

Technical Data Report

Multicolor Ecological Agriculture Group Inc.

Effect of Multicolor Crop and on Pineapple Production

Objective

The objective of the trial was to assess the effect of Multicolor Crop application on pineapple production.

Materials and Methods

A pineapple (*Ananas comosus* L.) field trial was conducted during from January to April 2015 in Pará, Brazil. The pineapple variety 'Pérola' was used to evaluate the effect of two different Multicolor Crop application rates on fruit sizing: 1) two Multicolor Crop applications, each 400 ml/ha, applied 60 days apart (27 January 2015 and 4 April 2015); 2) three Multicolor Crop applications, each 250 ml/ha 30 days apart (27 January 2015, 28 February 2015, and 4 April 2015) and compare it with untreated control. Thirty fruits were harvested on 30 April 2015 and sorted according to the Brazilian Ministry of Agriculture (MAPA) categories: Type 1 (less than 1 kg); Type 2 (between 1 kg and 1.3 kg); and Type 3 (greater than 1.3 kg). Multicolor Crop was supplied by Multicolor Ecological Agriculture Group Inc. and cultural methods, including chemical control measures, were also the same for control and treated plots. Multicolor Crop applications were made with a sprayer, using a volume of 12 liters of solution per 809 plants.

Results

Compared to the untreated control, two Multicolor Crop applications (400 ml/ha) decreased the percentage of lower-quality Type 1 fruits by 26%, whereas the percentage of Type 2 fruits increased by 4% and Type 3 by 22%. Three Multicolor Crop applications (250 ml/ha each) decreased the number of Type 1 fruits by 6% and increased Type 2 and Type 3 fruits by 4% and 2%, respectively (Table 1).

Table 1. Influence of Multicolor Crop on pineapple fruit size, 2015, at Antonio Ferreira Souza, near Floresta do Araguaia, Pará, Brazil.

Treatment	Percent (%) fruit		
	Type 1 (<1 kg)	Type 2 (1 kg-1.3 kg)	Type 3 (>1.3 kg)
Control	36%	36%	28%
Multicolor Crop 2 applications, 400 ml/ha each	10%	40%	50%
Difference from control	-26%	+4%	+22%
% Different from control	-86.7%	+11.1%	+78.6%
Multicolor Crop 3 applications, 250 ml/ha each	30%	40%	30%
Difference from control	-6%	+4%	+2%
% Different from control	-16.7%	+11.1%	+7.1%

Conclusion

Compared to the untreated control, two applications of Multicolor Crop decreased the overall proportion of lowest quality Type 1 fruits by 86.7% and increased the fraction of the more desirable Type 2 and Type 3 fruits by 11.1% and 78.6%, respectively. Three applications of Multicolor Crop decreased the proportion of Type 1 fruits by 16.7% and increased the fraction of Type 2 and Type 3 fruits by 11.1% and 7.1%, respectively. Two Multicolor Crop applications of 400 ml/ha each increased the proportion of higher quality fruit (i.e. Types 2 and 3) more than three applications (at 250 ml/ha each), and is therefore the preferred Multicolor Crop application

