Technical Data Report
Multicolor Ecological Agriculture Group Inc.

Effects of Multicolor Crop on Production of Hamlin Oranges

Objective

The objective of this study was to determine the effects of Multicolor Crop on production of Hamlin oranges.

Materials and Methods

Field trials were conducted on orange (*Citrus sinensis* L. cv. Hamlin) in a commercial orchard at Wauchula, Florida, USA for three years. Treatments included 1) Control and 2) Multicolor Crop at 600 ml/ha (8 fl oz/acre). Trial began in early spring. Each block consisted of 4 trees with 8.5 m (28 ft) row spacing and 5.2 m (17 ft) between the trees. The experimental row was alternated by an untreated buffer row to minimize any cross contamination of treatments during foliar applications. The soil type was Pamona fine sand and pH was 6.6. Multicolor Crop was applied three times at beginning of bloom, fruit set and color change each year using Durand Wayland sprayer calibrated to apply 250 gal/acre of spray mix. Multicolor Crop was obtained from Multicolor Ecological Agriculture Group Inc., USA. The study design was completely randomized block with eight replications. Cultural practices followed local procedures and were the same for treated and untreated plots. Fruits were picked from two trees in each plot. Fruit yield was measured in number of boxes per plot and then expressed in the number of boxes per tree.

Results

Applications of Multicolor Crop at 600 ml/ha (8 fl oz/acre) to Hamlin oranges at beginning of bloom, fruit set, and color change improved yields by 1.1, 1.6, and 1.5 box/tree over control trees with a multiyear average of 1.4 box/tree (Table 1). Significantly higher yields were recorded with Multicolor Crop applications in the second year of conducting the experiment compared to the untreated control.

Table 1. Influence of Multicolor Crop on orange yields in Florida, USA.

Treatment	Yield of oranges (boxes/tree)		
	Year 1	Year 2	Year 3
Control	6.05	8.9 b*	7.5
Multicolor Crop at 600 ml/ha (8 fl oz/acre) at beginning of bloom, fruit set, and color change	7.15	10.5 a	9.0
Difference	1.1	1.6	1.5
Difference (%)	18.8	18.0	20.0

** Different letters indicate significant difference at P≤0.05.*

Conclusions

Compared to untreated control, Multicolor Crop applications at 600 ml/ha (8 fl oz/acre) at beginning of bloom, fruit set, and color change increased yields of Hamlin oranges by an average of 18.9%. Multicolor Crop application significantly improved yields of oranges by 18.0% over control in the second year.