What You Can Do to Help Improve Regulation of the Plants for Planting Pathway[1]

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Abstract

The current rules for plants for planting are being revised. The United States Department of Agriculture-Animal and Plant Health Inspection Service (USDA-APHIS) has already provided several opportunities for public input into the new rules, and more opportunities will be coming soon. Considering the importance most plant health scientists attach to this issue, it is surprising how few people contribute comments. It is as easy as sending an email, once you sign up for notices. The proposed changes to the rules are outlined in this paper, with suggestions for research needs to inform the regulatory process and its effective implementation. It is up to YOU to do something about this important pathway!

Key words: Nursery stock, plants for planting, nursery stock imports, nursery stock regulation, nursery stock trade.

Introduction

The current rules for plants for planting could be described as a "Black List" approach. Under this system, all plants for planting are permitted entry unless they are known to harbor a specific regulated pest. No rating of weediness is currently required of imported plants. At present, 106 genera or species are prohibited based on concerns about specific pest/host/country combinations (See further reading, 1). There are 56 genera or species which require post-entry quarantine. Such quarantine is usually just a period of separation from saleable stock in a corner of a grower's facility. There are no longer any limitations on the number of plants that can be shipped, and routine fumigation is no longer required. Plants can be imported for propagation or for retail sales, as long as they pass through a plant inspection station, where approximately 2 percent are inspected for pests.

Issues

Too many plants to inspect

In 2006, 2.5 billion plants were imported into the U.S. Of these, about 75 percent enter via the Miami Port Inspection Station, where 22 inspectors struggle valiantly to keep up with the flow.

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[1] A version of this paper was presented at the Sudden Oak Death Third Science Symposium, March 5–9, 2007, Santa Rosa, California.

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Latent pathogens and hidden insects

All pathogens and many insect pests have latent periods before symptoms are expressed. By definition these cannot be detected by visual inspection.

Most serious forest pathogens and pests have been unknowns

Many pests are unknown to science prior to establishing invasive populations in a new land. Expecting overloaded inspectors to detect unknown pathogens is unrealistic.

Too many risk assessments to do

The tide of import plants is overwhelming, and to do a risk assessment on each plant/country of origin combination would take several lifetimes. Therefore in most cases the risk associated with plants we are importing has not been assessed.

Legal Limitations

The Sanitary and Phytosanitary Agreement of the World Trade Organization specifies that countries cannot require phytosanitary measures against non-regulated pests. To be regulated, a pest must not be present, or it must be limited in distribution AND under regulatory control.

An International Standard is Needed

The legal limitations listed above prevent regional or national plant protection organizations from taking a strong stand against pests arriving on plants for planting. This problem must be fixed at the International Plant Protection Convention (IPPC) level, by developing an international standard. The IPPC can ensure a level playing field and avoid claims of trade protectionism. The IPPC recently convened a committee to draft an international standard on plants for planting, but it undoubtedly will take years to gain the unanimous approval required for adoption.

The NAPPO Standard

The North American Plant Protection Organization (NAPPO) recently adopted RSPM No. 24, a regional standard for plants for planting (see further reading, 2). This standard calls for a systems approach for producing clean nursery stock, which will be bilaterally negotiated crop by crop, country by country. The presumption is that preventing pests we know will reduce the incidence of unknowns too. Each member country (in other words, Canada, Mexico, and the U.S.) has agreed to develop regulations to implement the standard. The responsibility for this lies with each national plant protection organization (in the U.S. this is the USDA_APHIS).

The USDA Regulations for Plants for Planting

APHIS is currently revising these regulations, called “Q-37”. This process was begun years before the NAPPO standard was adopted. Adjustments will have to be made to help bring USDA regulations in line with the NAPPO standard. This is very much a work in progress, so plant health specialists should not hesitate to contribute their expertise toward the goal of making trade in plants for planting as safe as it can

be. To sign up for notices of opportunities to comment, go to: https://web01.aphis.usda.gov/PPQStakeWeb2.nsf.

An advanced notice of proposed rulemaking was issued in the federal register in 2004 (see further reading, 3). It solicited feedback on the following proposals, which seek to address plants as pests themselves, as well as plants as pathways for pests:

1) Collect consistent entry data

Currently the certificates accompanying plants often do not provide the scientific name or even the genus of plants being imported, and quantity estimates are unreliable. APHIS is already developing better tracking systems.

2) Create a new category: Not authorized for import pending a pest risk assessment (NAPPRA)

This category would be populated by plants which meet the following criteria:

- Damage potential demonstrated
- Pest clearly identified
- Geographic regulatory requirements (in other words., not here, or not widespread)
- Host range of pest defined (at either the genus or species level)
- Status of host as pathway clearly documented

3) Establish clean stock programs and best management practices

The nursery industry has been working towards a voluntary program within the U.S., but the implementation of RSPM-24 will require certification of growers by the national plant protection organization of countries exporting plants to North America.

4) Streamline the pest risk assessment (PRA) process

Some PRAs take years to complete, and the flow of desired trade plant x origin combinations is much greater than the capacity of APHIS to assess their risks.

5) Consolidate the plants for planting regulations

A large number of rules for different hosts and noxious weeds have been recorded over the years.

In the years since this advance notice was published, APHIS has wrestled with the feedback they received, and also with the necessity of implementing the NAPPO standard. Early in 2007 they hosted an online forum on assessing weediness of plants proposed for importation into the United States.

Plant Health Specialists Voice Concern

A new and very readable report by The Nature Conservancy provides a good description of the situation (see further reading, 4). The writers propose that all plants be put in the NAPPRA category, and that APHIS move quickly to clear most common imports, keeping natural resources safe while deciding whether the others require restrictions. There is considerable support for a stringent approach like this in the international community of plant pathologists.

A concept paper on plants for planting was recently developed by the International Union of Forest Research Organization's working group on invasive species in international trade (see further reading, 5). The paper calls for a pathway approach to plants for planting, using the new wood packing materials regulations as an example. However, it is important to recognize that the pathway risk assessment as described by the IPPC requires the identification of specific exemplary pests and the adoption of mitigation measures that address those pests. Again, the presumption is that by mitigating pests we know, we will also serendipitously mitigate many unknown pests.

What can we ALL do to Help?

Stay informed (see further reading, 6) and engage in the discussion! Spread the word: plants for planting is a key pathway. Encourage your local nurseries to sell certified stock, and be willing to pay a little extra for it. Keep your eyes open and help identify new invasive plants and pests.

What can Scientists do?

The following areas of information are needed for most invasive species:

- Criteria for invasiveness: what makes a species invasive?
- Clean stock production systems that are practical and effective.
- Taxonomy, distribution, and host range of pest organisms.
- Detection methods for use at ports, in preclearance programs, and in nurseries.
- Estimates of impacts (actual and potential) to guide decisionmakers.
- Mitigation measures that will permit trade to continue, safely.

What can the Nursery Industry do?

- Help frame best management practices that are practical, effective, and proven.
- Help consumers appreciate native and home-grown products.

Summary

Recognizing that we have a problem is the first step toward finding a solution. The system we have now allows those who import plants for fun or profit to do so with little consideration for the potential long-term impacts on natural ecosystems. The government must then combat the hitchhiking pests or weeds using millions of tax dollars. A system should be devised that places the economic burden of screening plants for planting on those who desire the plants. I would gladly pay a little extra for my exotic plants to be secure in the knowledge that my pleasures are not causing ecological harm, or jeopardizing the inheritance of future generations.

Acknowledgments

Thanks to all the hard working, dedicated people at APHIS who are truly stuck with a difficult job, trying to enhance trade while protecting natural resources.

Further Reading

1. For the list of prohibited plants, and those allowed with restrictions, see: http://ecfr.gpoaccess.gov/cgi/t/text/textidx?c=ecfr&sid=64938ae67d906f1fc8ba68b478241a07&rgn=div8&view=text&node=7:5.1.1.1.6.7.49.8&idno=7

2. RSPM No. 24 Integrated Pest Risk Management Measures for the Importation of Plants for Planting into NAPPO Member countries. Adopted October, 2005 http://www.nappo.org/Standards/NEW/RSPMNo.24-e.pdf

3. U.S. Department of Agriculture Animal and Plant Health Inspection Service Advance notice of proposed rulemaking and request for comments on nursery stock regulations Federal Register: December 10, 2004 (Volume 69, Number 237) http://a257.g.akamaitech.net/7/257/2422/06jun20041800/edocket.access.gpo.gov/2004/pdf/04-27139.pdf

4. An Ounce of Prevention: How to Stop Invasive Insects and Disease from Devastating U.S. Forests http://www.nature.org/initiatives/forests/files/ounceofpreventionsingle1.pdf

5. Recommendation of a Pathway Approach for Regulation of Plants for Planting. A Concept Paper from the IUFRO Unit on Alien Invasive Species and International Trade http://www.forestry-quarantine.org/Documents/IUFRO-ConceptPaper-%20Plants-Planting.pdf

6. For more information on the developing Plants for Planting regulations, see: http://www.aphis.usda.gov/ppq/Q37/revision.html