Seeds of India

3G Branch Cutting

A simple method for exponential produce growth

Introduction

The 3G (Third Generation) cutting method is a fairly new technique used to improve produce yield in various species of plants. The technique involves pruning first and second generation branches in order to change the male:female flower ratio. Male flowers are used to pollinate the female flowers, and the female flowers are the organ of the plant that, once pollinated, grows the produce. The presence of more male flowers is not necessarily beneficial since they are not the ones that produce the vegetables. They are simply the pollinators, and there is nothing stopping the male flower from pollinating more than one

female flower. So by increasing the ratio of female flowers, you create more opportunities for precious veggies to grow on the plant.

Species

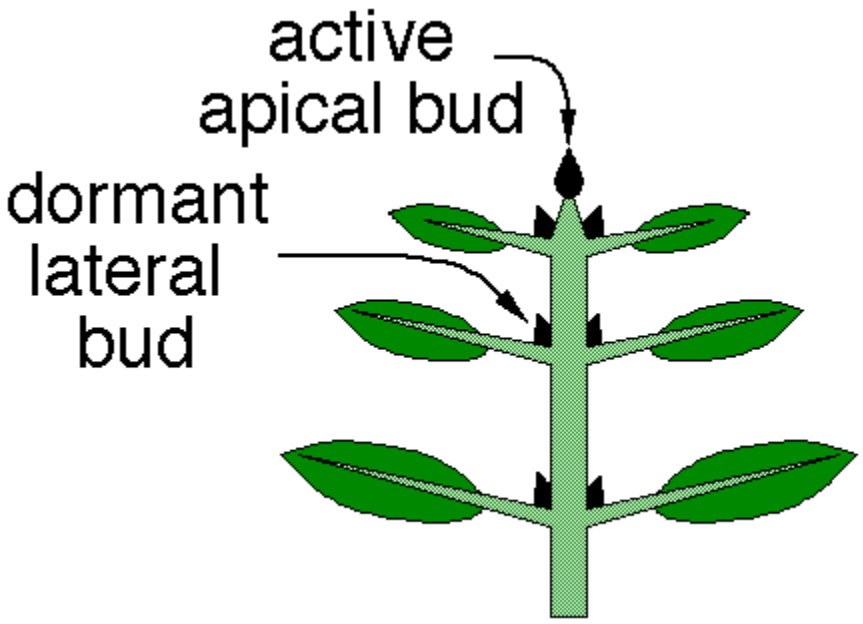
The following Seeds of India vegetable plants have shown to be responsive to the 3G cutting technique: Bottlegourd, RIdgegourd, Tomato, Okra,Cucumber, Pumpkin, Eggplant,Chili and Ash Gourd.

Tell me already! How do I perform 3G cutting?!

The first and second generation branches are pruned to deprive them of apical dominance which leads to an increased production in third generation branches. 3rd generation branches have been observed to produce a higher ratio of female flowers.

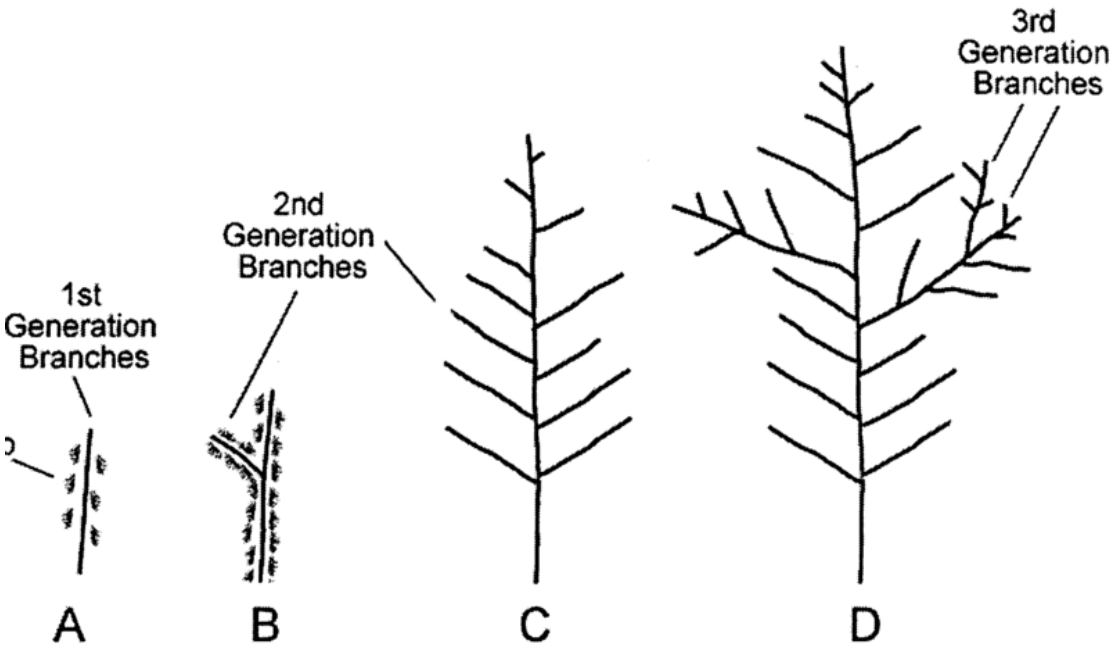
Slowdown, slowdown--Apical, what now?

Apical dominance is the observed natural phenomenon where the main stem of a plant grows stronger than the side stems. When this occurs the dormant lateral buds are stimulated to grow in a dominant way. This will stimulate the plant to create more third generation branches because the normally dominant branches have been removed.



So branches have generations? Like a family tree?

Well, sort of. Visually, the structure of the stems are akin to that of a family tree. Use the image below to help you visualize the branch structure as you follow the procedure.



Now that we are caught up on jargon, let's get to it.

1. Allow the plant to grow to a height of 6-8 ft.
2. Pinch off any side branches that start before the plant has 5 leaves(this is important for the strength of the plant).
3. Once the plant meets the above criteria, the growth of the main stem should be pinched.
4. The side branches that develop(2G) due to the dominance shift should be allowed to grow until they have 12 leaves on them (this number was determined because it supports optimal female flower growth).
5. After the side branches have the requisite number of leaves, all of the growing stems on the second generation branches should be pruned.
6. After these growing tips are removed the third generation (3G) branches will develop.

7. After a few days, flowering will begin. It has been observed that the 1G and 2G branches will produce male flowers. The 3G branches will have a large number of female flowers.
8. Some farmers have seen a male:female ratio swing from 14:1 to 1:2 from adopting this method.

This technique is great for increasing the yield on your vegetable plants. It is a useful tip for farmers that want to increase profits, but also for the home gardener who wants to get the most out of their small garden plot.

We recently studied about this technique and wanted to share it with our Seeds of India family. There are some resources online that document this process, which we used to compile this article, as well as some videos. We will be experimenting with this method in our test gardens this year. We will document the process and share our experience. Stay tuned for more great gardening tips and videos throughout the year!

Caution:

Ensure to look out for fungus growth on trimmed tips. Treat with fungicide, if needed.

This type of pruning can also increase the bushiness of plants. It is important to prune away the excessive bushiness from the plant, because this may hinder the size of the fruit the plant produces through restriction of sunlight and space.