Plant Tissue Sampling for Wheat

Predictive (GS-30) sampling is used to determine mid-season N rates and evaluate overall nutritional status.

When to sample: Zadoks growth stage 30 (GS-30).
~ Feb. – March but correct growth stage is critical. When wheat begins to stand up tall and straight, pull several plants. Split the stems from the top to the base and look for the growing point. Before GS-30, it will be just above the roots. At GS-30, it will be about 1/2 inch up the stem.

How: GS-30 sampling requires two types of samples: tissue and biomass.

Tissue: Cut plants about 1/2 inch above surface. Two large fistfuls of leaves will make a good sized sample.

Biomass: Collect all the above-ground plant tissue in 36” row section or, in broadcast fields, from one yard².

Tips
- Use paper bags for storing and mailing. Don’t put your leaves in a plastic bag. They will rot.
- Submit your tissue and biomass samples in separate bags.
- For submitting Diagnostic (troubleshooting) samples outside of the GS-30 period, there is no need to submit a biomass sample.
- Fill out the Plant Sample Information form as completely as possible. The more information you provide, the more precise your recommendations will be.

Standard analysis includes: nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, zinc, copper, and boron.

Fees: $5 per sample for N.C. growers ($25 for out-of-state; $12 for N.C. researchers). (no charge for biomass samples)

Send samples to: NCDA&CS Agronomic Services
Mailing address:
1040 Mail Service Center, Raleigh, NC 27699

Physical address:
4300 Reedy Creek Rd, Raleigh NC 27607
Phone: (919) 733-2655

For more detailed information, visit the Plant Tissue Analysis page at www.ncagr.gov/agronomi or contact the regional agronomist for your county.