

## Effect of Pruning and Paclobutrazol on Flowering of *Jasminum sambac*

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*Jasminum sambac* is grown worldwide for the extraction of jasmine essential oil from flower buds. This study was conducted to increase the flower bud production. Effect of tip pruning (T1), pruning 15 cm above the ground (hard pruning) (T2), pruning 15 cm above the ground (hard pruning) followed by tip pruning (T3), and pruning the excess lengthy branches followed by 230 ppm paclobutrazol application (T4) or without paclobutrazol application (T5) on flowering and branching of *J. sambac* was investigated using 2.5 years old plants. As jasmine flowers are produced at the terminals of the shoots, by increasing the number of secondary shoots, flower bud yield can be increased. There is a significant difference of cumulative number of secondary shoots per primary shoot in hard pruning (T2), ( $P < 0.05$ ) and it changed at an increasing rate over the time. Pruning of the excess lengthy branches followed by the application of 230 ppm paclobutrazol (T4), showed the best results with regards to the cumulative number and cumulative weight of flower buds ( $P < 0.05$ ). However, the application of paclobutrazol (T4), reduced the diameter of the flower buds. Changes in the yield parameters were observed within 1-3 weeks of paclobutrazol application. Overall, 6-9 weeks after tip pruning (T1), hard pruning (T2) and hard pruning followed by tip pruning (T3), produced better yields. Hard pruning (T2) is effective for increasing the number of secondary shoots, while pruning of the lengthy branches followed by paclobutrazol application (T4) increases the flower yield. Pruning of the excessively lengthy branches (T5) was not an effective practice. The combination of hard pruning and paclobutrazol is best for increasing yield.

**Keywords:** Hard pruning, Lengthy branches, Paclobutrazol, Tip pruning

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