

Research of Atemoya Orchard Windproof Cultivation and Post Disaster Restoration Technology

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Abstract

Object of this study is to explore that affect of pruning mode, wind facilities on reduce wind damage before the wind damage and building resume production technology after the wind damage of atemoya, to reduce farmers disaster losses. In atemoya wind experiment the result was showed, tree patterns of horizontal trellis training mode with the best windbreak affect, had the lowest rate of branches broken branches; orchard setting windbreak net could reduce the branch broken rate, the scope of protection of windproof net height of 7 times the distance. The most serious injury was fruit bruises in the typhoon, in the strong wind coming prior to removal of surrounding foliage and fruit jacketed set fruit net treatments had a protective effect to fruit, could significantly reduce the fruit injured rate. Atemoya post disaster restoration experiment results were showed, the treatment of night lighting and pruning on September 22nd and October 11th, the blossom rate respectively reach 82.9% and 72.7% were significantly higher than the control treatment (control group 42.8% and 24%); treatment group fruits were harvested in April, average single fruit weight were 717.2g and 618.5g, were Significantly larger than the control group (control group, harvested in March, single fruit weight was 547.8 g). 2013 experiment results with the 2012 results were similar. But the treatment of lighting and pruning on October 21, that fruit development period coincided with the low temperature in winter, fruit growth arrest and had high proportion of deformed fruit, fruit does not have commercial value. The results was indicate, when the typhoon before early October, we can promote atemoya blossom and fruiting again after wind disaster by pruning and night light treatments, to achieve rapid restoration goals.

Keywords: Atemoya, Windproof culture, Post-disaster repopulation, Typhoon, Vertical trellis training system

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