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Potential Problems Facing the U.S. Nursery Industry[1]

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Overview of the U.S. Nursery Industry

This fact sheet focuses on the possible impact of free trade on the U.S. nursery industry. The nursery crops covered include ornamental plants and trees with woody stems (broadleaf evergreens, coniferous evergreens, deciduous shade trees, deciduous flowering trees, deciduous shrubs and other ornamentals, fruit and nut plants for home use, cut and to-be-cut Christmas trees, and propagation material or lining-out stock).

U.S. farm value of nursery crops in 2002 was estimated at $8.92 billion (USDA, 2003). Although the value was $0.01 billion less than in the previous year, the annual growth rate over the period 1989 to 2002 remains impressive at 4.4 percent. The slowdown in 2002 was due to a weak U.S. economy. Because these plants are generally utilized in local markets, consumption patterns mirrored production, increasing from $5.4 billion in 1989 to $9.1 billion in 2002 (Table 1).

The value of nursery crop imports doubled between 1989 and 2002, increasing from $0.14 billion to about $0.30 billion. However, the import share of domestic consumption (products mainly from Canada and the Netherlands) remained insignificant, increasing from 2.7 percent in 1989 to 3.4 percent in 2002 (Table 1). The relatively low ratio of imports to domestic consumption reflects stringent regulatory policies. The export share of domestic production remained relatively flat over the period at 1.5 percent.

The Dilemma Facing the Nursery Industry

Based on evaluations carried out by independent testing agencies, the U.S. nursery industry ranks at the top (Kreith and Golino, 2003). The industry's clean stock status has been attributed largely to a stringent import policy based on U.S. federal quarantine regulations under the Plant Quarantine Act of 1912 (repealed in 2000), and a series of voluntary state certification programs. To enter the United States, foreign nursery stock must either originate from approved virus certification programs abroad that are similar to those in the United States or be tested for both exotic and domestic pathogens. These restrictions have curtailed imports of nursery stocks and have reduced the potential for accidental or intentional introduction of damaging pathogens. Thus the restrictions are an efficient way to manage plant disease control. They also help to minimize government expenses and taxpayer costs.

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Potential changes in the way the industry currently operates, however, could emerge from U.S. commitments to international trade agreements, particularly the World Trade Organization's Sanitary and Phytosanitary (WTO-SPS) Agreement, the North American Free Trade Agreement (NAFTA), and the proposed Free Trade Area of the Americas (FTAA). The problem is that the import restrictions currently in place are not considered consistent with the general principles of the WTO-SPS Agreement, of non-discrimination between foreign and domestic goods. To address these concerns, the United States repealed the Plant Quarantine Act of 1912 and replaced it with the Plant Protection Act of 2000, which better reflects the general provisions of the World Trade Organization's Sanitary and Phytosanitary Agreement. Information on the WTO-SPS Agreement is available at the following WTO website: http://www.wto.org/english/tratop_e/sps_e/sps_e.htm.

The WTO-SPS Agreement recognizes the International Plant Protection Convention (IPPC) as the relevant international standard-setting organization for the elaboration of international standards to help ensure that phytosanitary measures are not used as unjustified barriers to trade (http://www.ippc.int/IPP/En/default.htm). The specific issue in this fact sheet is how the International Plant Protection Convention (IPPC) sets out its rules governing the regulation of pests and diseases under the phytosanitary component of the agreement. The rule allows regulations only against damaging pests *not* known to occur in the home country, or those targeted for eradication or control by an official program (Foster, 2000). Consequently, U.S. federal quarantine actions that restrict entry of domestic pests that are already present in the United States that have either been eliminated or controlled are considered discriminatory against foreign producers whether or not the domestic pest is known to cause serious economic damages. Hence, the IPPC approach effectively eliminates from the current U.S. list of regulated pathogens a whole host of pests for which no official eradication or control programs are currently being undertaken. These include some of the most damaging pathogens that once plagued the nursery industry, including tristeza, exocortis and psorosis of citrus, fanleaf, leafroll, corky bark and stem pitting of grape, green crinkle, flat limb, rubbery wood and blister bark of apple, stony pit, blister canker, little cherry, necrotic ringspot, prune dwarf, X-disease of stone fruits, and red stele of strawberry (Foster, 2000). Allowing the possibility for such pests to be imported along with nursery stock could jeopardize the U.S. nursery industry's clean status.

Implications for the U.S. Nursery Industry

Foster (2000) points out that an obvious implication is that, for every domestic pest now included on the U.S. list of excluded pests, a decision will have to be made to either implement an official control program or remove the pest from the list. Either decision could prove to be costly. Moreover, many of these domestic pests are either on the verge of being eradicated or are significantly controlled, thanks to the work of scientists. In these cases, implementing official eradication programs at this time would not be warranted. However, removing such pests from the restricted lists and allowing for the possible infected planting material to enter the United States could result in a resurgence of these pathogens and severely undermine years of scientific work and investment.

In the past, countries wishing to export nursery stock to the United States had to have in place a certification program that was similar to those in the United States. With the adoption of the Plant Protection Act of 2000, certification is only required for (1) pests not yet present in the United States that were previously declared to be of concern and (2) domestic pests in implemented official control programs. This means that many pests will be removed from the excluded list and that entry conditions for pests will be made easier. It is conceivable that the floodgates could be opened for entry of newer, more virulent strains of pests than were regulated under the old system.

Because only a limited amount of planting materials were imported into the United States under the Plant Quarantine Act of 1912, there was no need to maintain an elaborate regulatory infrastructure for imported nursery crops. However, with the expected deluge of nursery stock imports coming from all over

the world under the Plant Protection Act of 2000, additional U.S. regulatory infrastructure will become necessary. Establishing and maintaining such systems could have considerable budgetary implications.

The WTO-SPS Agreement, which requires scientific evidence as proof before imports can be restricted, assumes that "there is no risk in the unknown." However, as entry conditions are made easier and the United States begins trading in nursery stocks and propagating materials from non-traditional sources, there is the increased likelihood of introducing new pests and diseases into the United States. Invasive species are not necessarily pests where they are native because natural predators and parasites keep them in balance, but they can cause significant damage to agricultural systems and native plants and animals when introduced into a new environment. Moreover, because many of these diseases are not detected immediately, this could greatly offset the short-term gains from freeing up trade.

One possible solution that has been suggested is a move towards federal or state mandatory certification for nursery crops. Such a move would both satisfy the WTO-SPS principle of non-discrimination against foreign products and preserve the current U.S. list of regulated pests. However, how such a system would work is unclear because the United States does not have a federal mandatory certification program model at this time (Kreith and Golino, 2003). It is conceivable that some nurserymen and growers might consider such an idea to be intrusive. Also, enforcing mandatory programs would require substantial additional funds far in excess of what is being spent on the current system.

Concluding Remarks

The WTO-SPS Agreement recognizes the importance of a country protecting its resources and, undoubtedly, freer trade could lead to unrealized benefits for a country. However, when trading live organisms, particularly when such organisms are not destined for food or feed, the underlying assumption of perfect knowledge does not hold and the potential gains from trade are questionable. Live organisms can reproduce, escape, and become invasive, causing damage to the surrounding environment. They also can harbor damaging pathogens that are not easily detected, so it could be a long time before the full impact of the damage was realized.

References

Foster, J.A. 2000. Free Trade and the American Fruit Industry. http://fpms.ucdavis.edu/FreeTradeArticleJAFoster.pdf

Kreith, M., and D. Golino. 2003. Regulatory Framework and Institutional Players. In *Exotic Pests and Diseases Biology and Economics for Biosecurity*,edited by D. Sumner. Ames, IA: Iowa State University Press.

USDA. 2003. Floriculture and Nursery Crops Situation and Outlook Yearbook. FLO-2003, Market and Trade Economics Division, Economic Research Service, United States Department of Agriculture, Washington, D.C. (June).

Table 1. U.S. Nursery Crops: Value of Production, Trade, and Consumption, 1989-2002.

Year	Production	Consumption	Imports	Exports	Import Share
	(*Million Dollars*)				(*Percent*)
1989	5,329	5,393	143	79	2.7
1990	5,963	6,018	157	102	2.6
1991	6,182	6,241	166	107	2.7
1992	6,270	6,332	182	120	2.9
1993	6,325	6,373	192	143	3.0
1994	6,607	6,658	203	152	3.1
1995	7,007	7,109	240	138	3.4
1996	7,422	7,549	255	129	3.4
1997	7,981	8,099	264	146	3.3
1998	8,101	8,217	287	171	3.5
1999	8,524	8,668	301	156	3.5
2000	8,561	8,724	307	144	3.5
2001	8,927	9,095	312	144	3.4
2002	8,917	9,076	298	137	3.4

Source: *Floriculture and Nursery Crops Situation and Outlook Yearbook*, USDA/ERS, June 2003.