

2005 University of Delaware White Sweet Corn Variety Demonstration

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Introduction

The 2005 White Sweet Corn Variety Demonstration was planted on April 18th at the University of Delaware Research and Education Center in Georgetown, DE. Thirty varieties were entered in the demo. The varieties were seeded in three-row plots using a jab planter. Plots were 20 feet long with 15 inch between-row spacing and 9 inch in-row spacing. Plots were not replicated. Sugary enhanced and synergistic varieties were isolated from supersweet and augmented shrunken varieties by more than 300 feet.

Corn had emerged by 11 DAP. Stands and emergence were good. However the supersweet and augmented shrunken plot sustained some bird damage. Plots were sidedressed and cultivated on June 1. We began applying Warrior twice a week when the earliest varieties began silking in order to control corn earworm.

Plots were harvested once, when the majority of ears were “ready”. The stalk height, and height to the first ear was measured for a sample of ten plants from each plot on the day of harvest. Five ears of each variety were evaluated for ear length, tip cover and number of rows. Four ears from each variety were also photographed in husk and with the husk removed.

The following report includes a summary table of the data collected on each variety followed by photographs of each variety.

Participating Seed Companies

Abbott & Cobb

Siegers Seed

Crookham Company

Mesa Maize

Seedway

Syngenta/Rogers Brand

Harris Seeds

Acknowledgements

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2005 University of Delaware White Sweet Corn Demonstration Summary Table

Variety	Days to Harvest ¹	Plant Height (in.)	Ear Length (in.)	Number of Rows	Ear Height (in.)	Tip Cover ²
<i>Heterozygous se</i>						
Argent	86 (93)	70	8.2	14	14.8	good
<i>Homozygous se</i>						
Spring Snow	65 (81)	46	7.5	13	10.0	good
Debutante	70 (84)	62	7.5	15	11.6	good
Chantilly	71 (86)	63	7.4	14	15.5	good
Venus	72 (86)	49	7.0	14	8.3	fair
Whiteout TSW	72 (86)	67	8.1	16	16.5	good
Sugarpearl TSW	73 (88)	72	7.8	14	14.4	good
Silver Princess	74 (86)	63	7.7	16	15.0	good
Frosty	75 (84)	63	7.1	15	15.0	good
Mesa Maize 21189	75 (91)	63	8.5	16	14.4	good
Sugar Queen	80 (91)	67	8.3	14	17.5	good
Silver King	84 (91)	77	7.6	15	19.1	good
<i>Synergistic Supersweet</i>						
Cinderella	80 (91)	57	8.2	16	10.1	poor
Alexis	86 (93)	50	8.0	16	10.9	good
Celestial	87 (93)	71	8.2	14	12.9	good
<i>Synergistic Brittle</i>						
Misquamicut	78 (91)	64	7.9	17	18.3	good
WH0807	82 (91)	72	7.9	16	12.7	good
Avalon	82 (91)	69	9.0	16	13.3	good
ISOLATE³						
<i>Supersweet</i>						
Summer Sweet 7111W	75 (91)	49	7.4	16	11.6	good
Acropolis	77 (93)	55	7.6	16	6.2	good
Boreal	78 (93)	73	7.4	14	17.2	good
Accelerator	79 (93)	62	7.1	17	12.8	good
WSS0987	79 (93)	77	7.0	16	15.1	good
Tahoe	80 (93)	82	7.4	18	17.4	good
Ice Queen	83 (93)	63	7.9	16	16.8	fair
<i>Augmented Shrunken</i>						
Xtra-Tender 372A	72 (91)	53	7.8	17	14.1	poor
ACX 727W	74 (91)	58	7.75	14	14.2	poor
Xtra-Tender 377A	77 (93)	62	6.9	16	13.6	good
Xtra-Tender 378A	78 (93)	68	7.1	18	16.2	good
ACX 4058W	80 (93)	64	6.5	14	15.6	good

¹First number is days to harvest according to seed supplier. Number in parenthesis is actual days to harvest for the variety demo (April 18th planting date).

²Coverage of the tip of the ear by the husk was rated as good, fair or poor.

³Varieties in the top portion of the table should be isolated from those in the bottom portion.

Supersweet Varieties



Summer Sweet 7111W
Days to Harvest: 75 (91)
Plant Height: 49 in.



Ear Length: 7.4 in.
Number of Rows: 16
Ear Height: 11.6 in.



Acropolis
Days to Harvest: 77 (93)
Plant Height: 55 in.



Ear Length: 7.6 in.
Number of Rows: 16
Ear Height: 6.2 in.



Boreal
Days to Harvest: 78 (93)
Plant Height: 73 in.



Ear Length: 7.4
Number of Rows: 14
Ear Height: 17.2 in.



Accelerator

Days to Harvest: 79 (93)

Plant Height: 62 in.



Ear Length: 7.1 in.

Number of Rows: 17

Ear Height: 12.8 in.



WSS0987

Days to Harvest: 79 (93)

Plant Height: 77 in.



Ear Length: 7.0 in.

Number of Rows: 16

Ear Height: 15.1 in.



Tahoe

Days to Harvest: 80 (93)

Plant Height: 82 in.



Ear Length: 7.4 in.

Number of Rows: 18

Ear Height: 17.4 in.



Ice Queen

Days to Harvest: 83 (93)

Plant Height: 63 in.



Ear Length: 7.9 in.

Number of Rows: 16

Ear Height: 16.8 in.

Augmented Shrunk Varieties



Xtra-Tender 372A
Days to Harvest: 72 (91)
Plant Height: 53 in.



Ear Length: 7.8 in.
Number of Rows: 17
Ear Height: 14.1 in.



ACX727W
Days to Harvest: 74 (91)
Plant Height: 58 in.



Ear Length: 7.75 in
Number of Rows: 14
Ear Height: 14.2 in.



Xtra-Tender 377A
Days to Harvest: 77 (93)
Plant Height: 62 in.



Ear Length: 6.9 in.
Number of Rows: 16
Ear Height: 13.6 in.



Xtra-Tender 378A

Days to Harvest: 78 (93)

Plant Height: 68 in.



Ear Length: 7.1 in.

Number of Rows: 18

Ear Height: 16.2 in.



ACX4058W

Days to Harvest: 80 (93)

Plant Height: 64 in.



Ear Length: 6.5 in.

Number of Rows: 14

Ear Height: 15.6 in.

Heterozygous Sugary Enhanced Variety



Argent

Days to Harvest: 86 (93)

Plant Height: 70 in.



Ear Length: 8.2 in.

Number of Rows: 14

Ear Height: 14.8 in.

Homozygous Sugary Enhanced Varieties



Spring Snow

Days to Harvest: 65 (81)

Plant Height: 46 in.



Ear Length: 7.5 in.

Number of Rows: 13

Ear Height: 10.0 in.



Debutante

Days to Harvest: 70 (84)

Plant Height: 62 in.



Ear Length: 7.5 in.

Number of Rows: 15

Ear Height: 11.6 in.



Chantilly

Days to Harvest: 71 (86)

Plant Height: 63 in.



Ear Length: 7.4 in.

Number of Rows: 14

Ear Height: 15.5 in.



Venus

Days to Harvest: 72 (86)
Plant Height: 49



Ear Length: 7.0 in.
Number of Rows: 14
Ear Height: 8.3 in.



Whiteout TSW

Days to Harvest: 72 (86)
Plant Height: 67 in.



Ear Length: 8.1 in.
Number of Rows: 16
Ear Height: 16.5 in.



Sugarpearl TSW

Days to Harvest: 73 (88)
Plant Height: 72 in.



Ear Length: 7.8 in.
Number of Rows: 14
Ear Height: 14.4 in.



Silver Princess

Days to Harvest: 74 (86)
Plant Height: 63 in.



Ear Length: 7.7 in.
Number of Rows: 16
Ear Height: 15.0 in.



Frosty

Days to Harvest: 75 (84)
Plant Height: 63 in.



Ear Length: 7.1 in.
Number of Rows: 15
Ear Height: 15.0 in.



Mesa Maize 21189

Days to Harvest: 75 (91)
Plant Height: 63 in.



Ear Length: 8.5 in.
Number of Rows: 16
Ear Height: 14.4 in.



Sugar Queen

Days to Harvest: 80 (91)

Plant Height: 67 in.



Ear Length: 8.3 in.

Number of Rows: 14

Ear Height: 17.5 in.



Silver King

Days to Harvest: 84 (91)

Plant Height: 77 in.



Ear Length: 7.6 in.

Number of Rows: 15

Ear Height: 19.1 in.

Synergistic Brittle Varieites



Misquamicut

Days to Harvest: 78 (91)

Plant Height: 64 in.



Ear Length: 7.9 in.

Number of Rows: 17

Ear Height: 18.3 in.



WH0807

Days to Harvest: 82 (91)

Plant Height: 72 in.



Ear Length: 7.9 in.

Number of Rows: 16

Ear Height: 12.7 in.



Avalon

Days to Harvest: 82 (91)

Plant Height: 69 in.



Ear Length: 9.0 in

Number of Rows: 16

Ear Height: 13.3 in.

Synergistic Supersweet Varieties



Cinderella

Days to Harvest: 80 (91)

Plant Height: 57 in.



Ear Length: 8.2 in.

Number of Rows: 16

Ear Height: 10.1 in.



Alexis

Days to Harvest: 86 (93)

Plant Height: 50 in.



Ear Length: 8.0 in.

Number of Rows: 16

Ear Height: 10.9 in.



Celestial

Days to Harvest: 87 (93)

Plant Height: 71 in.



Ear Length: 8.2 in.

Number of Rows: 14

Ear Height: 12.9 in.