

Worm Power Liquid Extract Increases Yield of Fall Tomatoes

Background & Objective.

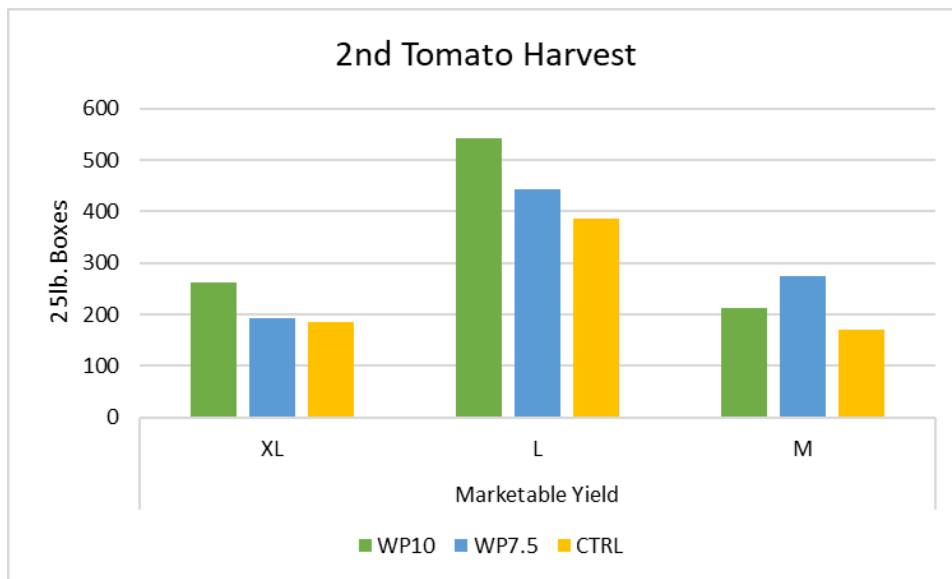
Worm Power Liquid Extract delivers many beneficial microbes to the plant roots. Previous research has shown benefits of plant health and yield. The purpose of this trial was to determine the yield benefits of Worm Power Liquid Extract (WPLE) when added to a grower’s round tomato production system.

Methods and Materials.

The trial consisted of three treatments: a control with no additional product, WP10 (WPLE applied monthly at 10 gallons per acre), and WP7.5 (WPLE applied monthly at 7.5 gallons per acre). Applications started two weeks after planting in August for a total of four applications for each WPLE treatment. Tomatoes were harvested three times and tomatoes were sized according to USDA standards.

Results and Discussion.

While the first harvest yields were not significantly different, the second harvest saw the largest increase in yield with the WPLE treatments.



As shown above, the difference between the second harvest of WP10 and the control was 278 boxes or 6,950lbs of tomatoes. The difference between WP7.5 and the control was 168 boxes or 4,200 lbs. of tomatoes. This was an increase of **37.57%** and **22.7%** with WP10 and WP7.5 respectively.

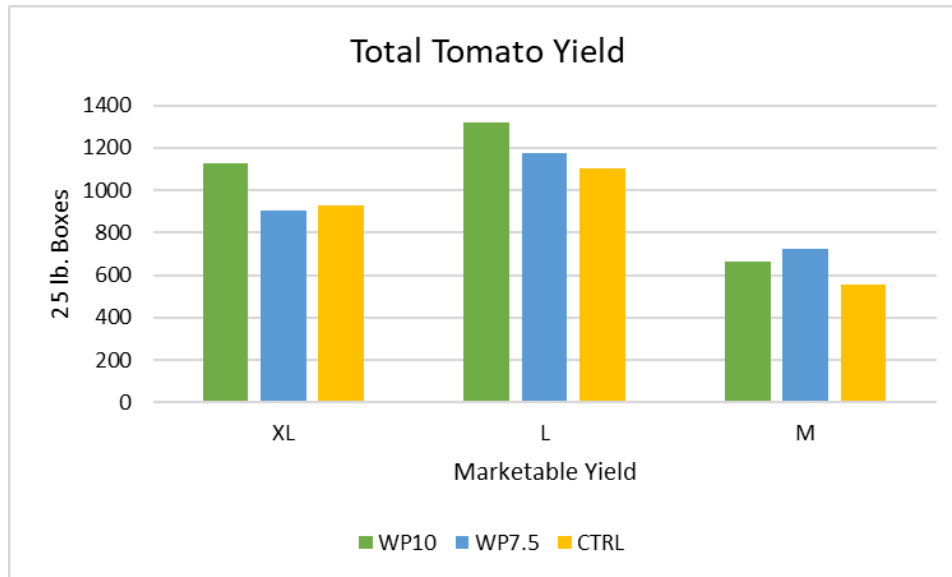
WP10 increased the yield of XL tomatoes 42.9%, Large by 40.2%, and Medium by 25.3%. WP7.5 increased the yield of XL tomatoes 4.3%, Large by 14%, and Medium by 61.2%.

The table below is the total yield of tomatoes as 25 lb. boxes per acre. The categories include the number of marketable tomatoes grouped by sizing and the unmarketable tomatoes.

	Total Tomato Yield				
	Marketable Yield				Unmarketable
	25 lb. boxes/acre				
	XL	L	M	Total	
WP10	1,127	1,318	665	3,110	130
WP7.5	903	1,175	721	2,799	145
CTRL	927	1,100	556	2,583	142
p-value	0.11	0.03	0.47	0.04	0.78
sig		*		*	

The total difference between WP10 and the control was 527 boxes or 13,175 lbs. of tomatoes. This is a total increase of **20.4 %**. WP10 increased total XL grade tomato yields by 21.9%, Large by 19.8%, and Medium by 19.6%. The Total Unmarketable tomato yield decreased 8.5% with WP10.

The total difference between WP7.5 and the control was 216 boxes or 5,400 pounds of tomato. The total increase in yield was **8.36%**.



The addition of WPLE increased the amount of total yield of tomatoes as compared to the control. Both WPLE application rates increased the number of boxes produced, however the WP10 rate was statistically significantly different in increased yield. WP10 showed a significant difference in the total number of Medium grade tomatoes produced. While the total Large grade tomato was not significantly different, the difference with WP10 was still 200 more 25-lb. boxes.

The addition of Worm Power Liquid Extract resulted in increased tomato yields. The yield increase was most significant in the second harvest. The trial concludes that the addition of Worm Power Liquid Extract to a current production system will provide beneficial microbes and increase plant yield.