

# How to prepare and submit a good sample for laboratory identification at the Virginia Tech labs

---

## Diseased Plants and Plant Identification

### Timing of submission

Please bring plant material to the Albemarle VCE Extension office on Mondays and Tuesdays to avoid letting it rot in the lab over the weekend, resulting in no diagnosis. Harvest plant material just before bringing and keep as cool as possible.

### Photos – a helpful diagnostic tool

It is helpful to submit photos of the problem to us (if possible), in conjunction with bringing in a physical sample. Take a landscape shot – showing the problem in the context of the landscape – and then a close-up of the problem.

### What to submit

Submit whole plants when possible, especially if a root problem is suspected, e.g. when all or large parts of the plant are wilting or dying back. Include two cups of soil within the root ball, and as many roots as possible. Tie a plastic bag around the root ball to contain soil and roots.

If sending a whole plant is not possible, you will need the following:

- In a sealed plastic baggie: a large handful of the fibrous roots (skinny roots) in at least 2 cups of soil. This will give the lab enough roots for isolations, as well as enough soil for a nematode assay if one is warranted. Submitting the roots in soil will also keep them from drying out.
- In a separate plastic bag: Several 1 foot sections of plant material that include *living and dead material* on each piece. If individual branches or stems are dying, cut the stem to include the junction of healthy and affected tissue. This is the site where the pathogen is most active – and easiest for the lab to culture and diagnose. A completely dead sample is not sufficient for accurate diagnosis. If possible, submit stems with affected leaves still attached. They will remain fresher that way.
- Note: Do NOT add water to soil or other samples, Do NOT wrap plant material in

## **Insect Identification**

With the exception of butterflies and moths, insects should be placed in alcohol when fresh before transport to Extension office. Desiccated insects are hard to identify, and break in transport to the lab. We will place them in a vial with alcohol filled to the top.

Insects that are difficult to see with the naked eye should be submitted on ample affected plant material in a plastic bag.

---

## **Soil Testing**

Soil test kits and forms are available at the James City County VCE office.

### **Collecting a good soil sample**

Instructions: [http://pubs.ext.vt.edu/452/452-129/452-129\\_pdf.pdf](http://pubs.ext.vt.edu/452/452-129/452-129_pdf.pdf)

One sample should be taken for each area that is managed differently or that is experiencing a problem.

### **Ideal time to sample**

You can take a soil sample any time of the year, although it's best not to do so when the soil is extremely wet. The fall months are ideal simply because if there are lime recommendations, this is a good time of year to apply the lime.

### **Mailing**

1. Place representative soil sample in baggie inside box obtained from VCE.
2. Fill out form
3. Place completed form (and \$10 check/sample) in baggie on top of soil in box.
4. Mail at your local post office

Virginia Tech Soil Testing Lab  
145 Smyth Hall (0465)  
Blacksburg, VA 24061

### **Getting your results**

- It usually takes 1-2 weeks to receive the results – depending on the time of year. Fall and spring are the busiest times of the year.
- The results will be sent directly to the client via e-mail (if the client provided an email address) or snail mail.
- Please check your email junk mail if you do not receive your report
- Please contact the Extension office for access to old or misplaced soil test reports.