Sweet Corn

Family: Poaceae
or True Grasses
The Iroquois gave the first recorded sweet corn (called 'Papoon') to European settlers in 1779.
Sweet Corn
Types: SU, SE, SH2
(White, Bi-color, Yellow)
CLIMATE REQUIREMENTS

- Is adapted to a wide range of climates since it is grown in every state of the United States and Mexico (loves hot weather)
- Grown in all kinds of soil, as long as they are well drained.
- Grows rapidly and can utilize large amounts of nitrogen and potash
- Grows well over a wide range of soil reaction from PH 5.5 to PH 7.0
SEEDS

- 120 to 200 seeds/oz, 1,920 to 3,200 seeds/lb
- Round to oblong, Shrunken
- Commercial seed is planted with raw seed using a air planter
GERMINATION

- Soil temperature range: 60-95 F
- Plant shallow, with light moisture
- Seeds every six to seven inches between seeds within rows, 30 to 36 inches between rows,
FERTILIZER PRICES

AVERAGE U.S. FARM PRICES OF SELECTED FERTILIZERS

Source: Agricultural Prices, National Agricultural Statistics Service, USDA.
ROOT SYSTEM

- Not Fibrous

Many Taps
• **Nitrogen** helps boost a plant’s foliage growth above ground. If your plants are lacking Nitrogen they may appear stunted. Leaves will pale, yellowing due to a slow down of chlorophyll production.

• **Phosphorus** is required by a plant for the conversion of light energy to chemical energy during photosynthesis and also for cell communication and reproduction. It helps roots, fruit and flower development. If your plants are lacking Phosphorus they are likely to show signs of stunted or spindally growth, taking longer to mature. A chile deficient of Phosphorus will have difficulty taking all the other essential nutrients up through the roots.

• **Potassium** regulates the water transfer through the plant, reducing water loss from the leaves, making them more resistant to cold and dry weather. Unfortunately deficiencies only become visible when they are severe. Older leaves may show as blotches or discoloration along the edges of the leaves, as well as a lack of flowering or fruit set.
GROWTH CYCLE
<table>
<thead>
<tr>
<th>Vegetable</th>
<th>N (lb/acre)</th>
<th>P₂O₅ (lb/acre)</th>
<th>K₂O (lb/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Low</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Parsley</td>
<td>120</td>
<td>150</td>
<td>120</td>
</tr>
<tr>
<td>Pea, southern</td>
<td>60</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>Pepper</td>
<td>200</td>
<td>150</td>
<td>120</td>
</tr>
<tr>
<td>Potato</td>
<td>200</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>Radish</td>
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<tr>
<td>Spinach</td>
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<td>120</td>
<td>100</td>
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<tr>
<td>Squash</td>
<td>150</td>
<td>120</td>
<td>100</td>
</tr>
<tr>
<td>Strawberry</td>
<td>150</td>
<td>150</td>
<td>120</td>
</tr>
<tr>
<td>Sweet corn</td>
<td>200</td>
<td>150</td>
<td>120</td>
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<tr>
<td>Sweet potato</td>
<td>60</td>
<td>120</td>
<td>100</td>
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<tr>
<td>Tomato</td>
<td>200</td>
<td>150</td>
<td>120</td>
</tr>
<tr>
<td>Watermelon</td>
<td>150</td>
<td>150</td>
<td>120</td>
</tr>
</tbody>
</table>


*No P or K recommended for soils testing high except for potato, which receives no P but receives 140 lb K₂O/acre.
Smut
Virus disease
Leaf spot
Rust
Stalk rot
INSECTS

- Fall Armyworm
- Corn Borer
- Corn Earworm
- Cutworm
- Mole Cricket
- Wireworm
- White Grub
- Flea beetle
PACKAGING

Sweet Corn are packed in paperboard (wax cartons), wooded crates, or plastic hampers
Sweet Corn Cultivar Trial 2014

Planted: April 11

Plot Size: 25 ft. X 12 ft. (4 Rows)

White Cultivars:
Ice Queen (HM)
Bright White (CC)
7401 IMP (7906WZ) (AC)
XTH3174 (IFSI)
Munition (SYN)
Glacial (1743)
XTH3380 (IFSI)
SV1580SC (SEM)

Bi-Color Cultivars:
Rainier (HM)
Anthem XR (CC)
APA426 (CC)
Ap426 (10-426) (IFSI)
SS2742 (AC)
Obsession II (SEM)
Obsession (SEM)
Marquette (HM)
Aces (2060) (AC)
Battalion (SYN)

Yellow Cultivars:
Vision (IFSI)
ACR 3023 (AC)
SV1446SD (SEM)
CSAYF9-345 (CC)
CSAYF9-382 (CC)
Yosemite (HM)
SCH4184 (SEM)
3188MR (AC)
ICE QUEEN - HARRIS MORAN

Tassel Date: June 2
Silk Date: June 6
Harvest Date: June 20
Average Height at Tassel: 55”
Average Ear Height: 11”
Total Number of Ears Inside Rows: 52
Total Number of Ears outside Rows: 51
Length of 5 Ears: 41
Width of 5 Ears: 9
Tip Cover Rating: 2
Tip Fill Rating: 2

Note: Some dieback, medium long flag leaves, some suckers, not all kernels straight
BRIGHT WHITE – CROOKHAM COMPANY

Tassel Date: June 2
Silk Date: June 6
Harvest Date: June 20
Average Height at Tassel: 56”
Average Ear Height: 10”
Total Number of Ears Inside Rows: 51
Total Number of Ears outside Rows: 52
Length of 5 Ears: 41
Width of 5 Ears: 10
Tip Cover Rating: 1
Tip Fill Rating: 1

Note: Few flag leaves, mostly small, some long. Some dieback
RESULTS JUNE 20 HARVEST

• Ice Queen and Bright White both produced the same amount of yields. Bright White had a little bit better tip cover and tip fill and were long skinny ears, while Ice Queen was short and fat ears.
7401 IMP (7906WZ) – ABBOTT & COBB

Tassel Date: June 4
Silk Date: June 9
Harvest Date: June 23
Average Height at Tassel: 59”
Average Ear Height: 9”
Total Number of Ears Inside Rows: 56
Total Number of Ears Outside Rows: 51
Length of 5 Ears: 41
Width of 5 Ears: 10
Tip Cover Rating: 1
Tip Fill Rating: 1

Note: Many suckers, pretty ear, some husk burning, many long, fat, dark green flag leaves
Note: Lots of husk burning, few fat flag leaves or medium length, dark green, tight husk

Tassel Date: June 4
Silk Date: June 9
Harvest Date: June 23
Average Height at Tassel: 59”
Average Ear Height: 12”
Total Number of Ears Inside Rows: 49
Total Number of Ears Outside Rows: 49
Length of 5 Ears: 41
Width of 5 Ears: 9
Tip Cover Rating: 1
Tip Fill Rating: 1
RESULTS JUNE 23 HARVEST

• 7401 IMP (7906WZ) produced better yields than XTH3174 did, both had really good tip fill and tip cover. Both were short and fat ears.
GLACIAL(1743) - ABBOTT & COBB

Tassel Date: June 6
Silk Date: June 9
Harvest Date: June 25
Average Height at Tassel: 50”
Average Ear Height: 8”
Total Number of Ears Inside Rows: 53
Total Number of Ears outside Rows: 48
Length of 5 Ears: 39”
Width of 5 Ears: 9”
Tip Cover Rating: 2
Tip Fill Rating: 2

Note: Some dieback, many long flag leaves, loose husks
MUNITION - SYNGENTA

Tassel Date: June 9
Silk Date: June 11
Harvest Date: June 25
Average Height at Tassel: 63”
Average Ear Height: 16”
Total Number of Ears Inside Rows: 53
Total Number of Ears outside Rows: 48
Length of 5 Ears: 39”
Width of 5 Ears: 9”
Tip Cover Rating: 2
Tip Fill Rating: 2

Note: Some dieback, many long, thick flag leaves, lose husk
RESULTS FOR JUNE 25 HARVEST

- Glacial (1743) and Munition had no difference in yields or tip cover and tip fill and both were short fat ears.
Tassel Date: June 9
Silk Date: June 11
Harvest Date: June 27
Average Height at Tassel: 61”
Average Ear Height: 13”
Total Number of Ears Inside Rows: 43
Total Number of Ears outside Rows: 45
Length of 5 Ears: 38”
Width of 5 Ears: 9”
Tip Cover Rating: 1
Tip Fill Rating: 1

Note: Lots of husk burning, few fat flag leaves or medium length, dark green, tight husk
Tassel Date: June 6
Silk Date: June 11
Harvest Date: June 27
Average Height at Tassel: 55”
Average Ear Height: 11”
Total Number of Ears Inside Rows: 53
Total Number of Ears outside Rows: 51
Length of 5 Ears: 38”
Width of 5 Ears: 9”
Tip Cover Rating: 1
Tip Fill Rating: 1

Note: Some dieback, medium-long flag leaves
RESULTS JUNE 27 HARVEST

- **XTH3380** produced a lot less yields on the inside rows that **SV1580SC** did, both had good tip fill and tip cover, and were short fat ears.
RAINER – HARRIS MORAN

Tassel Date: June 4
Silk Date: June 6
Harvest Date: June 20
Average Height at Tassel: 48"
Average Ear Height: 7.2"
Total Number of Ears Inside Rows: 63
Total Number of Ears outside Rows: 68
Length of 5 Ears: 36.3"
Width of 5 Ears: 9"
Tip Cover Rating: 1
Tip Fill Rating: 2

Note: Some dieback, small ear, dark green, lots suckers,
R1&2:small flag leaves, R3:lots med-long dark green flags
Tassel Date: June 2
Silk Date: June 6
Harvest Date: June 23
Average Height at Tassel: 53.5”
Average Ear Height: 11.4”
Total Number of Ears Inside Rows: 54
Total Number of Ears outside Rows: 45
Length of 5 Ears: 40.5”
Width of 5 Ears: 9.8”
Tip Cover Rating: 1
Tip Fill Rating: 1

Note: Tight husk, smallish ears, long flag leaves of medium width, dark green, some husk burning
APA426 - CROOKHAM COMPANY

Tassel Date: June 4
Silk Date: June 9
Harvest Date: June 23
Average Height at Tassel: 49.2"
Average Ear Height: 8.3"
Total Number of Ears Inside Rows: 44
Total Number of Ears outside Rows: 36
Length of 5 Ears: 38"
Width of 5 Ears: 9"
Tip Cover Rating: 1
Tip Fill Rating: 1

Note: Tight husk, not pretty--kernels not straight, medium length, skinny, dark green flag leaves
AP426 (10-426) – CROOKHAM COMPANY

Tassel Date: June 2
Silk Date: June 9
Harvest Date: June 23
Average Height at Tassel: 55.3”
Average Ear Height: 8”
Total Number of Ears Inside Rows: 50
Total Number of Ears outside Rows: 43
Length of 5 Ears: 39.5”
Width of 5 Ears: 9.2”
Tip Cover Rating: 1
Tip Fill Rating: 1

Note: Tight husk, a few short, dark green flag leaves, some husk burning
SS2742- ABBOTT & COBB

Tassel Date: June 4  
Silk Date: June 6  
Harvest Date: June 23  
Average Height at Tassel: 61”  
Average Ear Height: 12.9”  
Total Number of Ears Inside Rows: 58  
Total Number of Ears outside Rows: 49  
Length of 5 Ears: 35.8”  
Width of 5 Ears: 8.8”  
Tip Cover Rating: 1  
Tip Fill Rating: 1

Note: Some dieback, long, medium width flag leaves, loose husk
OBSESSION II(BT) - SEMINIS

Tassel Date: June 4
Silk Date: June 9
Harvest Date: June 23
Average Height at Tassel: 55.2"
Average Ear Height: 10.8"
Total Number of Ears Inside Rows: 52
Total Number of Ears outside Rows: 48
Length of 5 Ears: 37.2"
Width of 5 Ears: 8.8"
Tip Cover Rating: 1
Tip Fill Rating: 1

Note: Some dieback, skinny flag leaves of medium length, loose husk
OBSESSION - SEMINIS

Tassel Date: June 4
Silk Date: June 6
Harvest Date: June 23
Average Height at Tassel: 55.6”
Average Ear Height: 13.7”
Total Number of Ears Inside Rows: 47
Total Number of Ears outside Rows: 38
Length of 5 Ears: 39.3”
Width of 5 Ears: 9.6”
Tip Cover Rating: 1
Tip Fill Rating: 1

Note: Many suckers, light green, short flag leaves, big ears, well-filled, some dieback
Tassel Date: June 6
Silk Date: June 9
Harvest Date: June 23
Average Height at Tassel: 52.8”
Average Ear Height: 8.2 ”
Total Number of Ears Inside Rows: 50
Total Number of Ears outside Rows: 40
Length of 5 Ears: 37.7”
Width of 5 Ears: 9”
Tip Cover Rating: 1
Tip Fill Rating: 1.67

Note: Little dieback, loose husk, long, dark green flag leaves
RESULTS FOR JUNE 23 HARVEST

• **SS2742** produced the most out of the variety’s harvested this day and was the most marketable having nice fat ears and good tip fill and tip cover. **APA426** didn’t produce very good yields and was the worst as far as yields harvested this day, but it did have nice fat ears and good tip fill and tip cover.
ACES(2060) - ABOTT & COBB

Tassel Date: June 6
Silk Date: June 9
Harvest Date: June 25
Average Height at Tassel: 49”
Average Ear Height: 9.1”
Total Number of Ears Inside Rows: 28
Total Number of Ears outside Rows: 26
Length of 5 Ears: 37.5”
Width of 5 Ears: 8.8”
Tip Cover Rating: 1
Tip Fill Rating: 1

Note: Low yield, kernels not straight, some dieback, long, thick flag leaves
BATTALION – SYNGENTA

Tassel Date: June 4
Silk Date: June 6
Harvest Date: June 25
Average Height at Tassel: 57.17 ”
Average Ear Height: 13.67”
Total Number of Ears Inside Rows: 41.33
Total Number of Ears outside Rows: 42.67
Length of 5 Ears: 38”
Width of 5 Ears: 9”
Tip Cover Rating: 1
Tip Fill Rating: 1

Note: Long, dark green, thick flag leaves
Tassel Date: June 2
Silk Date: June 6
Harvest Date: June 20
Average Height at Tassel: 49.7”
Average Ear Height: 7.9”
Total Number of Ears Inside Rows: 52
Total Number of Ears outside Rows: 56
Length of 5 Ears: 38.2”
Width of 5 Ears: 9”
Tip Cover Rating: 1.8
Tip Fill Rating: 2

Note: Medium length flag leaves--R1: lots, R2&3: some; some dieback, light green, some secondary ears
ACR 3023 - ABBOTT & COBB

Tassel Date: June 4
Silk Date: June 9
Harvest Date: June 23
Average Height at Tassel: 53.1"
Average Ear Height: 10.2"
Total Number of Ears Inside Rows: 54
Total Number of Ears outside Rows: 47
Length of 5 Ears: 36.4"
Width of 5 Ears: 9"
Tip Cover Rating: 1.3
Tip Fill Cover: 1.3

Note: Light green, slightly loose husk, medium width flag leaves, some light burning of husk
SV1446SD - SEMINIS

Tassel Date: June 4
Silk Date: June 9
Harvest Date: June 23
Average Height at Tassel: 51.7”
Average Ear Height: 16.2”
Total Number of Ears Inside Rows: 44
Total Number of Ears outside Rows: 38
Length of 5 Ears: 38.7”
Width of 5 Ears: 9”
Tip Cover Rating: 1.7
Tip Fill Cover: 2.3

Note: Light green, slightly loose husk, medium width flag leaves, some light burning of husk
RESULTS FOR JUNE 23 HARVEST

- **ACR3023** produced a lot better yield than **SV1446SD** and had better tip fill and tip cover also. **ACR3023** also had fatter yields while **SV1446SD** had longer skinnier ears.
Tassel Date: June 6
Silk Date: June 11
Harvest Date: June 25
Average Height at Tassel: 60.5”
Average Ear Height: 16.6”
Total Number of Ears Inside Rows: 41
Total Number of Ears outside Rows: 41
Length of 5 Ears: 38.5”
Width of 5 Ears: 9.8”
Tip Cover Rating: 2.3
Tip Fill Rating: 1

Note: Light green, short flag leaves, tight husk
Tassel Date: June 6
Silk Date: June 9
Harvest Date: June 25
Average Height at Tassel: 56.2 ”
Average Ear Height: 13.8 ”
Total Number of Ears Inside Rows: 51
Total Number of Ears outside Rows: 48
Length of 5 Ears: 39.3”
Width of 5 Ears: 8.8”
Tip Cover Rating: 1
Tip Fill Rating: 1

Note: Some dieback, long, thick, dark green flag leaves
RESULTS FOR JUNE 25 HARVEST

- **CSAYF9-382** produced a lot better yield and had really good tip cover and had longer fatter ears. **CSAYF9-345** had longer skinnier ears.
Tassel Date: June 9
Silk Date: June 13
Harvest Date: June 27
Average Height at Tassel: 62.5”
Average Ear Height: 19.6”
Total Number of Ears Inside Rows: 43
Total Number of Ears outside Rows: 43
Length of 5 Ears: 42.6”
Width of 5 Ears: 10”
Tip Cover Rating: 1
Tip Fill Rating: 1

Note: Medium length flag leaves, dark green, some dieback, tight husks, big ear
SCH4184 - SEEDWAY

Tassel Date: June 9
Silk Date: June 13
Harvest Date: June 30
Average Height at Tassel: 71.3"
Average Ear Height: 21.1"
Total Number of Ears Inside Rows: 57
Total Number of Ears outside Rows: 55
Length of 5 Ears: 34.2"
Width of 5 Ears: 8.8"
Tip Cover Rating: 2
Tip Fill Rating: 1

Note: Loose husk, light green, small ear, lots of light green flag leaves
3188MR - ABBOTT & COBB

Tassel Date: June 6
Silk Date: June 13
Harvest Date: June 30
Average Height at Tassel: 57.3”
Average Ear Height: 14.5”
Total Number of Ears Inside Rows: 45
Total Number of Ears outside Rows: 53
Length of 5 Ears: 39”
Width of 5 Ears: 9.2”
Tip Cover Rating: 2
Tip Fill Rating: 1.7

Note: Dark green, tight husk, many suckers
RESULTS FOR JUNE 30 HARVEST

- SCH4184 produced the best yield, both SCH4184 and 3188MR had short fat ears.