

STOLLER ENTERPRISES, INC.

...World leader in crop nutrition...

ROOTS ... ROOTS ... ROOTS WHERE'S THE ACTION?

Plants grow from the roots ... UP!!!

Plants die from the roots ... UP!!!

The roots are the brain of the plant. They determine the kind and amount of different nutrients that plants use. They determine the amount of water that the plant receives. More importantly, they control the hormone balance in the plant.

In return, roots receive food from the leaves, so that they can grow. ROOTS GET THEIR FOOD FROM THE LEAVES.

Now, where does all of this action take place in the roots? In the **new** root hair tissue ... within the tip 1/4" of **new** root hair growth.

If the **new** root tissue is over 10 days old, it is old tissue ... no longer **new**. After root tissue is 10 days old, it no longer absorbs much fertilizer or makes many hormones.

Root hair growth must be continuous ... during the whole life of the plant. Remember, old root growth is not functional.

What causes root growth?

- 1. The proper ratio of CYK : IAA. These are two different hormones that are made in the roots and plant.
- 2. The adequate supply of food from the leaves that roots need for growth.

The most difficult period to keep roots actively growing is during the reproductive period ... seed-filling period.

How can we tell if new root growth has stopped or being reduced?

Look for yellow or dead leaves on the bottom of the plant. If bottom leaves are dying, roots are no longer producing adequate new growth.

The best way to keep new root hair growing is to apply STIMULATE (hormones) in a sidedress application ... with nitrogen.

Rate of Application: 5 oz. to 7 oz. per acre

The preferred nitrogen source is Nitro Plus. It will immediately start new root hair growth.

This is the Language Of The Plant.