

## **Sweet Corn Production in Miami-Dade County, Florida<sup>1</sup>**

Y. C. Li, W. Klassen, M. Lamberts and T. Olczyk<sup>2</sup>

### **Situation**

In 1995-96, gross sales from approximately 14,300 acres of sweet corn in Miami-Dade County were at \$9.8 million, with an average yield of roughly 300-450 42-lb crates per acre. The production cost was approximately \$12.91 per crate or \$3,874/acre for an acceptable yield of 300 42-pound crates per acre in 1999-2000. Sweet corn produced in Miami-Dade County is sold for the fresh market nationwide during winter and spring.

### **Varieties**

Refer to the Vegetable Production Guide for Florida (SP170) for variety selection. Currently the major varieties grown in Miami-Dade County are Primetime, Summersweet9730, and Sunvolt. Bt-corn hybrids are not grown because they cannot be exported to Europe.

### **Soils, Land Preparation, and Planting**

Sweet corn in Miami-Dade County is grown on both gravelly and marl soils. Sandy soils (west Kendall area) also are suitable for sweet corn. To be suitable, gravelly soils must be a minimum of 6 inches deep above the bedrock. Sweet corn is relatively tolerant to flooding. Nevertheless both, yield and quality are reduced under prolonged flooding.

The planting season for sweet corn extends from early October to January and occasionally February. Typically seed is spaced 6-8 inches within the row and rows are spaced 28-32 inches apart. Seeding rates of 20,000 to 22,000 seeds per acre are used.

### **Fertilizer**

Calibrated soil tests for the calcareous soils of Miami-Dade County are not available at present. Tissue analysis is recommended to determine the composition and rates of fertilizers to be applied. Instructions for tissue sample collection, preparation,

- 
1. This document is HS-862, one of a series of the Horticultural Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Revised: April 2006. Please visit the EDIS Web site at <http://edis.ifas.ufl.edu/>. This document is written specifically for growers in Miami-Dade County as a supplement to Vegetable Production Guide for Florida (SP170) ([http://edis.ifas.ufl.edu/MENU\\_CV:VEGPROD](http://edis.ifas.ufl.edu/MENU_CV:VEGPROD)). We thank many colleagues, growers and representatives from seed and chemical companies and grower services for reviewing the document.
  2. Y. C. Li, Associate Professor, Tropical Research and Education Center, Homestead, FL; W. Klassen, Professor, Tropical Research and Education Center, Homestead, FL., Mary Lamberts, Extension Agent IV, Miami-Dade County Extension, Teresa Olczyk, Extension Agent III, Miami-Dade County Extension, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. U.S. Department of Agriculture, Cooperative Extension Service, University of Florida, IFAS, Florida A. & M. University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Larry Arrington, Dean

and submission are provided in Plant Tissue Information Sheet (SL-131), which is available from the Miami-Dade County Cooperative Extension Service. Information on plant tissue analysis for sweet corn is provided in the Vegetable Production Guide for Florida. The total amount of fertilizer required in Miami-Dade County depends on the variety, soil fertility, and other environmental factors. Preplant fertilizer formulas of 6-6-6, 6-3-6, 10-10-10, or similar formulas are satisfactory. All of the phosphorus and two thirds of the N and K fertilizer should be applied as dry fertilizer prior to planting. The remainder should be side dressed 2 to 4 times during the season.

### **Irrigation and Freeze Protection**

Center pivot, in line low volume sprinklers, or traveling guns can be used for irrigation. Irrigation frequencies depend on plant growth stages, soil type, and weather conditions. Normally corn is irrigated once every 5-7 days though more frequent irrigation may be required at certain growth stages during drought period.

Sweet corn has little resistance to frost. Indeed chilling injury occurs when temperatures drop 2 °F below freezing. Because of the cost of solid set overhead sprinklers, most sweet corn growers in Miami-Dade County do not provide freeze protection for sweet corn.

### **Insect Management**

Refer to the Vegetable Production Guide for Florida (SP170) for extensive information on insect control. The major pests are the fall armyworm and the corn silk fly, lesser cornstalk borer, cutworm, and wireworm.

### **Disease Management**

Refer to the Vegetable Production Guide for Florida (SP170) Major diseases include maydis, turcicum, rust, and viruses.

### **Weed Management**

Refer to the Vegetable Production Guide for Florida (SP170).

## **Harvest**

Harvesting season extends from January through April. The harvest date depends on the variety. When hand harvested, sweet corn usually is packed in the field.

### **Multiple Cropping/Rotation**

Because of the long residual action of certain herbicides commonly used in corn production, few crops can be grown in rotation with sweet corn.