

STORIES FROM THE SWEETPOTATO FIELD

Craig Yencho, Professor and Program Leader
Sweetpotato and Potato Breeding and Genetics Programs
Department of Horticultural Science
North Carolina State University
Raleigh, NC 27695-7609

Sweetpotato is ranked as the seventh most important food crop by the Food and Agricultural Organization of the United Nations (FAO). In developing countries, sweetpotato ranks fifth in importance for its caloric contribution per acre after rice, wheat, maize and cassava (FAOSTAT 2014). The potential of this crop as a food and carbohydrate source is widely recognized and its global importance is increasing. China currently accounts for roughly 70-80% of the world production, but sweetpotatoes are an important food staple in sub-Saharan Africa (SSA) and SE Asia.

In the United States, sweetpotato is considered to be a minor specialty crop, but it is rapidly growing in popularity. Sweetpotatoes are a very important crop in North Carolina and we produce roughly 40-45% of the U.S. crop, but significant amounts are also produced in California, Mississippi and Louisiana. During 2008-2012, approximately 119,400 acres of sweetpotato were planted in the U.S., generating ca. \$450 million in farm-gate revenue (USDA-NASS, 2014). About 60% of the U.S. crop is marketed fresh domestically and internationally, with the remainder processed by various food processors. In terms of total sales, fries are growing in importance while pureed sweetpotatoes are one of the leading vegetable baby food products sold by food processors in the US. As consumers become aware of the nutritional value of this food and demand for fresh and processed products increases, chip and French fry processors are beginning to produce new, nutritious, value-added products. It is anticipated that acreage will continue to increase. In this talk, I will share with you some of the breeding, variety release and product development experiences that I have had with this remarkable crop. Sweetpotatoes demonstrate remarkable genetic diversity, which can be harnessed for adaptation. They continue to grow in importance in the US and are a great example of a southern crop that is increasingly being produced in the northern regions.