

# The American Phytopathological Society

## In Focus: One Health



### About APS

The American Phytopathological Society (APS) is a non-profit, professional organization of 3,600 plant pathology scientists and practitioners whose work safeguards agriculture, food security, and the national ecosystem to prevent billions of dollars in crop losses in the U.S. each year. Spanning industry, academia, government, and private practice, APS members study and manage plant pathogens, pests, and diseases to ensure healthy plants thrive in crops of all types across all 50 states.

### Plant Health under One Health

The One Health framework acknowledges the interconnectedness of human, animal, and environmental health, yet plant health—a critical component of ecosystem stability, food security, and economic resilience—has been largely overlooked. Integrating plant health into One Health initiatives is essential to holistically address complex health challenges. APS supports the critical incorporation of plant health for the following reasons:



### Plants are a Cornerstone of Ecosystem Health

Healthy plants play a fundamental role in sustaining the environment, providing oxygen, sequestering carbon, and forming the base of nearly all terrestrial food webs. Plant diseases and pest outbreaks not only affect biodiversity but also compromise the health of people and animals who rely on these ecosystems.

### Protecting Food Security and Public Health

Plant pathogens and pests significantly threaten agricultural productivity and food security. They can disrupt food supply chains and increase reliance on chemical inputs, impacting food safety, affordability, and nutrition—all critically impacting plant health.

### Economic Impact

In the United States alone, plant diseases and invasive pests cost billions in agricultural losses and control measures each year. Investment in plant health research and sustainable management practices can bolster economic resilience to benefit farmers, businesses, and consumers.

### Addressing Emerging Threats

As climate variability reshapes ecosystems, plants are increasingly vulnerable to shifting pest and pathogen pressures. Proactive research and funding are essential to equip the U.S. with the scientific tools to adapt and safeguard plant health.

Plant pathology is an interdisciplinary science that includes knowledge of botany, microbiology, crop science, soil science, ecology, genetics, biochemistry, molecular biology, and physiology.



## Policy Asks

### **Include Plant Health in One Health Programs**

Require that plant health is recognized as a core component within all One Health initiatives, including policy planning, interagency collaboration, and educational outreach.

### **Expand Funding for Plant Health Research**

Allocate increased funding to the USDA, EPA, NIH, and NSF for plant pathology research, focusing on integrated disease management, invasive species control, and climate resilience. Support funding for pathogen surveillance and detection to support rapid response capacity.

### **Support Rapid Response Capacity**

Fund programs, such as the National Plant Diagnostic Network to support early detection, rapid response, and the management of plant disease outbreaks, especially those threatening economically significant crops.

### **Promote Education and Public Awareness**

Support public education campaigns that highlight the importance of plant health in everyday life, increasing awareness and encouraging practices to protect ecosystems and reduce pathogen spread.