



Kentucky Matted Row Strawberry Profitability Estimated Costs and Returns

Matt Ernst¹

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Two different strawberry production scenarios in Kentucky were analyzed under 2019 production assumptions. The tables on Page 2 report potential profits for both Pick Your Own (PYO) and Wholesale/Retail production under matted row assumptions.

A useful strawberry budget template may be found in the Penn State University Ag Alternatives Series at <https://extension.psu.edu/strawberry-production>. Another helpful budget template may be accessed from Iowa State University at <https://www.extension.ia-state.edu/agdm/decisionaidsall.html>.

The returns reported here are based on years 2-4 of a four-year rotation. These are estimated returns to capital, or the returns a producer would realize after accounting for all expenses of production, land, labor and management. Producers should remember that strawberries must be established for a year before harvest. No returns are generated in the first year in a matted row production system.

The costs of establishment (approximately \$4,000 per acre) are assumed to be prorated over the four-year life of the strawberry planting at an interest rate of 6 percent. Thus, a producer will have to be able to generate adequate returns to cover the cost of establishment. Based on these estimates, well-managed matted row strawberry plantings in Kentucky have the potential to return \$3,000-\$15,000 per year, over the costs of establishment, during a four-year lifetime. Under these assumptions, establishment costs should be recouped by the second fruiting year



with positive economic returns in years three and four.

Annual plasticulture strawberry production has also been successful in Kentucky. The establishment costs for annual plasticulture strawberries, which can approach or exceed total costs as much as \$10,000 to \$15,000 per acre, are substantially more than matted row production. (These costs include both the establishment/planting costs and the production costs before harvest.) Substantially higher costs are because of higher fixed costs for the plasticulture system, higher harvest costs because of higher yields, and potentially higher marketing costs. However, higher yield from plasticulture production results in annual returns from plasticulture that are competitive with the annualized return from matted row production. Profitability potential from annual plasticulture strawberry production is reported in the [CCD Plasticulture Strawberry crop profile](#).



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

**Strawberries: Matted Row, Hired Harvest Labor
Annual Per Acre Return to Management (Years 2-4) at Varying Prices and Yields**

\$/lb	Yield (Pounds)						
	5500	6000	6500	7000	8000	8500	9000
\$ 1.25	\$ 250	\$ 459	\$ 668	\$ 878	\$ 1,293	\$ 1,505	\$ 1,714
\$ 1.40	\$ 993	\$ 1,269	\$ 1,546	\$ 1,823	\$ 2,376	\$ 2,653	\$ 2,929
\$ 1.50	\$ 1,488	\$ 1,809	\$ 2,131	\$ 2,453	\$ 3,096	\$ 3,418	\$ 3,739
\$ 1.60	\$ 1,983	\$ 2,349	\$ 2,716	\$ 3,085	\$ 3,816	\$ 4,183	\$ 4,549
\$ 1.75	\$ 2,725	\$ 3,159	\$ 3,593	\$ 4,028	\$ 4,896	\$ 5,330	\$ 5,764
\$ 1.90	\$ 3,468	\$ 3,969	\$ 4,471	\$ 4,973	\$ 5,976	\$ 6,478	\$ 6,979
\$ 2.00	\$ 3,963	\$ 4,509	\$ 5,056	\$ 5,603	\$ 6,696	\$ 7,243	\$ 7,789
\$ 2.10	\$ 4,458	\$ 5,049	\$ 5,641	\$ 6,233	\$ 7,416	\$ 8,008	\$ 8,599
\$ 2.25	\$ 5,200	\$ 5,859	\$ 6,518	\$ 7,178	\$ 8,496	\$ 9,155	\$ 9,814
\$ 2.40	\$ 5,943	\$ 6,669	\$ 7,396	\$ 8,123	\$ 9,576	\$ 10,303	\$ 11,029
\$ 2.50	\$ 6,438	\$ 7,209	\$ 7,981	\$ 8,753	\$ 10,296	\$ 11,068	\$ 11,839
\$ 2.75	\$ 7,675	\$ 8,559	\$ 9,443	\$ 10,328	\$ 12,096	\$ 12,980	\$ 13,864
\$ 3.00	\$ 8,913	\$ 9,909	\$ 10,906	\$ 11,903	\$ 13,896	\$ 14,893	\$ 15,889
\$ 3.25	\$ 10,150	\$ 11,259	\$ 12,368	\$ 13,478	\$ 15,696	\$ 16,805	\$ 17,914
\$ 3.50	\$ 11,388	\$ 12,609	\$ 13,831	\$ 15,053	\$ 17,496	\$ 18,718	\$ 19,939
\$ 3.75	\$ 12,625	\$ 13,959	\$ 15,293	\$ 16,628	\$ 19,296	\$ 20,630	\$ 21,964
\$ 4.00	\$ 13,863	\$ 15,309	\$ 16,756	\$ 18,203	\$ 21,096	\$ 22,543	\$ 23,989

**Strawberries: Matted Row, Pick Your Own
Annual Per Acre Return to Management (Years 2-4) at Varying Prices and Yields**

\$/lb	Yield (Pounds)						
	5500	6000	6500	7000	8000	8500	9000
\$ 1.00	\$ 2,142	\$ 2,521	\$ 2,900	\$ 3,280	\$ 4,038	\$ 4,418	\$ 4,797
\$ 1.25	\$ 3,379	\$ 3,871	\$ 4,363	\$ 4,855	\$ 5,838	\$ 6,330	\$ 6,822
\$ 1.50	\$ 4,617	\$ 5,221	\$ 5,825	\$ 6,430	\$ 7,638	\$ 8,243	\$ 8,847
\$ 1.75	\$ 5,854	\$ 6,571	\$ 7,288	\$ 8,005	\$ 9,438	\$ 10,155	\$ 10,872
\$ 2.00	\$ 7,092	\$ 7,921	\$ 8,750	\$ 9,580	\$ 11,238	\$ 12,068	\$ 12,897
\$ 2.25	\$ 8,329	\$ 9,271	\$ 10,213	\$ 11,155	\$ 13,038	\$ 13,980	\$ 14,922
\$ 2.50	\$ 9,567	\$ 10,621	\$ 11,676	\$ 12,730	\$ 14,838	\$ 15,893	\$ 16,947
\$ 2.75	\$ 10,804	\$ 11,971	\$ 13,138	\$ 14,368	\$ 16,710	\$ 17,882	\$ 18,972
\$ 3.00	\$ 12,042	\$ 13,321	\$ 14,600	\$ 15,880	\$ 18,438	\$ 19,718	\$ 20,997
\$ 3.25	\$ 13,279	\$ 14,671	\$ 16,063	\$ 17,455	\$ 20,238	\$ 21,630	\$ 23,022

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Reviewed by John Strang and Shawn Wright, UK Extension Specialists

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