

*Cubanelle Pepper Transplant Trial*

*Background & Objective.*

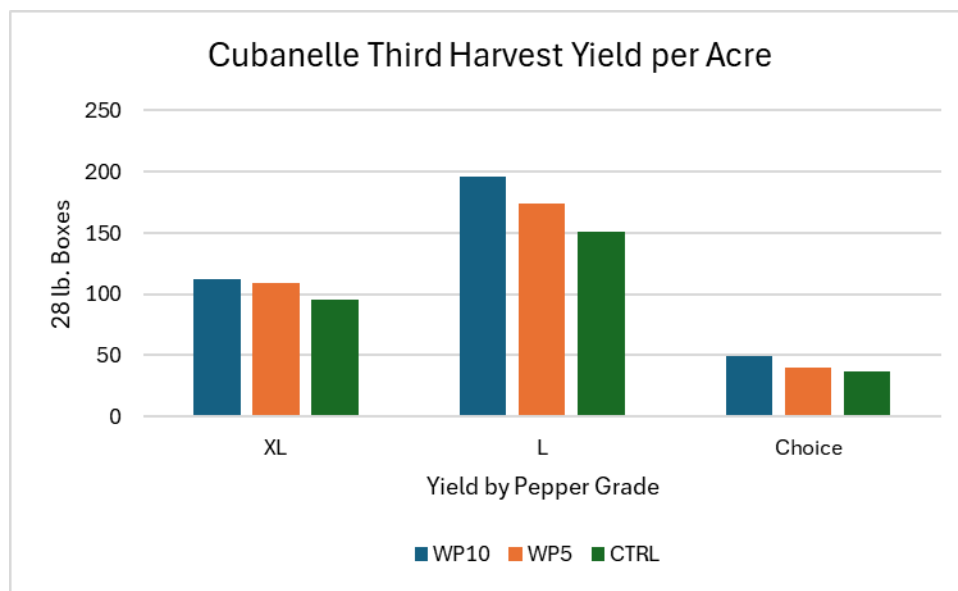
The purpose of this trial was to evaluate the effect of Worm Power Liquid Extract (WPLE) when applied during transplant. Many growers in Florida use seepage irrigation in their crops and using WPLE during transplant can inoculate the roots with beneficial microbes.

*Methods & Materials.*

Cubanelle peppers were planted on October 6<sup>th</sup> at a plant population of 17,500 peppers per acre. WPLE was applied once during transplant at a rate of 10 gallons per acre (WP10) and at a rate of 5 gallons per acre (WP5). These two treatments were compared to a control that received no additional treatment. Heavy rainfall occurred in November and December during flowering. Four harvests were made on December 15<sup>th</sup>, December 22<sup>nd</sup>, January 2<sup>nd</sup>, and January 15<sup>th</sup>.

*Results & Discussion.*

Figure 1. Yield of the Third Harvest.



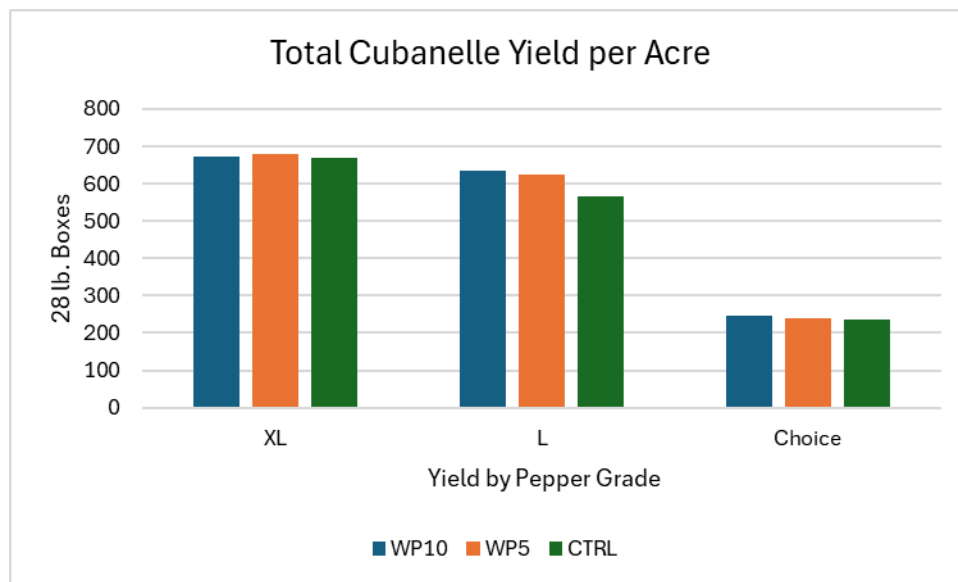
The most significant increase in yield was observed during the third harvest of cubanelle peppers, as shown in Figure 1. The addition of WP10 at transplant increased the number of Large-grade peppers by 30% and XL-grade pepper by 16%.

Table 1. Total Yield of all Four Cubanelle Harvests.

	TOTAL Yield per Acre			
	Marketable Yield (28 lb. box)			
	XL	L	Choice	Total
WP10	674	636	247	1557
WP5	678	623	240	1542
CTRL	670	567	236	1473

With only a single application at transplant, the total pepper yield increases 5.7% and 4.7% with the addition of WP10 and WP5, respectively. The total increase of peppers with WP10 was 84 boxes or 2,352 pounds and 69 boxes or 1,932 pounds with WP5. The yield increase with WPLE trended higher with each additional harvest after the first harvest.

Figure 2. Total Yield of all Four Cubanelle Harvests by Grade.



Worm Power Liquid Extract (WPLE) provides beneficial microbes to the plant when applied at transplant. These microbes inoculate the young roots to provide a strong foundation. The microbes support the transplants by promoting a strong root system and providing beneficial compounds to increase yield. The trial concludes that the single addition of WPLE at transplant can increase cubanelle pepper yields.