

Sensitivity Analysis of Irrigated Soybeans

Net Returns Above Variable Costs Per Acre					
Varying Prices and Yields (bushel)					
Price \ bushel/Acre	-25%	-10%	Expected	+10%	+25%
	45	54	60	66	75
\$9.00	\$32.88	\$113.88	\$167.88	\$221.88	\$302.88
\$10.00	\$77.88	\$167.88	\$227.88	\$287.88	\$377.88
\$11.00	\$122.88	\$221.88	\$287.88	\$353.88	\$452.88
\$12.00	\$167.88	\$275.88	\$347.88	\$419.88	\$527.88
\$13.00	\$212.88	\$329.88	\$407.88	\$485.88	\$602.88

Estimated Labor and Machinery Costs per Acre

Preharvest Operations

Operation	Acres/Hour	Number of Times Over	Labor Use**** (hrs/ac)	Fuel Use (gal/ac)	Repairs (\$/ac)	Fixed Costs (\$/ac)
Heavy Disk 27' with Tractor (180-199 hp) MFWD 190	13.2	1	0.09	0.74	\$ 1.59	\$ 4.63
Disk Harrow 32' with Tractor (180-199 hp) MFWD 190	16.3	1	0.08	0.60	\$ 1.41	\$ 4.08
Bed-Disk (Hipper) 6R-36 with Tractor (180-199 hp) MFWD 190	9.6	1	0.13	1.02	\$ 1.39	\$ 4.30
Plant - Rigid 6R-36 with Tractor (120-139 hp) 2WD 130	9.5	1	0.13	0.70	\$ 1.67	\$ 4.66
Spray (Broadcast) 60' with Tractor (120-139 hp) 2WD 130	35.5	3	0.11	0.57	\$ 1.03	\$ 2.45
Total Preharvest Values			0.54	3.63	\$ 7.09	\$ 20.13

Harvest Operations

Operation	Acres/Hour	Number of Times Over	Labor Use**** (hrs/ac)	Fuel Use (gal/ac)	Repairs (\$/ac)	Fixed Costs (\$/ac)
Header -Soybean 18' Flex with Combine (200-249 hp) 240 hp	7.0	1	0.18	1.75	\$ 4.57	\$ 24.59
Grain Cart Corn 500 bu with Tractor (120-139 hp) 2WD 130	10.6	1	0.12	0.63	\$ 1.22	\$ 3.29
Total Harvest Values			0.29	2.38	\$ 5.79	\$ 27.89

**** Includes unallocated labor factor of 0.25. Unallocated labor factor is percentage allowance for additional labor required to move equipment and hook/unhook implements, etc.

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