How sweet is it?

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We love it fresh, canned and frozen. It's grown in every state, and according to a recent study published by the American Society of Horticultural Science, adds up to a whopping $807 million per year industry in the U.S. In other words, sweet corn is big business.

Fresh market production of sweet corn in the U.S. peaks in July, with only ten percent of the annual volume marketed during winter months. Fresh sweet corn is extremely perishable as a result of rapid decrease in sugar content, discoloration and risk of pathogen infection. This intricate combination of seasonal production limitations and the perishable nature of the vegetable sparked an interest in finding reliable methods for predicting the timing, quality and weight of sweet corn crops.

To assist corn producers and the agricultural industry with meeting consumer demand for this sweet, nutritrious vegetable, researchers have developed a new tool, or "simulation model" that has the capacity to predict the quality and yield of sweet corn crops. Simulation models are widely accepted tools used in research, extension and agricultural planning. Models for field corn have been available since the mid 1980's, but no simulation model existed for sweet corn until early 2007.

Jon Lizaso and a team of researchers from the Universities of Florida and Georgia developed the new simulation model over a five year period. Lizaso explained that "the sweet corn market is based on the quality of fresh market whole ears, which is different from the dry grain measure used in the field corn market. We found that modifying a well known field corn simulation model was enough to correctly simulate the

growth and production of fresh market sweet corn."

Lizaso thinks the research and resulting simulation model have significant promise for sweet corn producers, technical consultants, extension agents and the agricultural industry, as well as the larger horticultural and scientific communities. "Existing maize simulation models had limited potential to assist sweet corn production as a result of the distinctive nature of the marketed end product. The new simulation model can improve the quality of sweet corn ear growth as well as predicting fresh market yield and fresh market ear quality", he noted.

Source: American Society for Horticultural Science