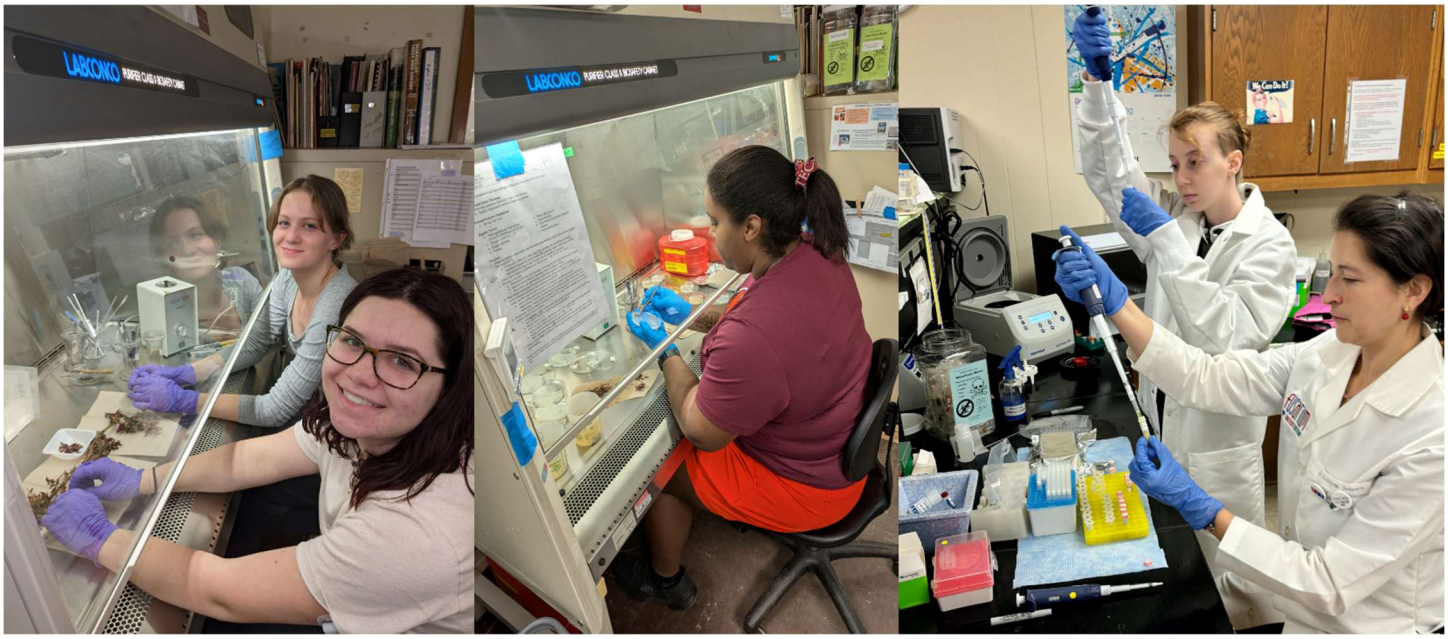
The VT Plant Disease Clinic (PDC) Annual Report 2024

A message from the PDC staff

As a service laboratory, the Plant Disease Clinic (PDC) team applies its plant diagnostic expertise to address plant problems, offering science-based recommendations that benefit Virginia's agriculture, landscape professionals, and home growers. The PDC staff are committed to enhancing their services by providing precise and timely diagnoses. We continuously work to incorporate rapid, sensitive molecular tests for key pathogens that adversely affect Virginia's agriculture and ecosystem. In 2025, we look forward to further supporting Virginian citizens with diagnostic tests and detection methods that will enhance the health of their plants, landscapes, and commercial operations.

Sincerely,

Lina and the PDC Team of student workers

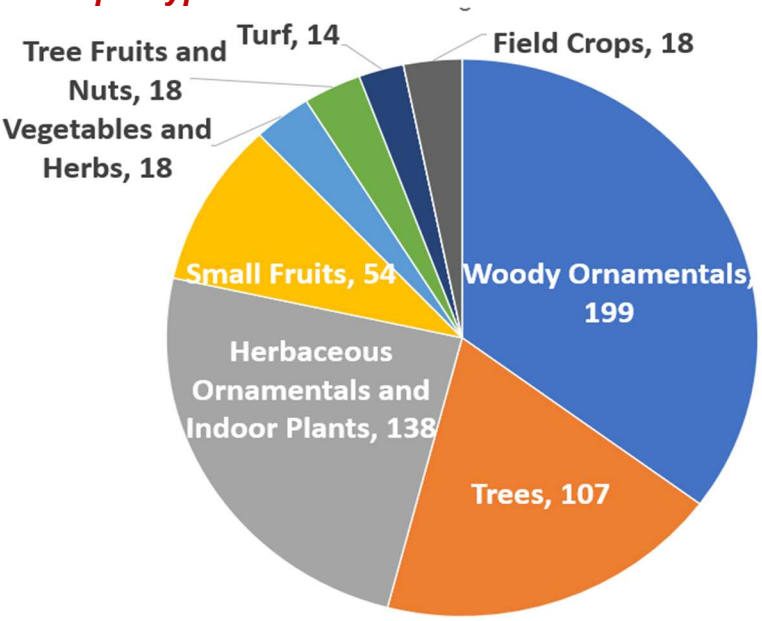


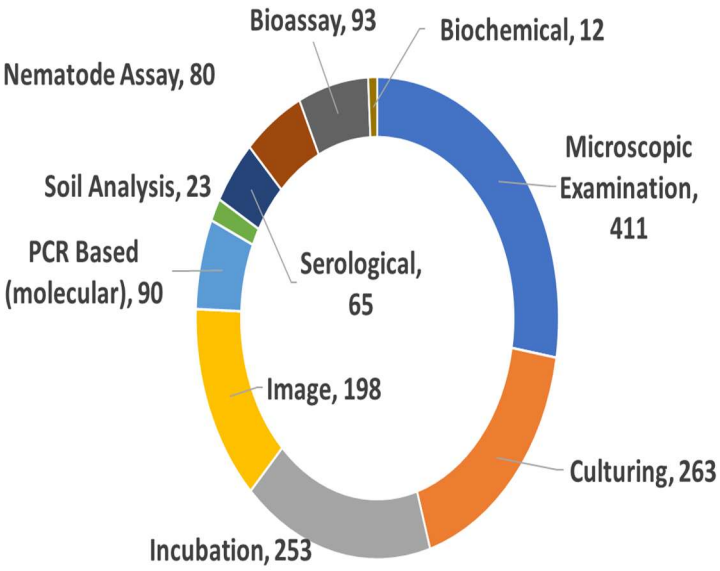
(From left to right), Riley Plafcan (undergraduate lab assistant), Karlie Casper (undergraduate lab assistant), Sydneye Bronson Casper (undergraduate lab assistant), Grayson Priebe (undergraduate lab assistant) and Lina Rodriguez Salamanca (Plant Disease Clinic Manager and Diagnostician).

The PDC Team

Dr. Lina Rodriguez Salamanca directs the plant disease clinic. Lina has 10 years of plant diagnostic experience. She frequently consults VT/VCE agronomic, horticulture, entomology, and plant pathology specialists, located both on campus and at VT Agricultural and Research Extension Centers, as part of the diagnostic process–particularly for specialty crops, such as small fruit, tree fruit, vegetables, row and greenhouse crops. Our VT specialists' knowledge, input, and expertise are valued by the PDC team and greatly enhance the PDC diagnostic services. Thank you all!
During 2024, we had the pleasure of training and mentoring five undergraduate students who provided laboratory assistance in the PDC. We rely on undergraduate laboratory assistants for various support tasks (e.g., clerical and laboratory).

Sample types





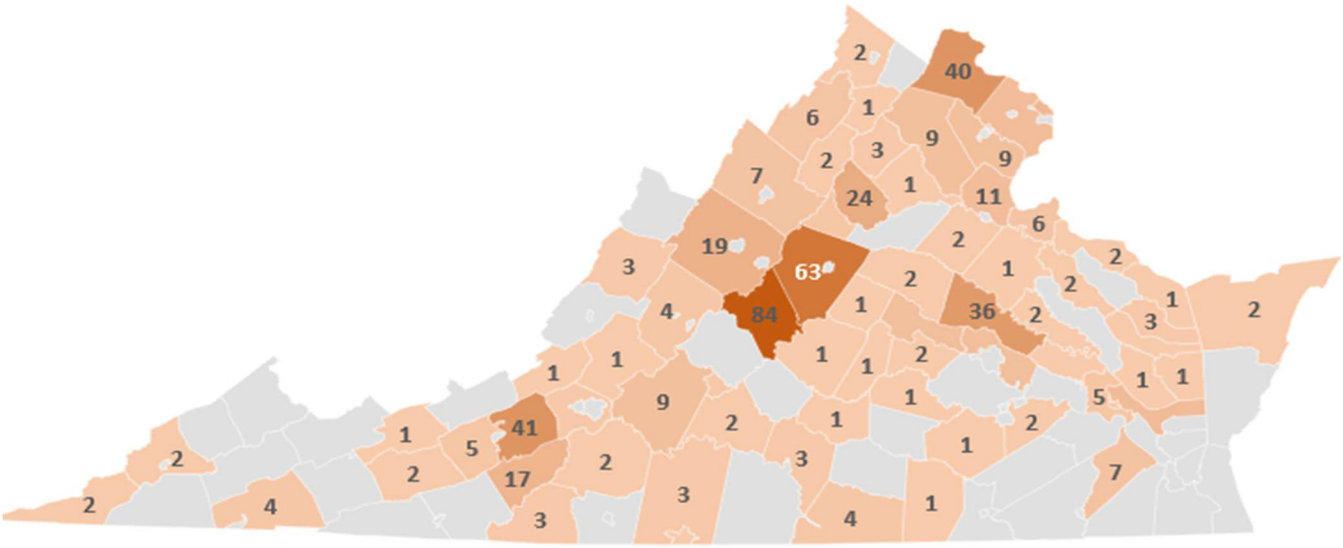
The PDC diagnosed a broad range of plants in 2024 (above). We used a wide variety of diagnostic procedures and tests to investigate plant problems and rule out or confirm plant pathogens.

Rapid, sensitive testing for difficult-to-detect and high-consequence pathogens

New services implemented in 2024: Oak wilt (*B. fagacearum*)

Regular services: *Xyllela fastidiosa* (Bacterial leaf scorch/pierce's disease), Rose Rosette Virus, Laurel wilt, Boxwood Colletotrichum Dieback and Turf Spring dead spot. Aster yellows and various Phytoplasma (qPCR), Tobacco rattle virus, Brown stem Rot (*C. gregata*) qPCR, Sudden Death syndrome (*F. virgulifrome*, qPCR), Grapevine Red Blotch Virus (qPCR), and Grapevine Leafroll Virus-3 (qPCR).

Samples by Virginia County



The PDC is a service lab to VCE; PDC samples are submitted through the client's local VCE offices. However, some clientele−particularly commercial growers and service professionals−directly submit samples.

Client Breakdown

Client type	No. of samples
Commercial grower (Producer)	271
Home grower	181
Commercial service professional	105
Public Grounds	11
Total	**568**

Type of Client Contact	
Email consultations	1026
Phone consultations	60
Physical sample	348
Physical & Digital samples	171
Digital only samples	49
Talks, webinar, workshops (attendees)	737

Feedback from some of the PDC clients

See all our annual clientele survey results at http://bit.ly/40iCCRB, top comments:

From commercial growers:

"This is a really important service for farmers and commercial growers, and we thank you for your guidance help and services"

From service professionals:

"They are prompt and informative, I'm grateful for their services"

From home growers:

"A very valuable resource. They were very responsive. Much faster response then I expected."
"Extremely happy with the services I received from the VTPDC!"
"Qualified and professional diagnosis."

Not every plant problem requires a sample.

Some plant diseases have very characteristic symptoms or signs. Using a combination of your observation skills and the PDC's ***Plant Problem Image Gallery (https://apps.cals.vt.edu/ppig/),*** one may be able to narrow down some suspects.

Not sure what to submit?

Check our website https://bit.ly/VTplantclinic; we have added several photo examples.

Digital submissions are a great place to start. This allows the PDC diagnostician to observe the problem on site (nursery, landscape, or field) and advise on exactly what type of physical sample to submit, saving in shipping and avoiding a resubmission. Refer to the Guidance on Submitting a Good Digital Sample section on the submitting sample page, which details the range of images needed.

What the PDC can NOT do: Test for nutrients in plant tissue (must use private labs) or soil testing (goes to Virginia Tech Soil Testing Lab, https://www.soiltest.vt.edu/), test for chemical residue on plant tissues (must use a private lab), or recommend edibility of mushrooms or plants.

Want to learn more about common diseases? Our website has pages with the most up to date resources from PDC and VCE. on Disease Alerts, Plant Disease Publications, Videos: Common Plant Diseases and Disease Management, Boxwood Blight Task Force and Pest Management Guides.

bit.ly/VTplantclinic