PRA before importing into Vietnam.

Article 2. Terms and definitions

In this Circular, the following terms shall be understood to mean:

1. *Area of PRA*: An officially defined country, part of a country or all or parts of several countries (hereafter called Area).
2. *Vietnam's Agro-ecological areas*: Northern mountainous region, Red River Delta, North Central Coast, South Central Coast, Central Highlands, South East and Mekong River Delta.
3. *Endangered species*: all species are listed in the list of wild fauna and flora specified in the Appendices of the Convention on International Trade in endangered species (CITES) of wild fauna and flora of the Circular 40/2013/TT-2013 dated September 5th, 2013 issued by the Minister of Agricultural and Rural Development.
4. *Endangered area or risk area*: is an area where ecological factors favor the establishment of a pest whose presence in the area will result in economically important loss.
5. *Entry of pest* is a movement of a pest into an area where it is not yet present, or present but not widely distributed and being officially controlled.
6. *Establishment* is a perpetuation, for the foreseeable future, of a pest within an area after entry.
7. *Infestation (of a commodity)* is a presence in a commodity of a living pest of the plant or plant products concerned. Infestation includes infection.
8. *Packaging* is a material used in supporting, protecting or carrying a commodity
9. *Pest risk management (for quarantine pests)* is a valuation and selection of measures to reduce the risk of introduction and spread of a quarantine pest.
10. *Phytosanitary measure* is any measures having the purpose to prevent the introduction and/or spread of quarantine pests, or to limit the economic impact of regulated non-quarantine pests.
11. *Spread* is expansion of the geographical distribution of a quarantine pest within an area.
12. *Pathway* is any mean that allows the entry or spread of a quarantine pest.
13. *Pest categorization* is the process of determining whether a pest has or has not the characteristics of a quarantine pest or those of regulated non-quarantine pests.

Article 3. General requirements

1. For regulated articles subject to pest risk analysis before importing into Vietnam, the Plant Protection Department will consider, evaluate and decide an analysis for a risk to be a weed before implementing PRA process under this Circular;
2. Risk to Environment analysis for beneficial biological articles used for plant protection imported into Vietnam, should be carried out in accordance with National Standard.
3. PRA procedure for quarantine pests should consist three stages:
 - a) Stage 1: Initiating the process for analyzing risk;
 - b) Stage 2: Assessing pest risk;
 - c) Stage 3: Managing pest risk.
4. PRA report should present full results of the pest risk analysis for imported plants and plant products. Format and contents of PRA report should be in accordance with Appendix VI issued with this Circular.
5. An authorized government agency responsible on plant quarantine in exporting country will be responsible to provide information either in Vietnamese or in English for PRA in a form in the Appendix I (for a case of PRA of plant products) or Appendix II (for a case of PRA affecting to environment of beneficial biological articles imported to be used for plant protection) issued attached herewith this Circular; register with the Plant Protection Department to conduct PRA for regulated articles subject to PRA.

Article 4. Budget for PRA implementation

Annually, Government will secure budget for PRA implementation of regulated articles subject to PRA.

**CHAPTER II
PEST RISK ANALYSIS PROCEDURE**

Article 5. Initiating the PRA process

1. Initial point of PRA process

1. The identification of a pathway of quarantine pests, of which regulated articles may allow the introduction and/or spread of quarantine pests;
2. The identification of a pest that may qualify as a quarantine pest.

2. PRA initiated by a Pathway

A requirement for a new or revised PRA originating from one of following specific pathways:

- a) A new commodity or a commodity from a new origin to be imported into Vietnam;
- b) New plant species, which are not present in Vietnam, to be imported into Vietnam for scientific research and variety selection purposes.
- c) Another pathway: natural spread, packages, mail, garbage, passenger's baggage etc.;
- d) New changes in phytosanitary regulations or requirements concerning on specific imported commodities;
- e) A new phytosanitary treatment, or new information needs to be considered.

3. PRA initiated by a Pest

A requirement for a new or revised PRA originating from one of following situations:

- a) An emergence of a new pest, which has an established infestation within a PRA area.
 - b) An emergence of a new pest in an imported commodity.
 - c) A quarantine pest is reported to be more damaging in a new area other than the PRA area and its area of origin.
 - d) A particular quarantine pest is repeatedly intercepted.
 - dd) A request is made to import, as such, an organism, by researchers, educators, biological practitioners, businesses (for ornamental plant purposes);
 - e) A new phytosanitary treatment, or new information needs to be considered.
4. Develop a list of quarantine pests, which may spread with imported commodities. And each quarantine pest is then subjected to Stage 2 in the PRA process. If no potential quarantine pests are identified as likely to follow the pathway, the PRA stops at this point.

Article 6. Review of earlier PRAs

- 1. Identify previous relevant pest risk analysis. If there is an existing risk assessment that adequately assesses the risks, the results of risk assessment will be used here.
- 2. Consider current importations of the same commodity from different countries, from which PRA has been conducted.

Article 7. Risk Assessment for plants and plant products possibly being weeds

Risk assessment for plants and plant products for cultivation, which are possible to be weeds, and subject to PRA before importing into Vietnam, must be conducted in accordance with national technical regulations.

Article 8. Contents of Pest Risk Assessment

- 1. Review of data on quarantine pests intercepted on regulated articles imported into Vietnam: Sum up all data/records of intercepted pest on imported commodities, which are given in Table 1 of Appendix V issued with this Circular.

2. Quarantine Pest Categorization

- a) Following sources of information used for developing List of quarantine pests for regulated articles subject to PRA include:

Quarantine Pest list of the exporting country and relevant information required in Appendix I issued with this Circular;

List of pests detected on regulated articles subject to PRA in a form specified in Table 1, Appendix III issued with this Circular;

Previous pest risk assessments;

Relevant international databases.

- b) Information used for pest categorization includes:

Geographical distribution (distribution map, region climate);

Pest biological characters;

Pattern of pest attack;
Pathways;
Pest management measures currently applied;
Other related information.

c) Results of quarantine pest categorization developed in accordance with a form specified in Table 2, Appendix III issued with this Circular.

3. Identify Pests Likely to be Quarantine Pests

a) The criteria for identification of pests likely to be quarantine pests, includes:

Being present in the exporting country;
Being associated with regulated articles subject to PRA;
Being a quarantine pest.

b) All quarantine pests in the List regulated in point c) of Point 2 of this Article meeting all criteria regulated at point a) of Point 3 of this Article, will be selected into the List of Pests potentially to be Quarantine Pests for further assessment following form specified in Table 3, Appendix III issued with this Circular.

4. Rating for Consequences of Introduction

a) For each of these quarantine pests, the potential consequences of introduction are rated using five Risk Elements including: Climate-Host Interaction of quarantine pest; Host Range; Dispersal Potential; Economic Impacts; Environmental Impacts. The evaluation should be carried out regulated in Appendix IV issued with this Circular.

b) Sum up all Risk Element values of rating introduction consequences. All values of rating introduction consequences for quarantine pests are in accordance with a form specified in the Table 4, Appendix III issued with this Circular.

5. Assess Introduction Potential

a) Introduction potential for each quarantine pest is assessed based on six risk elements including: Volume of regulated articles subject to PRA, imported annually; Quarantine Pest Survival potential after treatment; Quarantine Pest Survival Potential during shipment; Potential of Quarantine Pest, which are not detected at the port of entry; Survival potential of quarantine pest in area, to which regulated articles subject to PRA are delivered; Host materials suitable for quarantine pest reproduction. Assessment will be carried out as regulated in Appendix V issued with this Circular.

b) Sum up all results of introduction potential assessment. All results of introduction potential assessment are specified in a form regulated in Table 5, Appendix III issued with this Circular.

6. Conclusion on Pest Risk Potential and Phytosanitary Measure Requirements for Quarantine Pest.

a) Sum up all results of of Pest Risk Potential as specified in Table 6, Appendix III issued with this Circular.

- b) Depending on Risk Potential of each quarantine pest, risk management measures can be as follows:

Low risk potential: No need to apply any phytosanitary measures for pest;

Medium risk potential: Specific phytosanitary measures need to be applied;

High risk potential: Specific phytosanitary measures should be strongly and strictly applied;

Article 9. Pest Risk Management

1. Pest Risk Management Measures

Based on assessment of pest risk potential for regulated articles subject to PRA, in consultation with relevant stakeholders such as scientists, managers, producers, importers, specific management requirements are considered in order to minimize the risks as below:

- a) Requesting exporting country to conduct specific phytosanitary measures for regulated articles subject to PRA before importing into Vietnam;
- b) Negotiating with the exporting country to conclude bilateral agreement on export regulated articles subject to PRA into Vietnam.

2. Pest risk mitigation options to be considered:

- a) Ban of regulated articles subject to PRA from specific countries or region;
- b) Requirements of phytosanitary import permit;
- c) Inspection at the exporting country;
- d) Requesting phytosanitary treatment measure at the exporting country;
- dd) Requirements of pest free area for regulated articles subject to PRA;
- e) Inspection and treatment at entry point;
- g) Quarantine inspection after post import
- h) Other measures

3. Assessment of efficacy and impact of options/measures

Assessment of efficacy and impact of options/measures aiming to mitigate risk of quarantine pests, is carried out based on following criterias:

- a) Economic impact;
- b) Environmental impact;
- c) Social impact;
- d) Feasibility;
- e) Suitability of existing regulations;
- f) Time needed to implement a new regulation.

4. Selection of options/measures

Appropriate measures for a specific pest are decided on the basis of efficacy and impact of available options/measures; phytosanitary measures on imported regulated articles subject to PRA, are proposed to adopt.

5. Draft PRA report

- a) PRA report is regulated as in form Appendix VI of this Circular.

- b) Organize consultation with relevant stakeholders for comments on this draft PRA report.
6. Draft proposed requirements for import plant quarantine
 - a) Draft of proposed requirements for import plant quarantine is regulated as described in a form in Appendix VII of this Circular;
 - b) Organize consultation with relevant stakeholders for comments on this draft proposed requirements for import plant quarantine.
 7. Finalization of PRA report and proposal of import plant quarantine requirements.

**CHAPTER III
IMPLEMENTATION ORGANIZATION**

Article 10. Responsibility of Plant Protection Department

1. Develop a plan for PRA and implement PRA as regulated in this Circular.
2. Notify results of PRA in written correspondence to authorised agency of plant quarantine in exporting country and relevant organizations and individuals.

Article 11. Effective date for implementation

This Circular will come in to force on January 1, 2015.

Article 12. Implementation organization

Director General of the Plant Protection Department, Heads of MARD's relevant agencies and organizations, individuals concerned take responsibility to implement this Circular./.

During implementation, if there is any questions, all agencies, organizations or individuals are requested to report on time to MARD (The Plant Protection Department) for summarizing and submitting to Minister of Agricultural and Rural Development for consideration and decision./.

**On behalf of MINISTER
Vice Minister
(Signed)
Le Quoc Doanh**

Recipients:

- Office of Government;
- Relevant Ministries, ministereial level agencies
- Provincial Departments of Agriculture and Rural Development
- Ministry of Justice (Department of legal document control)
- Government Gazette;
- Government website; MARD's website
- MARD's departments, offices
- PPD's departments, officies
- Filling in PPD office (300)

Appendix I

Required information for PRA implementation

(Issued with the Circular 36/2014/TT-BNNPTNT dated 31 October 2014, by the Minister of Agriculture and Rural Development)

I. General Requirements:

National Plant Protection Office (NPPO) of the exporting country is an authorized agency responsible to provide update information (valid for not over 10 years from the date of providing information) in Vietnamese or in English (include both hard copy and soft copy) for PRA process.

II. Specific requirements

1. **Full address of NPPO** (telephone, fax, email of the official in charge of providing information.

2. **Information on proposed commodity, plant and plant products subject to PRA, to export into Vietnam**

- 2.1. Scientific name;
- 2.2. Category location;
- 2.3. Common name;
- 2.4. Other name (Syn.);
- 2.5. Variety or branch;
- 2.6. Plant part to be exported into Vietnam (fruits, seeds,...);
- 2.7. Proposed final use purpose of the products/commodity (breeding, consumption, processing..);
- 2.8. List of current importing countries of this commodity/product (not includes Vietnam);
- 2.9. Images, photos of commodity/plant, plant products.

3. Information on production area for export

- 3.1. Name of commune, district, province producing products for export;
- 3.2. Describe climate of production area for export (highest temperature, lowest temperature, and average temperature per year; average rain fall per year; wind speed);
- 3.3. Time (month) for cultivation and time (month) for harvest in the year;
- 3.4. Estimate export volume (tons/year);
- 3.5. Indication of production areas on map.

4. Information on production and quarantine pest management

- 4.1. Specific risk surveillance and management programs; certification procedures (survey data/sample method/certification process...);
- 4.2. Products produced from pest free areas, certified by NPPO of exporting country;
- 4.3. Information on production, and harvest.

5. Information on pest relevant to regulated article subject to PRA and disease vector for crops *(refer to below table)

Scientific name and other	Common name	Order	Family	Affected part of plant	Distribution	Biological Character	Mitigation measures	Reference documents
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name						s	-res	
Small spider 1.								
Insects 1.								
Fungi 1.								
Bacteria 1.								
Virus 1.								
Nematode 1.								
Weed 1.								
Other quarantine pest 1.								

*Relevant information for each specific quarantine pest is required.

6. Information on commodity post harvest management

6.1. Packing method

6.2. Inspection procedure

6.3. Post harvest treatment methods for infestation and efficiency of each type of treatment

6.4. Conditions and security of storage facility to control re-infestation.

6.5. Images of packed products, label for export.

7. **Current Phytosanitary Certification System** (field checking, sampling, additional announcement...)

8. Information on transportation means and storage conditions during transportation

8.1. Transportation means for export commodities;

8.2. Conditions of storage facility for export commodities (temperature, humidity) during transportation.

9. Results of pest risk assessment carried out in other countries

PRAs carried out must be in accordance with the guidance of international standards on phytosanitary measures, especially standards on PRA protocols.

Appendix II

Required information for PRA implementation relating to environment of beneficial biological agent imported to be used for plant protection

(Issued with the Circular 36/2014/TT-BNNPTNT dated October 31, 2014 by the Minister of Agriculture and Rural Development)

I. General Requirements:

National Plant Protection Office (NPPO) of the exporting country is an authorized agency responsible to provide update information (valid for not over 10 years from the date of providing information) **in Vietnamese** or **in English** (include both hard copy and soft copy) for PRA process.

II. Specific requirements

1. Full address of NPPO (*telephone, fax, email of the official in charge of providing information.*)

2. General information for quarantine pest to be prevented by beneficial biological agent

2.1. Category: scientific name, category location (order, family, branch...), other name, common name (if any), category characteristics.

2.2. Origin and distribution.

2.3. Biological characteristics, habitats.

2.4. Distribution status of other major quarantine pests relating to quarantine pest that needs to be prevented.

2.5. Pest status prevented by biological agent in PRA area (including all regulations applied for the quarantine pest).

2.6. Economic impacts.

2.7. All measures applied for quarantine pest prevention

3. General information for imported biological agent

3.1. Category: scientific name, category location (order, family, branch...), other name, common name (if any), category characteristics.

3.2. Origin and distribution (including distribution in natural environment and release environment)

3.3. Biological characteristics, habitat characteristics in laboratory and in natural environment (shelflife, number of generation, information on production, development and reproduction such as production form, parasitic characteristics, development period, longevity, reproduction potential,..., generation protection manner (such as winter rest, sleeping style, shelter, migration,...); distribution manner; climate conditions of biological prevention agent in natural environment and release areas.

3.4. Functions of biological prevention agent: parasite/symbiosis/bait catching,...

3.5. Assessment method of biological prevention agent (e.g. morphology, molecule,...)

3.6. Location of production.

3.7. Production method, packing, storage and usage (release quantity and release times).

3.8. Method of foreign matter removal.

3.9. Host distribution in natural environment and in laboratory.

3.10. Sources of biological prevention agents.

3.11. Other natural enemy of beneficial biological agents (e.g. parasite, fungi, competitive species, antagonistic species).

3.12. History of usage of beneficial biological agents

3.14. Information on other biological species relating or similar with beneficial biological agent./.

Appendix III

Data form for PRA

(Issued with the Circular 36/2014/TT-BNNPTNT dated October 31, 2014 by the Minister of Agriculture and Rural Development)

Table 1. Quarantine Pest intercepted on regulated article subject to PRA (commodity with scientific name) from...(country)

Pest	Origin	Number of interception				Total
		Fruit	Plant	Plant part (branch)	Other parts of plant	

Table 2. List of Pests Associated with imported plant and plant products in the exporting country

Pest	Pest Geographic Distribution	Plant Part Affected	Quarantine Pest (yes/no)	Follow Pathway (yes/no)	References
Arthropods					
Quarantine Pest Species (Order, Family)					
Fungi					
Quarantine Pest Species (Order, Family)					
Bacteria					
Quarantine Pest Species (Order, Family)					
Virus					
Quarantine Pest Species					
Nematode					
Quarantine Pest Species (Order, Family)					
Weeds					
Quarantine Pest Species (Order, Family)					
Other quarantine pests					

Table 3. List of quarantine pests (likely to follow the pathway on imported plants and plant products) selected for further assessment

Series Number	List of quarantine pests (likely to follow the pathway of ... (name of commodity)..(scientific name of plant commodity) selected for further assessment
Arthropods	
Order	
Family	
1	Quarantine Pest species
Fungi	
Order	

Family	
2	Quarantine Pest species
Bacteria	
Order	
Family	
3	Quarantine Pest species
Virus	
4	Quarantine Pest species
Nematode	
Order	
Family	
5	Quarantine Pest species
Weeds	
Order	
Family	
6	Quarantine Pest species
Other quarantine pests	

Table 4: Rating for Consequences of Introduction

Pest	Risk Element 1	Risk Element 2	Risk Element 3	Risk Element 4	Risk Element 5	Cumulative Risk Rating
Quarantine Pest species (Order, Family)	Low, Medium, High (1,2,3)	Low, Medium, High (1,2,3)	Low, Medium, High (1,2,3)	Low, Medium, High (1,2,3)	Low, Medium, High (1,2,3)	Low, Medium, High (5-15)

Notes*: An cumulative risk for rating of consequences of introduction, is accessed as below:

- Low :5 - 8 points
- Medium :9 - 12 points
- High :13 - 15 points

Table 5. Risk Rating for Likelihood of Introduction

Pest	Sub-element 1	Sub-element 2	Sub-element 3	Sub element 4	Sub element 5	Sub-element 6	Cumulative Risk Rating Pest of species
Pest species	Low, or Medium, or High (1,or 2, or 3)	Low, or Medium, or High (1,or 2, or 3)	Low, or Medium, or High (1,or 2, or 3)	Low, or Medium, or High (1,or 2, or 3)	Low, or Medium, or High (1,or 2, or 3)	Low, or Medium, or High (1,or 2, or 3)	Low, or Medium, or High (1,or 2, or 3)

Note*: Cummulative Risk for rating of Likelihood of introduction of pest is assessed as follows:

Low :6 - 9 points
 Medium :10 - 14 points
 High :15 - 18 points

Table 6. Pest Risk Potential

Pest	Consequences of Introduction	Likelihood of Introduction	Pest Risk Potential
Pest species	Low, Medium, High (5 - 15)	Low, Medium, High (6 -18)	Low, Medium, High (11 - 33)

Note*: Rating of pest risk potential is assessed as follows:

Low :11-- 18 points
 Medium :19 - 26 points
 High :27 - 33 points

Appendix IV

All risk elements for rating of consequences of pest introduction

(Issued with the Circular 36/2014/TT-BNNPTNT dated October 31, 2014 by the Minister of Agriculture and Rural Development)

1. Element 1: Climate-Host Interaction of quarantine pest

Base on climate characteristics, Vietnam has 7 defined agro-ecological zones. Pest can be assessed due to its suitability and establishment in each agro-ecological zones of Vietnam.

Risk Assessment Scores are as follows:

Low: In a single ecological zone1 point
 Medium: In two or three ecological zones.....2 points
 High: In four or more ecological zones..... 3 points

In a case that quarantine pest is evaluated as potentially to establish a breeding colony and spread in concentrated production areas of host plants as a major crop for Vietnam's agriculture, a risk rating for that quarantine pest will be considered and increased to one higher level (*only apply for quarantine pests having low and medium risk levels*) in the regulated in Element 1.

2. Element 2: Host Range

The risk posed by a plant pest depends on both its ability to establish a viable, reproductive population and its potential for causing plant damage. For arthropods, risk is assumed to be correlated positively with host range. For pathogens, risk is more complex and is assumed to depend on host range, aggressiveness, virulence and pathogenicity; for simplicity, risk is rated as a function of host range.

Risk Assessment Scores are as follows:

Low: Pest attacks a single species or multiple species within a single genus..... 1 point
Medium: Pest attacks multiple species within a single plant family... ..2 points
High: Pest attacks multiple species among multiple plant families.....3 points

3. Element 3: Dispersal Potential

A pest may disperse after introduction to a new area. The following items are considered: 1) Reproductive patterns of the pest; 2) Dispersal Potential of the pest; 3) Factors facilitating dispersal

Risk Assessment Scores are as follows:

Low: Pest has neither high reproductive potential nor rapid dispersal capability.....1 point
Medium: Pest has either high reproductive potential or the species is capable of rapid dispersal..2 points
High: Pest has high biotic potential (e.g., many generations per year, many offspring per reproduction, and evidence exists that the pest is capable of rapid dispersal such as over 10 km/year under its own power; or via natural forces like wind, water, vectors, etc., or human assistance3 points

4. Element 4: Economic Impacts

Introduced pests are capable of causing a variety of direct and indirect economic impacts. These are divided into three primary categories: a) Lower yield of the host crop (e.g. by causing plant mortality, or by acting as a disease vector); b) Lower value of the commodity (e.g. by increasing costs of production, lowering market price, or a combination); c) Loss of foreign or domestic markets due to a presence of new quarantine pest.

Risk Assessment Rating is as follows:

Low: Pest causes any one or none of the above impacts..... 1 point
Medium: Pest causes any two of the above impacts..... 2 points
High: Pest causes all three of the above impacts 3 points

5. Element 5: Environmental Impact

The assessment of the potential of each quarantine pest to cause environmental damage, proceeds by considering the following factors:

Introduction of the pest is expected to cause significant, direct environmental impacts (e.g. ecological disruptions, reduced biodiversity);

Pest is expected to have direct impacts on plant species listed as endangered or threatened in Vietnam;

Pest is expected to have indirect impacts on plant species listed as endangered or threatened in Vietnam (e.g. by disrupting sensitiveness, critical habitat);

Introduction of the pest would stimulate chemical or biological control programs.

Risk Assessment Rating is as follows:

- Low: None of the above would occur.....1 point
- Medium: One of the above would occur..... 2 points
- High: Two or more of the above would occur..... 3 points

Appendix V

All elements for rating pest introduction potential

(Issued with the Circular 36/2014/TT-BNNPTNT dated October 31, 2014 by the Minister of Agriculture and Rural Development)

1. Element 1- Annually Imported Volume of regulated articles subject to PRA:

The likelihood that an quarantine pest will be introduced depends on the imported volume of the potentially infested regulated articles subject to PRA. For qualitative pest risk assessments, the volume of regulated articles subject to PRA imported is estimated in units of standard 40 feet shipping containers. In those cases where the quantity of a imported plant and plant products is provided in terms of kilograms, pounds, etc, convert the units into terms of 40 feet (40') shipping containers.

Score are assessed based on number of 40' containers as follows:

- Low: < 10 containers/year 1 point
- Medium:10 - 100 containers/year..... 2 points
- High: > 100 containers/year 3 points

For imported plant and plant products subject to PRA, which are possibly used as crop cultivation, risk rate in the element 1 is consider as High if number of imported containers from 10 containers per year and up.

2. Element 2- Quarantine Pest Survival after post harvest treatment

For this element, post harvest treatment refers to any manipulation, handling or specific phytosanitary treatment to which the commodity is subjected. Examples of post harvest treatments include culling, washing, chemical treatment, cold storage, etc. If there is no post harvest treatment, estimate the likelihood of this element as High.

3. Element 3- Quarantine Pest Survival during shipment

Estimate pest survival during shipment based on biological characteristics of quarantine pest, storage and shipping conditions of plant and plant products.

4. Element 4- Quarantine Pest are not detected at the port of entry

Unless specific protocols are in place for special inspection of the commodity in question, assume standard inspection protocols for like commodities. To consider this sub-element, the following issues should be taken into account: commodity type (such as planting materials), pests (latent diseases, development stages), staff capabilities, equipment, existing protocols, etc.

5. Element 5- Further movement of regulated articles subject to PRA delivered to an area with an environment suitable for quarantine pest survival

Consider the geographic location of likely markets and the proportion of the plant and plant products that is likely to move to locations suitable for pest survival. Even if infested plant and plant products enter the country, not all final destinations will have suitable climatic conditions for pest survival.

For regulated articles subject to PRA, imported for consumption purpose (such as vegetables, flowers, and fresh fruits), storages of imported products are supermarkets or shopping malls, where there is a cold or cool system (low temperature), therefore it is less or not suitable for pest survival. As a result, risk rate of the products as described in element 5 is from low to medium.

For plant and plant products subject to plant quarantine, imported for cultivation purpose, storages of imported products are seed storages, where condition is suitable for pest survival. As a result, risk rate of the products as described in element 5 is from medium to high.

6. Element 6- Host material suitable for pest reproduction

Even if the final destination of infested commodities is suitable for pest survival, suitable hosts must be available in order for the pest to survive. Consider the complete host range of the pest species.

For regulated articles subject to PRA, which is imported for consumption purpose (such as vegetables, flowers, fresh fruits), destination of these articles are supermarkets, wet markets, or trading centers. These locations are far from cultivation locations (having host materials), contact possibility of quarantine pest with host material is limited. Besides that, the left over part after usage will be destroyed with trashes. As a result, risk rate of the products as described in element 6 is from low to medium.

For regulated articles subject to PRA, which is imported for crop cultivation purpose, destination of these articles are seed storage, farmers' seed keeping house or cultivation areas (having suitable host materials), contact possibility of quarantine pest with host material will be increase. As a result, risk rate of the products as described in element 6 is from medium to high.

Appendix VI

PRA Report Form

(Issued with the Circular 36/2014/TT-BNNPTNT dated October 31, 2014 by the Minister of Agriculture and Rural Development)

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Glossary of letters abbreviated

1. General information

General information relating to regulated articles subject to PRA, includes:

- PRA implementing Organization/Individual;
- Type of imported regulated articles subject to PRA;
- Region for conducting PRA;
- Exporting country;
- Implementation Methods (name of procedure applied).

Outline of regulated articles subject to PRA:

- Scientific name of regulated articles subject to PRA, name of documents/materials and year published.
- Combine all information relating to imported regulated articles subject to PRA, including
 - + Place of growing (ecological, geographical, soil conditions and maps);
 - + Area and cultivated method;
 - + Yield;
 - + Variety and characteristic of regulated articles subject to PRA;
 - + Time of harvest, maintained method; post harvest treatment; storage conditions and commodity transportation means;
 - + Export markets and export capacity

2. Pest Risk Assessment

Results of Pest risk assessment are reported in accordance with pest risk analysis procedure for regulated articles subject to PRA mentioned in this Circular.

2.1. Initial stage of PRA process

Outlining all contents relating to PRA implementation, providing evident adequately (if known any).

2.2. Review all Previous Pest Risk Assessments

Review all previous relevant PRA reports. Review a status of the same regulated articles imported from other countries, which have PRA reports conducted (summarize all data from results of pest detection and interception evidence at entry ports on regulated articles subject to PRA).

2.3. Risk assessment for Pest possibly being weed (*if necessary*)

2.4. Pest Risk Assessment

2.4.1. Pest Categorization

Any pests listed in the "List of quarantine pests relating to regulated articles subject to PRA in exporting country (regulated in Table 2, Addendix III issued with this Circular) , must be ordered in alphabet A, B, C with order, family, species (of each branch).

Each species assessed independently attached with relevant information adequately (*i.e. detected on field, in point of entries or removed during parking, storage...etc*).

Identify pest possibly being quarantine pest.

2.4.2. Consequences of Introduction

Based on cumulative risk rating, risk of each pest will be identified as regulated in Table 4, Appendix III issued with this Circular.

2.4.3. Likelihood of Introduction

Pest's Likelihood of Introduction will be also assessed as regulated in Table 5, Appendix III issued with this Circular.

2.4.4. Conclusion on risk levels

Combined resultss of risk assessment of each pest according to the form regulated in Table 6, Appendix III issued with this Circular.

2.5. Risk Management

Only apply measures for risk management and risk mitigation for quarantine pest concluded as medium or high levels.

2.5.1. Proposed risk management measures applied in the field in cultivation area of the exporting counties

2.5.1.1 Proposed risk management measures to be applied in production areas.

2.5.1.2. Proposed risk management measures to be applied during harvest, processing, post-harvest treatment and packing in the exporting counties

2.5.1.3. Proposed risk management measures to be applied for consignment before exporting

- 2.5.1.4. Proposed risk management measures to be applied for consignment during shipment
- 2.5.2. Request regulated articles subject to PRA to be produced in pest free area
- 2.5.3. Proposed risk management measures to be applied for consignment at entry port
- 2.5.4. Proposed risk management measures to be applied for post import consignment
- 2.5.5. Other measures
- 2.5.6. Evaluate efficiency and impacts of risk mitigation measures
- 2.5.7. Import Phytosanitary Inspection requirements

3. Assessment Authors and Reviewers

- 3.1. Authors (included name, organization ordered alphabet)
- 3.2. Reviewers (included name, organization ordered alphabet)

4. References

5. Biological information of Quarantine pest

Appendix VII

Import Phytosanitary Inspection Requirements

(Issued with the Circular No. 36/2014/TT-BNNPTNT dated October 31, 2014 by the Minister of Agriculture and Rural Development)

1. General Introduction

2. Requirement on application of quarantine pest mitigation measures

2.1. Requirement on registration of production area and processing and packaging facility

2.2. Requirement on application of quarantine pest mitigation measures before harvest of products

- 2.2.1. Requirement for quarantine pest free area;
- 2.2.2. Requirement of quarantine pest prevention programs;
- 2.2.3. Requirement of review programs, phytosanitary certificates during production issued by Plant Quarantine Office of exporting countries.

2.3. Requirement on application of quarantine pest mitigation measures after harvest and storage in exporting country

- 2.3.1. Requirement of processing procedure, product packing, and security assurance from quarantine pest after harvest;
- 2.3.2. Requirement of application of phytosanitary treatment measures;
- 2.3.3. Requirement of packaging and storage;
- 2.3.4. Requirement of sample collecting procedure and control, phytosanitary certification system of Plant Quarantine Office of exporting countries before exporting;

2.4. Requirement on checking and control at entry point

2.5. Other requirements

- 2.5.1. Requirement of transportation;
- 2.5.2. Requirement of origin traceability of imported consignments in exporting countries;

- 2.5.3. Requirement of control and evaluate first consignment of regulated articles subject to PRA before exporting;
- 2.5.4. Requirements of rechecking and re-evaluating (when detected quarantine pest in the consignment of regulated articles subject to PRA imported into Vietnam or any changes in phytosanitary inspection in exporting countries)

3. Conclusion