Why Do Tall Plants Have Less Yield?

We have all seen this ...

• Taller soybean plants have fewer pods.

• Taller cotton plants have fewer bolls.

• Fast growing trees have fewer fruit.

• Rapidly growing asparagus ferns produce lower spear yields.

• Rapidly growing grain crops produce fewer seeds.

• Very tall corn plants (same variety) have less yields than smaller stalks with larger diameter.

Why?

When plants make vigorous top growth, the plants have an unbalanced hormone system.

Gibberelllic Acid at the growing point dominates plant growth. This happens because of plant stress.

This causes the auxins that rapidly move from the growing point ... down toward the roots.

PHOTOSYNTHATES (food) MOVE FROM THE LEAVES IN THE OPPOSITE DIRECTION TO AUXIN MOVEMENT.

The growing points (top growth) receive more food. The roots receive less food. As the plant grows more vigorous, the roots become weaker.

The plants will then senesce earlier (early dying).

Rapidly growing plants will usually die earlier.

The highest yielding plants will always be ready for harvest, but the stalks or stems will always be green. The plant does not die.

Every day that the plant lives during seed or pod filling ... yields will increase about 4% ... per day.

How can we slow down top growth and keep plants alive?

1. Treat your seed with 4 oz./cwt. of Stimulate

or

Apply 6 oz./acre of Stimulate in the seed furrow at planting.

2. Use Nitro Plus 18

18-0-0-5(Ca)-1 1/2(Mg)-0.1(B)

as your nitrogen source.

3. Add 6 oz./acre of Stimulate in the side dress nitrogen.

Middle East Office: 9, El Shahid / Abdel Moniem Ismail St., Suite # 1, Golf Area, Heliopolis, Cairo, Egypt.
Tel & Fax: (+ 202) 4147599 – 4194265 - 4153410 - E-mail: a.elshiati@stollerme.com ♦ www.stollerusa.com ♦ www.stollerme.com