

# The Language of the Plant - Part II

*Jerry Stoller, President & CEO of the Stoller Group, Inc.*

## Epigenetics

There is a new word that growers, consultants, and research professionals are going to have to add to their vocabulary. It is called:

EPIGENETICS. The new word has just been recently recognized by plant physiologists. The implications are that when you change the expression of a plant cell, this expression is passed on to all daughter cells, grand daughter cells, etc. In other



words, when you change the genetic expression of a cell it is passed on to all cells for the rest of the plants life.

An example of epigenetics could possibly be the earlier planting of corn in cold soil. The corn plant grows with shorter internodes than the same variety that is planted in warmer soil. The yield is generally higher. All farmers know that the earlier that they plant, the higher the potential yield will be.

Evidently, epigenetics is easier to instill in plant cells when the plant is young. This is the reason why seed treatments can have such a profound effect upon crop yields. The epigenetic effect on the young plant, as it

germinates, may be easier to obtain than waiting to foliar spray a plant when it gets older.

Stoller's research at various Universities consistently show that seed treatment will return the greatest dollar value per dollar invested of any treatment, when trying to enhance yields of any crop. This applies to corn, soybeans, wheat, cotton, canola and other crops. In fact, seed treatment with

Stoller's Bio-Forge® can be picked up in the color of the corn grain, the germination of the corn seed, and the vigorous plant growth when the seed is planted compared against the seed that has not been treated with Bio-Forge the previous year.

At the present time, most growers are only realizing 30 to 35 per cent



*Jerry Stoller is the President and CEO of the Stoller Group. In agri-business for over 40 years, Stoller is dedicated to helping producers enhance crops by maximizing the genetic expression of plants.*

of the potential yield that the DNA in each plant cell contains. If one could greatly increase expression of the DNA in the plant cell, yield increase may be very substantial.

“...growers are only realizing 30 to 35 per cent of the potential yield ...each plant cell contains.”

When referring to epigenetics, we are merely referring to the plants to give a greater expression to the DNA that is contained from the mother and father genetics of this single plant. You are going to read more and more about the per-

manent change that occurs in the plant when it is treated in order to greater express the power of each cell. This power will steadily pass on to the other cells in the plant for the rest of the plants life. You are going to read more and more about it in the future.

Stoller refers to this effect as "Increasing the power of the plants". ❖



Stoller, headquartered in Houston, Texas, is actively researching and developing plant performance products in more than 50 countries. For more information, email: [solutions@cangrow.com](mailto:solutions@cangrow.com)