NCPN-Berries Keeps on Growing!

There are currently four NCPN-Berries Clean Plant Centers in the U.S. Programs in Arkansas, North Carolina, Oregon, and California address the specific needs of growers from different regions and growing environments. As with all crop groups in the Network, the Berries network continues to make strides in expanding and improving on services offered.

The Oregon Clean Plant Center Open to Berry Diagnostic Submissions

The diagnostic capacity at the NCPN-Berries Center in Oregon is expanding to provide virus testing to private stakeholders as well as the public. Private breeders will be charged a service fee through an alliance of the Oregon Clean Plant Center (OCPC) and the Oregon State University (OSU) Plant Clinic. The National Clean Plant Network (NCPN) will continue to subsidize costs for public breeders.

Read more

FPS in California Offering Import and Testing Services for Berries

Foundation Plant Services, a clean plant center with longstanding quarantine programs for grapes and fruit trees, is now also offering import and testing services for berries. A member of NCPN-Berries because of its management of UC strawberry cultivars, Vaccinium (blueberry), Rubus (blackberry, raspberry), and Fragaria (strawberry) have recently been added to the Controlled Import Permit (CIP) that allows FPS to quarantine material entering the US. In addition to these quarantine services, FPS will offer diagnostic testing for domestic customers with export or other needs.

Read more

Staff member collects positive control specimens in green house at Oregon State University, Corvallis.

Citrus as a Pioneer "Clean" Plant

In 1932, Citrus was the first crop in which a disease was associated with a virus (Citrus psorosis virus). This led to the establishment in California of a program to supply budwood of citrus that was free of the psorosis virus. As more graft-transmissible diseases of citrus were described, budwood sources free of the causal pathogens became necessary and led to the establishment of the Citrus Varietal Improvement Program in the 1950's in California. The concept of using only clean sources of citrus budwood spread from California into other citrus-producing states and was eventually incorporated into the APHIS protocol for interstate movement of citrus propagative materials.

The use of clean source propagative materials in citrus was well established when the National Clean Plant Network (NCPN) was implemented starting in 2009, so it was natural to include citrus as an NCPN commodity. The NCPN promotes a distributed model of service from geographically diverse clean plant centers. It brings the Centers, industry, researchers, State and Federal regulatory personnel together to discuss issues. Within the NCPN, citrus has the largest number of clean plant centers, highest number of accessions maintained, and second highest number of propagative units distributed annually.

More information on the origins of clean citrus and its status in the NCPN is available at:

https://ucanr.edu/sites/default/files/2024-12/Topics_in_Subtropics104004.pdf

Virologists Recommend Re-Evaluation of Regulated Grapevine Viruses

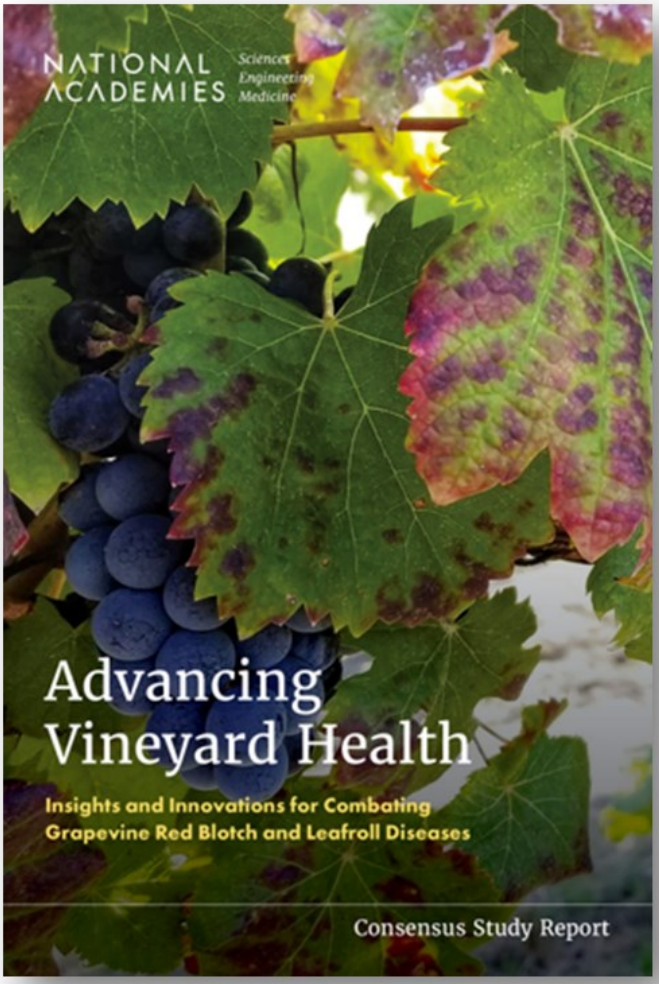
The exchange of grapevine propagation material across geographic and regulatory boundaries increases the diversity of cultivars and rootstocks available to the grape and wine industries but also risks the dissemination of pests and detrimental pathogens such as viruses in new grape production areas. Therefore, regulations are established to facilitate the safe trade of propagation material with desirable traits and to safeguard vineyard health. Sometimes regulations are inadequate, thus unduly delaying the accessibility of desired germplasm for growers and providing motivation for illegally introducing germplasm of interest. To address some of the regulatory limitations, scientists from around the world recently defined *phantom agents*. These are pathogens for which neither reference material nor nucleotide sequences are available, making it impossible to diagnose such agents in grapevine and other fruit crops.

This scenario provided a compelling case for excluding such pathogens from regulatory oversight (Tzanetakis et al. 2024). At the same time, a group of virologists realized the need to complement the list of phantom agents in grapevines and recommended excluding nine viruses, 14 virus-like diseases and nine viroids from regulation (Fuchs et al. 2025). The pathogens and diseases are not known or are not suspected to have any substantial detrimental impact on vine health.

Collectively, these recommendations are anticipated to serve as a solid foundation for facilitating an informed dialogue with federal and state policy makers, and to result in more streamlined regulations for expediting the safe exchange of grapevine germplasm while reducing incentives for illicit introductions. Adopting these recommendations will substantially reduce the list of target pathogens for diagnostics and therapeutics at Clean Plant Centers of the NCPN-Grapes, thus optimizing resources and contributing to the NCPN sustainability.

A New NASEM Report Tackles the Threats of Leafroll and Red Blotch

Two major viral disease threats to the sustainability and profitability of the global wine grape industry are grapevine leafroll disease (GLD) and grapevine red blotch disease (GRBD). Both diseases are spread via planting materials and insect vectors. Despite decades of research efforts to manage them, GLD and GRBD continue to spread and cause detrimental impacts, including grape yield reduction, poor grape and wine quality, and reduced vineyard productivity and lifespan.



Recognizing the continued threats that GLD and GRBD pose to the $73 billion per annum wine and wine grape sector in California, the California Department of Food and Agriculture (CDFA) and the California Pierce's Disease/Glassy-winged Sharpshooter Board commissioned the National Academies to conduct a study to review the current state of knowledge on GLD and GRBD, identify knowledge gaps, and propose key research and actions that could help reduce the spread and economic impact of GLD and GRBD.

The National Academies assembled a group of subject-matter experts on insect-vectored plant viruses to work on the study, culminating in the release of the report titled “Advancing Vineyard Health: Insights and Innovations for Combating Grapevine Red Blotch and Leafroll Diseases”. The full consensus study report is available for free download here: https://nap.nationalacademies.org/read/27472