HIGH TUNNEL RASPBERRY PRODUCTION – VIRGINIA STATE UNIVERSITY'S EXPERIENCE

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ABSTRACT

Nationally, consumer demand for locally grown fresh fruits and vegetables is on the rise. This trend in combination with higher gas prices adding to the transportation cost to supply fresh produce over long distances has forced produce retailers, brokers and wholesalers to look for sources of regional supply. Clearly, this is an opportunity for local growers to capitalize on this trend and concentrate on growing crops with proven market demand.

In recent years the health benefits associated with many of the berry crops, in particular raspberries have caused a sharp increase in their market demand. According to a USDA publication, raspberries are ranked among the top ten food items with the highest level of Oxygen Radical Absorbance Capacity (ORAC), a unit used to measure the antioxidant capacity of foods. According to another USDA report, the consumption of fresh raspberries in the U.S. has tripled since the early 1990s to an estimated 0.33 pounds per person in 2005. The growing demand for raspberries and the recognition of their health benefits in an increasingly health conscious society identifies raspberries as a crop with considerable market potential.

As Virginia growers are looking for profitable farm enterprises to diversify their current production systems, crops such as raspberry appear as a prime production candidate for Virginia farmers. A high tunnel is an affordable structure that provides a micro climate for crops under production, allowing growers to expand their production season and improve fruit quality. Virginia State University has established a high tunnel raspberry project, testing several varieties and developing a sustainable production and marketing package to assist growers the possibility of growing this potential crop.

Preliminary results at VSU indicate considerable yield increase and season expansion when comparing high tunnel grown raspberries with that grown in the field. This allows growers to harvest fruit starting from mid-April and continue until Mid-November in Southern Virginia. Also due to the protection provided by high tunnel, the disease and insect incidences are less when compared raspberries grown in a high tunnel with that grown in the field. Research is underway to study the economic feasibility of high tunnel gown raspberries in Southern Virginia.