How to submit a turfgrass sample to the K-State plant diagnostic clinic

Sending in a quality sample is key to a good diagnosis.

1) Choose the right spot. Take the sample from the "leading edge" of the damage, not from the area that has already been dead for awhile. The leading edge is where it is easiest to find a pathogen, if one is present. So, the plug should contain both healthy and diseased grass. In the spots that have been long dead, usually there are secondary rotting organisms present that disguise the original problem.



2) Take a plug that is a few inches across and a few inches deep

Use a knife, trowel, or shovel, and dig deep enough to collect some roots. At golf courses, they usually use a cup-cutter to take samples for the lab. That is a good image to keep in mind—think about taking a plug that is a few inches across and a few inches deep, as if you were going to try to putt a golf ball into the hole afterwards.

- **3) Pack it up nicely.** Put the sample into a ziplock bag, or wrap it in aluminum foil. Do not put any wet paper towel inside. If you take several samples put them in separate bags and label them clearly, like "front yard," "side yard," "green #3," " fairway #9." Then, use a large padded envelope or a box with packing material to send it.
- **3) Send it in promptly.** Overnight shipment is the best, especially for urgent commercial samples. No matter what, don't ship on a Friday because the sample will spend all weekend who knows where, maybe in a hot postal truck, and will be mush by the time it arrives on Monday. Take the sample to your local K-State Research and Extension office, or you can send directly to:

Plant Disease Diagnostic Lab 1712 Claflin Rd 4032 Throckmorton Kansas State University Manhattan, KS 66506

- **4)** Include some background info. Don't just send a plug of turf. At minimum, make sure to include your name, business name, address, phone, and email. Dropping a business card into the box is one way to do it. Write down the grass species, if known, and the cultivar/variety name. Some details about the site can be very helpful, such as:
 - When did the problem appear (last week? last month?)
 - How widespread is it (front yard? Both front and back? One putting green? ALL putting greens?)
 - What do the symptoms look like (patches ~5 feet across? Streaks that follow drainage patterns?).
 - What has the weather been like lately?

If you have information on recent pesticide and fertility applications, write that down as well. All this info can go into a note in the box, or you can email it to the turf disease pathologist, Dr. Megan Kennelly, at Kennelly@ksu.edu. If you have a digital camera, you can email photos, too. Do not send any payment—you'll get an invoice later.

5) Be patient. In most cases, commercial turf samples get turned around within about 48 hours, but sometimes that is not possible depending on which tests are required. Home lawn samples are usually completed within about 3-5 days. If an email address is provided the report will be sent by email. Otherwise it will be sent by postal mail along with the invoice.