



## **Sampling Instructions**

### **Collecting Corn Stalks**

#### **for Nitrate Stalk Test.**

Measure up 14 inches from crown

than measure down 8 inches

and cut leaving the lower 6 inches behind.

Collect 15 stalks

## **Nitrate Interpretation**

Low -less than 450 ppm (deficient)

Optimal- 450 – 2000 ppm( Non limiting)

Excessive - 2000 ppm (Uptake greater than need)

# Nitrate Stalk Tests

- University of Purdue recommends an 8 inch stalk section 6 inches above ground.
- Avoid sampling diseased stalks.
- Unusually stunted plants
- Hail damaged or insect damaged stalks.
- Stalks that are lodged or insect damaged.
- This is a post-mortem.

# Stalk Test

- Dale Cowan says send your samples we will take your money.
- Knowing that you used too little or too much N from Fertilizer or manure after the fact has little to do with decisions for next year.
- While you are collecting the stalks make notes for the producer of how many, diseased, broken stalks are affected by corn borer etc. take soil samples so you can check for potassium levels then throw the stalk samples away.
- Sit with the farmer and discuss the merits of variety selection and reduce the population of diseased plants for another year by reviewing variety performance and cultural practices.

# Summary

- The exercise of post-mortem analysis prior to harvest is an excellent opportunity to assess variety performance in terms of disease and stand-ability.
- Avoiding these plants to collect healthy stalks for nitrate analysis is less likely to improve our bottom lines.
- The nitrate soil test in the spring (PSNT) will make you more money and more often than not predicts the correct rate of nitrogen. The correct rate of N is more important at the beginning of the season not the end.
- Sample if you will, we a have the testing protocol, I would rather see the money spent on soil testing to make sure P, K, Mg pH etc are optimum.