



Potassium Deficient Leaves or "Finished" Leaves ?

A common practice in today's Ag environment is the application of K as a soil or foliar application in late season due to the field identification of Potash deficient leaves in the lower portion of the plant.

It is important to remember that a leaf on any plant will grow, mature and then 'burn out'. This is the point at which the leaf becomes 'used up' or, for lack of a better term, **"finished"**.

Cotton

In cotton, a leaf will typically last for some 55 to 58 days before being "finished". When this occurs, the leaf takes on an appearance that is similar, if not identical, to that of a typical K deficiency. This is because K is the first thing to go in typical senescence (maturing).

The **'safety net'** for making the distinction between a K deficiency and senescence, is to count internodes to determine the age of the leaf that is being observed. Cotton will typically set a new node on the main stalk every 3 to 5 days, and will set a node on a fruiting branch every 5 to 7 days. We can use three (3) and five (5) days respectively to determine the approximate age of the leaf that is showing the K deficiency. If it is determined that the leaf is older than 50 days, it is probably senescence that we are observing. **NOTE:** In Cotton, always use three (3) days per node on the stalk and five (5) days on the branch. The count should be made from the terminal at the top, down the stalk, and out the branch to the leaf.

Example: 14 nodes down to the branch X 3
3 nodes out to the leaf on the branch X 5= 42 days
= 15 days
= 77 days "Finished Leaf"Total days (age of leaf)= 77 days "Finished Leaf"



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