Recommendations and Guidelines for Soil N Testing

Soil nitrogen (N) testing helps growers meet regulatory requirements and optimize fertilizer use for crop health and environmental protection.

Step 1: Identify your goal: Why are you testing your soil N?

A. Ag Order reporting requirements
B. Adjusting fertilizer applications

Step 2: Decide how many tests you need:

If you answered A above: Each AGL will require a soil N test

If you answered B above: Determine the areas where you manage fertilizer differently (crop type, soil type, blocks, etc.) and use those areas as your sampling blocks

Step 3: Choose your testing method:

1. Soil Nitrate Quick Test Instructions (DIY)
2. Commercial soil testing laboratories (use accredited labs)

Step 4: Collect your soil samples

Sampling Guidelines

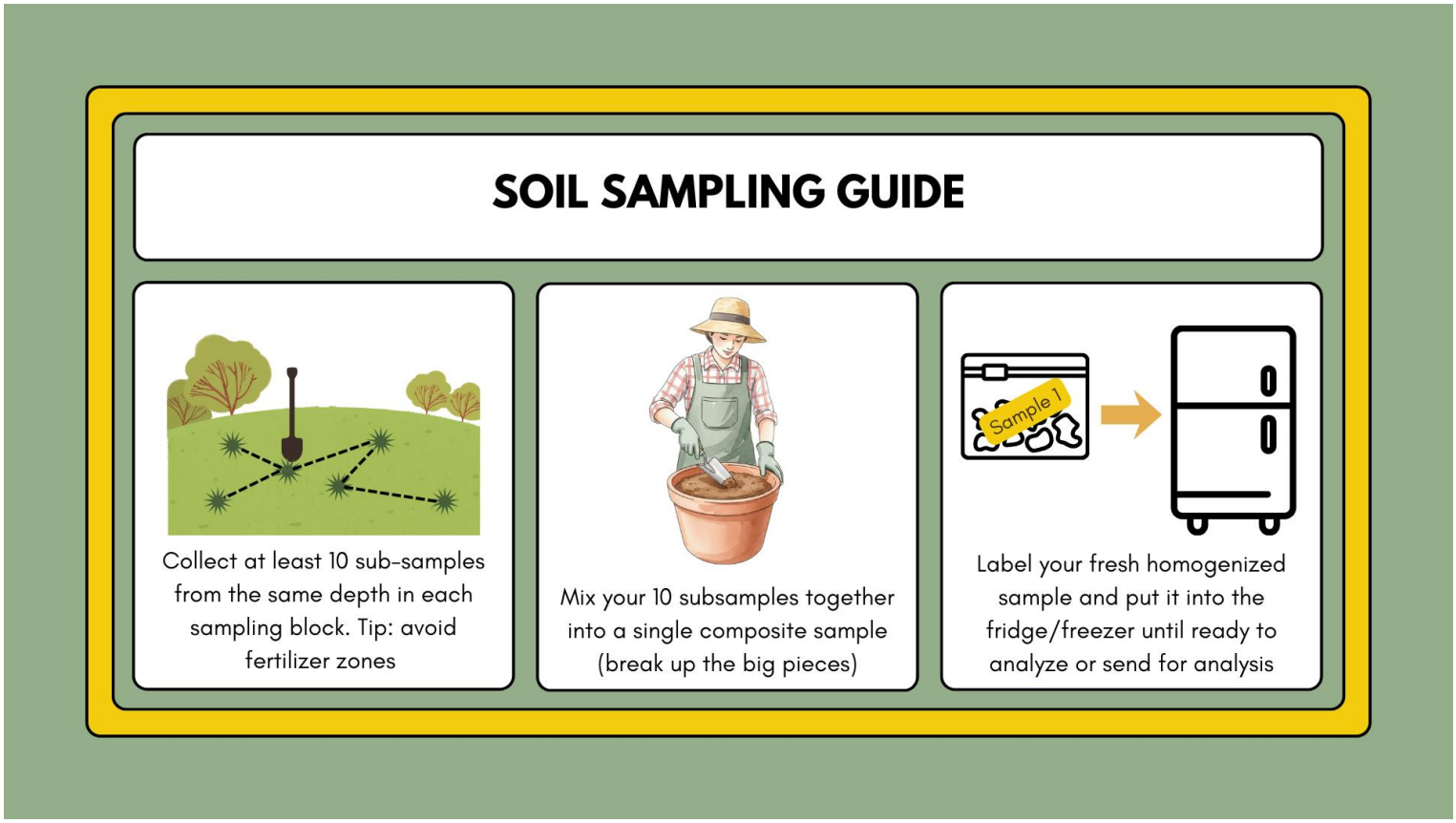
1. Collect samples the same day; refrigerate if not analyzing immediately.
2. Take **at least 10 subsamples** per sampling block.
3. Use a **zig-zag or X-pattern** across the field for representative sampling.
4. Keep sampling depth consistent; record it for later calculations.
5. Mix subsamples thoroughly; break up clumps.
6. Place ~2 cups of mixed soil in a labeled ziplock bag; refrigerate.

Best Practices:

- Always check lab submission requirements before shipping. Avoid: Leaving samples unrefrigerated for more than 4 hours.
- If analyzing via soil nitrate quick test, proceed with instructions provided once you are ready to analyze, mixing each sample one more time before analyzing.
- Avoid sampling directly from areas where fertilizer is applied (e.g., near fertigation lines), but ensure samples are taken within the crop's rooting zone for accurate results

Soil Sampling Checklist:

- ❑ Goal identified
- ❑ Sampling blocks defined
- ❑ Method chosen
- ❑ Samples collected & stored properly
- ❑ Analysis completed



Soil Sample Example

1. Homogenized from 10-subsamples
2. Clearly labeled
3. Sealed and immediately place in the refrigerator until ready to analyze or send for analysis

Best Practice: mix-again prior to analyzing