



**Western SARE**

Phil Rasmussen, Coordinator  
 Utah State University  
 Agricultural Science Building  
 Room 305  
 4865 Old Main Hill  
 Logan, Utah 84322-4865  
 phone: (435) 797-2257  
 fax: (435) 797-3344

**Professional Development Program**

Bob Newhall  
 Utah PDP Coordinator  
 Utah State University  
 4865 Old Main Hill  
 Logan, UT 84322-4865  
 (435) 797-2183  
 Bob.Newhall@usu.edu

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## EARLY SWEET CORN PRODUCTION

**Situation**

Sweet corn that matures before the general corn crop typically sells for 50 cents to \$1 more per dozen at farmers markets and on-farm and roadside stands. An advantage for early sweet corn is that there is less market competition, making it easier to entice new buyers to purchase the product and possibly become long-term customers.

Early sweet corn trials were conducted on a farm in Roy, Utah, that is owned by Mildred Miya and operated by Enrique Santos. 'Bodacious,' a 75-day sweet corn, was used in the trials in 2005, and 'Sugar Buns,' a 72-day sweet corn, was used in 2006.

**Objectives**

- Determine maturity and harvest dates for two different corn varieties based on planting date,

**Professional Development/ IPM Grant**

**Title:** Early Sweet Corn Production

**Project Coordinator:**  
 James Barnhill  
 Agriculture Agent  
 Weber County Extension  
 Utah State University  
 1181 N. Fairgrounds Drive  
 Ogden, UT 84404  
 (801) 399-8208  
 (801) 399-8205  
[jamesb@ext.usu.edu](mailto:jamesb@ext.usu.edu)



Farm Manager Enrique Santos displays early corn.

- growing environment and planting method
- Assess the economics of the various planting and growing options
  - Disseminate the information to producers and ag educators

**Actions**

Several treatments were planted in various combinations:

**Planting Date**

- Early planted (middle of April)

- Conventional planting (end of April)
- Growing Environment
- Plastic mulch (black)
  - Row cover (floating)
  - Open (no protection)
- Planting method
- Transplanted (3 weeks old)
  - Seeded

**Results**

**Planting Date**

Corn planted 14 days early matured only 3-5 days earlier than the conventionally planted corn. This suggests that sweet corn planted in mid April needs to be planted 2-3 days earlier to achieve a harvest 1 day earlier.

**Planting Method**

Corn planted through black plastic mulch matures 5 days earlier than the corn grown in bare soil. However, it was very difficult to remove the plastic after harvest.

Corn covered with 0.5-ounce flowing row cover matured 5 days earlier than uncovered corn. The row cover



A seedling emerges through the plastic mulch.

*Western SARE, a USDA organization, funds grants for research and education that develop or promote some aspect of agricultural sustainability, which embraces*

- *profitable farms and ranches*
- *a healthy environment*
- *strong families and communities.*

*The Western Region, one of four SARE regions nationwide, is administered through Utah State University.*

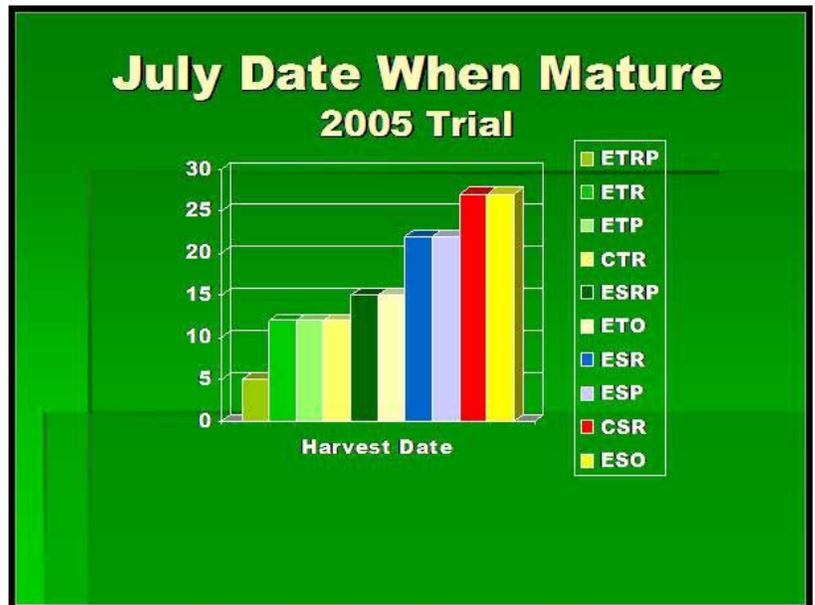
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## EARLY SWEET CORN PRODUCTION

Key for Table:

- E, early planted
- C, conventional planted
- T, transplanted
- S, seeded; R, row cover
- P, plastic mulch
- O, open, no protection.



was on from planting through the middle of May. *If care is taken when removing the fabric it can be re-used the second year.*

### Planting Method

Three-week-old sweet corn transplants matured 12 days earlier than seeded corn. Results showed no advantage in planting out transplants early. *Transplanted corn is consistently shorter than seeded corn, although the ear size doesn't seem to be affected. Transplants do suffer more from cold weather and drought stress than seeded*

*plants.*

### Cost of Treatments

- Plastic mulch = \$250 per acre
- Floating row cover = \$588 per acre used for one year; \$294 used for two years
- Transplanting corn = \$3,000 per acre

### Potential Benefits

The earliness achieved from the treatments was cumulative. For example, 5 days could be gained from using a plastic mulch, another 5 days



Sweet corn thrives under the floating row cover.



Two-week old corn in the cold rame is ready for transplant.

from using a floating row cover and an additional 12 days from using transplants.

Using all three together resulted in sweet corn that matured 22 days earlier than corn seeded in bare soil.

A yield of 1,100 dozen marketable ears per acre, sold at \$3 per dozen, provides a gross return of \$3,300 per acre. An extra 50 cents per dozen for early sweet corn would provide an additional income of \$550 per acre.