

October 1, 2013

# CASE STUDY: REPORT ON THE BEHAVIOR OF A POMEGRANATE ORCHARD UNDER THE INFLUENCE OF **TERRABELLA®**

## I. Introduction

A test of the effectiveness of TerraBella® was conducted in 2013 in the pomegranate orchard of Mr. Mashali in MoshavArugot, Israel.

## II. Test Process

Total Test Area: 10 tree Treated Area: Lines 3, 4, Control: Lines 1-2, 5-9  
lines in 2,000<sup>2</sup> meters, or and 10  
2 dunam

Amount of TerraBella®: .5 liters

<u>Applications</u>	<u>Date</u>	<u>Amount</u>
#1	April 2013	250 ml
#2	May 2013	125 ml
#3	June 2013	125 ml

Harvest: October 1, 2013

## Notes

- It should be noted that the first application, was done while the trees were already flowering. (Optimal results from TerraBella® are realized when the first application occurs before flowering.) TerraBella® was applied to the soil at the base of the trees.
- Present at harvest time were Mr. Mashali, his partner, Mr. Shim'on and Mr. Nissim Barnea and Shim'on Ben Haim representing TerraBella Israel. The owners oversaw the harvest; confirmed that all mature fruit was picked; ensured treated and untreated pomegranates were placed in separate boxes – one box per tree; and supervised the counting and weighing.
- At harvest, three trees from lines 3 and 10 (treated) and three trees from lines 5 and 8 (untreated) were randomly selected for counting and weighing of mature fruit.



Area of the treated trees

### III. RESULTS

Table 1: Summary

Mean Weight per Fruit (grams)	Count	Weight (Kg)	
<b>652</b>	<b>352</b>	<b>229.5</b>	TerraBella®
549	314	172.5	Control
<b>+19%</b>	<b>+12%</b>	<b>+33%</b>	Difference

Table 2 – Detail: 3 Trees Treated With TerraBella®

	Description	
1	Overall weight of fruit in box from trees in line 10	97Kg
2	Overall # units of fruit in box from trees in line 10	130
3	Mean weight of fruit in box from trees in line 10	746gr
4	Overall weight of fruit in box from trees in line 3	132,5Kg
5	Overall # units of fruit in box from trees in line 3	222
6	Mean weight of fruit in box from trees in line 3	596gr
7	<b>Overall weight of fruit in box from treated trees</b>	<b><u>229,5Kg</u></b>
8	<b>Overall # units of fruit in box from treated trees</b>	<b><u>352</u></b>
9	<b>Mean weight of fruit in box from treated trees</b>	<b><u>652gr</u></b>



Weighing the Pomegranates

Table 3 – Detail: 3 Control Trees

	Description	
1	Overall weight of fruit in box from trees in line 8	60Kg
2	Overall # units of fruit in box from trees in line 8	103
3	Mean weight of fruit in box from trees in line 8	582gr
4	Overall weight of fruit in box from trees in line 5	112,5Kg
5	Overall # units of fruit in box from trees in line 5	211
6	Mean weight of fruit in box from trees in line 5	533gr
7	<b>Overall weight of fruit in box from un treated trees</b>	<b>172,5Kg</b>
8	<b>Overall # units of fruit in box from treated trees</b>	<b>314</b>
9	<b>Mean weight of fruit in box from treated trees</b>	<b>549gr</b>

#### IV. Conclusion

Even though TerraBella® was applied later than recommended, namely after the flowering, the results show its effectiveness promoting the healthy development of the fruit and trees. Also observed was an *accelerated maturation of the fruit*, allowing the farmer to get to the market earlier and capture higher price per gram with larger and more fruit.

The **return on investment** for the farmer is central to the decision to use TerraBella®. For this harvest, considering the cost of the TerraBella® and revenue per unit, the **33% yield increase** generated an **ROI of 2,461%**.

TerraBella® has shown that it generates a high ROI, while contributing to a more biologically balanced soil, with correct root development and better absorption of nutrients from the soil.



**For more information about TerraBella® or this case study, please call Aquabella Organic Solutions at 1-707-829-3347 or email [info@aquabellaorganics.com](mailto:info@aquabellaorganics.com).**