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## **Seasonal Price Analysis to Determine Economic Gains Associated with High-Tunnel Season Extension for Mississippi Vegetable Producers**

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Mississippi is not known for fruit and vegetable production. However, small scale commercial fruit and vegetable producers generated an estimated \$80 million dollars, or 2% of the total value of agriculture, in the state, in 2010 (Riley). Most of the fruit and vegetable growers in Mississippi are small scale operators with an average of less than 200 acres of production (USDA 2007 Census of Agriculture).

Small scale producers do not command a large share of the fruit and vegetable market and do not produce the quantities required to dictate the price in the market place. Mississippi producers will generally be quoted prices similar to the reported daily average price paid at the Atlanta, Georgia, terminal market. Another problem that small scale growers contend with at direct markets is over supply of fresh produce at peak harvest time. In rural areas, home gardens may flood the local market at the peak harvest time and drive prices down. In theory high tunnels will allow growers to harvest produce earlier and later than traditional growing season harvest time and capture stronger prices.

The total estimated annual cost, both variable and fixed, per tunnel is \$2,633. Total cost per pound is \$0.43. The fixed cost was estimated using an initial investment of \$3575 per 30 ft. by 96 ft. high tunnel. Estimated yield is 307 twenty-pound boxes of tomatoes per tunnel (Table 1).

Traditional harvest time for field grown tomatoes in Mississippi begins the last week in May and ends the last week in July. Fall crop tomatoes begin harvest the last week in September and ends with first frost, generally the third week of October. High tunnel production allows harvest to begin first week in May for spring crop. The high tunnel can extend fall crop harvest into the second week of December. Graph 1 exhibits the 10-year average monthly prices, per pound, received for tomatoes at the Atlanta, Georgia terminal market for the years 2001-2010. Average prices paid for tomatoes were consistently higher prior to and after traditional harvest periods in Mississippi.

## References

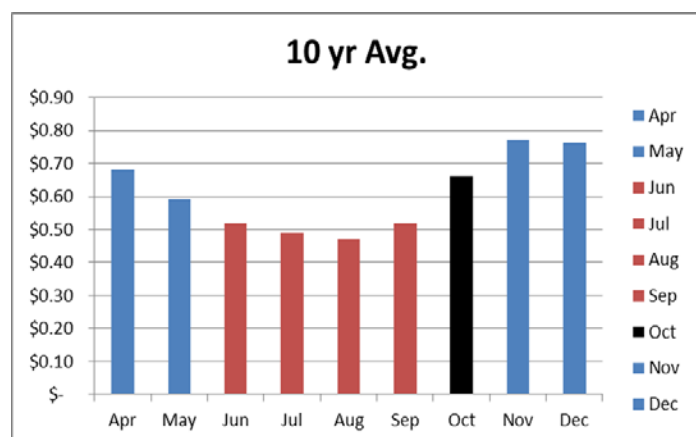
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**Table 1.** Estimated total cost of production per 30’ x 96’ tunnel for Mississippi 2010

Item	Annual Cost/Tunnel	Cost/Sq. ft	Cost/lb
Total Fixed cost	1,227	0.43	0.20
Total Direct Inputs	494	0.17	0.08
Total Labor cost	858	0.30	0.14
Interest on Operating capital	54	0.02	0.01
<b>Total Cost</b>	<b>2,633</b>	<b>0.91</b>	<b>0.43</b>

Source: Unpublished preliminary research, Mississippi State University, 2010.



**Figure 1.** Ten-year average monthly prices for tomatoes, Atlanta, Georgia terminal market