

Sample Asparagus Production Budget for Kentucky

Center for Crop Diversification
May 2016



Asparagus is a popular, early-season crop that can aid a diversified vegetable producer’s cash flow during the first part of Kentucky’s harvest season. Once established, properly managed asparagus plantings can produce for many years. According to these sample budgets, an acre of asparagus marketed at \$1.75 per pound will return the costs of establishment in the second year of full production (third year after planting). Following that year, properly managed asparagus can return in the \$1,200 to \$1,500 range to land, labor, and management.

Asparagus, like berries and greens, is a highly perishable crop. Because of variable systems and costs for postharvest cooling, a cost is not assigned in these budgets. Operations considering asparagus will need to consider a cooling system for the crop. Even a small cooler that is also used for other crops throughout the season (greens, berries, etc.) will soon pay for itself in extended shelf life and increased product quality. For more information on the details and assumptions used in these budgets, contact tim.woods@uky.edu.

Table 1. Asparagus Cost and Return Summary

	Total Costs	Total Returns	Return to Land, Labor, and Management
Soil Buildup Year	\$416.70	--	(\$416.70)
Planting Year	\$1,992.54	--	(\$1,992.54)
Maturing Year	\$677.02	\$875.00	\$197.98
Full Harvest Years	\$1,296.09	\$2,625.00	\$1,328.91

Table 2. Full Harvest Year Return to Land, Labor and Management at Varying Yields & Prices

Price/Pound	Yield (Pounds)					
	1,000	1,250	1,400	1,500	1,750	2,000
\$1.00	75	197	270	319	441	563
\$1.25	300	478	585	656	834	1012
\$1.50	524	758	899	992	1226	1460
\$1.70	704	983	1150	1262	1541	1819
\$1.75	749	1039	1213	1329	1619	1909
\$1.80	793	1095	1276	1396	1698	1999
\$2.00	973	1319	1527	1665	2012	2358
\$2.25	1197	1600	1841	2002	2404	2807
\$2.50	1422	1880	2155	2339	2797	3255

This publication contains estimates for production of a selected crop enterprise in Kentucky. The purpose of this budget is to serve as a management and decision-making guide for current and prospective producers of asparagus. This publication is not intended to replace a producer's own records and estimates. Producers are strongly encouraged to adapt these budgets to their specific situation. In the absence of such data, however, these budgets can serve as a reasonably accurate cost and income guide. These budget estimates are based on the best and most accurate input cost information and crop price projections available at the time of release. Further, costs and returns are based on production practices and yield levels thought to be representative of typical growers in Kentucky given normal growing conditions. This publication allows producers to change prices and quantities for easy adaptation of the budgets to their own farming situation. Because price, cost, and yield expectations change over time, and because each producer will have unique cost, production, and management levels, these budgets can serve only as a general cost and return guide.

ASPARAGUS, Kentucky, 2016 Sample Budget

Soil Buildup Year Summary

	Quantity	Unit	\$/Unit	Total	Your Estimate
GROSS RETURNS	0	lbs		\$ -	
VARIABLE COSTS					
PRODUCTION					
Soil Test	2	assays	\$ 10.00	\$ 20.00	<input type="text"/>
Lime	3	tons	\$ 20.00	\$ 60.00	<input type="text"/>
Herbicide	2	quarts	\$ 17.00	\$ 34.00	<input type="text"/>
Fertilizer	1	acre	\$ 180.00	\$ 180.00	<input type="text"/>
Cover Crop Seed	110	pounds	\$ 0.50	\$ 55.00	<input type="text"/>
Variable Machinery Costs	1	acre	\$ 25.17	\$ 25.17	<input type="text"/>
Interest				\$ 11.11	<input type="text"/>
TOTAL PRODUCTION COST				\$ 385.28	<input type="text"/>
RETURN ABOVE VARIABLE COSTS				\$ (385.28)	<input type="text"/>
FIXED COSTS					
Fixed Machinery & Equipment Costs	1	acre	\$ 31.42	\$ 31.42	<input type="text"/>
TOTAL FIXED COST				\$ 31.42	<input type="text"/>
TOTAL COSTS				\$ 416.70	<input type="text"/>
RETURN TO OPERATOR LABOR, LAND, CAPITAL, AND MGT.				\$ (416.70)	<input type="text"/>
Operator and Unpaid Family Labor	3.90	hrs	\$ 10.00	\$ 39.00	<input type="text"/>
TOTAL OPERATOR AND UNPAID FAMILY LABOR				\$ 39.00	<input type="text"/>
RETURN TO LAND, CAPITAL, AND MANAGEMENT				\$ (455.70)	<input type="text"/>

ASPARAGUS, Kentucky, 2016 Sample Budget

Planting Year Summary

	Quantity	Unit	\$/Unit	Total	Your Estimate
GROSS RETURNS	0	lbs		\$ -	
VARIABLE COSTS					
PRODUCTION					
Fertilizer	1	acre	\$ 107.90	\$ 107.90	<input type="text"/>
Crowns	5	1000	\$ 250.00	\$ 1,250.00	<input type="text"/>
Pesticides	1	acre	\$ 102.00	\$ 102.00	<input type="text"/>
Variable Equipment Costs	1	acre	\$ 33.88	\$ 43.43	<input type="text"/>
Hired Labor (Planting)	40	hours	\$ 10.00	\$ 400.00	<input type="text"/>
				\$ -	<input type="text"/>
Interest				\$ 52.02	<input type="text"/>
TOTAL PRODUCTION COST				\$ 1,955.35	<input type="text"/>
RETURN ABOVE VARIABLE COSTS				\$ (1,955.35)	<input type="text"/>
FIXED COSTS					
Fixed Machinery & Equipment Costs	1	acre	\$ 37.19	\$ 37.19	<input type="text"/>
TOTAL FIXED COST				\$ 37.19	<input type="text"/>
TOTAL COSTS				\$ 1,992.54	<input type="text"/>
RETURN TO OPERATOR LABOR, LAND, CAPITAL, AND MGT.				\$ (1,992.54)	<input type="text"/>
Operator and Unpaid Family Labor	15.00	hrs	\$ 10.00	\$ 150.00	<input type="text"/>
TOTAL OPERATOR AND UNPAID FAMILY LABOR				\$ 150.00	<input type="text"/>
RETURN TO LAND, CAPITAL, AND MANAGEMENT				\$ (2,142.54)	<input type="text"/>

ASPARAGUS, Kentucky, 2016 Sample Budget

Maturing Year Summary

	Quantity	Unit	\$/Unit	Total	Your Estimate
GROSS RETURNS	500	lbs	\$ 1.75	\$ 875.00	<input type="text"/>
VARIABLE COSTS					
PRODUCTION					
Soil Test	2	assays	\$ 10.00	\$ 20.00	<input type="text"/>
Fertilizer--N,K, Boron	1	acre	\$ 96.15	\$ 96.15	<input type="text"/>
Herbicide	1	acre	\$ 79.00	\$ 79.00	<input type="text"/>
Insecticide/Fungicide	1	acre	\$ 116.75	\$ 116.75	<input type="text"/>
Variable Equipment Costs	1	acre	\$ 15.30	\$ 18.32	<input type="text"/>
TOTAL PREHARVEST COST				\$ 330.22	<input type="text"/>
HARVESTING AND MARKETING					
Hired Labor	20	hours	\$ 10.00	\$ 200.00	<input type="text"/>
Marketing Costs	10%	gross	\$ 875.00	\$ 87.50	<input type="text"/>
Variable Equipment Costs	1	acre	\$ 15.00	\$ 15.00	<input type="text"/>
Total Harvest and Marketing Cost				\$ 302.50	<input type="text"/>
Interest on Variable Costs (6 months)	1	acre	\$ 15.82	\$ 15.82	<input type="text"/>
TOTAL VARIABLE COSTS				\$ 648.54	<input type="text"/>
RETURN ABOVE VARIABLE COSTS				\$ 226.46	<input type="text"/>
FIXED COSTS					
Fixed Machinery & Equipment Costs	1	acre	\$ 28.48	\$ 28.48	<input type="text"/>
TOTAL FIXED COST				\$ 28.48	<input type="text"/>
TOTAL COSTS				\$ 677.02	<input type="text"/>
RETURN TO OPERATOR LABOR, LAND, CAPITAL, AND MGT.				\$ 197.98	<input type="text"/>
Operator and Unpaid Family Labor	10.00	hrs	\$ 10.00	\$ 100.00	<input type="text"/>
TOTAL OPERATOR AND UNPAID FAMILY LABOR				\$ 100.00	<input type="text"/>
RETURN TO LAND, CAPITAL, AND MANAGEMENT				\$ 97.98	<input type="text"/>

ASPARAGUS, Kentucky, 2016 Sample Budget

Annual Production Year Summary

	Quantity	Unit	\$/Unit	Total	Your Estimate
GROSS RETURNS	1500	lbs	\$ 1.75	\$ 2,625.00	<input type="text"/>
VARIABLE COSTS					
PRODUCTION					
Soil Test	2	assays	\$ 10.00	\$ 20.00	<input type="text"/>
Fertilizer	1	acre	\$ 108.30	\$ 108.30	<input type="text"/>
Herbicide	1	acre	\$ 79.00	\$ 79.00	<input type="text"/>
Insecticide/Fungicide	1	acre	\$ 116.75	\$ 116.75	<input type="text"/>
Variable Equipment Costs	1	acre	\$ 14.48	\$ 14.48	<input type="text"/>
TOTAL PREHARVEST COST				\$ 338.53	<input type="text"/>
HARVESTING AND MARKETING					
Hired Labor	60	hours	\$ 10.00	\$ 600.00	<input type="text"/>
Marketing Costs	10%	gross	\$2,625.00	\$ 262.50	<input type="text"/>
Variable Equipment Costs	1	acre	\$ 30.00	\$ 30.00	<input type="text"/>
Total Harvest and Marketing Cost				\$ 892.50	<input type="text"/>
Interest on Variable Costs (6 months)	1	acre	\$ 30.78	\$ 30.78	<input type="text"/>
TOTAL VARIABLE COSTS				\$ 1,261.81	<input type="text"/>
RETURN ABOVE VARIABLE COSTS				\$ 1,363.19	<input type="text"/>
FIXED COSTS					
Fixed Machinery & Equipment Costs	1	acre	\$ 34.28	\$ 34.28	<input type="text"/>
TOTAL FIXED COST				\$ 34.28	<input type="text"/>
TOTAL COSTS				\$ 1,296.09	<input type="text"/>
RETURN TO OPERATOR LABOR, LAND, CAPITAL, AND MGT.				\$ 1,328.91	<input type="text"/>
Operator and Unpaid Family Labor	10.00	hrs	\$ 10.00	\$ 100.00	<input type="text"/>
TOTAL OPERATOR AND UNPAID FAMILY LABOR				\$ 100.00	<input type="text"/>
RETURN TO LAND, CAPITAL, AND MANAGEMENT				\$ 1,228.91	<input type="text"/>

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