Effects of Temperature on Growing Crops

The effects of temperature during the crop growing season may be the most important factor which controls our yields.

The most productive temperatures for crop growth and quality are during temperatures that are above 68ºF (21ºC) and below 86ºF (30ºC). Why is this so?

In order for plants to have maximum growth, they must have the ability to make rapid cell division. When temperatures are above the above optimal and below the lowest temperatures above, the plants do not make sufficient Auxins for rapid cell division. This limits plant growth and fruit growth.

If the temperatures are below the optimal range, additional Auxins may be foliar applied to the plant. If temperatures are above the optimal, Auxins can be foliar applied to the plant.

The above will assure maximum cell division and more normal plant growth.

Stimulate can be applied to the crops every 14 days when the temperatures are below or above the optimal growing conditions. It can be combined with any insecticide, fungicide, or other applications, which are normally carried on through the season.

If one considers the above, it is very possible to see the effects of temperatures that are outside this optimal range. Most physiological disorders of fruit and small fruit size occur when the temperatures are outside this optimal range in the period of pollination and 3 weeks afterwards. In addition, these temperatures are very important in Determining the genetic potential when the plant is small or preceding the flowering period.