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## Maine Nursery and Landscape Industry Perspectives on Invasive Plant Issues

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## Maine Nursery and Landscape Industry Perspectives on Invasive Plant Issues

Vanessa C. Coats, Lois Berg Stack, and Mary E. Rumpho\*

A survey of the Maine landscape and nursery industry was conducted to identify industry views on invasive plant issues, attitudes towards potential regulation, and to estimate the potential economic costs of banning the sale of specific invasive plant species in Maine. Analysis of the 190 surveys returned (19% of 980 mailed) revealed that 76% of industry member respondents were genuinely concerned about invasive plant issues, and the same percentage felt the horticulture industry is responsible for educating customers about invasive plants. Industry members (68%) did not feel compelled to sell invasive plants merely on the basis of customer attraction to the plant, or due to competition with a neighboring business that sells the invasive plant. Self-reporting of sales indicated that Norway maple (\$96K), burningbush (\$68K), and Japanese barberry (\$44K) constituted the largest portion of annual industry revenue (maximum values reported for 2006 to 2008) derived from the sale of seven identified invasive plants. Industry self-regulation was the most favored form of regulation, although the industry likely would not be significantly affected by legislated state-wide bans of at least purple loosestrife and oriental bittersweet. Bans on other popular invasive plants, including burningbush, Japanese barberry, and Norway maple likely would have a relatively small, short-term impact on the horticulture industry until alternative plants with similar properties were identified. The results of this survey demonstrated a need for identifying which plants are truly invasive or potentially invasive in Maine, as well as a need for open discussion of invasive plant issues among all interested parties in Maine. Nomenclature: Burningbush, Euonymus alatus (Thunb.) Siebold; Japanese barberry, Berberis thunbergii DC.; Japanese honeysuckle, Lonicera japonica Thunb.; multiflora rose, Rosa multiflora Thunb.; Norway maple, Acer platanoides L.; oriental bittersweet, Celastrus orbiculatus Thunb.; purple loosestrife, Lythrum salicaria L. Key words: Ornamental horticulture, economic impacts, survey, prevention, nursery crops, St. Louis Declaration, self-regulation, invasive species.

The United States Invasive Species Advisory Committee defines the term invasive species as "those [species] that are not native to the ecosystem under consideration and that cause or are likely to cause economic or environmental harm or harm to human, animal, or plant health" (ISAC 2006). Nonnative status alone does not dictate that a species will be classified as invasive, and some nonnative species are invasive in one region but not another. To clearly define an invasive species as such, evidence must show that the environmental or economic harm caused by a species clearly outweighs the beneficial effects it provides (Beck et al. 2008). Thus, invasive species are a concern because they threaten biodiversity, cause environmental damage, and/or require significant economic costs for control and eradication. In fact, almost half of the U.S. species listed in the 1973 Endangered Species Act are at risk because of invasive species (Pimental et al. 2005). Economic cost estimates from losses, damages, and control of all invasive species in the United States are just over \$120 billion annually, of which invasive plant species carry costs of control approaching \$35 billion (Pimentel et al. 2005).

The introduction of an invasive plant species frequently is the result of either accidental or intentional human action (Mack and Lonsdale 2001). Accidental introductions are harder to predict, identify, and eliminate due to unintentional transport with seeds, soil, and other products (Mack et al. 2000; Pimentel et al. 2005). Current regulations intended to prevent introductions, such as border inspections and container fumigation at ports, are not sufficient in part because of the magnitude of international trade (Burt et al. 2007). The horticulture trade is involved directly in the domestic and international transport of plant commodities, and consequently is a major route of invasive plant introductions. Estimates

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