

California Native Plant Society

POLICY ON

PREVENTING INFECTION AND SPREAD OF HARMFUL PATHOGENS VIA NATIVE PLANT NURSERY AND PLANT SALE STOCK

Adopted by Chapter Council 5 December 2015

Statement:

The California Native Plant Society (CNPS) strongly encourages native plant nursery and propagation practices that help prevent plant diseases and that discourage the spread of *Phytophthora* and other harmful plant pathogens. CNPS gives special attention to stock propagated and/or sold by CNPS chapters, and offers support to chapters for purchasing clean stock and maintaining clean operations.

Intent:

- To foster the use of clean stock used in all landscape and restoration plantings of native plants, including from nurseries, chapters, and other native-plant growers
- To ensure the integrity and credibility of chapter sales of native plants.

Supporting Materials

Rationale:

Plant pathogens in the water mold genus *Phytophthora* affect a wide variety of native and horticultural plants and have been common in plant nurseries for many years.ⁱ Increased international trade in nursery plants has resulted in an increase in the number of exotic *Phytophthora* species in nurseries, including California native plant nurseries.ⁱⁱ Disease and plant death caused by these pathogens has been documented in native plant habitats, including sites where the pathogens were introduced via nursery plants.ⁱⁱⁱ *Phytophthora* species can also be introduced via infected nursery stock into horticultural landscapes, with permanent adverse effects on their ability to support many native plants.^{iv} To further its core mission, CNPS supports actions to minimize the threat that these pathogens pose to California native plants in natural stands, restored habitats, and horticultural landscapes.

CNPS chapters typically raise funds through native plant sales involving purchased stock and/or stock that they have propagated themselves.^v This close involvement of CNPS with propagated materials requires that CNPS be proactive in preventing harmful pathogen introductions and subsequent spread. As the principal organization dedicated to California's native flora, providing clean plant material and leadership is especially important as public and government agencies turn to CNPS in this water-limited era for guidance in using native plants in landscaping.

Implementation:

1. Recommendations for helping chapters
 - a. EDUCATION - Educate chapters about the problem, and share current information about the status of infection across the state.
 - b. BEST MANAGEMENT PRACTICES (BMPs) - Compile, develop, and communicate BMPs for avoiding infection in propagation and handling of nursery stock.
 - i. Recommended BMPs should reflect the most current science, and should be evaluated for effectiveness.
 - ii. Recommended BMPs should be appropriate for the size and type of chapter plant sale operations, and for their reliance on volunteers.
 - iii. Encourage chapters that follow the BMPs to communicate that fact to their buying public.
 - iv. Support research for improved methods of testing and evaluating the condition of nursery stock.
 - v. Recommended BMPs will be posted to the CNPS website.
 - c. Provide guidelines for dealing with infection if found in order to prevent the sale of infested plants.
 - i. For purchased nursery stock, advise the supplier of the condition of their plants, and do not purchase or take possession from the supplier until assured that they have implemented sufficient BMPs in their operation.
 - ii. For Chapter-grown nursery stock, provide support for the chapter to re-evaluate their implementation of recommended BMPs.
2. Recommendations for helping nurseries, the general public, and agencies
 - a. Educate the public with current information on:
 - i. impacts of these pathogens on native plants in native habitats and gardens
 - ii. how diseases develop and can be prevented in nursery stock;
 - iii. how to purchase nursery stock that has the least likelihood to be infected by harmful plant pathogens; and
 - iv. what to do if your nursery or garden becomes contaminated.
 - b. Support the development of BMPs in the California nursery industry to minimize the risk of harmful pathogens in their nursery stock.
 - c. Support implementation of a reliable certification program for California nurseries that informs consumers when practices were followed to minimize the risk of harmful pathogens in their nursery stock.
 - d. Support the use of contract specifications by public and private entities to minimize the risk of harmful pathogens in the nursery stock used for their projects and to control their spread in the landscape. (Calif. Dept. of Food & Ag. Provides guidelines and forms for all facets of moving or handling plants or green waste in quarantine areas).

ⁱ Baker, K.F. Editor. 1957. The U.C. System for Producing Healthy Container Grown Plants, Manual 23. University of California, Division of Agricultural Sciences, Agricultural Experiment Station Extension Service

ⁱⁱ Brasier, C.M. 2008. The biosecurity threat to the UK and global environment from international trade in plants. *Plant Pathology* 57(5):792-808

ⁱⁱⁱ Rooney-Latham, S., C. L. Blomquist, T. Swiecki, E. Bernhardt, and S. J. Frankel. 2015. First detection in the US: new plant pathogen, *Phytophthora tentaculata*, in native plant nurseries and restoration sites in California. *Native Plants Journal* 16:(1) 23-27

^{iv} Parke, J. L., and Grünwald, N. J. 2012. A systems approach for management of pests and pathogens of nursery crops. *Plant Dis.* 96:1236-1244

^v CNPS Horticulture Committee Survey of CNPS Chapter Plant Sale Chairs, November 2014