Corn & Soybean SAMPLING GUIDE

At Agronomy 365, collecting **high quality soil and tissue samples** is fundamental to capturing **valuable nutrient data** for your operation. There are four key steps to collecting the best sample from your field or plant. Let's dive in.



STEP #1

CREATING FIELD ZONES

No two acres in a field are the same. That's why we recommend creating zones within each field to accurately divide and assess the nutrient properties. As our soil and tissue analysis services continue to expand, providing consistent and accurate zones is important to managing your sample reports. The quality of information collected from the sampling program is determined by the quality of the sampling procedure and zone placement.

When setting zones, remember to choose quality locations. This means no end rows, compaction areas, wet holes, hilltops or old livestock yards. These zones should represent the majority of the field and be in a location that is accessible all season. The best way to identify your desired zones is by using BaselineRx or a soil map.

Baseline Map



When Bare Ground Maps are available, they will

provide the best zone selection resource. When looking at the map, determine the two most common zones. If there are multiple zones that have a similar represented area, choose the ones that will allow the greatest success of repeatability and sampling accuracy.

*Adjust sample point according to visual observation.





If Bare Ground Maps are unavailable, utilize **websoilsurvey.sc.egov.usda.gov/app**. This public countrywide database will allow you to access soil information for almost every location in the U.S. and determine the most prominent soil types in every field. After you have found your field's information, set the zones in a part of the field that correlates with the desired soil types.

*Adjust sample point according to visual observation.

STEP #2

DETERMINING THE PROPER GROWTH STAGE

Collecting tissue samples at the appropriate growth stage ensures you gather the desired nutrient data to make informed decisions for your operation throughout the growing season.



V1 - V5

In this stage, you are taking whole plant tissues. For the most accurate results, ensure there is no soil on the bottom of the plant. When pulling the sample, use a knife or box cutter to cut the plant slightly above the soil line. **Pull 15 to 20 samples** to ensure an adequate amount of tissue for the lab.

V6 - Vn

At the V6 stage you are sampling the topcollared leaf. Determine if the leaf is collared by pulling it straight up. If the worle comes out with the leaf that leaf was not collared. Once you identify your top collared leaf, pull straight up and then back down again and the leaf should seperate from the stalk. **Pull 15 to 20 samples** to ensure an adequate amount of tissue for the lab.

VT - R6

At the VT stage you are sampling the ear leaf. This leaf will be directly below the uppermost ear, where the silks are protruding from the stalk. Due to the translocation of nutrients in the plant, we will pull the ear leaf from here on out.

SOYBEANS

V3 - V6

In this stage, you are taking whole plant tissues. For the most accurate results, ensure there is no soil on the bottom of the plant. When pulling the sample, use a knife or box cutter to cut the plant slightly above the soil line. **Pull 15 to 20 samples** to ensure an adequate amount of tissue for the lab.



R1 - R6

In the reproductive stage you are switching to the fully developed leaves at the top of the plant. **Pull a minimum of 20 samples** to ensure an adequate amount of tissue for the lab.

STEP #3 COLLECTING QUALITY SAMPLES

SOIL SAMPLING TIPS

Collecting a quality soil sample is as easy as:

- Keep your sampling probe at a 90 degree angle to get a good soil profile in your sample.
- 2. Collect samples within the row and no more than 6" on either side of the row.
- **3.** Mark your probe for the desired sampling depth based on a 0-6" or 6-12" sample



STEP #4

WHICH ANALYSIS TEST DO I NEED?

SOIL ANALYSIS

- **Plant Available** Sometimes all you need is a solid reliable truck to get you around, that's this test. This test will get you key nitrogen and plant-available nutrients to hone in on your in-season application of nutrients.
- Indicator Complete This test is the Cadillac of soil tests. Having every indicator listed above for multiple nutrients, this test gets you almost everything you could want. With 80 metrics you will be able to dig deep into how your soil is behaving chemically and biologically.
- Indicator Max If the indicator complete is a Cadillac, this test is a Mercedes-Benz. It includes all the features of the Indicator Complete with the addition of total pool nutrients. This test allows growers to see their farms like never before.

TISSUE ANALYSIS

- **Plant Complete** Our Plant Complete analysis provides the fundamental nutrient evaluation for your plant, while still going the extra mile. With 13 nutrients included in the Plant Complete test, you will have no shortage of data to incorporate into your management plan.
- **Plant Complete Plus** This test is a deluxe upgrade, helping you maximize the potential of your crop by including key nutrients AND calibrating those nutrients based on time of day. The Plant Complete Plus analysis helps you get an accurate reading of nutrient levels regardless of when the sample is collected.
- Plant Complete Max (CORN ONLY) This corn only test is the ultimate tissue test. This test gives you insight into the FUTURE of your plant's nutrients levels, by measuring the nutrient storage within the mid rib. Learn what is coming AND going throughout your plant and forecast what nutrients to manage for the highest yield possible.