

In-Season Plant-K Determination

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Corn sap extraction using garlic press

Recently, soil tests to predict K^+ availability for plants have been challenged.

Regions where K^+ was considered non-limiting factor for plant growth, nowadays, are facing potassium deficiency problems.

Weather, clay minerals, crop, and yield potential are few of the variables challenging soil-K tests and K-recommendations.



Cotton sap extraction using syringe
 K^+ Cardy Ion Meter – readings



K^+ analysis in a corn field

K^+ Cardy Ion Meter

- Great correlation with plant tissue analysis (cotton 92%).
- Accurate, simple, quick, and cheap method to determine potassium in plants.



Cotton + K^+ and - K^+

OBJECTIVES

- Evaluate plant-sap-K during the growing season and correlate plant K-content with soil test and plant yield response to K.
- Use Cardy Ion Meter to evaluate the efficiency of soil tests to predict plant available K.
- Predict yield potential using plant- K^+ status.
- Determine K-deficiency before visual symptoms.