Carmel-Muncie, IN CSA and also including Grant County, IN;

(25) Kansas City-Overland Park-Kansas City, MO–KS—consisting of the Kansas City-Overland Park-Kansas City, MO–KS CSA and also including Jackson County, KS, Jefferson County, KS, Osage County, KS, Shawnee County, KS, and Wabaunsee County, KS;

(26) Laredo, TX—consisting of the Laredo, TX MSA;

(27) Las Vegas-Henderson, NV–AZ—consisting of the Las Vegas-Henderson, NV–AZ CSA;

(28) Los Angeles-Long Beach, CA—consisting of the Los Angeles-Long Beach, CA CSA and also including Kern County, CA, and Santa Barbara County, CA;

(29) Miami-Fort Lauderdale-Port St. Lucie, FL—consisting of the Miami-Fort Lauderdale-Port St. Lucie, FL CSA and also including Monroe County, FL;

(30) Milwaukee-Racine-Waukesha, WI—consisting of the Milwaukee-Racine-Waukesha, WI CSA;

(31) Minneapolis-St. Paul, MN–WI—consisting of the Minneapolis-St. Paul, MN–WI CSA;

(32) New York-Newark, NY–NJ–CT–PA—consisting of the New York-Newark, NY–NJ–CT–PA CSA and also including all of Joint Base McGuire-Dix-Lakehurst;

(33) Palm Bay-Melbourne-Titusville, FL—consisting of the Palm Bay-Melbourne-Titusville, FL MSA;

(34) Philadelphia-Reading-Camden, PA–NJ–DE–MD—consisting of the Philadelphia-Reading-Camden, PA–NJ–DE–MD CSA, except for Joint Base McGuire-Dix-Lakehurst;

(35) Phoenix-Mesa-Scottsdale, AZ—consisting of the Phoenix-Mesa-Scottsdale, AZ MSA;

(36) Pittsburgh-New Castle-Weirton, PA–OH–WV—consisting of the Pittsburgh-New Castle-Weirton, PA–OH–WV CSA;

(37) Portland-Vancouver-Salem, OR–WA—consisting of the Portland-Vancouver-Salem, OR–WA CSA;

(38) Raleigh-Durham-Chapel Hill, NC—consisting of the Raleigh-Durham-Chapel Hill, NC CSA and also including Cumberland County, NC, Hoke County, NC, Robeson County, NC, Scotland County, NC, and Wayne County, NC;

(39) Richmond, VA—consisting of the Richmond, VA MSA and also including Cumberland County, VA, King and Queen County, VA, and Louisa County, VA;

(40) Sacramento-Roseville, CA–NV—consisting of the Sacramento-Roseville, CA CSA and also including Carson City, NV, and Douglas County, NV;

(41) San Diego-Carlsbad, CA—consisting of the San Diego-Carlsbad, CA MSA;

(42) San Jose-San Francisco-Oakland, CA—consisting of the San Jose-San Francisco-Oakland, CA CSA and also including Monterey County, CA;

(43) Seattle-Tacoma, WA—consisting of the Seattle-Tacoma, WA CSA and also including Whatcom County, WA;

(44) St. Louis-St. Charles-Farmington, MO–IL—consisting of the St. Louis-St. Charles-Farmington, MO–IL CSA;

(45) Tucson-Nogales, AZ—consisting of the Tucson-Nogales, AZ CSA and also including Cochise County, AZ;

(46) Washington-Baltimore-Arlington, DC–MD–VA–WV–PA—consisting of the Washington-Baltimore-Arlington, DC–MD–VA–WV–PA CSA and also including Kent County, MD, Adams County, PA, York County, PA, King George County, VA, and Morgan County, WV; and

(47) Rest of U.S.—consisting of those portions of the United States and its territories and possessions as listed in 5 CFR 591.205 not located within another locality pay area.

[FR Doc. 2015–13135 Filed 5–29–15; 8:45 am]

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DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

7 CFR Part 319

[Docket No. APHIS–2014–0106]

RIN 0579–AE10

Importation of Phalaenopsis Spp. Plants for Planting in Approved Growing Media From China to the Continental United States

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Proposed rule.

SUMMARY: We are proposing to amend the regulations governing the importation of plants for planting to authorize the importation of *Phalaenopsis* spp. plants for planting from China in approved growing media into the continental United States, subject to a systems approach. The systems approach would consist of measures that are currently specified in the regulations as generally applicable to all plants for planting authorized importation into the United States in approved growing media. This proposed rule would allow for the importation of *Phalaenopsis* spp. plants for planting from China in approved growing media, while providing protection against the introduction of plant pests.

DATES: We will consider all comments that we receive on or before July 31, 2015.

ADDRESSES: You may submit comments by either of the following methods:

- Federal eRulemaking Portal: Go to *http://www.regulations.gov/#!docketDetail;D=APHIS-2014-0106.*
- Postal Mail/Commercial Delivery: Send your comment to Docket No. APHIS–2014–0106, Regulatory Analysis and Development, PPD, APHIS, Station 3A–03.8, 4700 River Road Unit 118, Riverdale, MD 20737–1238.

Supporting documents and any comments we receive on this docket may be viewed at *http://www.regulations.gov/#!docketDetail;D=APHIS-2014-0106* or in our reading room, which is located in room 1141 of the USDA South Building, 14th Street and Independence Avenue SW., Washington, DC. Normal reading room hours are 8 a.m. to 4:30 p.m., Monday through Friday, except holidays. To be sure someone is there to help you, please call (202) 799–7039 before coming.

FOR FURTHER INFORMATION CONTACT: Ms. Lydia E. Colón, PPQ, APHIS, 4700 River Road Unit 133, Riverdale, MD 20737–1236; (301) 851–2302.

SUPPLEMENTARY INFORMATION:

Background

The regulations in 7 CFR part 319 prohibit or restrict the importation of certain plants and plant products into the United States to prevent the introduction of quarantine plant pests. The regulations contained in "Subpart—Plants for Planting," §§ 319.37 through 319.37–14 (referred to below as the regulations), prohibit or restrict, among other things, the importation of living plants, plant parts, and seeds for propagation or planting.

The regulations differentiate between prohibited articles and restricted articles. Prohibited articles are plants for planting whose importation into the United States is not authorized due to the risk the articles present of introducing or disseminating plant pests. Restricted articles are articles authorized importation into the United States, provided that the articles are subject to measures to address such risk.

Conditions for the importation into the United States of restricted articles in growing media are found in § 319.37–8. Within that section, the introductory text of paragraph (e) lists taxa of restricted articles that may be imported into the United States in approved growing media, subject to the provisions of a systems approach. Paragraph (e)(1) of § 319.37–8 lists the approved growing

media, while paragraph (e)(2) contains the provisions of the systems approach. Within paragraph (e)(2), paragraphs (i) through (viii) contain provisions that are generally applicable to all the taxa listed in the introductory text of paragraph (e), while paragraphs (ix) through (xi) contain additional, taxon-specific provisions.

Currently, *Phalaenopsis* spp. plants for planting from China are not authorized for importation into the United States in approved growing media. However, the Animal and Plant Health Inspection Service (APHIS) has received a request from the national plant protection organization (NPPO) of China to authorize the importation of *Phalaenopsis* spp. plants for planting in approved growing media into the continental United States.

In evaluating China's request, we prepared a pest risk assessment (PRA) and a risk management document (RMD). Copies of the PRA and the RMD may be obtained from the person listed under **FOR FURTHER INFORMATION CONTACT** or viewed on the Regulations.gov Web site (see **ADDRESSES** above for instructions for accessing Regulations.gov).

The PRA, titled "Importation of *Phalaenopsis* spp. Orchid Plants in Approved Growing Media from China into the Continental United States; A Pathway-Initiated Pest Risk Assessment," analyzed the potential pest risk associated with the importation of *Phalaenopsis* spp. plants for planting in approved growing media into the continental United States from China.

The PRA identified four quarantine pests that could be introduced into the continental United States through the importation of *Phalaenopsis* spp. plants for planting from China in approved growing media:

- *Spodoptera litura,* tropical armyworm;
- *Thrips palmi,* melon thrips;
- *Cylindrosporium phalaenopsidis,* a pathogenic fungus that causes orchid black spot;
- *Lissachatina fulica,* the giant African snail.

The PRA determined that these four pests pose a medium risk of following the pathway of *Phalaenopsis* spp. plants for planting in approved growing media from China into the continental United States and having negative effects on U.S. agriculture.

Based on these risk ratings, the RMD, titled "Importation of *Phalaenopsis* spp. Orchids in Approved Growing Media from China into the Continental United States," identifies the phytosanitary measures necessary to ensure the safe importation into the continental United States of *Phalaenopsis* spp. plants for planting in approved growing media from China. The RMD finds that the mitigations that are currently specified in paragraphs (e)(2)(i) through (e)(2)(viii) of § 319.37–8 and that are generally applicable to the importation of all restricted articles authorized importation into the United States in approved growing media will mitigate the risk associated with the importation *Phalaenopsis* spp. plants for planting in approved growing media from China into the continental United States.

Accordingly, we propose to amend the introductory text of paragraph (e) of § 319.37–8 to add *Phalaenopsis* spp. plants for planting from China to the list of taxa authorized importation into the United States in approved growing media. We also propose to add a paragraph (e)(2)(xii) to § 319.37–8 that would specify that such plants for planting may only be imported into the continental United States.

Executive Order 12866 and Regulatory Flexibility Act

This proposed rule has been determined to be not significant for the purposes of Executive Order 12866 and, therefore, has not been reviewed by the Office of Management and Budget.

In accordance with 5 U.S.C. 603, we have performed an initial regulatory flexibility analysis, which is summarized below, regarding the economic effects of this proposed rule on small entities. Copies of the full analysis are available by contacting the person listed under **FOR FURTHER INFORMATION CONTACT** or on the Regulations.gov Web site (see **ADDRESSES** above for instructions for accessing Regulations.gov).

Based on the information we have, there is no reason to conclude that adoption of this proposed rule would result in any significant economic effect on a substantial number of small entities. However, we do not currently have all of the data necessary for a comprehensive analysis of the effects of this proposed rule on small entities. Therefore, we are inviting comments on potential effects. In particular, we are interested in determining the number and kind of small entities that may incur benefits or costs from the implementation of this proposed rule.

APHIS is proposing to amend the regulations in 7 CFR 319.37–8(e) to authorize the importation from China into the continental United States of orchids of the genus *Phalaenopsis* established in an approved growing medium, subject to specified growing, inspection, and certification requirements.

Currently, only bare-rooted *Phalaenopsis* spp. plants for planting may be imported from China into the United States. Eliminating this restriction by allowing the importation of plants in growing media, as well as bare-rooted plants, is expected to increase the number and quality of orchids imported from China by U.S. producers, who then finish the plants for the retail market. This change could result in cost savings for these U.S. producers, which may or may not be passed on to U.S. buyers. The amended regulations could also result in the importation of market-ready *Phalaenopsis* spp. in approved growing media from China that would directly compete at wholesale and retail levels with U.S. finished potted orchids. The latter scenario is considered unlikely, given the technical challenges and additional marketing costs incurred when shipping finished plants in pots.

The Small Business Administration (SBA) small-entity standard for entities involved in Floriculture Production (NAICS 111422) is $750,000 or less in annual receipts. The number of entities participating in this broadly defined industry was 26,963 in 2012, with $5.9 billion in sales that year. Orchid producers numbered 177 in 2012, or 0.6 percent of the total industry. In 2013, the average wholesale value of orchids produced by the largest producers was $1.4 million. These businesses fall above the SBA threshold for small entities. However, this average sales value excludes sales by an unknown number of smaller establishments that qualify as small entities by the SBA definition.

While many of the U.S. entities that would be affected by the proposed rule such as orchid producers and importers may be small by SBA standards, we expect economic effects for these entities to be modest. We welcome informed public comment that would enable us to better determine the extent to which U.S. small entities may be affected positively or negatively by this proposed rule.

Executive Order 12988

This proposed rule has been reviewed under Executive Order 12988, Civil Justice Reform. If this proposed rule is adopted: (1) All State and local laws and regulations that are inconsistent with this rule will be preempted; (2) no retroactive effect will be given to this rule; and (3) administrative proceedings will not be required before parties may file suit in court challenging this rule.

National Environmental Policy Act

To provide the public with documentation of APHIS' review and analysis of any potential environmental impacts associated with the importation of *Phalaenopsis* spp. plants in approved growing media from China into the continental United States, we have prepared an environmental assessment. The environmental assessment was prepared in accordance with: (1) The National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. 4321 *et seq.*), (2) regulations of the Council on Environmental Quality for implementing the procedural provisions of NEPA (40 CFR parts 1500–1508), (3) USDA regulations implementing NEPA (7 CFR part 1b), and (4) APHIS' NEPA Implementing Procedures (7 CFR part 372).

The environmental assessment may be viewed on the Regulations.gov Web site or in our reading room. (A link to Regulations.gov and information on the location and hours of the reading room are provided under the heading **ADDRESSES** at the beginning of this proposed rule.) In addition, copies may be obtained by calling or writing to the individual listed under **FOR FURTHER INFORMATION CONTACT.**

Paperwork Reduction Act

In accordance with section 3507(d) of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the information collection or recordkeeping requirements included in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB). Please send written comments to the Office of Information and Regulatory Affairs, OMB, Attention: Desk Officer for APHIS, Washington, DC 20503. Please state that your comments refer to Docket No. APHIS–2014–0106. Please send a copy of your comments to: (1) Docket No. APHIS–2014–0106, Regulatory Analysis and Development, PPD, APHIS, Station 3A–03.8, 4700 River Road Unit 118, Riverdale, MD 20737–1238, and (2) Clearance Officer, OCIO, USDA, Room 404–W, 14th Street and Independence Avenue SW., Washington, DC 20250.

APHIS is proposing to amend the plants for planting regulations to allow the importation of *Phalaenopsis* spp. plants for planting in approved growing media from China into the continental United States. As a condition of entry, the plantlets would have to be produced in accordance with a systems approach. This action would allow for the importation of *Phalaenopsis* spp. plants for planting from China into the continental United States in approved growing media while providing protection against the introduction of plant pests.

Allowing *Phalaenopsis* spp. plants for planting to be imported into the continental United States will require information collection activities, including phytosanitary certificates, inspections, agreements between producers and the NPPO of China, and an agreement between the NPPO of China and APHIS.

We are soliciting comments from the public (as well as affected agencies) concerning our proposed information collection and recordkeeping requirements. These comments will help us:

(1) Evaluate whether the proposed information collection is necessary for the proper performance of our agency's functions, including whether the information will have practical utility;

(2) Evaluate the accuracy of our estimate of the burden of the proposed information collection, including the validity of the methodology and assumptions used;

(3) Enhance the quality, utility, and clarity of the information to be collected; and

(4) Minimize the burden of the information collection on those who are to respond (such as through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology; *e.g.*, permitting electronic submission of responses).

Estimate of burden: Public reporting burden for this collection of information is estimated to average 0.6956 hours per response.

Respondents: NPPO of China, producers, exporters.

Estimated annual number of respondents: 5.

Estimated annual number of responses per respondent: 4.6.

Estimated annual number of responses: 23.

Estimated total annual burden on respondents: 16 hours. (Due to averaging, the total annual burden hours may not equal the product of the annual number of responses multiplied by the reporting burden per response.)

Copies of this information collection can be obtained from Ms. Kimberly Hardy, APHIS' Information Collection Coordinator, at (301) 851–2727.

E-Government Act Compliance

The Animal and Plant Health Inspection Service is committed to compliance with the EGovernment Act to promote the use of the Internet and other information technologies, to provide increased opportunities for citizen access to Government information and services, and for other purposes. For information pertinent to E-Government Act compliance related to this proposed rule, please contact Ms. Kimberly Hardy, APHIS' Information Collection Coordinator, at (301) 851–2727.

List of Subjects in 7 CFR Part 319

Coffee, Cotton, Fruits, Imports, Logs, Nursery stock, Plant diseases and pests, Quarantine, Reporting and recordkeeping requirements, Rice, Vegetables.

Accordingly, we propose to amend 7 CFR part 319 as follows:

PART 319—FOREIGN QUARANTINE NOTICES

■ 1. The authority citation for part 319 continues to read as follows:

Authority: 7 U.S.C. 450, 7701–7772, and 7781–7786; 21 U.S.C. 136 and 136a; 7 CFR 2.22, 2.80, and 371.3.

■ 2. Section 319.37–8 is amended as follows:

■ a. In the introductory text of paragraph (e), in the entry for "Phalaenopsis spp. from Taiwan", by adding the words "and the People's Republic of China" after the word "Taiwan".

■ b. By adding a paragraph (e)(2)(xii).

The addition reads as follows:

§ 319.37–8 Growing media.

* * * * *

(e) * * *

(2) * * *

(xii) Plants for planting of *Phalaenopsis* spp. from the People's Republic of China may only be imported into the continental United States, and may not be imported or moved into Hawaii or the territories of the United States.

* * * * *

Done in Washington, DC, this 22nd day of May 2015.

Kevin Shea

Administrator, Animal and Plant Health Inspection Service.

[FR Doc. 2015–13162 Filed 5–29–15; 8:45 am]

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Importation of Orchid Plants in Growing Media From China

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Docket ID: APHIS-2014-0106
Agency: Animal and Plant Health Inspection Service (APHIS)
Parent Agency: Department of Agriculture (USDA)

RIN: Not Assigned

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Related RINs: None
Related Dockets: None
Category: Importation of Plants and Plant Products
Keyword(s): USDA, agriculture
Type: Rulemaking
Program: Plant Protection and Quarantine

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Importation of Orchids (Phalaenopsis spp.) in Approved Growing Media From China
Supporting & Related Material **Posted:** 06/01/2015 **ID:** APHIS-2014-0106-0004 Comments Not Accepted

Initial Regulatory Flexibility Analysis
Supporting & Related Material **Posted:** 06/01/2015 **ID:** APHIS-2014-0106-0005 Comments Not Accepted

Importation of Phalaenopsis spp. Orchid Plants in Approved Growing Media from China into the...
Supporting & Related Material **Posted:** 06/01/2015 **ID:** APHIS-2014-0106-0002 Comments Not Accepted

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United States Department of Agriculture

Marketing and Regulatory Programs

Animal and Plant Health Inspection Service

Importation of Orchids (*Phalaenopsis* spp.) in Approved Growing Media From China

Draft Environmental Assessment, March 2015

Importation of Orchids (*Phalaenopsis* spp.) in Approved Growing Media From the China

Draft Environmental Assessment
March 2015

Agency Contact:
Lydia E. Colón
Regulatory Policy Management
Plant Protection and Quarantine
Animal and Plant Health Inspection Service
U.S. Department of Agriculture
4700 River Road, Unit 133
Riverdale, MD 20737–1237

Table of Contents

I. Introduction

A. Background

Currently in the United States, orchids are sold in pots primarily for the interior design market. It is not uncommon for these plants to be mass-produced and sold at wholesale to general merchandise retailers and specialty outlets where they are purchased by consumers. *Phalaenopsis* spp. and other orchids are imported into the United States from the People's Republic of China (China) as bare-rooted plants (7 Code of Federal Regulations (CFR) § 319.37–8(d)), and subject to inspection at U.S. Department of Agriculture's (USDA) plant inspection stations at certain U.S. ports of entry. In accordance with section 319.37–8(a) of the regulations, USDA's Animal and Plant Health Inspection Service (APHIS) requires, with certain exceptions, that plants offered for importation into the United States be free of sand, soil, earth, and other growing media. Many U.S. potted orchid growers begin with imported plants; they purchase the bare-rooted imports, pot and grow them for sale.

Flowering orchids have become the second-most valuable potted flowering plant produced in the United States. In 2013, the wholesale value of potted orchids sold in the United States was estimated at $ 245 million. However, this statistic includes only commercial greenhouses that have sales of at least $100,000 per year. Therefore, the orchid industry is much larger than the USDA statistics indicate.

The *Phalaenopsis* industry in China was initiated by orchid growers from Taiwan, with the varieties produced, production operation, greenhouse structure and equipment, and supporting material all modeled after the industry in Taiwan. Since the late 1990s, the *Phalaenopsis* market in China has steadily increased. In 2004, China began exporting *Phalaenopsis* to Europe and Korea. The United States also imports live orchids from Thailand (approximately 4 percent), the Netherlands (approximately 2.4 percent), Canada (approximately 2.4 percent), and Costa Rica (less than 2 percent) each year.

China has requested to export to the United States *Phalaenopsis* spp. orchids potted in APHIS-approved growing media. This will improve the viability of imported plants because, currently, there is high mortality of bare-rooted plants (Su et al., 2001). In China, most bare root plants are dry packed in sleeves and cardboard boxes, transported by road to local markets, and airlifted to export destinations with varying levels of post-harvest handling losses.

This environmental assessment (EA) was prepared to comply with the National Environmental Policy Act of 1969 (NEPA) 42 United States Code (U.S.C.) 4321, et seq., as prescribed in implementing regulations adopted by the Council on Environmental Quality (40 CFR §§1500–1508), by USDA (7 CFR part 1b), by APHIS (7 CFR part 372), and to satisfy Executive Order (EO) 12114, "Environmental Effects Abroad of Major Federal Actions."

B. Purpose and Need

USDA–APHIS, Plant Protection and Quarantine (PPQ) is proposing to amend the regulations for the importation of plants and plant products (7 CFR part 319). PPQ has been petitioned to add orchids of the genera *Phalaenopsis* (known as moth orchids) from China to the list of plants that may be imported in approved growing media, subject to specified growing, inspection, and certification requirements.

Similar to other epiphytic orchids, *Phalaenopsis* species are imported from China into the United States as bare-rooted plants or when growing on tree fern slabs, coconut husk or coconut fiber, new clay pots, or new wooden baskets, under the provisions of 7 CFR § 319.37–8(d). China has requested that PPQ consider amending the regulations to allow *Phalaenopsis* spp. orchids to be imported into the United States in an approved growing media under the provisions of 7 CFR § 319.37–8(e).

II. Alternatives

This EA analyzes potential environmental consequences of the implementation of a proposal to amend the regulations governing the importation of plants and plant products into the United States (7 CFR part 319). Two possible alternatives are considered in this EA: maintaining the current regulation for the importation of orchids of the genera *Phalaenopsis* from China into the Continental United States (no action alternative), and the implementation of regulations under the proposed rule (preferred alternative).

A. No Action

The no action alternative would leave 7 CFR part 319 unchanged. Section 319.37–8(a) of the regulations requires, with certain exceptions, that plants offered for importation into the United States be free of sand, soil, earth, and other growing medium. This requirement is intended to help prevent the introduction of plant pests that might be present in unapproved growing media; the exceptions to this requirement take into account factors that mitigate that risk. Those

exceptions, which are found in paragraphs (b) through (e) of 7 CFR § 319.37–8, consider either the origin of the plants and growing media; or the nature of the growing media and/or the use of a combination of growing conditions, approved media, inspections, and other requirements.

Currently, as epiphytic plants, *Phalaenopsis* orchid spp. are imported from the China into the United States as bare-rooted plants or when growing on tree fern slabs, coconut husk or coconut fiber, new clay pots, or new wooden baskets. All forms are enterable subject to inspection findings at designated ports of entry to the United States, that is, ports associated with facilities where propagative material can be examined (plant inspection stations). All orchid consignments must be accompanied by a USDA permit, a phytosanitary certificate issued by the plant protection service of the exporting country, and a Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) document. Together, these documents verify that the orchids have been inspected, found free of quarantine pests, and authorized for international export.

As stated in 7 CFR § 319.37–8(e), the following groups of plants established in approved growing media are currently allowed entry to the United States:

- *Alstroemeria*
- *Ananas*
- *Anthurium*
- Bromeliad plants of the genera *Aechmea, Cryptanthus, Guzmania, Hohenbergia, Neoregelia, Tillandsia,* and *Vriesea* from Belgium, Denmark, and the Netherlands;
- *Begonia*
- *Gloxinia* (=*Sinningia*)
- *Nidularium*
- *Peperomia*
- *Phalaenopsis* spp. from Taiwan
- Polypodiophyta (=Filicales);
- *Rhipsalidopsis* spp. from the Netherlands and Denmark,
- *Rhododendron* from Europe;
- *Saintpaulia*;
- *Schlumbergera* spp. from the Netherlands and Denmark.

Under the no action alternative, *Phalaenopsis* spp. orchids from the China would not be added to the list of taxa allowed entry into the United States established in approved growing media and would continue to enter the United States under current requirements (7 CFR § 319.37–8(d)).

B. Preferred Alternative

The proposed rule (preferred alternative) would change 7 CFR part 319 and thus allow importation of orchids of the genera *Phalaenopsis* from China rooted in approved growing media. The orchids would be required to be produced, handled, and imported in accordance with the requirements of 7 CFR § 319.37–8(e) and accompanied, at the time of importation, by a phytosanitary certificate issued by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China (AQSIQ), declaring that the requirements have been met.

The proposed action includes propagation, rearing, shipping, and importation of *Phalaenopsis* spp. in approved growing media into the United States from China. Below are detailed requirements that must be met, as stipulated in 7 CFR § 319.37–8(e):

(e) *Phalaenopsis* spp. orchids may be imported from China established in an approved growing media if the article meets the conditions of this paragraph and is accompanied by a phytosanitary certificate issued by AQSIQ that declares that the article meets the conditions of this paragraph:

1) A written agreement must be established and signed by AQSIQ and APHIS to set out the conditions for producing and monitoring plant production and enforcing the requirements of the regulations;
2) A written agreement must be established between the grower and AQSIQ in which the grower agrees to comply with the regulations and to allow inspectors access to the growing facility as necessary to monitor compliance;
3) Plants must be established in APHIS-approved growing media which has not been used previously;
4) Plants must be grown in approved greenhouses which are used solely for plants grown in compliance with the regulations;
5) Greenhouses must have screening with openings of not more than 0.6 mm on all vents and openings except entryways;
6) All greenhouse entryways must be equipped with double doors which close automatically and which cannot remain open at the same time;
7) Greenhouses must be free from sand, soil, weeds, plant pests and debris;
8) Sanitary procedures adequate to exclude quarantine pests must always be employed in greenhouses, including the cleaning and disinfection of floors, benches and tools, and the application of measures to protect against quarantine pests;

9) A pest management plan must be established and approved by AQSIQ to monitor and control pests, including the use of yellow and blue sticky traps which are monitored on a regular basis; and if treatments are required, these must be approved and prescribed by AQSIQ;
10) Plants must be developed from mother stock that was inspected and found free from evidence of quarantine pests no more than 60 days prior to the time the plants are established in the greenhouse or must be developed from seeds germinated in the greenhouse;
11) Mother stock must have been grown for at least 9 months in China prior to importation of the descendent plants into the United States. However, if the mother stock was imported into China from another country, it must be grown for at least 12 months in China prior to importation of descendent plants, or it must be treated at the time of importation with a treatment prescribed by AQSIQ for quarantine pests and then grown for at least 9 months in China;
12) Plants must be rooted and grown in the greenhouse in an active state of foliar growth for at least four consecutive months prior to importation into the United States;
13) Plants must be grown on benches raised at least 46 cm above the floor and supported by legs that have copper plates wrapped around each leg, or an equivalent means of preventing mollusk infestation;
14) Plants must be watered only with rainwater that has been boiled or pasteurized, clean well water or potable water;
15) Plants and growing media must be stored and packaged only in areas free from sand, soil, earth and quarantine pests;
16) Plants must be inspected in the greenhouse and found free from evidence of quarantine pests by an APHIS or AQSIQ inspector no more than 30 days prior to the date of export to the United States;
17) Plants must comply with all other requirements in 7 CFR 319.37;
18) Plants must be accompanied by a Phytosanitary Certificate issued by AQSIQ which declares that the plants meet the conditions of the regulations and the written agreement between AQSIQ and APHIS.

Importation of *Phalaenopsis* plants in growing media from Taiwan is currently authorized in 7 CFR 319.37-8 and a written agreement between APHIS and the Taiwan Bureau of Animal and Plant Health Inspection and Quarantine has been in place since 2004 (United States Department of Agriculture 2011b). If approved in 7 CFR 319.37-8, a similar written agreement will be required for the importation of *Phalaenopsis* plants in growing media from China.

The packaging commonly used in the orchid industry is cardboard boxes; however, other alternatives, such as plastic, are possible. These cardboard boxes are similar to other APHIS-approved packaging that excludes pests during the packing process and prevents hitchhikers from entering the packaged plants. The term "hitchhikers" is commonly used within PPQ to mean biological contaminants, including insects that generally are not specific to orchids. PPQ-approved packing material includes paper, rockwool, sawdust, and other media specified in 7 CFR § 319.37–9. The pots containing the plants are most likely those that are commonly used in the orchid industry such as plastic, clay, or other composite materials.

Preshipment treatment measures (i.e., fumigation) are not included as a condition of entry of *Phalaenopsis* spp. orchids from China because the pest risk assessment (United States Department of Agriculture 2014a) did not identify any quarantine pests which required these treatments in order to ensure quarantine security beyond the mitigations listed in 7 CFR § 319.37–8(e).

III. Affected Environment

The area available for both the current importation of bare-rooted *Phalaenopsis* spp. orchids and the proposed importation of *Phalaenopsis* spp. orchids from China in APHIS-approved growing media is the continental United States. However, no orchid plants will be shipped directly to a location prior to passing through a PPQ plant inspection station where plants can be inspected at the port of entry. Once consignments are cleared through a plant inspection station, orchids could be distributed to any location in the United States, including its possessions and trust territories.

After receiving China's request to allow importation of *Phalaenopsis* spp. orchids established in approved growing media into the United States, APHIS conducted a pest risk assessment (United States Department of Agriculture 2014a) to examine the potential plant pest risk associated with unmitigated importations of orchids in growing media. The risk assessment prepared by USDA examined the plant pest risk associated with the importation of *Phalaenopsis* spp. orchids established in APHIS-approved growing media from China into the continental United States. The assessment characterized risk in terms such as high, medium, or low, based upon supporting evidence regarding climate-host interactions, host range, dispersal potential, economic impact, and environmental impact. In addition, the methods used to initiate, conduct, and report the risk assessment are consistent with guidelines provided by the North American Plant Protection Organization and the International Plant Protection Convention

administered by the Food and Agriculture Organization of the United Nations.

In the pest risk assessment, only the quarantine pests that can reasonably be expected to follow the pathway (i.e., be included in commercial shipments of *Phalaenopsis* spp. plants) were further analyzed. A quarantine pest is defined as "a pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled" (IPPC 2010). The biological hazard of organisms identified only to the order, family, or generic levels is not assessed because of the uncertainty about the lack of species identifications; however, if pests identified only to higher taxa are intercepted at the port of entry in the future, then reevaluations of their risk may occur. The pests that were determined to have potential to be included in commercial shipments of *Phalaenopsis* spp. (both bare rooted or in growing media) are listed in table 1.

Table 1. Quarantine Pests that May Follow the Pathway on *Phalaenopsis* spp. from China into the United States (United States Department of Agriculture 2014a).

Type	Pest
Insects	*Spodoptera litura*
	Thrips palmi
Mollusks	*Lissachatina fulica*
Fungi	*Cylindrosporium phalaenopsidis*

A. Host Range of Quarantine Pests

The host range of the oriental leafworm moth, *Spodoptera litura,* includes over 40 plant families. Plant species attacked by *S. litura* in the tropics include:

- *Oncidium* sp.,
- *Dendrobium* sp. (Orchidaceae) (Kumari and Lyla 2001); (Weaver 2003),
- *Colocasia esculenta* (Araceae),
- Brassica sp. (Brassicaceae),
- *Ipomea batatas* (Convolvulaceae),
- *Cucumis* sp. (Cucurbitaceae),
- *Ricinus* sp. (Euphobiaceae),
- *Arachis* sp.,
- *Glycine* sp.,
- *Leucaena leucocephala,*
- *Medicago sativa,*
- *Phaseolus* sp.,

- *Vigna* sp. (Fabaceae),
- *Linum* sp. (Linaceae),
- *Corchorus* sp.,
- *Gossypium* sp. (Malvaceae),
- *Zea mays*,
- *Oryza* sp. (Poaceae),
- *Capsicum* sp.,
- *Nicotiana tabaccum*,
- *Solanum melongena*,
- *Solanum tuberosum* (Solanaceae), and
- *Camelia* sp. (Theaceae)

((CABI 2011); b).

The thrip *Thrips palmi* feeds on many hosts and attacks plants in several families. Among primary hosts are species of:

- *Actinidia chinensis, A. deliciosa* (Acitnidiaceae);
- *Amaranthus spinosus, A. tricolor, A. viridis* (Amaranthaceae);
- *Mangifera indica* (Anacardiaceae);
- *Ageratum conyzoides, Ageratum* spp., *Chrysanthemun* sp., *Helianthus annuus, Lactuca sativa* (Asteraceae),
- *Cucumis melo, C. sativus, Cucurbita moschata, C, pepo* (Cucurbitaceae);
- *Allium cepa* (Liliaceae),
- *Arachis hypogaea*,
- *Glycine max*,
- *Phaseolus vulgaris*,
- *Vigna ungiculat* (Fabaceae),
- *Persea americana* (Lauraceae);
- *Gossypium* sp. *Abelmoschus esculentus* (Malvaceae);
- *Oryza sativa* (Poaceae),
- *Sesamum indicum* (Pedaliaceae);
- *Citrus* spp., *C. medica* and *C. sinensis* (Rutaceae);
- *Capsicum* spp, *Capsicum annuum;*
- *Nicotiana tabacum*; and
- *Solanum lycopersicum, S. melongena, S. tuberosum* (Solanaceae)

(White 2007)

The terrestrial snail, *Lissachatina fulica*, has a broad range of host plants, and includes more than 200 plant species in about 40 families (Raut and Barke, 2002). Young snails are most predaceous on living vegetation, while very small and older individuals prefer detritus and decaying vegetation (The Global Invasive Species Database, 2006). Major hosts include:

- *Amaranthus* sp.,(Amaranthaceae);
- *Alocasia* sp.,
- *Colocasia sculenta,*
- *Xanthosoma brasiliensis* (Araceae);
- *Brassica oleracea* (Brassicaceae);
- *Citrillus lanatus,*
- *Cucumis melo, C. sativus,*
- *Cucurbita maxima, C. pepo, Luffa* sp.,(Cucurbitaceae);
- *Arachis hypogea,*
- *Glycine max,*
- *Pisum sativum* (Fabaceae);
- *Allium cepa* (Liliaceae);
- *Gossypium sp* (Malvaceae);
- *Musa paradisiaca (*Musaseae*);*
- *Coffea arabica, C. canephora,* (Rubiaceae);
- *Citrus sinensis, C. reticulata* (Rutaceae);
- *Solanum melongena,*
- *Lycopersicum sculentum,*
- *Capsicum annun* (Solanaceae);
- *Theobroma cacao* (Sterculiaceae);
- *Camellia sinensis* (Theaceae)

(Raut and Barke 2002).

The host range of *C. phalaenopsidis*, which causes orchid black spot, includes *Cymbidium* spp., *Calanthe* spp., and *Phalaenopsis* spp. All three genera are members of the family Orchidaceae.

B. Climate-Host Interaction

The leafworm or noctuid catepillar, *S. litura*, is widely distributed over several subtropical and tropical countries (EPPO 1997c) corresponding to Plant Hardiness Zones 7–11 (USDA 1990); (Magarey et al. 2008).

Thrips palmi (*T. palmi*) is subtropical to tropical in distribution. Populations in temperate climates are able to overwinter in greenhouses or other artificial situations because it cannot survive subzero temperatures for more than a few days (Lewis 1997); (Capinera 2010). Based on this distribution, it is estimated that *T. palmi* could establish in the United States in U.S. Plant Hardiness Zones 9–11. One or more of its potential hosts occur in these zones (USDA 1990) .

The snail *L. fulica* has a large host range, and where it is introduced, it has the potential to be a significant pest of agricultural crops and can serve as an intermediate host for the rat lungworm (United States Department of Agriculture 2011a). The snail can inhabit ranges far outside of tropical areas, where most members of the Family

Achatinidae are found. Individuals remains active at a temperature range of 9–29° C, and can survive temperatures as low as 2° C, and as high as 30° C, though it is not known to establish itself in temperate regions (Raut and Barker 2002). Overall, this species is likely to survive in Plant Hardiness Zones 10 – 11, which includes portions of California, Arizona, Hawaii, southern Florida, and Puerto Rico (USDA, 2012c). However, based on the worldwide distribution of *L. fulica*, it is most likely associated with tropical and subtropical broadleaf forests, which do not occur in the United States.

Cylindrosporium phalaenopsidis is knows to occur in provinces of China and Taiwan (United States Department of Agriculture 2014a). Those places, and the subtropical and tropical orchid-growing areas of China and Taiwan (Zheng et al., 2008) correspond to Plant Hardiness Zones 9–11 in the continental United States. While orchids may be grown outdoors in southern portions of the United States, they generally are grown indoors and/or in temperature controlled production facilities (Simone and Burnett 1995).

C. Threatened and Endangered Species

The following table lists threatened and/or endangered plant species that may potentially be impacted by the establishment of actionable pests identified by the PRA. These pests may follow the pathway of *Phalaenopsis* spp. from China. To date, no impacts to listed animal species have been identified.

Table 2. Quarantine (actionable) pests that may follow the pathway on *Phalaenopsis* spp. from China into the United States and the associated Threatened and/or Endangered plant species that may potentially be affected by their establishment (United States Department of Agriculture 2014a).

Actionable Pest	Listed Plant Species	Distribution of Listed Species
S. litura	*Trifolium amoenum*	CA
	T. stoloniferum	AR, IN, KY, MO, OH, WV
	T. trichocalyx	CA
	Helianthus paradoxus	NM, TX
	Helianthus schweinitzii	SC, NC
	Allium munzii	CA
	Amaranthus pumilus	DE, MA, MD, NC, NJ, NY, RI, SC, VA
	Lilium occidentale	CA, OR
	Lilium pardalinum ssp. pitkinense	CA
	Manihot walkerae	TX

	Alopecurus aequalis var. sonomensis	CA
	Neostapfia colusana	CA
	Neostapfia colusana	CA
	Orcuttia inaequalis	CA
	Orcuttia pilosa	CA
	Orcuttia tenuis	CA
	Orcuttia viscida	CA
	Poa atropurpurea	CA
	Poa napensis	CA
	Swallenia alexandrae	CA
	Tuctoria greenei	CA
	Tuctoria mucronata	CA
	Zizania texana	TX
	Prumus geniculate	FL
L. fulica	*Cucurbita okeechobeensis* ssp. *Okeechobeensis*	FL
	Amaranthus pumilus	DE, MA, MD, NC, NJ, NY, RI, SC, VA
	Solanum drymophilum	PR
	Opuntia treleasei	CA
	Scirpus ancistrochaetus	MD, MA, NH, NY, PA, VT, VA, WV
	Cereus eriophorus var. fragrans	FL
	Manihot walkerae	TX
	Allium munzii	CA
	Clitoria fragrans	FL
	Hibiscus dasycalyx	TX
	Eryngium aristulatum var. parishii	CA
	Eryngium constancei	CA
	Eryngium cuneifolium	FL
	Asplenium scolopendrium var. americanum	AL, MI, NY, TN
C. phalaenopsidis	No known species	
T. palmi	*Allium munzii*	CA
	Cucurbita okeechobeensis spp. *okeechobeensis*	FL
	Helianthus paradoxus	NM, TX
	Helianthus schweinitzii	SC, NC
	Piperia yadonii	CA
	Spiranthes delitescens	AZ
	Spiranthes parksii	TX
	Amaranthus pumilus	DE, NC, NJ, NY, SC, VA
	Isotria medeoloides	CT, DE, GA, IL, MA, ME, MI, MO, NC, NH, NJ, NY, OH, PA, RI, SC, TN, VA, WV
	Piperia yadonii	CA
	Platanthera leucophaea	IA, IL, IN, ME, MI, MO, OH, OK, VA, WI
	Platanthera praeclara	IA, KS, MN, MO, ND, NE, OK, SD
	Spiranthes delitescens	AZ

	Spiranthes diluvialis	CO, ID, MT, NE, NV, UT, WA, WY
	Spiranthes parksii	TX

IV. Environmental Impacts

A. No Action

There are no reports of invasiveness of *Phalaenopsis* spp. orchids in the United States since bare-rooted importations have been allowed to enter the country. The importation of orchids into the United States has occurred for decades, and they are shipped to all known habitats. The PLANTS database (http://plants.usda.gov) and other weed reporting services do not include reports of imported boat or moth orchids as invasive or having weed potential.

Many plants that are classified as weeds have a suite of characteristics associated with colonization capabilities, some of which characterize orchids in general, including abundant seed production and distance dispersal. Most orchids do occur in frequently disturbed habitats, including pastures, roadsides, citrus groves, and coffee and tea farms (Ackerman, 2007). Reports of orchids as weeds include *Oeceoclades maculata*, which has recently naturalized in central and southern Florida (Pemberton et al, 2008). It is not known whether it escaped from cultivation or arrived in Florida via windblown seeds from the Greater Antilles or the nearby Bahaman Archipelago (FNA, 2003). *Monadenia bracteata* is a species in Australia that flowers more abundantly after fire (Bates, 1996). The introduced *Epipactis helliborine* is an orchid with few growth requirements and high environmental adaptability that grows as a weed across much of the Eastern United States (McCartney, 2010).

B. Preferred Alternative

Within the United States, nonindigenous species have had major impacts including degradation of wildlife habitat, decreased biological diversity, altered natural ecosystems, and negative effects on fishing and water sports (OTA, 1993). There is concern that because parts of China are climatically similar to Florida and California, nonindigenous species imported with orchids from China are more likely to become established in these areas. Many of these areas have already been heavily impacted by nonindigenous species, despite State and Federal efforts to prevent them. USDA APHIS currently allows the importation of *Phalaenopsis* plants in growing media from Taiwan; however, no reports of escaped or naturalized orchids have been linked to the importation of orchids established in growing media.

1. Orchids

Characteristics of weedy orchid species, such as limited growth requirements and high environmental adaptability, do not represent the basic biology of *Phalaenopsis* spp. Therefore, they are not expected to become invasive. Invasive orchids share the following characteristics: quick development, self-pollination (autogamy), asexual reproduction through seeds (apomixis), wide ecological amplitudes, and broad natural distribution (Adamowski, 1999). Orchid species in the genera *Phalaenopsis* do not share any of these characteristics. In addition, a screening performed by PPQ for the weed potential of *Phalaenopsis* genera from China showed that these plants did not meet the criteria of a weed pest (APHIS, 2012a).

The climate that favors *Phalaenopsis* is replicated in greenhouses and indoor environments (not less than 65 °F, and either a humid atmosphere or unfailing moisture at the roots (Bailey and Bailey, 1976) within most of the continental United States, which creates environmental and spatial barriers to plant introduction into native ecosystems. Moth orchids are native to Asia, the Malay Archipelago, and Oceania (Bailey and Bailey, 1976). Although plants may be discarded, there is no evidence that these discards have the capacity to over-season out-of-doors outside of tropical and semi-tropical areas.

Phalaenopsis orchids are epiphytes or rock-dwelling herbs (Bailey and Bailey, 1976). The physical environments that favor root growth are found in osmundia fiber and sphagnum moss (Bailey and Bailey, 1976) in pots (Griesbach, 2000). *Phalaenopsis* orchids have light-intensity requirements (Konow and Wang, 2001; Wang, 1995) in addition to nutrition (Wang, 1998; Duan and Yazawa, 1995; Wang and Gregg, 1994) and mycorrhizal requirements (Clements, 1988). This means that a favorable combination of many factors is needed for moth orchids to grow. This contrasts with the habits of plants that tend to become problematic as invasive species (Mooney and Hobbs, 2000; Cox, 1999; Zimdahl, 1999; Devine, 1998; Radosevich et al., 1997). For these reasons, it is unlikely that *Phalaenopsis* species will become invasive in the future.

Potential negative effects to listed members of the Orchidaceae are not expected because the host ranges for the quarantine pests do not overlap or are not within the same genus (congeneric) as *Phalaenopsis*. The listed species *Isotria medeoloides* occurs in many places within the continental United States, and is primarily threatened by loss of habitat (FWS, 1992). Similarly, the listed species *Platanthera leucophaea* occurs in colder climates, such as Iowa, Illinois, Indiana, Missouri, New York, Ohio, Pennsylvania, Oklahoma, Virginia, and Wisconsin (NatureServe, 2002). The taxonomically related *P. praeclara* also occurs in areas likely to be too cold for moth

orchids, such as Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and Oklahoma (NatureServe, 2002).

The listed species, *Spiranthes diluvialis,* which was originally known only to Colorado, Utah, and Nevada is now reported to also occur in Wyoming, Montana, Nebraska, Idaho, and Washington where the temperatures are likely to support *Phalaenopsis*, though *S. diluvialis* grows in lower-elevation wet meadow habitats (NatureServe, 2002). In contrast, the listed species *Spiranthes delitescens* occurs in Arizona (NatureServe, 2002), where the climate is likely to be too dry for moth or boat orchids to survive out-of-doors (Bailey and Bailey, 1976). *Spiranthes parksii* is reported as variable and robust, exhibiting hybrid vigor because it is believed to be either a polyploid member of the *S. cernua* complex or it is a nonpersisting hybrid of *S. lacera* var. *gracilis* and *S. cernua* (NatureServe, 2002). It occurs in open, grassy woodland sites in Texas that are likely to be exposed to heavy cattle grazing (NatureServe, 2002). The soil types that support grassy woodlands are unlikely to be able to provide the physical and nutritional requirements of moth or boat orchids which are either epiphytes, semi-terrestrial, or less commonly, rock-dwelling herbs (Bailey and Bailey, 1976).

Two arthropod pests (*S. litura, T. palmi*), a mollusk (*L. fulica*), and a fungus (*C. phalaenopsidis*) were identified as quarantine pests likely to be imported with unmitigated shipments of *Phalaenopsis* spp. orchids from China, possibly requiring phytosanitary measures to minimize risk.

2. Insects

Spodoptera litura is distributed over a number of U.S. trade cooperators that feature subtropical and tropical climates. The moth causes major damage to tobacco, cotton, chilies, cabbage, and other crops, and has a host range of at least 120 species (CPC, 2002). Most damage by *S. litura* is caused by larval foliar feeding, but larvae may also injure cotton bolls, and corn stalks and ears. This insect has high dispersal capability and potential for a high level of economic impact if it were to become established in the United States. *Spodoptera litura* is similar in biology and host range to army worms already present in the United States. Outbreaks in crops would likely trigger increased chemical control programs similar to those now in effect for other caterpillars.

Damage caused by flower thrips can sometimes make flowers unmarketable, but there is already a variety of thrips known to attack and infest orchid flowers in the United States. *Thirps palmi* is subtropical to tropical in distribution, and cannot survive subzero temperatures for more than a few days. This thrips is known to occur in Asia; Africa; North, Central, and South America; and parts of the

tropical Pacific. U.S. populations are restricted to American Samoa, southern Florida, Guam, Hawaii, and Puerto Rico (United States Department of Agriculture 2014a). Like many mealybugs, heavy infestations of thrips could cause dieback or death of host plants; however, outbreaks in other horticultural crops in addition orchids are not likely to occur due to its restricted host range.

3. Mollusks

Snail feeding reduces plant quality and productive leaf area, and some snails clip off succulent plant parts (Godan 1983); (Flinth 1999). The mollusk, *L. fulica,* cannot travel long distances unaided. The most active individuals tracked in a study moved 500 meters in six months ((Tomiyama and Nakane 1993), and natural spread is estimated to be a few hundred meters per year ((Lambert and Tillier 1993). Most can be transported for long distances on conveyances (transport vehicles) and non-host plant material (e.g., soil, gravel, and baggage) (CABI, 2011). *Lissachatina fulica* could be introduced on: bulbs, tubers, corms, rhizomes, leaves, roots, stems (above ground), shoots, trunks, branches. All of these could carry eggs, and juveniles that could be visible to the naked eye (CABI, 2011). The natural spread of these terrestrial snails appears to be limited, but their high reproductive potential and ability to be transported long distances increases the potential risks associated with these mollusks.

In Miami-Dade County, Florida, APHIS established a quarantine to control the spread of *L. fulica.* An eradication program began in late 2012, and treatments are ongoing. *Lissachatina fulica* consumes large volumes of native plants, modifies habitats, and out-competes native snails (USDA, 2013). The snail may also alter the food chain within ecosystems by providing an alternative food source for predators (Mead 1961).

4. Fungus

The fungus *C. phalaenopsidis* produces spores on infected tissue that are dispersed by rain or water splash and wind. The spores are very prolific and easily dispersed, surviving for an extended period of time in debris and soil.

C. Risk Management

Although the affected environment and the environmental consequences under both the no action alternative and the proposed action alternative are the same, the risk management to prevent the introduction of pests differs between the two alternatives. The following section discusses the phytosanitary measures imposed under the current importation scheme of bare-rooted *Phalaenopsis* spp. orchids (no action alternative) and the proposed phytosanitary measures for the import of these plants in growing media (preferred alternative).

1. No Action

The phytosanitary measures of the no action alternative would leave 7 CFR part 319 unchanged. Currently, *Phalaenopsis* spp. are imported from China as bare-rooted plants, growing on tree fern slabs, or in coconut husk or fiber (7 CFR § 319.37–8(d). All forms are enterable subject to inspection findings at designated ports of entry, that is, ports associated with facilities where propagative material can be examined (plant inspection stations). All orchid consignments must be accompanied by a USDA permit and a phytosanitary certificate issued by AQSIQ. This document certifies that the orchids have been inspected and found free of quarantine pests before shipment to the United States. No special growing conditions are required for these plants. *Phalaenopsis* spp. plants imported bare rooted generally do not have buds or flowers, and roots are not hidden from view within growing media; as such, visual inspection of these plants at the port of entry is effective.

Inspections of bare-rooted orchid consignments are conducted by PPQ personnel at a plant inspection station at the first port of entry in the United States. These stations are staffed with PPQ pest identification specialists, as well as PPQ officers, who carefully examine orchid consignments. Inspection and examination may be limited to a verification of the contents and a review of the documentation, or may consist of a standard inspection, including an inspection of at least 2 percent of the plants in the shipment. If quarantine pests are discovered on bare-rooted orchid consignments, appropriate phytosanitary measures are conducted (e.g., treatment, destruction, or return of consignments to exporting country).

2. Preferred Alternative

This section describes the phytosanitary measures required if *Phalaenopsis* spp. plants in approved growing media are imported into the continental United States from China. Amendment of 7 CFR part 319, according to the proposed rule, would allow importation of *Phalaenopsis* spp. orchids from China rooted in approved growing media, provided the orchids were produced, handled, and imported in accordance with the requirements of 7 CFR § 319.37–8(e), and are accompanied at the time of importation by a phytosanitary certificate issued by AQSIQ declaring that those requirements have been met.

Systems Approach

To effectively prevent the introduction of plant pests associated with plants grown in approved media, a series of important safeguards, (phytosanitary measures) must be in place. The risk management program used for plants in media is the systems approach—a defined set of phytosanitary procedures, at least two of which have an independent effect in mitigating pest risk associated with the

movement of commodities. This approach relies on a series of phytosanitary measures that, individually and cumulatively, reduce the pest risk posed by pests that may be associated with plants. All phases associated with plants established in growing media—before planting, during the growing period, postharvest, during transport, and importation—are considered.

The APHIS regulation on plants in media requires multiple phytosanitary measures designed to reduce the pest risk. The overall systems approach operates like as a fail-safe system in that tiered safeguards are built into the process. That is, if one mitigating measure fails, other safeguards exist to ensure that the risk is progressively reduced and managed. The systems approach is designed to apply all the measures to obtain the maximum risk reduction and to apply additional safeguards, as required. The steps or measures may overlap or be redundant to ensure an adequate reduction in pest risk, and that the reduction of risk is maintained during the entire process. These measures would be applied to the importation of *Phalaenopsis* spp. orchids from China in approved growing media.

a. Approved Plant Sources

The orchids imported into the United States will be greenhouse- or laboratory-propagated plants, or may be propagated in the laboratory from aseptic tissue culture. Wild or collected specimens and nondomesticated plants are not approved for importation into the United States. The plants must come from pest-free mother stock, as determined by a PPQ or an NPQS inspector, no more than 60 days prior to the time the plants are established in the greenhouse.

b. Approved Growing Media

Plants offered for importation into the United States must be free of sand, soil, earth, and other unapproved growing media. This requirement helps prevent the introduction of plant pests that might be present in and around the roots, and also eliminates many soil- and root-associated saprophytic organisms. Exceptions to the growing media requirement reflect additional factors that mitigate plant pest risk. Those exceptions consider either the origin of the plants and the growing media (7 CFR § 319.37–8(b)), the nature of the growing media (§§ 319.37–8(c), (d)), or the use of a combination of growing conditions, approved media, inspections, and other requirements (§ 319.37–8(e)). Soil-less and new, unused growing media eliminate an initial source for pests, including *S. litura, C. phalaenopsidis* and *T. palmi*. Studies on APHIS-approved growing media found that pathogens are not present (Santacroce, 1991).

c. Agreements

The orchids must be grown in accordance with written enforcement agreements between APHIS, AQSIQ, and Chinese growers. This will include the preparation of an operational work plan that outlines specific detection and eradication protocols to detect and eliminate problem pests before the orchids are exported to the United States. The work plan also outlines how the program will be monitored and supervised to ensure compliance. Chinese orchid growers who plan to export moth and/or boat orchids in growing media must be registered with AQSIQ; any grower not in compliance with the work plan requirements will be eliminated from the program.

d. Exclusionary Greenhouse

The orchids for shipment must be grown in a pest exclusionary greenhouse using the following phytosanitary measures: "Grown solely in a greenhouse in which sanitary procedures are adequate to exclude plant pests and diseases are always employed, including cleaning and disinfection of floors, benches, and tools, and the application of measures to protect against any injurious plant diseases, and injurious insect pests, and other plant pests" (7 CFR § 319.37–8(e)(2)(ii)). These measures may include trapping, surveying, and scouting to determine if pests are present, and pesticide applications or other control measures to eliminate pests that are discovered.

e. Raised Benches

The height of the benches on which the orchids are grown must be at least 46 cm above the floor and supported by legs that have copper plates wrapped around each leg, or an equivalent means of preventing mollusk infestation.. Raised benches reduce the chance of water being splashed onto benches from the floors that might be contaminated with nematodes, pathogens, and weed seeds. Also, because snails and slugs have the capability to climb up sidings and posts, higher benches make it more difficult for snails and slugs to climb and decrease the chances that such pests will invade the plants and media.

f. Greenhouse pest monitoring and management plan

A pest management plan must be implemented to monitor and control pests, including the use of yellow and blue sticky traps which are monitored on a regular basis; inspections for signs of infestation; and targeted pest control as appropriate. Information collected from scouting is used by plant production managers to select and schedule appropriate control tactics (United States Department of Agriculture 2014b). The pest management plan must be approved by AQSIQ, and

if treatments are required, they must be approved and prescribed by AQSIQ.

A comprehensive pest management plan must be implemented, and must include monitoring, inspections for signs of infestation, and targeted pest control as appropriate. Information gathered from scouting is used to select and schedule appropriate control tactics. The pest management plan must be approved by the National Plant Protection Organization (NPPO); if treatments are required, these must be approved and prescribed by the NPPO.

g. Automatic Doors

Automatic closing doors are required to exclude flying insects from entering the growing area. They are also used, to a limited extent, to keep windborne pests from being blown into the growing area and provide a physical barrier that reduces the exposure of the plants to splashing by rain and irrigation water (Agrios, 1997).

h. Screens

Greenhouses have vents or openings principally for the exchange of outside air and for temperature control. The addition of screens to these openings lowers the risk of certain pests entering the greenhouse. Screens must have openings no larger than 0.6 mm. Screens with 0.6 mm openings do not exclude all pests; however, they will act as a deterrent or barrier to many pests, including *S. litura* and *T. palmi*. Screened, enclosed greenhouses can therefore limit the ability of large mature and juvenile forms of *L. fulica* to enter and establish in the greenhouse.

i. Sanitation

Sanitary procedures must be used to maintain the greenhouse relatively free of pests. A suitable disinfectant should be employed to sanitize the greenhouse interior prior to plantings to reduce pathogens, nematodes, and other pests. These procedures should also include keeping tools, hoses, benches, floors, work areas, and floor benches clean and properly sanitized. The grower should maintain a record of the number of times disinfection takes place.

j. Detention Periods

Plant materials are commonly detained to allow time for certain pests to develop and become visible and detectable. Mother stock orchids must be grown in China for at least 9 months prior to export of descendant orchids to the United States. Mother plants imported into

China from another country must be grown at least 12 months in China prior to the export of descendant orchids to the United States. The growing period can be reduced to 9 months, as above, provided there is a prescribed treatment of the mother stock upon importation of that plant into China. Detention periods are necessary to allow ample time for the expression of disease, symptoms, and other signs of pests.

C. phalaenopsidis causes leaf spots that can be detected by trained inspectors through visual inspection, but latent infections may be unlikely to be detected (Pirone, 1978; Agrios, 2005; USDA, 2014). However, the regulations require mother stock to be grown for at least 9 months in the exporting country prior to importation of the descendent plants into the United States; and require descendent plants to be rooted and grown in the greenhouse in an active state of foliar growth for at least four consecutive months prior to importation into the United States (CFR, 2014).

Following spore germination, the mycelia of pathogens such as *C. phalaenopsidis* grow in the mesophyll and usually forms acervuli and conidia in the upper surface of affected tissues within approximately two weeks (USDA, 2014). The growth period requirements in 7 CFR 319.37-8 therefore provide for ample time periods for the expression of disease symptoms and minimize the likelihood that the pathogen will be undetected.

k. Clean Water Sources

The water source for plant watering must be either rainwater that has been boiled or pasteurized, clean well water, or potable water. Water is considered one of the principal means for the dispersal of plant pests, including pathogens and mollusks; water from clean sources must be used to ensure that phytosanitary measures are effective.

l. Phytosanitary Certificate

A phytosanitary certificate must be issued by AQSIQ. This document must accompany the plants during importation and certify that the required growing conditions were met.

m. Inspection

The NPPO of the producing country must enter into a bilateral workplan with APHIS setting out the conditions for producing and monitoring plant production and enforcing the requirements of the regulations. Likewise, the production facility must enter into a compliance agreement with the producing country NPPO. A

Phytosanitary Certificate is also required which declares that the plants meet the conditions of the regulations (CFR, 2014).

Importation of *Phalaenopsis* plants in growing media from Taiwan is currently authorized in 7 CFR 319.37-8 and a written agreement between APHIS and the Taiwan Bureau of Animal and Plant Health Inspection and Quarantine has been in place since 2004 (USDA, 2011). If approved in 7 CFR 319.37-8, a similar written agreement will be required for the importation of *Phalaenopsis* plants in growing media from China (CFR, 2014).

7 CFR 319.37-8 requires the inspection of mother stock no more than 60 days before plants are established in the greenhouse; inspection of plants in the greenhouse no more than 30 days before export; and growth period requirements for mother stock and export plants to allow sufficient time for pests and signs of pests to be detected (CFR, 2014). Phytosanitary inspections are widely recognized as an important part of a pest management program (Kahn and Mathur, 1999); and assist in ensuring compliance with United States import requirements.

Improper production and handling practices are often the primary means by which pests are introduced and spread in the place of production. The phytosanitary inspections, oversight, written agreements and administrative measures included in 7 CFR 319.37-8 provide additional phytosanitary quality control and rigor over other measures, and reduce the possibilities of improper practices being employed.

Larger mature and juvenile forms of *L. fulica* are usually conspicuous and can be detected by visual inspection. The mollusks can also be detected by slime trails, excrement, and symptoms on plants such as chewed leaves, rasping, defoliation and lesions (Bessin et al., 1997; Speiser, 2001; Hollingsworth and Sewake, 2002; Raut and Barker, 2002; USDA, 2007; CABI, 2014a). Small eggs in soil may be difficult to detect, but the possibility of eggs moving with the plants is reduced by using clean, approved growing media in conjunction with the other measures in the systems approach for plants in growing media.

n. Packing and Storing

Plants for export must be packed and stored in areas free of sand, soil, and plant pests. This will prevent contamination and the introduction of hitchhikers. *Phalaenopsis* spp. plants shall not be packed in the same container as prohibited articles.

Conclusions

APHIS has evaluated the four quarantine pests that were identified as candidates for risk management in the PRA (USDA, 2014) and has determined that the requirements in 7 CFR 319.37-8 (CFR, 2014) will be effective in managing the risk associated with these pests. APHIS will subsequently propose to add Phalaenopsis plants in growing media from China to the list of approved plants in 7 CFR 319.37-8(e).

If quarantine pests accompanying *Phalaenopsis* spp. shipments from China were to become established in the United States, an eradication program would likely be initiated. Although eradication of any nonindigenous pest would require the use of pesticides, APHIS would prepare the necessary environmental documentation under NEPA and the Endangered Species Act (ESA) in advance of any eradication activities.

D. Endangered Species Act

Section 7 of the Endangered Species Act (ESA) and the ESA's implementing regulations require Federal agencies to consult with the U.S. Fish and Wildlife Service (FWS) and/or the National Marine Fisheries Service to ensure that their actions are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat.

APHIS submitted a programmatic biological assessment to the USFWS on February 23, 2014 in order to reinitiate consultation on all APHIS programs to import plants in growing media (PIGM). This reinitiates a programmatic consultation first initiated in 1995 for *Rhododendron* on the program to import PIGM and produced in accordance with requirements set forth by PPQ under regulations found in 7 CFR § 319.37 (concurrence letter from the FWS dated March 23, 1998).

E. Other Considerations

Executive Orders

Executive Order (EO) 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," focuses Federal attention on the environmental and human health conditions of minority and low-income communities, and promotes community access to public information and public participation in matters relating to human health or the environment. This EO requires Federal agencies to conduct their programs, policies, and activities that substantially affect human health or the environment in a manner so as not to exclude persons and populations from

participation in or benefitting from such programs. It also enforces existing statutes to prevent minority and low-income communities from being subjected to disproportionately high and adverse human health or environmental effects. Neither alternative poses disproportionately high or adverse human health or environmental effects to any specific minority or low-income group.

EO 13045, "Protection of Children from Environmental Health Risks and Safety Risks," acknowledges that children may suffer disproportionately from environmental health and safety risks because of their developmental stage, greater metabolic activity levels, and behavior patterns as compared to adults. The EO, (to the extent permitted by law and appropriate, and consistent with the agency's mission) requires each Federal agency to consider environmental health risks and safety risks that may disproportionately affect children. Neither alternative is expected to have disproportionately high or adverse human health or environmental effects to children.

V. Listing of Agencies Consulted

Environmental and Risk Analysis Services
Policy and Program Development
Animal and Plant Health Inspection Service
U.S. Department of Agriculture
4700 River Road, Unit 149
Riverdale, MD 20737–1238

Phytosanitary Issues Management
Plant Protection and Quarantine
Animal and Plant Health Inspection Service
U.S. Department of Agriculture
4700 River Road, Unit 140
Riverdale, MD 20737–1228

Regulations, Permits, and Manuals
Plant Protection and Quarantine
Animal and Plant Health Inspection Service
U.S. Department of Agriculture
4700 River Road, Unit 141
Riverdale, MD 20737–1228

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