COOPERATIVE EXTENSION SERVICE UNIVERSITY OF KENTUCKY — COLLEGE OF AGRICULTURE



Sample Asparagus Production Budget for Kentucky

June 2005

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 \$1.40 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 \$1,500/acre 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, but 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 tawoods@uky.edu

	Total Costs	Total Returns	Return to Land, Labor, and
			Management
Soil Buildup Year	\$250.79		(\$250.79)
Planting Year	\$2,389.90		(\$2,389.90)
Maturing Year	\$548.30	\$840.00	\$291.70
Full Harvest Years	\$1,006.64	\$2,250.00	\$1,513.36

Table 1. Asparagus Cost and Return Summary

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

	Yield (Pounds)							
Price/Pound	1400	1600	1800	2000	2200	2400		
\$0.80	260	403	546	690	833	976		
\$1.00	510	690	869	1048	1227	1406		
\$1.20	761	976	1191	1406	1621	1836		
\$1.30	887	1119	1352	1585	1818	2051		
\$1.40	1012	1263	1513	1764	2014	2266		
\$1.50	1137	1406	1675	1943	2212	2481		
\$1.60	1263	1549	1836	2122	2409	2695		
\$1.75	1451	1764	2078	2390	2704	3018		
\$2.00	1764	2122	2480	2839	3197	3555		

This research was partially funded by the New Crop Opportunities Center at the University of Kentucky through a USDA Special Grant.

This publication contains estimates for production of a selected new 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 situations. 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.

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ASPARAGUS, Kentucky, 2005 Sample Budget Soil Buildup Year Summary

	Quantity Unit	9)/Unit		Total	Your Estimate
GROSS RETURNS	0 lbs			\$	-	
VARIABLE COSTS						
PRODUCTION						
Soil Test	2 assays	\$	10.00	\$	20.00	
Lime	3 tons	\$	13.25	\$	39.75	
Herbicide	2 quarts	\$	17.00	\$	34.00	
Fertilizer	1 acre	\$	56.00	\$	56.00	
Cover Crop Seed	70 pounds	\$	0.50	\$	35.00	
Variable Machinery Costs	1 acre	\$	25.17	\$	25.17	
Interest				\$	9.45	
TOTAL PRODUCTION COST				\$	219.37	I
RETURN ABOVE VARIABLE COSTS				\$	(219.37)	
				Ψ	(215.07)	
FIXED COSTS Fixed Machinery & Equipment Costs	1 acre	\$	31.42	\$	31.42	
TOTAL FIXED COST				\$	31.42	
TOTAL COSTS				\$	250.79	
RETURN TO OPERATOR LABOR, LAND, (CAPITAL, AND MGT.			\$	(250.79)	
					×	
Operator and Unpaid Family Labor	3.50 hrs	\$	10.00	\$	35.00	
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TOTAL OPERATOR AND UNPAID FAMILY	LABOR			\$	35.00	
RETURN TO LAND, CAPITAL, AND MANA	GEMENT			\$	(285.79)	

ASPARAGUS, Kentucky, 2005 Sample Budget Planting Year Summary

	Quantity Unit	\$/Unit		Total	Your Estimate
GROSS RETURNS	0 lbs		\$	-	
VARIABLE COSTS					
PRODUCTION					
FertilizerN&K	1 acre	\$ 33.60	\$	33.60	
Crowns	12 1000	 150.00		1,800.00	
Pesticides	1 acre	\$ 64.00	\$	64.00	
Variable Equipment Costs	1 acre	\$ 33.80		33.80	
Hired Labor (Planting)	40 hours	\$ 8.00	\$	320.00	
latere et			\$	-	
Interest			\$	101.31	
TOTAL PRODUCTION COST			\$	2,352.71]
RETURN ABOVE VARIABLE COSTS			\$(2,352.71)	
FIXED COSTS					
Fixed Machinery & Equipment Costs	1 acre	\$ 37.19	\$	37.19	
TOTAL FIXED COST			\$	37.19	
TOTAL COSTS			\$	2,389.90	
RETURN TO OPERATOR LABOR, LAND, O	CAPITAL, AND MGT.		\$((2,389.90)	
Operator and Unpaid Family Labor	15.00 hrs	\$ 10.00	\$	150.00	
TOTAL OPERATOR AND UNPAID FAMILY	LABOR		\$	150.00	
					. <u> </u>
RETURN TO LAND, CAPITAL, AND MANA	GEMENT		\$((2,539.90)	

ASPARAGUS, Kentucky, 2005 Sample Budget Maturing Year Summary

	Quantity Unit		\$/Unit		Total	Your Estimate
GROSS RETURNS	600 lbs	\$	1.40	\$	840.00	
PRODUCTION Soil Test	2 assays	\$	10.00	\$	20.00	
FertilizerN,K, Boron	1 acre	\$	30.60	\$	30.60	
Herbicide	1 acre	\$	72.25	\$	72.25	
Insecticide/Fungicide	1 acre	\$	94.53	\$	94.53	
Variable Equipment Costs	1 acre	\$	16.30	\$	16.30	
TOTAL PREHARVEST COST				\$	233.68	
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HARVESTING AND MARKETING						
Hired Labor	20 hours	\$	8.00	\$	160.00	
Marketing Costs	10% gross	\$	840.00	\$	84.00	
Variable Equipment Costs	1 acre	\$	15.00	\$	15.00	
Total Harvest and Marketing Cost				\$	259.00	
Interest on Variable Costs (6 months)	1 acre	\$	22.17	\$	22.17	
TOTAL VARIABLE COSTS				\$	514.85	
RETURN ABOVE VARIABLE COSTS				\$	325.15	
FIXED COSTS						
Fixed Machinery & Equipment Costs	1 acre	\$	33.45	\$	33.45	
TOTAL FIXED COST				\$	33.45	
TOTAL COSTS				\$	548.30	
RETURN TO OPERATOR LABOR, LAND, C	CAPITAL, AND MGT.			\$	291.70	
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Operator and Unpaid Family Labor	6.00 hrs	\$	10.00	\$	60.00	
TOTAL OPERATOR AND UNPAID FAMILY	LABOR			\$	60.00	
RETURN TO LAND, CAPITAL, AND MANA			\$	231.70		

ASPARAGUS, Kentucky, 2005 Sample Budget

Annual Production Year Summary

	Quantity Unit	\$/Unit	Total	Your Estimate
GROSS RETURNS	1800 lbs	\$ 1.40	\$ 2,520.00	
VARIABLE COSTS				
PRODUCTION				
Soil Test	2 assays	\$ 10.00	-	
Fertilizer	1 acre	\$ 33.33	+	
	1 acre	\$ 72.25	+ -	
Insecticide/Fungicide	1 acre	\$ 104.61	+	
Variable Equipment Costs	1 acre	\$ 18.30	\$ 18.30	
TOTAL PREHARVEST COST			\$ 248.49	
HARVESTING AND MARKETING				
Hired Labor	50 hours	\$ 8.00	+	
Marketing Costs	10% gross	\$2,520.00		
Variable Equipment Costs	1 acre	\$ 30.00	\$ 30.00	
Total Harvest and Marketing Cost			\$ 682.00	
Interest on Variable Costs (6 months)	1 acre	\$ 41.87	\$ 41.87	
TOTAL VARIABLE COSTS			\$ 972.36	
RETURN ABOVE VARIABLE COSTS			\$ 1,547.64	
FIXED COSTS				
Fixed Machinery & Equipment Costs	1 acre	\$ 34.28	\$ 34.28	
TOTAL FIXED COST			\$ 34.28	
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TOTAL COSTS			\$ 1,006.64	
RETURN TO OPERATOR LABOR, LAND, O	CAPITAL, AND MGT.		\$ 1,513.36	
Operator and Unpaid Family Labor	6.00 hrs	\$ 10.00	\$ 60.00	
TOTAL OPERATOR AND UNPAID FAMILY			\$ 60.00	
RETURN TO LAND, CAPITAL, AND MANA		\$ 1,453.36		

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