

How to Submit a Field Crop Sample to the K-State Plant Disease Diagnostic Lab

It is important to send the KSU Plant Diagnostic Lab an excellent sample so as to provide you with the best service possible concerning your valuable crop.

Following are some guidelines to help you in selecting and preparing your sample.

1) Fill out the sample submission form found at:

<http://www.plantpath.kstate.edu/DesktopDefault.aspx?tabid=725>.

The more information you can provide on the sheet, the better. If you are not sure what an item means, feel free to give us a call and we can help you fill it out over the phone. It is especially important to know:

- When the problem first occurred.
- How widespread it is – are there other plants that are also declining in the area? Do they share the same symptoms? Are they the same species? Include crop variety whenever possible.
- Describe the symptoms as the sample's appearance may change in shipment.
- What has the weather been like lately?
- How often the crop is irrigated.
- Properties of the soil or media the crop is being grown in, such as drainage and pH.
- Summarize any applications of pesticides or fertilizers during the current season.

Please do not send payment with your sample as you will receive an invoice later.

2) Choose the right sample. Try to send the entire plant when possible, including roots and soil contained around the root ball. Carefully dig up the sample rather than pulling the plants out of the ground. Choose plants that are declining, rather than ones that are already completely dead. Try to pick from the leading edge (where the disease is spreading out).

3) Take a large enough sample. A single plant is not adequate to represent an entire field. Send in as many whole plants as you can. It may be beneficial to send both a 'Good' and a 'Bad' sample for comparison. Sending in as much plant material as possible is going to result in a higher quality diagnosis. Photos showing field patterns can be sent with a sample or emailed to clinic@ksu.edu. Please specify on your submission sheet and within your email that the photos are linked with your sample.

4) Pack it up nicely. Put the sample into a plastic bag as soon as it is collected to prevent the leaves from drying out. Take note not to place the submission form or any other stationary in the bag with the sample as it may be damaged in the shipping process. Staple it to the outside of the bag so that it arrives in good shape.

5) Send it promptly. Expedited shipment is recommended. Do not send your samples on a Friday. It is recommended that they be sent between Monday and Wednesday. Samples sent later than Wednesday will often sit in a hot mail distribution site over the weekend and will literally become cooked by the heat or simply ferment due to lack of oxygen. Samples can be taken directly to your local K-State Research and Extension office, or mailed directly to:

Plant Disease Diagnostic Lab
4032 Throckmorton
Kansas State University
Manhattan, KS 66506

6) Be patient. For many diseases, it is necessary to perform tests that have wait times or incubation periods associated with them. Unfortunately, a stressful situation cannot speed up chemical or biological reaction rates, so take a deep breath and relax! You should receive some feedback within a week to two weeks. To check status the status of your sample, you may call us at **(785) 532 – 5810** M-F, 8a-5p, CST.



This is an example of a good crop sample to submit. The entire plant was sent in, including the roots. Ideally, there would also be some soil from around the roots included.