



Virginia State University is exploring sesame as a new crop for Virginia farmers. The project has shown that sesame seed yield can be high in Virginia, using close row spacing and early planting dates.

Sesame as a new crop for Virginia farmers

Who cares and why?

The American agricultural system is in need of diversification of cropping systems after traditionally relying heavily upon a few crops. In Virginia and the other Southern states, the loss of tobacco as a cash crop has caused disruption in the local economy. Sesame (*Sesamum indicum* L.) provides a potential option for producers interested in diversifying. It is one of the oldest crops known to humans, with sesame seeds being a source of food and oil through the ages. The world's sesame seed trade recently surpassed one million tons per year and was valued at approximately \$850 million. International demand for sesame continues to grow; in the last 15 years, world trade in sesame has increased by nearly 80%. About 65% of the world's annual sesame crop is processed into oil, and the remaining 35% is used in food. The United States imports more sesame than it grows; 2010 imports were valued at \$69.9 million. Considerable demand for sesame exists in Virginia: Sabra Dipping Company, with a plant located in Colonial Heights, Va., needs sesame for its hummus production and currently imports sesame from overseas. The New Crops Program at Virginia State University is exploring sesame as a potential crop for Virginia farmers.



What has the project done so far?

Research conducted at VSU with improved, proprietary sesame cultivars has indicated that sesame has the potential to be easily produced as a commercial crop in Virginia. Sesame seed yields in Virginia varied from about 870 to 1496 pounds per acre, depending on planting time. The highest seed yields were obtained using close row spacing and early plantings.

What research is needed?

Research is needed to identify optimal planting dates, as well as the optimal plant population, for Virginia. Producers also need information on weed management and fertilizer needs for growing sesame in Virginia.

Impact Statement

- Identified a sesame production system for Virginia
- Demonstrated that sesame can be grown in Virginia and that yield is highest using early plantings and close row spacing
- Concentration of oil in sesame seed has been about 46 percent; oil content in Virginia has been higher than that of sesame produced in Texas

Strategic Priority: This research supports the local and institutional priority that addresses the development of alternative crops.

Want to know more?

Dr. Harbans L. Bhardwaj
Virginia State University
hbhardwj@vsu.edu

Additional links: <http://www.umes.edu/ard/Default.aspx?id=46285>

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