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## A Simple Technique for Crop Regularization in Guava: Twisting Technique

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### Introduction

In Bihar's hot and humid climate, the guava (*Psidium guajava* L., Myrtaceae) flowers twice, once in the spring (*Ambe Bahar*) and once in the rainy season (*Mrig Bahar*). gives the winter crop as opposed to the rainy crop. blooms twice, in the spring (March–April) and the rainy season (July–August), which are known as and respectively. The spring flowering season is less strong since the flushing, flowering, and fruiting processes have already depleted the plant's food supplies. Considering the fruit quality and better market price of winter guava from in massage (twisting) technique of guava, after canopy management through pruning, the new branches about 4-5 feet high are twisted in a special technique and from every leaf node of twigs numerous flowers emerge. After 7 months of massage one can harvest bumper crop. Thus, through this technique one can get a good harvest as per one's wish by adopting the massage technique at the right time. Many farmers are now involved, with about 200 ha. of area using his approach and making more money.

### Twisting Technique for crop regulation

Thus, substantial crop production occurs during the kharif season (August to October), whereas light crop production occurs throughout the winter (December to February). Winter crops have a modest output volume, but they are highly valued on the market across India. Guava is a crop that can be regulated, meaning that a guava plant can be made to produce more by ensuring that two conditions are met: first, it must produce a lot of shoots during the summer (May–June), when it bears flowers on newly emerging lateral shoots, and second, it must prevent the exhaustion of its food supply by doing so in order to

encourage flowering in newly emerged summer shoots. In this context, branch bending with twisting and pruning could be of great use. Both cultural practises are known to encourage the growth of lateral shoots by reducing apical dominance and reawakening dormant buds on the branch.

### Twisting Technique

After canopy management by pruning, the new branches are twisted in a specific way in the twisting (massage) technique of the guava, and multiple blooms appear from each leaf node of the twigs. A large crop of massage can be harvested after seven months. By using the massage method at the appropriate moment, one can therefore use this approach to obtain a good harvest as desired.

### Technology



**Demonstration of Twisting Technique of Guava,**



### Demonstration of Twisting Technique of Guava



**View of Guava Field with Twisting Technique**

#### **In General Practices Uses in Crop regulation Technique**

Here are some common practices used for guava crop regulation:

- ✚ **Pruning:** Consistent pruning encourages the growth of new fruit-bearing shoots by eliminating damaged and dead branches. Pruning can also assist in lowering the amount of energy used by the plant to support unneeded vegetative growth.
- ✚ **Girdling:** This is the removal of a small section of bark from a branch or tree trunk. By preventing assimilates from moving downhill and causing them to collect in the area above the girdle, girdling increases fruit set and yield.
- ✚ **Nutrient Management:** Balanced nutrition plays a vital role in crop regulation. Over-fertilization can lead to excessive vegetative growth at the expense of reproductive growth. A balanced supply of major nutrients (N, P, K) as well as micronutrients is essential.
- ✚ **Chemical Growth Regulators:** Plant growth regulators like paclobutrazol can be used to regulate the vegetative and reproductive growth in guava. They inhibit vegetative growth and promote flowering and fruiting.
- ✚ **Water Management:** Over-irrigation can promote excessive vegetative growth. On the other hand, water stress at the time of flowering can lead to flower drop. It's essential to maintain a balance.

- ✚ **Control of Pests and Diseases:** A healthy plant is more likely to have a balanced vegetative and reproductive growth. Regular monitoring and management of pests and diseases are crucial.
- ✚ **Thinning:** In cases where there is excessive fruit set, it's beneficial to manually thin out the fruits. This ensures that the remaining fruits get enough nutrients and grow to a desirable size and quality.
- ✚ **Harvesting:** Timely harvesting ensures that the plant doesn't expend energy on over-ripened fruits. This energy can instead be used for the next fruiting cycle.
- ✚ **Canopy Management:** Keeping the tree at a manageable height and shape can aid in achieving a balance between vegetative and reproductive growth. It also helps in improving light distribution throughout the tree, which is beneficial for fruit development.

### Conclusion

In district of Kishanganj, Bihar summer pruning, branch bending with twisting had shown positive influence on shoot growth, flowering intensity, yield, and fruit quality. Hence, it may be concluded that under hot and humid climate of eastern India, branch bending could be adopted as a technology to regulate cropping in guava.