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Role of 3G cutting in Vegetable crops

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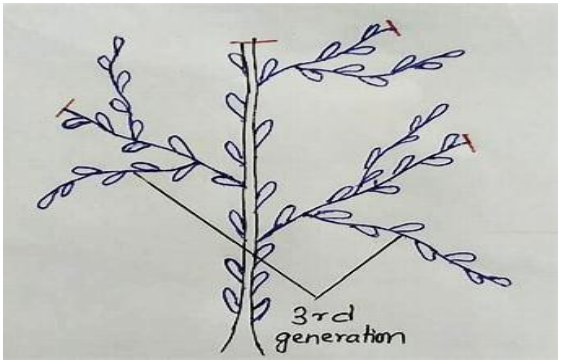
Abstract

Cucurbits are a group of fruits and vegetables that include bottle, ridge, bitter, spherical, pumpkin, cucumber, and gourds. The problem of low fruit set and fruit sets is getting more and more prevalent among farmers nowadays. The primary cause of this issue is the widespread use of chemical pesticides, which has caused a sharp decrease in helpful insects and other pollinators. Vegetable farmers will gain a deeper understanding of the correct way to perform 3G cutting in cucurbit plants after reading this article.

Introduction

In 3G cutting, three branches, or as many as third generation (tertiary) branches, are referred to as 3G. Because it triples or quadruples yield, agriculture uses it. Any crop can be referred to as third generation, or 3G for short. "3G cutting" is a technique used to promote the growth of third generation (tertiary) branches by eliminating first and second generation branches. A "first generation branch" is the single main branch that continues to grow after a seed germinates.

Another branch is the second generation branch, which is a subset of the main branch. In addition, a branch from the second generation is called a branch from the third generation.



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The ratio of male to female flowers in the first and second generation branches is found to be much higher (14:1). This deceives gardeners into believing that there is a lot of flowering when, in reality, there is very little fruit set. The third generation branch flushes with more female flowers than the first and second generation branches did. High fruit set per branch is therefore seen in plants with plenty of female flowers and sufficient pollination. By doing this, farmers are able to grow more branches or plants per unit of time. Therefore, maintaining the third generation branch ought to remain the top priority.underutilized horticultural crops because they have been consumed for many years. One such strategy is to investigate unconventional approaches, such as expanding the use of UUCs as future potential crops since they are adaptable to a variety of agro ecologies, are highly nutritious, and provide more opportunities in low-input

3G Cutting's goals

Preserving the proper quantitative relationship between male and female flowers on the plant is the main objective of 3G cutting, which enables the greatest amount to be harvested and hence increases crop yield tenfold.

The 3G Cutting Principle

Fruit is produced by pistillate blooms, as is common knowledge. This suggests that pistillate flowers are the most crucial for fruit development, even though male flowers are also required. This suggests that if a plant develops more pistillate flowers, it will be able to yield more fruits.

The 3G Cutting Process

As all of us know, 3G cutting is one of the most important intercultural practices that need to be done in order to boost yield when producing cucurbits and other vegetables. When doing 3G cutting, the following procedures must be followed:

- It's critical to provide the main branch from the sowed seed the support and care it requires to grow.
- Cut off the tip piece, about 4-5 inches in length, when the main branch reaches a height of 7-8 fit (gourds) or 5-6 fit (cucumber and pumpkin).
- To promote the growth of the secondary branch, the tip portion of the branch should be removed in the same way as the apical portion when it reaches a height of two to three fits. This promotes the growth of the tertiary, or third-generation, branch.
- It is now acceptable to provide the necessary nutritional fertilization and care for the third generation branch to grow.
- After tip trimming, the plant's vegetative phase lengthens, which

explains why it takes longer for it to bear fruit and flowers.

- Losses may occur from 3G cutting if technical competency is not met.
- The removed region is prone to disease and fungal infestation. As a result, the necessary precautions must be done. 3G cutting is generally seen by farmers as a laborious task.

Plants That Work Well with 3G Cutting

In the family Cucurbitaceous, 3G cutting is a popular and useful method. However, it can also be used on other types of crops.

- The following is a list of crops that gain from 3G cutting:
  - ✓ Tomato
  - ✓ Ridge Gourd
  - ✓ Pumpkin
  - ✓ Lady finger.
  - ✓ Cucumber
  - ✓ Brinjal
  - ✓ Bottle Gourd

Conclusion

Thus, the entire essay has educated us on the tremendous potential of 3G cutting in plants. Having knowledge of this system is crucial for farmers to boost output and earnings. Farmers only need to increase total crop productivity. Crop productivity can be raised overall by using this technique rather than chemical fertilizers.

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