WATERS AGRICULTURAL LABORATORIES, INC.
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LAB FACTS

Corn Stalk Nitrate Test

Why Test For Corn Stalk Nitrates?

Nitrogen is one of the most valuable nutrients utilized in a corn crop's growing season, as well as a costly input. We always ask the questions, "Did we apply enough Nitrogen or too little nitrogen to reach our target yield?" We now offer an *End of Season Nitrate Test* to see if your management practices paid off.

Sampling Technique

The best time to sample is between one and three weeks after black layer formation in 80% of the kernels.

Instructions:

1. Sample the fields in a zig-zag pattern, taking stalks that represent the entire area of interest.
2. Remove the sheaths. (Do not sample diseased stalks, stalks damaged by hail or insects, or stalks with no ears or extremely small ears).
3. Cut 8 inch samples of stalk from 6 inches to 14 inches above the ground. Take 15 stalks per sample.
4. Place the samples in a paper bag, labeled with Customer Name, Address and Sample ID.
5. Send to lab for analysis.

Interpreting Test Results

Level	Stalk Nitrate (ppm)	Management Suggestions
LOW	0-250	High probability that N is deficient
MARGINAL	251-700	N Management should be re-evaluated
OPTIMAL	701-2000	Yields are not limited by N
EXCESS	> 2000	N Supply Greater than needed

If your results fall within the low or excess category, conduct a thorough evaluation of the nitrogen fertilization program to determine where improvements can be made. Weather conditions can affect even the best programs, so it is beneficial to test for Corn Stalk Nitrates to determine if Nitrogen issues are due to management issues or environmental conditions.