

Poplar
Woody - Low Input

	Quantity	Unit	Price /Unit	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Total	Present Value	Annualized PV (compare to corn yearly cost)
REVENUE SOURCES																
Wood Yield	5.0	dry ton		3	5	5	5	5	5	5	5	5	5	48		
TOTAL REVENUE			\$ 60.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,900	\$2,900	\$1,780	\$231
CASH EXPENSES																
Planting Mat.																
Cuttings	1100.0	cutting	\$ 0.20	\$220	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$220	\$210	\$27
Fertilizer																
Nitrogen	0.0	lbs	\$ 0.46	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P ₂ O ₅	0.0	lbs	\$ 0.62	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
K ₂ O	0.0	lbs	\$ 0.63	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pest Control																
Glyphosphate	0.2	4 # (gal)	\$ 40.50	\$9	\$9	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18	\$16	\$2
Pendamethalin	0.3	3.3 # (gal)	\$ 29.70	\$10	\$10	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20	\$19	\$2
Machine Costs																
Chisel Plow	1.0	acre (not custom)	\$ 14.17	\$14	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14	\$13	\$2
Soil Finish	1.0	acre	\$ 11.10	\$11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11	\$11	\$1
Hand-planting	1.0	acre	\$ 277.63	\$278	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$278	\$264	\$34
Sprayer	2.0	acre	\$ 5.60	\$11	\$11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$22	\$21	\$3
Harvest*																
feller-buncher/for	1.0	green ton	\$ 13.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,257	\$1,257	\$772	\$100
Chipping/grinding	1.0	green ton	\$ 6.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$580	\$580	\$356	\$46
Trucking	1.0	green ton	\$ 5.20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$503	\$503	\$309	\$40
Marketing			3.5%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$102	\$102	\$62	\$8
TOTAL CASH EXPENSES				\$553	\$30	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,441	\$3,024	\$2,052	\$266
REV ABOVE EXPENSES				-\$553	-\$30	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$459	-\$124	-\$272	-\$35
Labor		hours/acre		18.21	0.23	0	0	0	0	0	0	0	0.54			

*Harvest cost are calculated per green ton. Green wood is roughly twice the weight of dry wood

Calculation Assumptions:

Interest Rate	5%
Years of Productic	10
(1+i) ⁿ - 1	0.63
i(1+i) ⁿ	0.08



Extension Bulletin E-3084, Profitability of Converting to Biofuel Crops
Web: <http://bioenergy.msu.edu/economics/index.shtml>