

Workshop: The Natives Are Restless: Proceedings from the ASHS Invasive Plants Research Interest Group 2017 and 2018 Workshops

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Conventional wisdom suggests that only introduced species can be invasive and that indigenous species cannot be classified as “weeds” because they belong in their native range. Therefore, most weed ecology and management research is focused on non-native plants. It is becoming increasingly clear that some native plants have the ability to grow aggressively, out-compete other native species, and form dense monocultures, resulting in the same problems associated with invasions by introduced plants. The Invasive Plants Research Interest Group of the American Society for Horticultural Science (ASHS) developed and hosted workshops at the 2017 and 2018 ASHS annual conferences to explore this phenomenon. The objective of the 2017 workshop, titled “Strategies for Mitigating Invasiveness of Native Species,” was to explore methods of reducing the “weediness” of native species via cultural management techniques as well as breeding

efforts. Coordinator M.A. Schnelle invited presenters to address problematic genera and practical strategies for mitigating damage from these species and presented the workshop’s opening paper (Plants of the Great Plains with Potential to Become Invasive). S.C. Marble (2018) discussed native “pests” of the Deep South, and L.A. Gettys outlined native aquatic plants that “break bad” and act like invasive species. J.M. Ruter focused on reforming the “seedy character” cherry laurel (*Prunus caroliniana*), and K.W. Leonhardt talked about using induced sterility as a management strategy for invasive species. The goal of the 2018 workshop, titled “It’s Native. Wait! It’s Exotic...Oh No, It’s a Nuisance!,” was to discuss some of the factors that may result in nuisance natives, including loss of natural predators in a species’ native range, invasive exotic haplotypes of native species, and how to manage ecosystems to preserve biodiversity and ecosystem

function. Coordinator L.A. Gettys started the workshop by outlining the arguments against native status for waterlettuce (*Pistia stratiotes*), one of Florida’s worst floating weeds. Then, M.A. Schnelle discussed a number of native plants that can escape cultivation and grow aggressively in areas where they are not wanted. A.K. Noyszewski spoke about the challenges of establishing the native compared to the exotic status of herbarium specimens of species with native and introduced biotypes and used reed canarygrass (*Phalaris arundinacea*) as a case study. The final speaker was N.O. Anderson, who argued that molecular biology may be necessary to distinguish between phenotypically identical native and exotic types of the same species of plants such as purple loosestrife (*Lythrum salicaria*) and reed canarygrass.

Attendees of these workshops gained valuable information and were provided with compelling evidence that aggressive growth and “invasiveness” are not solely the realm of introduced species. The concept that native plants can cause habitat destruction by reducing diversity is new and controversial, but this emerging phenomenon will certainly gain more attention in the future.

Literature cited

Marble, S.C. 2018. Native weedy pests of the Deep South. *HortScience* 53:1244–1249.

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