Sweet Corn

Breeding Objectives:

- Cold germination
- Early vigor
- Husk protection
- Disease resistance
- Eating quality
Two sugary-enhancer sweet corn populations
• Early population: MDseE
• Late population: MDseL

Derived from double-cross of 4 hybrids
• Sugar Buns
• Mystique
• Miracle
• Ambrosia
• Incredible
• Argent
• Delectable

Recurrent Selection

Summer 2008:
100 rows planted of each population at Gardens Of Eagan Farm in Minnesota
Each row represents a single ear
Approximately 12 rows selected for recombination

Selection Criteria
Germination
Rust resistance
Smut resistance
Husk protection
Tip fill
Ear shape
Sweetness
Tenderness
Remnant Seed

Before planting in Minnesota, a portion of seed from each ear-row are preserved in cold storage at the University of Wisconsin – Madison. After selection, kernels from the desired rows are retrieved and sent to winter nursery.

Winter nursery: South America

Controlled pollinations via paired row crosses
Row 1: remnant seed from one selected ear
Row 2: remnant seed mixture from all remaining ears

The breeding continues . . .

MDseE and MDseL have undergone four cycles of selection

In 2012, we will begin making improvements on population uniformity

Hopeful release of open-pollinated population by 2014