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Two-cluster Tomatoes Require Less Pesticide per 1000-kg of Salable Fruit than Eight-cluster Tomatoes

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Tomatoes were grown in plastic-covered rainshelters at a cool, moist 1300-m elevation. Plants were placed in aluminum beverage cans filled with growing medium and immersed in a 0.6-m wide tank containing 5 cm of non-circulating nutrient solution. Tomatoes were pruned such that only two, four, or eight clusters were harvested. Two-cluster 'Vendor' tomatoes yielded 49% and 73% more salable tomatoes per day than eight-cluster tomatoes in two experiments, respectively. Two-cluster 'Lenor' tomatoes yielded 47% and 92% more salable tomatoes per day than eight-cluster tomatoes in two experiments, respectively. Two-cluster tomatoes required 347 g of pesticide to produce 1000 kg of salable fruit compared to 708 g pesticide for eight-cluster tomatoes in the first experiment. Fungal pressure increased in the second tomato experiment such that the two-cluster tomatoes required 1112 g of pesticide to produce 1000 kg of salable fruit, whereas the eight-cluster tomatoes required 2075 g of pesticide. Most of the pesticides applied were fungicides.