



University of Kentucky
College of Agriculture,
Food and Environment
Cooperative Extension Service

Center for Crop Diversification Budget
CCD-BG-4

Highbush Blueberries, Kentucky Wholesale/Retail Marketing

Matt Ernst¹

Updated April 2019



Suggested Citation:

Ernst, M. (2019). *Highbush Blueberries, Kentucky, Wholesale/Retail Marketing*. CCD-BG-4. Lexington, KY: Center for Crop Diversification, University of Kentucky College of Agriculture, Food and Environment. Available: http://www.uky.edu/ccd/sites/www.uky.edu/ccd/files/2019blueberrybudget_wholesale_retail.pdf

¹Matt Ernst is an independent contractor with the Center for Crop Diversification.

Reviewed by John Strang and Tim Woods, UK Extension Specialists

HIGHBUSH BLUEBERRIES, Kentucky, 2019

Soil Buildup Year Summary

	Quantity	Unit	\$/Unit	Total	Your Estimate
GROSS RETURNS					
VARIABLE COSTS					
PRODUCTION					
Soil Test	2	assays	\$ 15.00	\$ 30.00	<input type="text"/>
Sulfur	650	pounds	\$ 0.35	\$ 227.50	<input type="text"/>
Herbicide	2	quarts	\$ 9.00	\$ 18.00	<input type="text"/>
Grass Seed	10	lbs	\$ 2.35	\$ 23.50	<input type="text"/>
Fertilizer (10-10-10)	800	lbs	\$ 0.45	\$ 360.00	<input type="text"/>
Variable Machinery Costs	1	acre	\$ 31.29	\$ 35.83	<input type="text"/>
Interest				\$ 20.84	<input type="text"/>
TOTAL PRODUCTION COST				\$ 715.67	<input type="text"/>
RETURN ABOVE VARIABLE COSTS				\$ 715.67	<input type="text"/>
FIXED COSTS					
Fixed Machinery & Equipment Costs	1	acre	\$ 31.47	\$ 31.47	<input type="text"/>
TOTAL FIXED COST				\$ 31.47	<input type="text"/>
TOTAL COSTS				\$ 747.14	<input type="text"/>
RETURN TO OPERATOR LABOR, LAND, CAPITAL, AND MGT.				\$ (747.14)	<input type="text"/>
Operator and Unpaid Family Labor	1.66	hrs	\$ 15.00	\$ 24.90	<input type="text"/>
TOTAL OPERATOR AND UNPAID FAMILY LABOR				\$ 24.90	<input type="text"/>
RETURN TO LAND, CAPITAL, AND MANAGEMENT				\$ (772.04)	<input type="text"/>

Totals will vary slightly from budget details due to rounding of labor hours.

HIGHBUSH BLUEBERRIES, Kentucky 2019

Planting Year Summary

	Quantity	Unit	\$/Unit	Total	Your Estimate
GROSS RETURNS					
VARIABLE COSTS					
PRODUCTION					
Herbicide (Burndown)	1	quarts	\$ 9.00	\$ 9.00	
Plants	605	plants	\$ 3.25	\$ 1,966.25	
Peat Moss	14	bales	\$ 25.00	\$ 350.00	
Fertilizer	61	lbs	\$ 0.60	\$ 36.60	
Mulch (Sawdust)	1	acre	\$ 250.00	\$ 250.00	
Herbicide (Planting)	1	lbs	\$ 135.00	\$ 135.00	
Herbicide (Midseason)	2.5	pints	\$ 11.13	\$ 27.83	
Insecticide	2	lbs	\$ 6.60	\$ 13.19	
Seed Grass	10	lbs	\$ 2.35	\$ 23.50	
Fall Herbicide	8	lbs	\$ 14.00	\$ 112.00	
Hired Labor					
Planting & Hoeing	58.00	hours	\$ 12.50		
TOTAL HIRED LABOR	58	hours	\$ 12.50	\$ 725.00	
Irrigation	6	months	\$ 41.33	\$ 248.00	
Variable Machinery Costs	1	acre	\$ 130.76	\$ 130.76	
Interest	1	acre	\$ 120.81	\$ 120.81	
TOTAL PRODUCTION COST				\$ 4,147.95	
RETURN ABOVE VARIABLE COSTS				\$ (4,147.95)	
FIXED COSTS					
Fixed Machinery Costs	1	acre	\$ 48.26	\$ 48.26	
Fixed Costs on Irrigation System	1	year	\$ 257.14	\$ 257.14	
TOTAL FIXED COST				\$ 305.40	
TOTAL COSTS				\$ 4,453.35	
RETURN TO OPERATOR LABOR, LAND, CAPITAL, AND MGT.				\$ (4,453.35)	
Operator and Unpaid Family Labor	10.63	hrs	\$ 15.00	\$ 159.45	
TOTAL OPERATOR AND UNPAID FAMILY LABOR				\$ 159.45	
RETURN TO LAND, CAPITAL, AND MANAGEMENT				\$ (4,612.80)	

Totals will vary slightly from budget details due to rounding of labor hours.

HIGHBUSH BLUEBERRIES, Kentucky 2019

Year After Planting Summary

	Quantity	Unit	\$/Unit	Total	Your Estimate
GROSS RETURNS					
VARIABLE COSTS					
PRODUCTION					
Fungicide	5 gallons		\$ 15.18	\$ 75.90	
Fungicide	10 gallons		\$ 33.00	\$ 330.00	
Plants (Replantings)	15 plants		\$ 3.25	\$ 48.75	
Fertilizer	122 lbs		\$ 0.60	\$ 73.20	
Herbicide	16 lbs		\$ 14.00	\$ 224.00	
Insecticide	2 lbs		\$ 6.60	\$ 13.19	
Irrigation	6 months		\$ 41.33	\$ 248.00	
Variable Machinery Costs	1 acre		\$ 23.76	\$ 23.76	
Hired Labor					
Hoeing and Flower Removal	5 hours		\$ 12.50	\$ 62.50	
Interest	1 acre		\$ 32.98	\$ 32.98	
TOTAL PRODUCTION COST				\$ 1,132.28	
RETURN ABOVE VARIABLE COSTS				\$ (1,132.28)	
FIXED COSTS					
Fixed Machinery Costs	1 acre		\$ 27.62	\$ 27.62	
Fixed Costs on Irrigation System	1 year		\$ 257.14	\$ 257.14	
TOTAL FIXED COST				\$ 284.76	
TOTAL COSTS				\$ 1,417.05	
RETURN TO OPERATOR LABOR, LAND, CAPITAL, AND MGT.				\$ (1,417.05)	
Operator and Unpaid Family Labor	10.35 hrs		\$ 15.00	\$ 155.25	
TOTAL OPERATOR AND UNPAID FAMILY LABOR				\$ 155.25	
RETURN TO LAND, CAPITAL, AND MANAGEMENT				\$ (1,572.30)	

Totals will vary slightly from budget details due to rounding of labor hours.

HIGHBUSH BLUEBERRIES, Kentucky 2019 (Operator Harvest)

First Production Year Summary

	Quantity	Unit	\$/Unit	Total	Your Estimate
GROSS RETURNS	1000 pts		\$ 2.25	\$ 2,250.00	
VARIABLE COSTS					
PRODUCTION					
Fungicide	1 acre		\$ 503.38	\$ 503.38	
Fungicide	acre		\$ 330.00	\$ -	
Fertilizer (Ammonium Sulfate)	193 lbs		\$ 0.60	\$ 115.80	
Herbicide	1 acre		\$ 187.00	\$ 187.00	
Insecticide	1 acre		\$ 23.26	\$ 23.26	
Irrigation	6 months		\$ 41.33	\$ 248.00	
Mulch	1 acre		\$ 250.00	\$ 250.00	
Pest Control	1 year		\$ 220.00	\$ 220.00	
Pollination	1 hive		\$ 100.00	\$ 100.00	
Variable Machinery Costs	1 acre		\$ 44.02	\$ 44.02	
Hired Labor					
Pest Control, Hoeing, Mulching	34 hours		\$ 12.50	\$ 425.00	
Interest	1 acre		\$ 63.49	\$ 63.49	
TOTAL PRODUCTION COST				\$ 2,179.96	
RETURN ABOVE PREHARVEST VARIABLE COSTS				\$ 70.04	
FIXED COSTS					
Fixed Machinery Costs	1 acre		\$ 50.38	\$ 50.38	
Fixed Costs on Irrigation System	1 year		\$ 257.14	\$ 257.14	
TOTAL FIXED COST				\$ 307.52	
TOTAL PREHARVEST COSTS				\$ 2,487.48	
HARVESTING AND MARKETING					
Hired Labor	40 hours		\$ 12.50	\$ 500.00	
Plastic Clamshells	1000 pints		\$ 0.15	\$ 150.00	
Marketing Costs	10% gross		\$ 2,250.00	\$ 225.00	
Refrigeration Costs	30 days		\$ 1.22	\$ 36.60	
Total Harvest and Marketing Variable Costs				\$ 911.60	
Fixed cost of refrigeration system	1 year		\$ 550.00	\$ 550.00	
Total Harvest Costs				\$ 1,461.60	
TOTAL COSTS				\$ 3,949.08	
Operator and Unpaid Family Labor	18.70 hrs		\$ 15.00	\$ 280.50	
RETURN TO LAND, CAPITAL, AND MANAGEMENT				\$ (1,699.08)	

Totals will vary slightly from budget details due to rounding of labor hours.

HIGHBUSH BLUEBERRIES, Kentucky 2019 (Operator Harvest)

Second Production Year Summary

	Quantity	Unit	\$/Unit	Total	Your Estimate
GROSS RETURNS	3000 pts		\$ 2.25	\$ 6,750.00	
VARIABLE COSTS					
PRODUCTION					
Fungicide	1 acre		\$ 173.38	\$ 173.38	
Fertilizer (Ammonium Sulfate)	254 lbs		\$ 0.60	\$ 152.40	
Herbicide	1 acre		\$ 187.00	\$ 187.00	
Insecticide	1 acre		\$ 41.46	\$ 41.46	
Irrigation	6 months		\$ 41.33	\$ 248.00	
Pest Control	1 year		\$ 220.00	\$ 220.00	
Pollination	1 hive		\$ 100.00	\$ 100.00	
Variable Machinery Costs	1 acre		\$ 40.14	\$ 40.14	
Hired Labor					
Pest Control, Hoeing, Mulching	18 hours		\$ 12.50	\$ 225.00	
Interest	1 acre		\$ 41.62	\$ 41.62	
TOTAL PRODUCTION COST				\$ 1,429.00	
RETURN ABOVE PREHARVEST VARIABLE COSTS				\$ 5,321.00	
FIXED COSTS					
Fixed Machinery Costs	1 acre		\$ 45.95	\$ 45.95	
Fixed Costs on Irrigation System	1 year		\$ 257.14	\$ 257.14	
TOTAL FIXED COST				\$ 303.09	
TOTAL PREHARVEST COSTS				\$ 1,732.10	
HARVESTING AND MARKETING					
Hired Labor	120 hours		\$ 12.50	\$ 1,500.00	
Plastic Clamshells	3000 pints		\$ 0.15	\$ 450.00	
Marketing Costs	10% gross		\$ 6,750.00	\$ 675.00	
Refrigeration Costs	30 days		\$ 1.22	\$ 36.60	
Total Harvest and Marketing Variable Costs				\$ 2,661.60	
Fixed cost of refrigeration system	1 year		\$ 550.00	\$ 550.00	
Total Harvest Costs				\$ 3,211.60	
TOTAL COSTS				\$ 4,943.70	
Operator and Unpaid Family Labor	19.95 hrs		\$ 15.00	\$ 299.25	
RETURN TO LAND, CAPITAL, AND MANAGEMENT				\$ 1,507.05	

Totals will vary slightly from budget details due to rounding of labor hours.

HIGHBUSH BLUEBERRIES, Kentucky 2019 (Operator Harvest)

Third Production Year Summary

	Quantity	Unit	\$/Unit	Total	Your Estimate
GROSS RETURNS	6000 pts		\$ 2.25	\$ 13,500.00	
VARIABLE COSTS					
PRODUCTION					
Fungicide	1 acre		\$ 173.38	\$ 173.38	
Fertilizer	315 lbs		\$ 0.60	\$ 189.00	
Herbicide	1 acre		\$ 187.00	\$ 187.00	
Insecticide	1 acre		\$ 41.46	\$ 41.46	
Irrigation	6 months		\$ 41.33	\$ 248.00	
Mulch	1 acre		\$ 125.00	\$ 125.00	
Pest Control	1 year		\$ 220.00	\$ 220.00	
Pollination	1 hive		\$ 100.00	\$ 100.00	
Variable Machinery Costs	1 acre		\$ 44.02	\$ 44.02	
Hired Labor					
Pest Control, Hoeing, Mulching	26 hours		\$ 12.50	\$ 325.00	
Interest	1 acre		\$ 49.59	\$ 49.59	
TOTAL PRODUCTION COST				\$ 1,702.45	
RETURN ABOVE PREHARVEST VARIABLE COSTS				\$ 11,797.55	
FIXED COSTS					
Fixed Machinery Costs	1 acre		\$ 50.38	\$ 50.38	
Fixed Costs on Irrigation System	1 year		\$ 257.14	\$ 257.14	
TOTAL FIXED COST				\$ 307.52	
TOTAL PREHARVEST COSTS				\$ 2,009.97	
HARVESTING AND MARKETING					
Hired Labor	240 hours		\$ 12.50	\$ 3,000.00	
Plastic Clamshells	6000 pints		\$ 0.15	\$ 900.00	
Marketing Costs	10% gross		\$ 13,500.00	\$ 1,350.00	
Refrigeration Costs	30 days		\$ 1.22	\$ 36.60	
Total Harvest and Marketing Variable Costs				\$ 5,286.60	
Fixed cost of refrigeration system	1 year		\$ 550.00	\$ 550.00	
Total Harvest Costs				\$ 5,836.60	
TOTAL COSTS				\$ 7,846.57	
Operator and Unpaid Family Labor	19.95 hrs		\$ 15.00	\$ 299.25	
RETURN TO LAND, CAPITAL, AND MANAGEMENT				\$ 5,354.18	

Totals will vary slightly from budget details due to rounding of labor hours.

HIGHBUSH BLUEBERRIES, Kentucky 2019 (Operator Harvest)

Full Production Year Summary

	Quantity	Unit	\$/Unit	Total	Your Estimate
GROSS RETURNS	8500 pts		\$ 2.25	\$ 19,125.00	
VARIABLE COSTS					
PRODUCTION					
Fungicide	1 acre		\$ 173.38	\$ 173.38	
Fertilizer	376 lbs		\$ 0.60	\$ 225.60	
Herbicide	1 acre		\$ 187.00	\$ 187.00	
Insecticide	1 acre		\$ 41.46	\$ 41.46	
Mulch	1 acre		\$ 125.00	\$ 125.00	
Irrigation	6 months		\$ 41.33	\$ 248.00	
Pest Control	1 year		\$ 220.00	\$ 220.00	
Pollination	1 hive		\$ 100.00	\$ 100.00	
Variable Machinery Costs	1 acre		\$ 44.02	\$ 44.02	
Hired Labor					
Pest Control, Hoeing, Mulching	26 hours		\$ 12.50	\$ 325.00	
Interest	1 acre		\$ 50.68	\$ 50.68	
TOTAL PRODUCTION COST				\$ 1,740.15	
RETURN ABOVE PREHARVEST VARIABLE COSTS				\$ 17,384.85	
FIXED COSTS					
Fixed Machinery Costs	1 acre		\$ 50.38	\$ 50.38	
Fixed Costs on Irrigation System	1 year		\$ 257.14	\$ 257.14	
TOTAL FIXED COST				\$ 307.52	
TOTAL PREHARVEST COSTS				\$ 2,047.67	
HARVESTING AND MARKETING					
Hired Labor	340 hours		\$ 12.50	\$ 4,250.00	
Plastic Clamshells	8500 pints		\$ 0.15	\$ 1,275.00	
Marketing Costs	10% gross		\$ 19,125.00	\$ 1,912.50	
Refrigeration Costs	30 days		\$ 1.22	\$ 36.60	
Total Harvest and Marketing Variable Costs				\$ 7,474.10	
Fixed cost of refrigeration system	1 year		\$ 550.00	\$ 550.00	
Total Harvest Costs				\$ 8,024.10	
TOTAL COSTS				\$ 10,071.77	
Operator and Unpaid Family Labor	19.95 hrs		\$ 15.00	\$ 299.25	
RETURN TO LAND, CAPITAL, AND MANAGEMENT				\$ 8,753.98	

Totals will vary slightly from budget details due to rounding of labor hours.