

Uniconazole on floral induction of mango 'Tommy Atkins' in the São Francisco River Valley region, Brazil

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One of the main problems of the mango crop for almost all varieties is the irregular production. To minimize this problem uniconazole was tested, 0.25 g a.i. / linear meter of canopy diameter, and its effects were compared to paclobutrazol (1.0 g a.i. / meter of canopy diameter). Both were applied to the soil, traditional use for mango floral induction. These flowering inducers were tested in an orchard of mango 'Tommy Atkins'.

The evaluation of the growth of branches was done every 30 days after products application and as a basis a maximum period of 90 days was set. The flowering percentage was registered at 130 days. The treatments started after the second vegetative flush emission, subsequent to the production pruning and the applications were made via soil, using 02 liters of water per plant. The dormancy-breaking of the flower bud was done through five applications of ammonium nitrate (NH_4NO_3) via foliar spraying at a concentration of 0.75%, with intervals of seven days, starting in the period of 95 to 100 days after the first spraying of the treatments. For each plant, 10 branches were marked, and their lengths were evaluated at the second vegetative flush.

It was found that both the PBZ, as UCZ inhibited significantly the development of vegetative branches compared to the control. Similarly, considering the percentage of flowering, it was registered that both the PBZ as the UCZ showed identical rates of flowering. Based on results, it can be concluded that PBZ and UCZ showed an inhibition in vegetative development in mango cv. Tommy Atkins, and promoted high levels of flowering. Thus, new tests are being carried out in other farms to confirm these findings, for different cultivars and seasons.