

# VEGETABLE GARDEN COST WORKBOOK

2020

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## Description

This workbook can be used to estimate the cost per unit to grow vegetables in a home garden. A PDF document and video are available with instructions on using this workbook. Enter your information in the green cells, and white numerical cells will update automatically. Notes and additional information can be entered in light blue cells.

For questions about this workbook, please contact Kevin Athearn at [athearn@ufl.edu](mailto:athearn@ufl.edu).

## Step-by-Step Instructions

1. In each Vegetable Cost Table, enter the name and description for each vegetable, one in each table (up to 5).
2. In each Vegetable Cost Table, list the Direct Materials used only for that vegetable, along with the Original Cost and Use Years (how many years the material will last) for each item.
3. In each Vegetable Cost Table, enter the harvest unit (e.g., pounds) and amount harvested for the year.
4. Identify shared cost groups (costs for a single production system or area shared by multiple vegetables).
5. In each Shared Cost Table, enter the cost group name and description, one cost group in each table (up to 3).
6. In each Shared Cost Table, list the Materials, along with the Original Cost and Use Years (how many years the material will last) for each item.
7. In each Shared Cost Table, list the vegetables shared that cost group (by selecting from the drop down menu in each cell). Enter the percent of the shared cost assigned to each vegetable in the % of Total column.
8. The shared costs allocated to each vegetable should show up automatically, both in the Shared Cost Tables and in the Vegetable Cost Tables.
9. In the Cost Savings worksheet, enter the grocery store cost per unit for each vegetable.
10. All other numerical cells should calculate automatically using the information you entered.

VEGETABLE COST TABLE 1			
<b>Vegetable:</b>	<b>Tomato</b>		
Description:	Grown in 2 raised beds, spring 2020.		
<b>Direct Materials</b>	<b>Original Cost</b>	<b>Use Years</b>	<b>Annual Cost</b>
Seedlings purchased	\$24.00	1.0	\$24.00
Tomato cages	\$40.00	4.0	\$10.00
Pest management	\$8.00	2.0	\$4.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
<b>Total direct materials</b>	<b>\$72.00</b>		<b>\$38.00</b>
<b>Shared Material Cost Allocations</b>			<b>Annual Allocation</b>
Shared Cost Table 1			\$36.00
Shared Cost Table 2			\$0.00
Shared Cost Table 3			\$0.00
		<b>Unit</b>	<b>Annual Totals</b>
<b>Total annual material cost</b>		\$	<b>\$74.00</b>
Annual amount harvested		pound	50
<b>Total material cost per unit</b>		<b>\$/pound</b>	<b>\$1.48</b>

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VEGETABLE COST TABLE 2			
<b>Vegetable:</b>	<b>Baby Spinach</b>		
Description:	Grown in 1 raised bed, winter 2019-2020		
<b>Direct Materials</b>	<b>Original Cost</b>	<b>Use Years</b>	<b>Annual Cost</b>
Seeds	\$5.00	1.0	\$5.00
Pest management	\$7.00	1.0	\$7.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
<b>Total direct materials</b>	<b>\$12.00</b>		<b>\$12.00</b>
<b>Shared Material Cost Allocations</b>			<b>Annual Allocation</b>
Shared Cost Table 1			\$18.00
Shared Cost Table 2			\$0.00
Shared Cost Table 3			\$0.00
		<b>Unit</b>	<b>Annual Totals</b>
<b>Total annual material cost</b>		\$	<b>\$30.00</b>
Annual amount harvested		pound	9
<b>Total material cost per unit</b>		<b>\$/pound</b>	<b>\$3.33</b>

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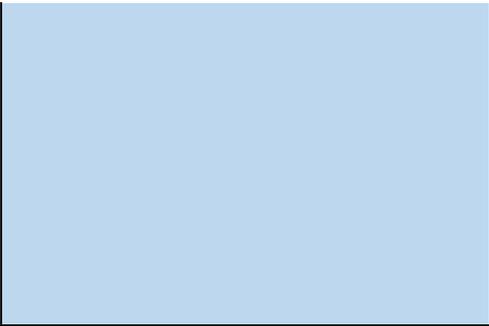
VEGETABLE COST TABLE 3			
<b>Vegetable:</b>	<b>Carrot</b>		
Description:	Grown in 1 raised bed, winter 2019-2020		
<b>Direct Materials</b>	<b>Original Cost</b>	<b>Use Years</b>	<b>Annual Cost</b>
Seeds	\$6.00	1.0	\$6.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
<b>Total direct materials</b>	<b>\$6.00</b>		<b>\$6.00</b>
<b>Shared Material Cost Allocations</b>			<b>Annual Allocation</b>
Shared Cost Table 1			\$18.00
Shared Cost Table 2			\$0.00
Shared Cost Table 3			\$0.00
		<b>Unit</b>	<b>Annual Totals</b>
<b>Total annual material cost</b>		\$	<b>\$24.00</b>
Annual amount harvested		pound	12
<b>Total material cost per unit</b>		<b>\$/pound</b>	<b>\$2.00</b>

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VEGETABLE COST TABLE 4			
<b>Vegetable:</b>	<b>Butterhead Lettuce</b>		
Description:	Grown in hydroponic buckets, Nov 2019 to April 2020		
<b>Direct Materials</b>	<b>Original Cost</b>	<b>Use Years</b>	<b>Annual Cost</b>
Seeds	\$10.00	1.0	\$10.00
			\$0.00
			\$0.00

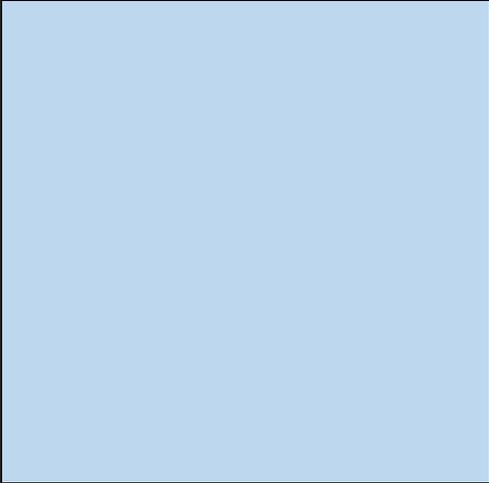
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			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
Total direct materials	\$10.00		\$10.00
<b>Shared Material Cost Allocations</b>			<b>Annual Allocation</b>
Shared Cost Table 1			\$0.00
Shared Cost Table 2			\$8.91
Shared Cost Table 3			\$3.19
		<b>Unit</b>	<b>Annual Totals</b>
Total annual material cost		\$	\$22.10
Annual amount harvested		head	15
Total material cost per unit		\$/head	\$1.47



VEGETABLE COST TABLE 5			
<b>Vegetable:</b>	<b>Mini Romaine</b>		
Description:	Grown in hydroponic buckets, Nov 2019 to April 2020		
<b>Direct Materials</b>	<b>Original Cost</b>	<b>Use Years</b>	<b>Annual Cost</b>
Seeds	\$7.00	2.0	\$3.50
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
Total direct materials	\$7.00		\$3.50
<b>Shared Material Cost Allocations</b>			<b>Annual Allocation</b>
Shared Cost Table 1			\$0.00
Shared Cost Table 2			\$18.09
Shared Cost Table 3			\$7.81
		<b>Unit</b>	<b>Annual Totals</b>
Total annual material cost		\$	\$29.40
Annual amount harvested		head	36
Total material cost per unit		\$/head	\$0.82

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SHARED COST TABLE 1			
Cost Group Name:	Raised Beds		
Description:	Two raised beds, 4' x 8' each, 64 sq. ft. total. November 2019 through June 2020.		
Materials	Original Cost	Use Years	Annual Cost
Raised bed lumber & hardware	\$70.00	5.0	\$14.00
Raised bed soil	\$120.00	5.0	\$24.00
Annual soil amendment & fertilizer	\$18.00	1.0	\$18.00
Gardening tools & hose	\$104.00	8.0	\$13.00
Hose nozzle	\$12.00	4.0	\$3.00
			\$0.00
			\$0.00
			\$0.00
<b>Total shared materials</b>	<b>\$324.00</b>		<b>\$72.00</b>
Vegetables sharing this group	Square Feet	% of Total	Annual Allocation
Tomato	64	50%	\$36.00
Baby Spinach	32	25%	\$18.00
Carrot	32	25%	\$18.00
			\$0.00
			\$0.00
<b>Total</b>	<b>128</b>	<b>100%</b>	<b>\$72.00</b>

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SHARED COST TABLE 2			
Cost Group Name:	Hydroponic Buckets		
Description:	Three 5-gal food-grade buckets; three plant positions each. November 2019 through April 2020.		
Materials	Original Cost	Use Years	Annual Cost
5-gal bucket with lid (3)	\$22.00	4.0	\$5.50
Hole-saw drill bit	\$12.00	8.0	\$1.50
Net pots (50-pack)	\$12.00	3.0	\$4.00
Premix + Calcium Nitrate	\$24.00	1.5	\$16.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
<b>Total shared materials</b>	<b>\$70.00</b>		<b>\$27.00</b>
Vegetables sharing this group	Plant Positions	% of Total	Annual Allocation
Butterhead Lettuce	3	33%	\$8.91
Mini Romaine	6	67%	\$18.09
			\$0.00
			\$0.00
			\$0.00
<b>Total</b>		<b>100%</b>	<b>\$27.00</b>

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SHARED COST TABLE 3			
Cost Group Name:	Own Seedlings		
Description:	Cost of growing own seedlings (not counting seed costs) October 2019 through March 2020		
Materials	Original Cost	Use Years	Annual Cost
Seedling flat	\$20.00	5.0	\$4.00
Germination mix	\$5.00	1.0	\$5.00
Spray bottles	\$8.00	4.0	\$2.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
<b>Total shared materials</b>	<b>\$33.00</b>		<b>\$11.00</b>
Vegetables sharing this group	Seedlings	% of Total	Annual Allocation
Butterhead Lettuce	15	29%	\$3.19
Mini Romaine	36	71%	\$7.81
			\$0.00
			\$0.00
			\$0.00
<b>Total</b>	<b>51</b>	<b>100%</b>	<b>\$11.00</b>

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COST COMPARISON TABLE						
	Tomato	Baby Spinach	Carrot	Butterhead Lettuce	Mini Romaine	
Unit	pound	pound	pound	head	head	
Grocery store cost per unit	\$1.99	\$8.00	\$1.50	\$2.00	\$1.00	
Garden cost per unit	\$1.48	\$3.33	\$2.00	\$1.47	\$0.82	
<b>Cost savings (or added cost) per unit</b>	<b>\$0.51</b>	<b>\$4.67</b>	<b>(\$0.50)</b>	<b>\$0.53</b>	<b>\$0.18</b>	

Cost savings (or added cost) per unit of vegetable harvested.