

# Industrial Hemp for Fiber Planning Budget

Using this budget, growers of industrial hemp fiber can estimate their production costs for 2025. Table 1 presents cost estimates for industrial hemp fiber production based on price conditions in October 2024. Assumptions are summarized in Tables 2 and 3. Use the “Your estimate” column to plan your operation’s costs and returns for 2025.

**Table 1. Missouri industrial hemp for fiber planning budget for 2025.**

	Dollars per acre <sup>1</sup>	Your estimate
<b>Income</b>		
Hemp fiber	975.00	
Other income	0.00	
Total income	975.00	
<b>Operating costs</b>		
Seed	150.00	
Fertilizer	145.20	
Crop protection	24.10	
Crop supplies, storage and marketing	15.00	
Crop consulting and insurance	0.00	
Custom hire and rental	86.20	
Machinery fuel	13.92	
Machinery repairs and maintenance	23.21	
Operator and hired labor	26.76	
Sampling and testing costs	20.00	
Other expense	5.00	
Operating interest	19.74	
Total operating costs	529.13	
<b>Ownership costs</b>		
Farm business overhead	22.95	
Machinery ownership	61.92	
Real estate charge	117.00	
Total ownership costs	201.87	
Total costs	731.00	
<b>Income over operating costs</b>	<b>445.87</b>	
<b>Income over total costs</b>	<b>244.00</b>	

1. Totals may not sum due to rounding.

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**Table 2. Input assumptions used in industrial hemp for fiber planning budget for 2025.**

Selected input quantities	Per acre	Selected input prices	Dollars per unit
Hemp fiber yield, pounds	6,500	Hemp fiber market price, per pound	0.15
Nitrogen rate, pounds N	100	Nitrogen, per pound N	0.60
Phosphorus rate, pounds P <sub>2</sub> O <sub>5</sub>	60	Phosphorus, per pound P <sub>2</sub> O <sub>5</sub>	0.55
Potassium rate, pounds K <sub>2</sub> O	90	Potassium, per pound K <sub>2</sub> O	0.38
Lime rate, tons	0.6	Lime delivery and spreading, per ton	30.00
Nonmachinery labor, hours	0.50	Labor, per hour	18.50
		Farm diesel, per gallon	3.25

**Table 3. Machinery used in industrial hemp for fiber planning budget for 2025, on a per acre basis.**

Machinery activity (including custom fieldwork)	Passes or hours per acre	Fuel (gallons)	Labor (hours)	Operating costs <sup>1</sup> (dollars)	Ownership costs <sup>2</sup> (dollars)	Total costs (dollars)
Tandem disk (21 feet), 160 HP MFWD	2.0	1.15	0.16	18.64	18.83	37.47
Cultimulcher (21 feet), 160 HP MFWD	1.0	0.58	0.08	8.40	10.55	18.95
Presswheel drill (16 feet), 75 HP MFWD	1.0	0.49	0.15	6.69	7.61	14.31
Disk mower (9 feet), 75 HP TWD	1.0	0.58	0.18	4.69	5.91	10.60
Hay rake (30 feet), 75 HP TWD	1.0	0.14	0.04	1.26	1.52	2.78
Round baler (30 feet), 160 HP MFWD	1.0	0.60	0.08	8.53	10.98	19.51
Pickup (1 ton), 4WD	0.25	0.75	0.25	6.44	6.52	12.95
Dry fertilizer application, custom charge	1.0					7.02
Liquid fertilizer application, custom charge	1.0					7.84
Moving round or large square bales on farm, custom charge						35.21
Moving round or large square bales locally, custom charge						36.13
<b>Total<sup>3</sup></b>		<b>4.28</b>	<b>0.95</b>	<b>54.64</b>	<b>61.92</b>	<b>116.56</b>

1. Machinery operating cost is the sum of fuel, repairs, maintenance and the value of labor.

2. Machinery ownership cost is the sum of machinery overhead and depreciation.

3. Totals may not sum due to rounding.

Abbreviations: HP = horsepower; MFWD = mechanical front-wheel drive tractor; TWD = two-wheel drive tractor; 4WD = four-wheel drive.

Farmers can customize this budget using the Missouri Industrial Hemp Budget spreadsheet, which can be downloaded from the industrial hemp section of the [Missouri Crop and Livestock Enterprise Budgets webpage](https://extension.missouri.edu/programs/agricultural-business-and-policy-extension/missouri-crop-and-livestock-enterprise-budgets) (extension.missouri.edu/programs/agricultural-business-and-policy-extension/missouri-crop-and-livestock-enterprise-budgets).