



2000 WATERMELON PRODUCTION BUDGET ¹

Plastic Mulch and Drip Irrigation

ITEM	EXPLANATION	PRICE PER UNIT	YIELD (cwt/A)			YOUR BUDGET
			240	300	360	
RECEIPTS ²						
Watermelons		\$7.00 /cwt	\$1,680	\$2,100	\$2,520	_____
VARIABLE COSTS						
Plants	2400 plants	0.08 /plant	192	192	192	_____
Fertilizer ³						
N	100 lb.	0.23 /lb.	23	23	23	_____
P ₂ O ₅	75 lb.	0.28 /lb.	21	21	21	_____
K ₂ O	125 lb.	0.13 /lb.	16	16	16	_____
Lime	2000 lb.	14 /ton	14	14	14	_____
Black Plastic/Drip Lines ⁴			270	270	270	_____
Pesticides ⁵			179	179	179	_____
Bee Rental	1 hive/A	40 /hive	40	40	40	_____
Hired Labor (hrs.) ⁶						
Machine	7	7.50 /hr	53	53	53	_____
Harvesting	25	7.50 /hr	188	210	233	_____
Packing	33	7.50 /hr	248	278	308	_____
Other	9	7.50 /hr	68	68	68	_____
Fuel, Oil, Grease			27	30	33	_____
Repairs			35	40	45	_____
Miscellaneous ⁷			12	12	12	_____
Marketing ⁸	5% of gross revenue		84	105	126	_____
Int. on Oper. Cap. ⁹	6 mo.	9.0%	62	65	68	_____
TOTAL VARIABLE COSTS		-Per Acre	1531	1615	1699	_____
		-Per Cwt	6.38	5.38	4.72	_____
FIXED COSTS						
Operator Labor Charge	7 hours	7.50 /hr	53	53	53	_____
Housing Charge ¹⁰			56	56	56	_____
Mach. And Equip. Charge			57	57	57	_____
Irrigation System ¹¹	\$15,000	20%	150	150	150	_____
Land Charge	Rent		100	150	200	_____
Management Charge	5% of Gross		84	105	126	_____
TOTAL FIXED COSTS			500	571	642	_____
TOTAL COSTS		-Per Acre	2030	2185	2340	_____
		-Per Cwt	8.46	7.28	6.50	_____
RETURN ABOVE VARIABLE COSTS			149	485	821	_____
RETURN ABOVE TOTAL COSTS			(350)	(85)	180	_____

¹ Conventional fertilizer application, no fertigation.

² Average price over entire season. Early watermelon prices may be significantly higher

³ See 2000 Ohio Vegetable Production Guide- Bulletin 672 for recommendations

⁴ Based on 7,260 linear row feet. (6 foot row spacing). One time use.

⁵ See current OSUE bulletins 472, 789, and 672 for recommended pesticides.

⁶ Labor estimates based on "Labor Standards for Non-Traditional Kansas Crops" available from Kansas State University

⁷ Costs include soil test, small tools, supplies, utilities, etc...

⁸ Marketing charges are assumed to be 5% of gross revenue. However, these costs vary greatly depending upon the type of marketing involved. Marketing costs may be minimal or significant in operations with an extensive marketing program. These costs should include the labor, advertising, supplies, transporting, and facilities used in the marketing of the melons.

⁹ Interest charges for 6 months @ 9% interest excluding labor

¹⁰ Housing charge can be estimated at $\$45/\text{ft}^2 \times 105 \text{ ft}^2 \text{ per person} \times 15 \text{ workers per unit} = \$70,875 \times 20.75\% \text{ overhead} \times 50\% \text{ usage on watermelons} = \$7,353$. Trash collection, utilit., land charge, water @ $\$2,000 \times 50\% \text{ usage} = \$1,000$
 $\$7,353 + \$1,000 = \$8,353 / 15 \text{ workers per unit} \times 0.1 \text{ worker per acre} = \$56 \text{ per harvested acre}$. Some cost sharing on housing investment is available through Agr. Labor Camp Improvement funds (Ohio 614-466-2285)

¹¹ Total cost of irrigation system \$15,000, expensed at 20% over 20 acres.

$\$15,000 \times 20\% / 20 \text{ acres} = \$150/\text{acre}$

Cost reflects depreciation, interest, and insurance costs of owning system.