

Summer Tomato Production Using Fruit-Setting Hormones

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Introduction

Fruit setting in tomatoes suffers when temperatures exceed 30°C. Under such hot conditions, application of hormones (growth regulators) with trade names such as Tomatotone® or Tomatolan® can promote fruit setting. This can lead to more fruits, larger fruits, and higher yields. Similar benefits can be had even under favorable growing conditions (15–25°C).

Directions

Prepare the growth regulator solution according to the instructions on the label. If commercial products are not available, mix 15–75 mg of 4-chlorophenoxy acetic acid (CPA) per liter of distilled water. Use the higher amount for higher temperatures.

Pour the solution into a spray bottle. Over the nozzle, fit a paper cup large enough to enclose the flower cluster.

Treat a cluster when 3–5 of its flowers have opened (see photo). Fit the cup over the cluster and apply **one squirt**. Direct the spray onto the **green backside of the flowers** (the *calyx*). Spraying on sunny days in the afternoon after 3 pm will yield best results.

Treat each cluster only once since multiple applications to the same cluster can cause fruit deformities. **Avoid spraying the foliage** as it can cause deformities to the leaves.



Treating flower cluster with hormone

Precautions

Tomato cultivars show varying responses to growth regulators. To be safe, you should first test the chemical on a few plants. A small percentage of fruits of some cultivars are sometimes deformed.

Heat tolerant varieties generally respond best to growth regulators.

Treated flowers will produce seedless fruits. Do not use these chemicals for tomato seed crops.

Once diluted, the growth regulator is best used within one week. Prepared solutions will last a maximum of four weeks under refrigeration.

Disclaimer

Mention of products by trade name does not imply endorsement of or discrimination against such products.