



SUMMARY

PETIOLE TESTING FOR COTTON ** A PROFESSIONAL TECHNICAL SERVICE **

- WHAT ? - To measure the effectiveness of your fertilizer program under your management and soil conditions. FOR MAXIMUM ECONOMIC YIELDS – DRYLAND-FLOOD-PIVOT-DRIP
- WHY ? - To start fruiting early – Expose leaves to sunlight all season.
Set maximum number of bolls in minimum time – load fruiting branches = earlier harvest
Terminate growth, speed maturity and harvest EARLY
- HOW ? - A systematic observation, sampling and testing program on a regular schedule during the growing season. – CROP LOGGING PLANT NUTRIENTS to allow efficient water use.
- Determine NO₃ & PO₄ in the sap of plants at weekly intervals to supply future growth.
 - Determine & Supply essential minerals and micros at critical times for best water use or utilization plus non traditional products: Humus – Hormones/enzymes - Biologicals.
 - Recommendations are made for the proper amounts of essential nutrients to be available when the cotton plant's requirements are critical before damage occurs and to prevent yield & nutrient losses. **Usually 7-21 days to correct before sap levels become visible deficiencies.**
 - Consultations and interpretations by qualified/ experienced field men & agronomists for most crops. Nutrients in plant sap can be adjusted in soil, water and/or foliar with adequate knowledge & experience.

TAKE SAMPLES PROPERLY -- GENERAL RULE

- With original sample send all info on submittal form (up to 6 digit ID – limit 6 fields or less/ report) arrange alphabetically & numerically for computer reporting.
- with small plants (less than 6") pull up the entire plant (10-15) thoroughly wash off all soil.
- older plants start at growing tip and go down to the MOST RECENT FULLY GROWN MATURE LEAF (#4,5 or 6 - depends on starting leaf), keep petiole (stem), detach and discard leaf (include 3-4 typical leaves in sample bag for lab observation).
- HOW MANY - Cotton petioles 25 if large > 3 1/2" and 35 if very small < 2" (only 1 per row)
- Take samples diagonal cross rows in a representative area-skip in uneven row pattern 3-5-etc.
- immediately rinse all soil, dust or spray off samples, use distilled water if available, take a bottle to the field with you. Any water is better than leaving soil, dust or sweat on plants.
- place in clean marked paper bag (NOT PLASTIC), samples must be dried to analyze. (Dry in bags as much as possible before shipping--dash of vehicle-hair dryer-AC exhaust)
- prevent dust or any foreign material from contaminating sample.
- be sure that sample is representative of the majority of the field or the problem area to be analyzed. (TAKE ONLY FROM SAME UNIFORM AREA EACH TIME.) Do not mix good & bad. Use GPS for sampling to avoid field variations between sample dates.
- Each time every sample needs observations of plant & field conditions for proper standards

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