**Carolina Farm Stewardship Association, 2019**

**Organic Watermelon – Irrigated – Wholesale Market – 1350 lb Crate**

**Budget based on 1 acre of watermelon on a 10 acre mixed organic vegetable farm.**

**Estimated Costs and Returns per Acre.**

 UNIT QUANTITY $/UNIT TOTAL $/ACRE YOUR FARM

**RECEIPTS**

1. Watermelon Crate 20 332 6,640 \_\_\_\_\_\_\_\_\_\_

**2. VARIABLE COSTS**

1. Organic Certification Acre 1 80 80 \_\_\_\_\_\_\_\_\_\_
2. Seedlings Thous. 2 350 700 \_\_\_\_\_\_\_\_\_\_
3. Compost/Manure Ton 2 40 80 \_\_\_\_\_\_\_\_\_\_
4. Cover Crop Acre 1 80 80 \_\_\_\_\_\_\_\_\_\_
5. Lime (prorated) Ton 0.33 50 17 \_\_\_\_\_\_\_\_\_\_
6. Organic Pest. Sprays Oz. 646 0.70 452 \_\_\_\_\_\_\_\_\_\_
7. Fuel Gal. 20 3.00 60 \_\_\_\_\_\_\_\_\_\_
8. Pallet Crate Each 20 20 400 \_\_\_\_\_\_\_\_\_\_
9. Labor Hrs. 33 10 330 \_\_\_\_\_\_\_\_\_\_
10. Irrigation Supplies Acre 1 1000 1000 \_\_\_\_\_\_\_\_\_\_
11. Plastic Mulch Roll 2.25 100 225 \_\_\_\_\_\_\_\_\_\_
12. Other? \_\_\_\_\_\_\_\_\_\_

Total Variable Costs 3,424

1. **FIXED COSTS**
2. Machine & Equip. Acre 1 211 211 \_\_\_\_\_\_\_\_\_\_
3. Irrigation Acre 1 80 80 \_\_\_\_\_\_\_\_\_\_
4. Land Charge Acre 1 50 50 \_\_\_\_\_\_\_\_\_\_

Total Fixed Costs 341

**TOTAL COSTS** **3,765**

**RETURN ABOVE VARIABLE COSTS 3,216**

**RETURN ABOVE TOTAL COSTS 2,875**

**Notes – Budget estimates for planning only.**

1. Yield extrapolated from Mississippi State University Budgets, 2013. Price are an average from the USDA Market News.
2. Variable costs are those costs that a farmer incurs because s/he decided to grow this specific crop.
3. Average organic certification cost from USDA Farm Services Administration.
4. Average of organic seedling prices based on Internet search.
5. Average price of 1 ton of compost, chicken litter, or manure found in Internet search.
6. Average cost for various cover crops species based on Internet search.
7. Equals 1 ton of lime per acre every 3 years. Price from Internet search.
8. Used only when mechanical and physical control methods are ineffective. Application rates and weighted average price for Dipel DF, PyGanic & Trilogy taken from 2013 CFSA pest control worksheets.
9. Average annual diesel price per gallon in the Carolinas from the U.S. Dept. of Energy, 2018.
10. From Mississippi State University Budgets, 2018.
11. Labor estimates vary widely. This estimate is extrapolated from enterprise budget developed by Clemson Extension, University of Georgia and Mississippi State University.
12. Irrigation supplies include 1.5 rolls of drip tape and 6 acre inches of rural water cost. Quantity needed derived from the Mississippi State University 2018 enterprise budgets, cost based on Internet search.
13. Plastic mulch quantity based on 6 foot row spacing from the center of one bed to the center of the next, requiring 5,445 linear feet, cost based on Internet search.
14. Purposely left blank for other unspecified farm costs.
15. Fixed costs are costs that a farmer incurs whether or not a crop is grown.
16. See table below.
17. Annual fixed cost for irrigation setup.
18. Average farm rental values for North and South Carolina from the USDA National Agricultural Statistics Service, 2018.

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| **Machinery and Equipment Costs\*** |
| **Item** | **Purchase Price** | **Salvage Value $** | **Useful Life Years** | **Acres Used/Yr.** | **Repair & Maint. $/AC** | **Total\*\* $/AC** |
| Tractor  | 17,000.00 | 4,000.00 | 20 | 10 | 3.00 | 68.00 |
| Chisel Plow | 2,500.00 | 600.00 | 15 | 10 | 0.30 | 13.00 |
| Transplanter | 2,600.00 | 600.00 | 20 | 4 | 0.20 | 25.00 |
| Pest. Sprayer | 9,400.00 | 1.90 | 20 | 10 | 9.50 | 47.00 |
| Trailer | 1,100.00 | 200.00 | 20 | 10 | 0.10 | 5.00 |
| Disk | 4,450.00 | 900.00 | 15 | 10 | 0.20 | 24.00 |
| Manure Spreader | 3,000.00 | 1,500.00 | 20 | 5 | 1.50 | 21.00 |
| Bed Shaper | 2,500.00 | 600.00 | 20 | 5 | 1.50 | 21.00 |
| \*Estimates derived from Mississippi State University, Traditional Vegetable 2013 Planning Budgets; Why Cows Need Names, and More Secrets of Amish Farms, Randy James, Kent State University Press, 2013 and internet search of various machinery suppliers. |
| \*\*Total $/Ac. = Purchase Price – Salvage Value/Useful Life/ Acres Used + Repair & Maintenance. |

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