Full Count®
Plant program

2022 Guide
Now at a billion plus.
The numbers speak for themselves. Trust in Full Count.

**Longevity:** 15+ years of proven success with transplants

**Syngenta genetics:** now on more than half of the U.S. watermelon acreage

**Experienced, dedicated customer service:** over 100 years experience

**Variety choice:** nine market-leading seedless varieties and counting

**Technology-based:** multiple U.S. patents, dedicated research and development teams, Super-Pollenizer™ technology, Full Count® Duals and Deuces companion transplant programs
FULL COUNT 2022

Our program has changed for 2022. SP-7 is our latest development in non-harvestable pollenizers with demand increasing yearly, we are also offering Blended Pollenizers. We still have competitive value pricing across the Full Count product range and can supply you with the basic seedless transplant to a Full Count companion transplant like Fascination/SP-7 Deuces.

The Full Count 2022 product range includes:

- **BASIC SEEDLESS TRANSPLANT**: We supply you with a Syngenta seedless watermelon variety transplant.

- **POLLENIZER TRANSPLANTS**: We offer three different types of pollenizers which include seeded Allsweet types, non-harvestable types (SP-7), and blended pollenizers.

- **SP BUNDLE AT A 3 TO 1 RATIO**: This is a traditional plant bundle but with a non-harvestable pollenizer. Non-harvestable pollenizers from Syngenta are designed to be non-competitive with a maximum amount of pollen available. A standard 3:1 SP bundle will accommodate traditional transplant operations, and provide initial access to a Super Pollenizer™ from Syngenta.

- **FULL COUNT DUALS**: Approximately one third of the cells in the transplant tray will have both a seedless watermelon transplant and a pollenizer. This is a Full Count companion transplant, which offers a choice of three ratio set options between an Allsweet variety and a Super Pollenizer™. Full Count Duals provide a diverse pollen source to help mitigate risk, as well as increasing transplant efficiency and reducing transplant labor costs.

- **FULL COUNT SP DEUCES**: The ultimate Full Count companion transplant! Approximately one third of the cells in the transplant tray will have both a seedless watermelon transplant and a SP pollenizer. Super Pollenizers are non-competitive and provide maximum amounts of pollen during the season. Full Count SP Deuces help to maximize productivity. Full Count companion transplants increase transplant efficiency and reduce transplant labor cost.

Value pricing:

The Full Count offering is modestly priced with basic seedless transplants at a competitive grower price with a minimal grower price increase per product offerings listed above as you move from creating your own plant bundle to the Full Count SP Deuces offering. We feel that there are several advantages of Full Count Duals and Full Count SP Deuces that provide additional value to our customers. If these are not yet part of your planting program, you need to talk to your Full Count transplant representative and compare the different scenarios through the Full Count Product Selection Worksheet and the Full Count Pricing Calculator as soon as possible!
Increase your productivity potential with
Full Count Deuces companion transplants

FEATURES

• Comes pre-set with a 3:1 seedless to Super Pollenizer ratio
• Plugs are easy to order and easy to use; simply load the plugs, pull and transplant
• Re-plant guesswork is eliminated; only order the quantity needed and re-plant
• Available with select Syngenta seedless watermelon varieties

BENEFITS

• Increases transplant efficiency as pollenizer and seedless ratios are pre-set making transplanting quick and efficient with no mix-ups
• Savings of up to 35 percent in transplant labor costs by requiring fewer field employees*
• Increases productivity as transplant crews can cover more acreage faster, because fewer plugs are pulled

* Based on studies conducted by Syngenta in AZ/CA 2008-2010.
Diversify your pollen source with Full Count Duals companion transplants

**FEATURES**

- Comes pre-set with a 3:1 seedless variety to pollenizer variety ratio; half of the pollenizers are a seeded watermelon variety and half are a Super Pollenizer variety
- Plugs are easy-to-order and easy-to-use; simply pull and transplant
- Re-plant guesswork is eliminated; order the quantity needed and re-plant
- Available with select Syngenta seedless watermelon varieties

**BENEFITS**

- Delivery of dual pollen source with two different pollenizers without hassle at transplanting
- Pre-set seedless/pollenizer variety ratio makes transplanting quick and efficient with fewer or no mix-ups
- Savings of up to 35 percent in transplant labor costs by requiring fewer field employees*  
  - Helps increase productivity as transplant crews can cover more acreage faster

* Based on studies conducted by Syngenta in AZ/CA 2008-2010.
<table>
<thead>
<tr>
<th><strong>VARIETY</strong></th>
<th><strong>VARIETY CHARACTERISTICS</strong></th>
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<tbody>
<tr>
<td></td>
<td><strong>Rind Pattern</strong></td>
</tr>
<tr>
<td><strong>SWEET DAWN</strong></td>
<td>Classic rind type</td>
</tr>
<tr>
<td><strong>MELODY</strong></td>
<td>Rich, dark rind</td>
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<tr>
<td><strong>NEW VALOR</strong></td>
<td>Rich, classic rind</td>
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<td><strong>EXCURSION</strong></td>
<td>Classic rind type</td>
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<tr>
<td><strong>FASCINATION</strong></td>
<td>Rich, dark rind</td>
</tr>
<tr>
<td><strong>NEW POWERHOUSE</strong></td>
<td>Rich, dark rind</td>
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<tr>
<td><strong>CAPTIVATION</strong></td>
<td>Rich, dark rind</td>
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**Fusarium Wilt** caused by *Fusarium oxysporum* f. sp. *niveum*

**Anthracnose** caused by *Colletotrichum orbiculare*

Orange shading signifies that the variety is a key variety for specific characteristic shaded.

In cases where specific races or strains are not noted, the variety is resistant to some, but not necessarily all known races or strains of the pathogen. For complete disease resistance information, please visit www.SyngentaUS.com/vegetables
Introducing New Seedless Watermelon – Valor

- Higher fruit sets
- Excellent watermelon flavor for great consumer appeal
- Early maturity with firm flesh
- Produces mostly 36- to 45-count fruit
- Ideal for retail either whole or fresh-cut
- Intermediate resistance to Fusarium Wilt race 1 and Anthracnose race 1

For more information, contact your Authorized Full Count Dealer.

New Syngenta Watermelon Variety Sales Will Benefit Veterans’ Organizations

Introduced in the 2022 growing season, for every new Valor plant sold through the Syngenta Full Count® Plant Program, a portion of the proceeds will be donated to American veterans’ organizations through the National Watermelon Association (NWA).
"I believe we have something special in Valor, and I look forward to seeing the donations it provides to American veterans' organizations as well as the benefits for those who grow it, and ultimately those who buy it."

– John Reese Franklin, TSR, Syngenta Vegetable Seeds & Veteran Sergeant in the U.S. Army
Watermelon varieties
Sweet Dawn
A new standard in quality

FIELD/GROWER FEATURES

• Early maturity, similar to Melody maturity
• Dark red, firm flesh and very smooth skin
• Large fruit size early, with mostly 45- and 36-count fruit and a few 60-count fruit
• Intermediate resistance to Fusarium wilt race 1 and Anthracnose race 1
• Has shown less hollow heart than traditional varieties in early season production areas
• Under conditions favorable to water ring has shown minimal issues as compared to standard varieties

BUYER/CONSUMER TRAITS

• First-to-market advantages
• Attractive appearance and great watermelon flavor for high market demand
• Ideal for early season plantings in the eastern U.S.

TECHNICAL DATA

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<th>Approx. days to maturity</th>
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<td>Fruit shape</td>
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<td>Fruit weight (lbs)</td>
<td>16 - 20</td>
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<tr>
<td>Rind pattern</td>
<td>Light green, very smooth skin with hazy, broad, medium-dark green stripes</td>
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<tr>
<td>Flesh description</td>
<td>Dark red, firm flesh</td>
</tr>
<tr>
<td>Disease resistance</td>
<td>IR: Co: 1 / Fon: 1</td>
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</tbody>
</table>

Early with exceptionally sweet flavor
Melody

Hit the early market window

FIELD/GROWER FEATURES

- First-to-market advantage: five to seven days earlier than Tri-X 313
- Heavy, concentrated set of 14 to 16 pound fruit
- Intermediate resistance to Anthracnose
- Exceptional yield potential in early season fields
- 45- to 60-count fruit

BUYER/CONSUMER TRAITS

- Richer rind pattern than standard seedless varieties for an appealing appearance
- Uniform fruit with attractive flesh
- Brilliant, sweet red flesh

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<tr>
<td>Rind pattern</td>
<td>Medium green with deep green stripes</td>
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<tr>
<td>Flesh description</td>
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<tr>
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</table>

A sweet option for early market returns!
Valor

Higher fruit sets

FIELD/GROWER FEATURES

- Rind appearance is very attractive with a pixelated type appearance
- Early maturity with firm flesh
- Produces mostly 36 and 45 count fruit
- Higher fruit sets

BUYER/CONSUMER TRAITS

- Intermediate resistance to Fusarium Wilt race 1 and Anthracnose race 1
- Ideal for retail either whole or fresh-cut
- Attractive appearance and excellent watermelon flavor for great consumer appeal

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<table>
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<tr>
<th>Feature</th>
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<tr>
<td>Rind pattern</td>
<td>Medium-dark green with pixelated, dark green stripes</td>
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<td>Flesh description</td>
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</table>

Ideal for retail either whole or fresh-cut
Excursion
For the early market

High yield potential with all-time classic appearance

FIELD/GROWER FEATURES

• Large fruit size potential with 50 percent or more 36-count fruit
• Excels in early to main season plantings where large fruit size is desired to meet market demands
• Matures up to seven days earlier than the current “standard” to hit early markets
• Large, oval-shaped fruit with classic Crimson stripe appearance
• Strong and vigorous plant for better performance under stressful conditions
• Improved disease resistance with intermediate resistance to Fusarium wilt race 1 and Anthracnose race 1
• In the field has shown stronger Fusarium tolerance than comparable varieties

BUYER/CONSUMER TRAITS

• Improved flesh quality over standard varieties in this segment
• Under conditions favorable to water ring, this variety has shown minimal issues as compared to standard varieties

TECHNICAL DATA

<table>
<thead>
<tr>
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<td>Fruit weight (lbs)</td>
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<tr>
<td>Rind pattern</td>
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<tr>
<td>Flesh description</td>
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</table>
Fascination
The industry leader

FIELD/GROWER FEATURES

- Attractive red, firm flesh
- Very small “pips” and great watermelon flavor for retail markets
- Improved disease resistance with intermediate resistance to Fusarium wilt race 1 and Anthracnose race 1
- Uniform 45- and 36-count blocky fruit
- Excellent yield potential
- Maturity is usually two to three days earlier than mid-season varieties

BUYER/CONSUMER TRAITS

- Ideal for fresh-cut
- Ships and holds well
- Superior eye appeal; glossy, rich rind color

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<th>Approx. days to maturity</th>
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<tbody>
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<td>Fruit shape</td>
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<td>Fruit weight (lbs)</td>
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<td>Rind pattern</td>
<td>Very deep, rich green skin with a medium Crimson Sweet stripe</td>
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<td>Flesh description</td>
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Combine with Syngenta Super Pollenizer for the best bundle in the industry!
**FIELD/GROWER FEATURES**

- High percentage of 45-count fruit
- Can develop sugars early in the flesh potentially allowing for an early harvest
- Thicker rind for improved shipping
- Improved fruit holding ability in the field
- Firm flesh, nice internal color
- Potential for high yields
- Improved vine vigor when compared to other varieties
- Uniform blocky fruit size and shape
- Broadly adapted

**BUYER/CONSUMER TRAITS**

- Full flavor
- Preferred fruit size
- Early market advantage
- Ideal for East and West, USA

**TECHNICAL DATA**

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<tr>
<th>Feature</th>
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<td>Rind pattern</td>
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<td>Flesh description</td>
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<tr>
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</tr>
</tbody>
</table>

Improved 45 type!
Captivation
A fascinating 45-count melon

FIELD/GROWER FEATURES
- Mostly 45-count fruit for whole fruit markets
- Uniform, consistent fruit size and shape provides a high quality product
- Strong disease resistance and plant growth habit for less than ideal field conditions
- Improved fruit set for high yield potential
- Maturity 4 to 5 days later than Fascination

BUYER/CONSUMER TRAITS
- Firm flesh for delivering a higher quality fruit to the market
- Attractive red flesh for repeat sales

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</table>

Uniform size in a 45!
Summerlicous

Extended Harvest Window

FIELD/GROWER FEATURES

• High percentage of 36 and 45-count fruit
• Improved fruit holding ability in the field
• Firm flesh, nice internal color
• Potential for high yields
• Uniform blocky fruit size and shape
• Broadly adapted
• Uniform blocky fruit size and shape

BUYER/CONSUMER TRAITS

• Full flavor
• Ideal for East and West, USA

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Improved Field Holding!
Exclamation
The full season choice

FIELD/GROWER FEATURES
- Larger fruit size: mostly 36- and 45-count fruit
- Full season maturity, later than Fascination by 5 to 7 days
- Strong disease package helps to protect your field investment
- Fruit has shown good field holding ability, allowing for more flexible harvest schedule
- Attractive, very firm red flesh with small-medium pips
- Performs well under warm-to-hot growing conditions
- Uniform fruit size; blocky fruit shape
- Good fruit set for high yield potential
- Tends to have strong vine vigor

BUYER/CONSUMER TRAITS
- Rich Crimson Sweet rind pattern that buyers prefer
- Crisp, sweet, red flesh with small pips
- Firm flesh makes this an excellent choice for fresh cut

TECHNICAL DATA

<table>
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<th>Approx. days to maturity</th>
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A reliable, full-season variety!

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**FIELD/GROWER FEATURES**

- Large fruit size
- Medium to dark red flesh
- Traditional Crimson Sweet type rind pattern

**BUYER/CONSUMER TRAITS**

- Vigorous plant
- Good uniformity of fruit shape and size

**TECHNICAL DATA**

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<tr>
<td>Disease resistance</td>
<td>IR: None reported</td>
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</table>
Sirius
Uniformity plus quality

FIELD/GROWER FEATURES

- Intermediate resistance to Fusarium wilt race 1
- Medium to large fruit size with mostly 8 and 6 count fruit
- Uniform fruit size for consistent performance
- Medium rind thickness

BUYER/CONSUMER TRAITS

- Provides a desirable range of fruit sizes
- Improved post-harvest handling due to medium rind thickness
- Good plant vigor with maturity approximately 2-3 days earlier than similar varieties in the same segment

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A reliable, full-season variety!
**Dark Knight**

Distinctive look and superior flavor

FIELD/GROWER FEATURES

- Excellent flesh quality
- Small pip size
- Uniquely dark, glossy and smooth rind
- High Brix content
- Slightly larger fruit size than Sweet Gem

BUYER/CONSUMER TRAITS

- Has shown less hollow heart than comparable varieties in trials
- Great consumer appeal
- Strong disease package

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<td>Fruit weight (lbs)</td>
<td>14 - 17</td>
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<tr>
<td>Rind pattern</td>
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<td>Flesh description</td>
<td>Dark red, medium firm flesh with higher Brix content</td>
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<td>Disease resistance</td>
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Higher brix readings
Sweet Gem
Distinctive look for local markets

FIELD/GROWER FEATURES
- Mostly 60- and 45-count seedless fruit with round shape
- Good fruit set with early maturity and excellent yield potential
- Rich, glossy dark green rind with classy appearance
- Attractive firm, red flesh with small pips
- Crisp, sweet, mouth-watering flavor

BUYER/CONSUMER TRAITS
- Distinctive look and superior flavor; ideal for roadside and local markets
- Unique, advanced features create opportunity for premium market pricing

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Ideal for local markets!
SP-7
A unique combination of attributes

The ultimate pollenizer companion to your Full Count selection

FIELD/GROWER FEATURES
- SP-7 has shown to deliver early male blooms that are earlier than current commercial varieties
- 25% larger male flowers plus a higher production of male flowers than SP-6
- In trials, the number of male blooms per plant has been nearly double of SP-6
- The vine has a high level of branching which increases the production of male flowers
- Trials have shown extended flowering with pollen available throughout the entire growing season
- Intermediate resistance to: Fusarium wilt race 1, Anthracnose race 1 and powdery mildew

BUYER/CONSUMER TRAITS
- 2016/17 university trials have shown improved seedless watermelon fruit set and/or fruit size with SP-7
- No competitive effect on the yield of seedless watermelon
- Easy to see fruit with a distinct rind pattern and a brittle rind which crushes easily
- Crop damage caused by harvesting pollenizer varieties is eliminated

* North Carolina State University
* Clemson State University
Watermelon plants you can count on

Take the guesswork out of your seed purchase
You need plants that are usable when transplanting. Full Count® delivers 100 percent of your needs based on actual plants that are usable. Syngenta transplant producers account for weak, unusable plants in the order when delivering to the field.

Avoid paying for unnecessary seed, transplant and freight costs
Full Count gives you the assurance of meeting 100 percent of your plant needs, without the worries of being long or short in plants that will ultimately add to your production costs.

Sow when you are ready
Syngenta has placed seed inventories with its Full Count producers to ensure that your order has just the right amount of growing days in the greenhouse to meet your plant quality requirements. Forget about just-in-time seed deliveries that throw your production plan off schedule.

Save on preplant costs by paying after you transplant in the field
Your Syngenta Full Count dealer invoices you after the plants are delivered to the field with standard 60-day terms. Due to increasing costs associated with field preparation, fertilizer and irrigation setup, preplant cost savings help to potentially increase your cash flow right from the start.

Receive preferred volume pricing
By placing a “contracted order,” you receive a discount based on the total cumulative volume of plants purchased through the program. The discount can save you $15-$30 per acre, depending on the order quantity. Discounts apply regardless of region, transplant producer or varieties contracted.
Estrella
A star performer in your field

FIELD/GROWER FEATURES
- Consistently high-quality blocky 36- to 45-count fruit
- Strong rind provides protection for fruit in all field conditions
- Intermediate resistance to Fusarium wilt race 1 and Anthracnose race 1

BUYER/CONSUMER TRAITS
- Small seed cavity extends shelf life
- Glossy Allsweet appearance creates consumer appeal
- Firm, sweet, red flesh with the small seeds that consumers prefer

TECHNICAL DATA
<table>
<thead>
<tr>
<th>Approx. days to maturity</th>
<th>80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit shape</td>
<td>Long blocky</td>
</tr>
<tr>
<td>Fruit weight (lbs)</td>
<td>20 - 24</td>
</tr>
<tr>
<td>Rind pattern</td>
<td>Dark green with broken, light green stripes</td>
</tr>
<tr>
<td>Flesh description</td>
<td>Dark red flesh with small seed</td>
</tr>
<tr>
<td>Disease resistance</td>
<td>IR: Co: 1 / Fon: 1</td>
</tr>
</tbody>
</table>

Broadly adapted, plant-anywhere variety provides high-quality fruit!
Melon varieties
FIELD/GROWER FEATURES

- Firm, orange flesh with a small, tight cavity
- High quality, netted appearance
- Extended shelf life
- Enhanced vine strength
- Great disease resistance package
- Bred for resistance to cotton aphid

BUYER/CONSUMER TRAITS

- Improved internal fruit quality and flesh firmness for extended shelf life
- Strong and vigorous plant to stand up to field stress and resist fruit cracking
- Excels in main to late-season plantings in eastern melon growing regions

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approx. days to maturity</td>
<td>75</td>
</tr>
<tr>
<td>Avg. fruit length x width (in)</td>
<td>7.5 x 6.7</td>
</tr>
<tr>
<td>Interior appearance</td>
<td>Small tight cavity with orange flesh</td>
</tr>
<tr>
<td>Exterior appearance</td>
<td>Netted</td>
</tr>
<tr>
<td>Disease resistance</td>
<td>HR: Pc: 1 / Pc: 2US / Fom: 0, 1, 2</td>
</tr>
<tr>
<td></td>
<td>IR: Ag / Pc: 3.5 T: S</td>
</tr>
</tbody>
</table>
FIELD/GROWER FEATURES
- Tight seed cavity with firm, orange flesh
- Medium netted exterior
- Extended shelf life
- Enhanced vine strength
- Great disease resistance package
- Bred for resistance to cotton aphid

TECHNICAL DATA
- Approx. days to maturity: 73
- Avg. fruit length x width (in): 7.5 x 6.7
- Interior appearance: Small tight cavity with orange flesh
- Exterior appearance: Netted
- Disease resistance: HR: Px: 1 / Px: 2US / Fom: 0, 1, 2, IR: Ag / Px: 3.5, T: S

BUYER/CONSUMER TRAITS
- Improved internal fruit quality for extended shelf life
- Improved shelf life due to flesh firmness
- Strong and vigorous plant to stand up to field stress and resist fruit cracking
- Excels in early to main-season plantings in eastern melon growing regions
Aphrodite
Proven performance year after year

FIELD/GROWER FEATURES

• Early maturing Athena type
• Produces large melons weighing 6 to 7 pounds
• High resistance to Fusarium wilt races 0, 1 and 2
• Approximately 72 days to maturity

BUYER/consumer traits

• Improved fruit netting, providing an advantage in fall plantings
• Complement to Athena for early and late season plantings in the East
• Has done well in midwest plantings

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Approx. days to maturity</th>
<th>72</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg. fruit length x width (in)</td>
<td>7 x 6.5</td>
</tr>
<tr>
<td>Interior appearance</td>
<td>Thick flesh similar to Athena</td>
</tr>
<tr>
<td>Exterior appearance</td>
<td>Medium-coarse netting, slight suture that is netted</td>
</tr>
<tr>
<td>Disease resistance</td>
<td><strong>HR:</strong> Fom: 0, 1, 2 / Px: 1</td>
</tr>
<tr>
<td><strong>T:</strong></td>
<td>5</td>
</tr>
</tbody>
</table>

The perfect companion to Athena!
Athena
The market standard

FIELD/GROWER FEATURES
- Proven performance in major melon production areas
- Good sizes with fruit averaging 5 to 6 pounds
- High resistance to Fusarium wilt races 0, 1 and 2
- Approximately 75 days to maturity

BUYER/CONSUMER TRAITS
- High quality and flavor sets the market standard!
- The name “Athena” is well-recognized from broker to consumer

TECHNICAL DATA

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Approx. days to maturity</td>
<td>75</td>
</tr>
<tr>
<td>Avg. fruit length x width (in)</td>
<td>6.5 x 6</td>
</tr>
<tr>
<td>Interior appearance</td>
<td>Thick flesh; very firm for an eastern type</td>
</tr>
<tr>
<td>Exterior appearance</td>
<td>Coarse netting; minor, netted indentations</td>
</tr>
<tr>
<td>Disease resistance</td>
<td>HR: Fom: 0, 1, 2 / Px: 1, 2US</td>
</tr>
</tbody>
</table>

Reliable, proven performance in an Eastern shipper!
Technical information
### Technical data: watermelon

<table>
<thead>
<tr>
<th>Variety</th>
<th>Approximate days to maturity</th>
<th>Fruit shape</th>
<th>Fruit weight range (lbs)</th>
<th>Rind pattern</th>
<th>Flesh description</th>
<th>Disease resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SEEDLESS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweet Dawn</td>
<td>74</td>
<td>Blocky</td>
<td>16 - 20</td>
<td>Light green, very smooth skin with hazy, broad, medium-dark green stripes</td>
<td>Dark red, firm flesh</td>
<td>IR: Co: 1 / Fon: 1</td>
</tr>
<tr>
<td>Sweet Gem</td>
<td>79</td>
<td>Globe</td>
<td>13 - 16</td>
<td>Rich, glossy, dark green skin</td>
<td>Dark red flesh</td>
<td>None reported</td>
</tr>
<tr>
<td>Melody</td>
<td>79</td>
<td>Globe</td>
<td>14 - 16</td>
<td>Medium green with deep green stripes</td>
<td>Dark red flesh</td>
<td>IR: Co: 1</td>
</tr>
<tr>
<td>Valor</td>
<td>NEW</td>
<td>Blocky</td>
<td>14 - 17</td>
<td>Medium-dark green with pixelated, dark green stripes</td>
<td>Deep red, firm flesh</td>
<td>IR: Co: 1 / Fon: 1</td>
</tr>
<tr>
<td>Dark Knight</td>
<td>NEW</td>
<td>Globe</td>
<td>14 - 17</td>
<td>Glossy, very dark green and smooth</td>
<td>Dark red, medium firm flesh with higher Brix content</td>
<td>IR: Co: 1 / Fon: 1 / Px: 1</td>
</tr>
<tr>
<td>Excursion</td>
<td>81</td>
<td>Blocky</td>
<td>17 - 22</td>
<td>Light green with hazy, broad medium-dark green stripes</td>
<td>Red, firm flesh</td>
<td>IR: Co: 1 / Fon: 1</td>
</tr>
<tr>
<td>Fascination</td>
<td>83</td>
<td>Blocky</td>
<td>15 - 20</td>
<td>Very deep, rich green skin with a medium Crimson Sweet stripe</td>
<td>Dark red, firm flesh</td>
<td>IR: Co: 1 / Fon: 1</td>
</tr>
<tr>
<td>Tri-X 313</td>
<td>86</td>
<td>Blocky</td>
<td>15 - 18</td>
<td>Light green with hazy, broad, medium-dark green stripes</td>
<td>Red flesh</td>
<td>None reported</td>
</tr>
<tr>
<td>Powerhouse</td>
<td>NEW</td>
<td>Blocky</td>
<td>14 - 18</td>
<td>Deep green skin color with a Crimson Sweet stripe</td>
<td>Red, firm flesh</td>
<td>IR: Co: 1 / Fon: 1</td>
</tr>
<tr>
<td>Captivation</td>
<td>89</td>
<td>Blocky</td>
<td>13 - 17</td>
<td>Deep green skin color with a Crimson Sweet type skin</td>
<td>Red, firm flesh</td>
<td>IR: Co: 1 / Fon: 1</td>
</tr>
<tr>
<td>Summerlicous</td>
<td>NEW</td>
<td>Blocky</td>
<td>14 - 18</td>
<td>Deep green skin color with a Crimson Sweet stripe</td>
<td>Red, firm flesh, good field holding</td>
<td>IR: Co: 1 / Fon: 1 / Px: 1</td>
</tr>
<tr>
<td>Exclamation</td>
<td>90</td>
<td>Blocky</td>
<td>17 - 21</td>
<td>Deep green skin color with a Crimson Sweet stripe</td>
<td>Red, firm flesh</td>
<td>IR: Co: 1 / Fon: 1</td>
</tr>
<tr>
<td>Sugar Fresh</td>
<td>87</td>
<td>Blocky</td>
<td>16 - 20</td>
<td>Light green with hazy, broad medium-dark green stripes</td>
<td>Medium to dark red flesh</td>
<td>None reported</td>
</tr>
<tr>
<td><strong>PERSONAL SIZE SEEDLESS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sirius</td>
<td>74</td>
<td>Globe</td>
<td>5.5 - 6.5</td>
<td>Medium thick with Crimson Sweet Skin</td>
<td>Red</td>
<td>IR: Fon: 1</td>
</tr>
<tr>
<td><strong>SEEDED</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estrella</td>
<td>80</td>
<td>Long blocky</td>
<td>20 - 24</td>
<td>Dark green with broken, light green stripes</td>
<td>Dark red flesh with small seed size</td>
<td>IR: Co: 1 / Fon: 1</td>
</tr>
<tr>
<td>Sangria</td>
<td>80</td>
<td>Elongated</td>
<td>20 - 24</td>
<td>Dark green with broken, light green stripes</td>
<td>Red flesh with medium seed size</td>
<td>IR: Co: 1 / Fon: 1</td>
</tr>
<tr>
<td>Jamboree</td>
<td>82</td>
<td>Elongated</td>
<td>24 - 28</td>
<td>Dark green with broken, light green stripes</td>
<td>Red flesh with medium seed size</td>
<td>IR: Co: 1 / Fon: 1</td>
</tr>
<tr>
<td><strong>POLLENIZERS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SP-7</td>
<td>75</td>
<td>Globe</td>
<td>1 - 2</td>
<td>Light green exterior with no stripes and thin, brittle rind</td>
<td>Medium yellow flesh</td>
<td>IR: Co: 1 / Fon: 1 / Px: 1</td>
</tr>
</tbody>
</table>

### Technical data: melon

<table>
<thead>
<tr>
<th>Variety</th>
<th>Approx. days to maturity</th>
<th>Average fruit length x width (in)</th>
<th>Interior appearance</th>
<th>Exterior appearance</th>
<th>Disease resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MELON</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aphrodite</td>
<td>72</td>
<td>7 x 6.5</td>
<td>Thick flesh similar to Athena</td>
<td>Medium-coarse netting, slight suture that is netted</td>
<td>HR: Fom: 0, 1, 2 / Px: 1</td>
</tr>
<tr>
<td>Athena</td>
<td>75</td>
<td>6.5 x 6</td>
<td>Thick flesh; very firm for an eastern type</td>
<td>Coarse netting; minor, netted indentations</td>
<td>HR: Gc: 1 / Px: 2 / T: S</td>
</tr>
<tr>
<td>Astound</td>
<td>75</td>
<td>7.5 x 6.7</td>
<td>Small tight cavity with orange flesh</td>
<td>Netted</td>
<td>HR: Pxc / Px: 2 / US / Fom: 0, 1, 2</td>
</tr>
<tr>
<td>Accolade</td>
<td>73</td>
<td>7.5 x 6.7</td>
<td>Small tight cavity with orange flesh</td>
<td>Netted</td>
<td>HR: Ag / Px: 3.5 / T: S</td>
</tr>
</tbody>
</table>

### Disease abbreviation key

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag</td>
<td>Cotton aphid caused by Aphis gossypii</td>
</tr>
<tr>
<td>Co</td>
<td>Anthracnose caused by Colletotrichum orbiculare</td>
</tr>
<tr>
<td>Form</td>
<td>Fusarium wilt caused by specific races of Fusarium oxysporum f. sp. melonis</td>
</tr>
<tr>
<td>Fon</td>
<td>Fusarium wilt caused by Fusarium oxysporum f. sp. niveum</td>
</tr>
<tr>
<td>Px</td>
<td>Powdery mildew</td>
</tr>
<tr>
<td>S</td>
<td>Sulfur burn caused by the application of some sulfur-based pesticides</td>
</tr>
<tr>
<td>ZYMV</td>
<td>Zucchini yellow mosaic virus</td>
</tr>
<tr>
<td>HR</td>
<td>High resistance</td>
</tr>
<tr>
<td>IR</td>
<td>Intermediate resistance</td>
</tr>
<tr>
<td>T</td>
<td>Tolerance</td>
</tr>
</tbody>
</table>

Pathogen races are indicated to the right of the abbreviation in parentheses [example: Fom (1, 2) = powdery mildew caused by races 1 and 2US of Sphaerotheca fuliginea]. In cases where specific races or strains are not noted, the variety is resistant to some, but not necessarily all known races or strains of the pathogen. For comprehensive disease resistance information, please visit [www.SyngentaUS.com/vegetables](http://www.SyngentaUS.com/vegetables).
Syngenta is now using a newer, improved test for bacterial fruit blotch of cucurbit seeds. By integrating this test into the overall Quality Assurance program, clean commercial seeds can be brought to market faster and with greater confidence than in the past. This method, which is an improved PCR test, achieves greater test sensitivity and speed by utilizing DNA-based testing technology similar to that applied in medical and food sciences.

Introduction:

Bacterial fruit blotch (BFB), caused by the bacterium Acidovorax avenae subsp. citrulli, is a serious disease of cucurbits (watermelons, melons, etc.) that can cause severe economic loss to commercial production in some markets (Hopkins, 1989). The disease was first reported in United States commercial watermelon fields in 1989 (ASTA). Shortly thereafter, testing of seeds became a common commercial practice (National Seed Health System [NSHS]). Over the past several decades there have been numerous outbreaks of BFB, particularly in the southeastern and midwestern portions of the U.S., with crop damages in the tens of millions ($USD). As a result, this pathogen continues to pose a significant risk to growers, seed companies, and ultimately, everyone associated with the cucurbit industry.

Symptom expressions of the disease include necrotic leaves with water soaked veins, water soaked lesions, and cracking of the fruit with severe infestation leading to penetration of the flesh, and ultimately dissolution of the fruit interior. Symptoms can be observed at the seedling and/or vegetative stage, and prior to fruit harvest (Pictures 1, 2, 3).

In commercial cucurbit production, BFB can be initiated from many different sources including infested plant debris, infected wild cucurbits, and infested seeds (ASTA). Also, the risk from the disease is as great now as it has ever been. To successfully manage this disease, everyone must do their part to prevent its occurrence and spread. The seed industry works to exclude BFB from seed at all stages of production from the greenhouse to the field as well as during harvest. Despite all of these efforts, the final evaluation of the seed health status occurs during seed testing. In order to achieve the highest quality seed, the most sensitive and robust methods for disease detection must be used.

Over the past 30 years there has been a shift from direct seeding of the crop to the use of transplants, often produced in high density and in environments conducive to the development and spread of BFB. The result is that there is an increased potential for explosive spread of the pathogen from seedborne and other inoculum.

A practical strategy for the management of bacterial fruit blotch is to prevent the introduction of the pathogen into the production system. This starts with the use of clean seeds. The key factor to the prevention of seed-associated BFB is utilizing a rigorous seed testing program to prevent infested seeds from entering fields and greenhouses. Using this approach, seed companies can be better assured the seeds they provide to growers are not going to cause epidemics. Constant research will continue to develop new tests and improvements to the existing ones to help growers combat this disease.

Grow out tests in favorable temperature and relative humidity conditions are commonly used to detect seed-associated BFB (Latin & Hopkins, 1995; NSHS). Several different types of grow out tests have been used, and since 2003 a single type of greenhouse grow out, which is approved by the NSHS, has been used by many seed producers. Some improvements have been made in the commercial BFB testing strategy in the last several years including a PCR-based assay, but now an improved PCR test has been developed by Syngenta using new DNA extraction and detection technology. This technology significantly increases the sensitivity for detecting BFB on seeds when compared to conventional grow out methods.
The new BFB test works by using the characteristics of Polymerase Chain Reaction, PCR for short. All organisms have unique pieces of DNA, and PCR detects small fragments of the DNA with a particular sequence. The targeted DNA sequence is unique to the BFB pathogen so all the other DNA in a sample is left alone. During PCR, a protein attaches to the specific pathogen DNA and through an enzymatic process, produces millions of copies of this DNA, which are then easy to detect. If the DNA does not have the specific target sequences, then the PCR will not make more copies.

The new Syngenta BFB test is the result of extensive research into improving the extraction and detection of DNA. Earlier PCR-based testing for BFB often suffered from poor quality DNA and PCR reagents. The new Syngenta BFB test uses improved DNA extraction technology to provide high-quality DNA to improve test robustness. Recent technological developments in PCR reagents have been integrated into the new test to increase its sensitivity and reliability.

Over 800 lots of cucurbits have been tested using the new method and it has an unblemished record for detecting seedborne BFB. While seedling grow out assays have continued to be used in conjunction with the BFB PCR testing, Syngenta is reducing the reliance on grow out assays due to the overwhelming quality of the new BFB PCR testing and the advantages the test offers.

For the new testing, 30,000 seeds from each watermelon and melon seed lot will be evaluated with this highly sensitive test resulting in an even greater assurance that transmissible BFB will not occur in the seeds purchased from Syngenta. Conventional grow out tests will still be used in cases where additional confirmation of seed health is desired. This can result in the testing of up to 90,000 seeds, which would be enough to plant more than 10 acres in the field.

The Syngenta BFB PCR testing

Advantages:
Highly sensitive method:
• Specific – only detects the BFB pathogen
• Consistent – unlike a grow out test, it is not dependent on environmental conditions
• Reliable and repeatable

Rapid:
• Two days versus three to four weeks for conventional grow out testing

Capacity:
• Increase in capacity over conventional grow out testing
• Requires very little space and far less energy than a grow out test

Control:
• Direct oversight of testing in a laboratory environment
• Not based on visual observation of plants, where a symptomatic seedling might be overlooked
• An internal control allows monitoring of test performance and prevents false negative results
• DNA samples can be stored
• Actual samples can be stored
• Results can be stored electronically

Limitations:
• Requires some additional, specialized equipment
• Requires specialized training to become proficient in the technique
The Syngenta PCR-based testing represents improved technology that provides a more rapid, less expensive, and extremely sensitive method for BFB detection from seeds. The benefits include much greater reliability to detect this high-risk pathogen while greatly reducing the test turnaround time. This is another step to enhance the ability of Syngenta to help ensure timely deliveries of high-quality seeds to its global markets.

Syngenta is willing to make this technology available to the seed industry because with a disease as potentially devastating as BFB, it is in the best interest of Syngenta and others in the seed industry to evaluate and select the best testing method(s) for their customers’ needs.

Syngenta would like to acknowledge the information and support provided by ASTA in the development of this bulletin.


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**Picture 1.** Bacterial fruit blotch spreading among a stand of melon seedlings. *Source: Syngenta*

**Picture 2.** Foliar symptoms on mature leaves of watermelons in a commercial field in the southeastern United States. *Source: Syngenta*

**Picture 3.** Bacterial fruit blotch symptoms on watermelon fruit. *Source: Syngenta*
Seedless vs seeded: Total watermelon acreage in the United States is over 130,000 acres. More than 85 percent of U.S. watermelon production consists of seedless varieties. Florida, Georgia, Texas and California are the leading production states in the U.S.

Planting seed vs transplants: One hundred percent of the seedless acreage is transplanted. Nearly 50 percent of the seeded acreage is transplanted.

Plant populations: Normal plant populations for seedless crops are from 1,800 to 2,200 seedless plants per acre, plus the pollenizer plants.

Pollenizer ratios for seedless: Normal ratios are from 3:1 to 4:1 seedless plants for every pollenizer (also referred to as seeded, diploid or male). Pollenizer plants range from 500 to 700 plants/A.

Bees/pollination: Bees are essential for pollination in a watermelon field. Growers will use at least 2 to 3 hives/A. Bumblebees are now used in some areas as bumblebees can work under colder/windier conditions than honeybees. Sixteen to 24 bee visits per flower are required for seedless watermelon plants to achieve maximum fruit set and development. Seeded watermelon plants only require 8 to 12 bee visits per flower in order to achieve maximum fruit set and development.

Hard seed coats: “My seedless watermelon had seeds. Why?” Chances are these are not seeds, but hard seed coats that are empty and do not contain a seed. Immature white seed coats are commonly found in a seedless watermelon. Under certain stress/environmental conditions, some of these seed coats may become hard and black and look like a seed, but are empty inside. There is no harm in eating these hard seed coats.

Irrigation: As moderate users of water, watermelon plants require ample irrigation during fruit development for uniform, well-developed fruit. Water stress can cause misshapen fruit and poor internal quality. In comparison, potatoes and cabbage are heavy users of water.

Fertilizer: Watermelon plants are moderate to heavy users of fertilizer. Depending on soil test results, a crop will need 100 to 150 lbs/A nitrogen, 50 to 150 lbs/A phosphate and 50 to 150 lbs/A potassium.

Grafting: Watermelon plants can be grafted onto a squash root stock to improve resistance to soil-borne diseases (like Fusarium) and to improve the performance of the plant under stressful conditions. Grafting is done in other parts of the world (Spain, Turkey, China, Mexico) but due to the high cost of grafting, which is a labor intensive process, it is not yet prevalent in the U.S. The USDA has funded a Specialty Crops Grant for grafting, which includes watermelon and other vegetable crops, in order to investigate ways to bring this technology into the U.S. market.
Although the breeding technology for seedless watermelon was developed in the late 1940s, only in the last quarter century have seedless watermelon crops been widely commercially grown. Standard seeded watermelon plants have 2 sets of 11 chromosomes (diploid), while seedless watermelon plants have 3 sets of 11 chromosomes (triploid).

**SEEDLESS WATERMELON DEVELOPMENT TIMELINE**

1940s
- Technology invention, Dr. H. Kihara

1960s
- Creation of seedless watermelon, Dr. O. J. Eigsti

1980s
- Development of varieties, including first sales of Tri-X 313 (the "Original Seedless Watermelon") in 1987

1990s
- Commercialization and proliferation due to improvements in transplant production (Dr. D. Maynard) and solid matrix seed priming (Dr. J. Eastin)

2000s
- Introduction of non-harvestable pollenizer varieties to enhance yield

**HOW TO MAKE A SEEDLESS WATERMELON**

The chromosome number of a standard diploid (2X) watermelon is doubled using a chemical agent (like colchicine) to produce a tetraploid (4X) watermelon. This step is necessary to the production of triploid (3X) seedless watermelon varieties, which are hybrids developed by crossing tetraploid (4X) and diploid (2X) parent lines.

**SEEDLESS WATERMELON TRAITS**

**GROWER TRAITS**
- Marketable yield potential
- Maturity
- Plant vigor
- Disease resistance
- Field holdability

**CONSUMER TRAITS**
- Fruit uniformity
- Firmness/texture
- Flesh color/lycopene
- Low hollow heart sensitivity
- Low hard seed coat sensitivity
- Sugar/brix
- Shelf-life

**UNDESIRABLE TRAITS**
- Poor flesh color/uniformity
- Hollow heart

**DESIRABLE TRAITS**
- Uniform fruit size
- Ideal flesh color/texture for seedless watermelon

**EXAMPLE DEVELOPMENT TIMELINE**

YEAR 1-4
- Parent development

YEAR 5
- Test hybrids

YEAR 6
- Advanced hybrid testing

YEAR 7
- Pre-commercial testing

YEAR 8
- Commercial

**BREEDING CONCEPT**

**SOURCES OF GENETIC VARIATION:** related species, wild types, elite material from different parts of the world, etc.

**SCREENING FOR TRAITS OF INTEREST:** disease resistance screen, stress tolerance screen, trials in multiple environments

**CROSSING AND SELECTION**
- Genetic diversity
- Cross pollination
- Powdery mildew screen
Major watermelon diseases

**Bacterial fruit blotch:** Appears as dark, greasy blotches on nearly ripe fruit. Fruits become non-marketable. Can cause serious economic loss.

**Gummy stem blight:** Starts on the older plant leaves. Leaf spots are dark brown and begin on the edges of the leaves. If severe, it can nearly defoliate a plant. Increasing resistance to several fungicides.

**Powdery mildew:** Appears during dry spells as yellow or white powdery spots on the leaves. Leaves can yellow quickly. Some resistance to fungicides.

**Fusarium:** Vascular tissue in the root becomes discolored, which leads to plant collapse. Control by crop rotation, resistant varieties and grafting.

**Additional diseases include:** Pythium, Anthracnose, downy mildew

Major watermelon insect pests

**Aphids:** Reproduce rapidly and produce a sticky honeydew-like substance that covers the leaf. Can transmit viral diseases.

**Whiteflies:** Reproduce quickly in hot weather. General feeding damage. Can transmit viral diseases.

**Spider mites:** Multiply rapidly during hot weather. Yellowing between the leaf veins, “webbing”, develops on the underside of the leaf.

**Rindworms:** Insect larvae that feed on watermelon rinds are generically referred to as rindworms. Their feeding results in irregular trails over the rind surface.

(Donald N. Maynard, University of Florida, Bradenton)

Disease and insect control:

There is genetic resistance available for Fusarium (now in commercial varieties) and powdery mildew (in some advanced experimental varieties). Watermelon growers utilize IPM (integrated pest management) programs and PCA (pest control advisor) services to monitor and appropriately control diseases and insects. Watermelon growers are careful to not over-apply pesticides because of environmental issues, added cost and pesticide resistance management.

HARVEST INFORMATION

1) **Number of harvests:** On average, a field is harvested 3 times with approximately 5 to 7 days between harvests.

2) **Seedless yield:** Yield will range from 40,000 to 90,000 lbs/A. Growers will average 1.5 to 2.5 harvestable fruits per plant for regular seedless watermelon.

3) **Fruit size:** Size is based on the number of fruit that will fit in a standard bin that weighs 700 lbs. Standard fruit sizes are 36-count (18 to 22 lbs/fruit), 45-count (14 to 17 lbs/fruit) and 60-count (10 to 14 lbs/fruit). Mini seedless are packed in cartons of 6 to 8 fruit/carton and fruit weigh 4 to 6 lbs.

4) **Postharvest handling:** Cooling is preferred, but not required. Most growers move the fruit into the market soon after harvest. Optimum storage temperature for whole fruit is 50 to 59°F. Storage life is typically 14 days at 59°F and up to 21 days at 45 to 50°F. Chilling injury (water-soaked areas on the rind, softening of the flesh) can develop if fruit are stored at less than 45°F.

5) **Ethylene:** Watermelons produce very little ethylene, but are very ethylene sensitive at levels as low as 5 ppm. Do not ship/store watermelon with muskmelons, cantaloupes, honeydews, apples or other “ethylene producers”.

(Source: Donald N. Maynard, University of Florida, Bradenton)
The scientific name for watermelon is *Citrullus lanatus*. Watermelon is a member of the Cucurbitaceae botanical family, which contains more than 800 different species, including watermelon, cucumber, melon, squash and various gourds. The center of origin for watermelon is the drier areas of tropical and subtropical Africa. Although originally domesticated in central and southern Africa, watermelons spread globally via emigration and trade routes. Early European colonists brought watermelon to the Americas and, by 1576, Spanish colonists were growing watermelon in Florida.

Watermelon is a warm season crop. Flowering and fruit development are promoted by intense sunlight and high temperatures. Watermelon crops are grown commercially throughout the world, with Asia being the most important production area (77 percent of the world’s watermelon production). Watermelon plants perform best in soil with good drainage, high levels of organic matter and a neutral to slightly acidic pH.

Watermelon seeds come in a range of colors and sizes. On average, they take 3 to 6 days to germinate. Optimal germination conditions are 85 to 90°F and high humidity.

Watermelon fruit are 92 percent water. Red fleshed varieties are a good source of lycopene—averaging between 36 to 78 ug/g. There is significant variation in watermelon appearance (size, shape, skin), flavor (bitter vs. sweet) and flesh characteristics (seeded vs. seedless, flesh colors, flesh textures).
Transplant producer information 2022
FLORIDA

Barnett-Partin Plants, Inc.

ADDRESS
1400 C.R. 830A
Felda, FL 33930
Phone: (863) 675-1394
Fax: (863) 675-1441

CONTACTS
Jack Partin: Cell (863) 673-0078
Sue McCormick: Cell (850) 419-7101
Nathan White: Cell (863) 843-5653

FREIGHT TERMS*
All plants delivered in trays unless otherwise requested.
Transplant delivery is the responsibility of the grower.
Growers are responsible for making freight arrangements directly with the greenhouse.
Contact Barnett-Partin Plants for freight and rate quotes.

Mobley Plant World, LLC

ADDRESS
1351 W. Cowboy Way
LaBelle, FL 33935
Phone: (863) 675-2020
Fax: (863) 675-6052

CONTACTS
Thomas Howard: (941) 809-0834
Carol Howard: (863) 675-2020

FREIGHT TERMS*
100 mile radius of Mobley Plant World:
$200 freight.
Over 100 miles: $2.25 per mile.
Transplant delivery is the responsibility of the grower.
Growers are responsible for making freight arrangements directly with the greenhouse.
All other orders will be quoted on an individual basis; please call Thomas Howard for a quote.

Quik-Starts Plants, LLC

ADDRESS
901 4th St N.W.
Ruskin, FL 33570
Phone: (813) 645-2528
Fax: (818) 645-8508

CONTACTS
Rosie Guerra
Kenny Lee

FREIGHT TERMS*
100 mile radius of Quik-Starts Plants:
$175 freight.
Over 100 miles: $2.25 per mile.
Transplant delivery is the responsibility of the grower.
Growers are responsible for making freight arrangements directly with the greenhouse.
All other orders will be quoted on an individual basis; please call Rosie Guerra for a quote.

PLANTS SHIPPED - TYPE

Pull and Pack fees:
$5.00/ks for orders of 10,000 or less
FLORIDA cont.

Redi Plants Corporation

**ADDRESS**
11341 Six L’s Farm Rd.
Naples, FL  34114
Phone: (239) 774-6030
Fax: (239) 774-6348

**CONTACTS**
Bob Poklemba, Manager
USE FIRST: Cell (239) 250-3113
Carter Lambert: (757) 709-0389

**FREIGHT TERMS**
All deliveries $1.45/mile round-trip mileage applicable.
Transplant delivery is the responsibility of the grower.
Growers are responsible for making freight arrangements directly with the greenhouse.
Contact Redi Plants for freight and rate quotes.

**PLANTS SHIPPED - TYPE**
Trailers hold 728 trays each
Racked boxes hold 189 trays
Racked boxes require forklift for off-loading
Pull and Pack by request only
Plant closure Mon-Fri 3:30 p.m.

Trans-Gro

**ADDRESS**
3315 State Road 29 South
Immokalee, FL  34142
Phone: (239) 657-6141

**CONTACTS**
Patrick Naughton: Cell (239) 641-5742
Email: pnaughton@Trans-Gro.com

**FREIGHT TERMS**
Mileage calculated on round-trip basis at $2.40 per mile
Transplant delivery is the responsibility of the grower.
Growers are responsible for making freight arrangements directly with the greenhouse.
Contact Trans-Gro for freight and rate quotes.

**PLANTS SHIPPED - TYPE**
Pull and Pack fees:
$5.00 per box - 350 plants (128)
$25.00 per pallet

* Products shipped to You will be shipped Ex Works, shipping point (as defined in Incoterms version 2010), at which time (i) shipped Products will be deemed accepted by You, and (ii) title and risk of loss for the shipped Products will pass to You (excluding any embedded proprietary or patent-protected technology which is offered under license only). Syngenta shall not be responsible for duties, import and export licenses and permits, custom charges and duty fees, taxes, excises, freight, boxes, insurances and other shipping expenses. Shipped products cannot be returned for credit by Syngenta.
GEORGIA

Fowler Plant Company

ADDRESS
7276 GA Highway 133 S
Moultrie, GA 31788
Phone: (229) 324-2630
Fax: (229) 324-2669

CONTACTS
Ashley Fowler: Cell (229) 529-4282
Laura Fowler

FREIGHT TERMS*
125 mile radius of Fowler Plant Company
$375.00 freight. All other freight must call for a quote (229)-529-4282.
In greenhouse provided rack trailers.
Growers are responsible for making shipping arrangements directly with greenhouse.
Contact Ashley Fowler for freight and rate quotes.

PLANTS SHIPPED - TYPE
Pull and Pack by request only at the time of order.
$10.00 per 1000 plants 128 cell
$7.00 per 1000 plants 162 cell
Tray deposit of $4.00 per tray required on all spot orders of 20,000 or less.
Return trays within 21 days to receive a tray deposit credit.

Mobley Greenhouse, Inc.

ADDRESS
1265 GA Highway 133 N.
Moultrie, GA 31788
Phone: (229) 985-5544
Office: (800) 345-5783
Fax: (229) 985-0567

CONTACTS
Joey Faison: Cell (229) 873-4759
Kayla Gay: (229) 785-2364

FREIGHT TERMS*
125 mile radius of Mobley Greenhouse:
$300 freight.
Transplant delivery is the responsibility of the grower.
Growers are responsible for making freight arrangements directly with the greenhouse.
All other orders will be quoted on an individual basis; please call Joey Faison for a quote.

PLANTS SHIPPED - TYPE
Trays
Boxed
Pull and Pack fees:
$10.00 per 1000 plants (128 and 162)
$5.00 per 1000 plants (242)

R&K Greenhouses

ADDRESS
4551 GA Highway 178
Lyons, GA 30436
Phone: (912) 293-3105

CONTACTS
Kaye Usher

FREIGHT TERMS*
Grower is responsible for making freight arrangements directly with greenhouse.
Bumper pull trailers available for grower pick up at no charge.
50 mile radius of greenhouse $50/load
Over 50 mile radius $3.00/mile
Contact R&K Greenhouses for availability of delivery and delivery quote.

PLANTS SHIPPED - TYPE
Trays on racked trailers
Pull and Pack on request ONLY.
Prior notice required.
$5.00/BOX (128)
Products shipped to You will be shipped Ex Works, shipping point (as defined in Incoterms version 2010), at which time (i) shipped Products will be deemed accepted by You, and (ii) title and risk of loss for the shipped Products will pass to You (excluding any embedded proprietary or patent-protected technology which is offered under license only). Syngenta shall not be responsible for duties, import and export licenses and permits, custom charges and duty fees, taxes, excises, freight, boxes, insurances and other shipping expenses. Shipped products cannot be returned for credit by Syngenta.

Valdosta Plant Company, Inc.

ADDRESS
524 Plant Farm Rd.
Adel, GA 31620
Phone: (229) 896-4802
Fax: (229) 896-3020

CONTACTS
Tom Daughtrey, Owner
Ann Daughtrey
Jake Daughtrey

FREIGHT TERMS*
125 mile radius of Valdosta Plant Company: $375.00 (min. of 100,000 plants). All other freight must call for a quote 229-896-4802.
Transplant delivery is the responsibility of the grower.
Growers are responsible for making freight arrangements directly with the greenhouse.
Contact Valdosta Plant Company for freight and rate quotes.

PLANTS SHIPPED - TYPE
Racked Trays
Boxes: Pull and Pack by request only
Pull and Pack fees:
$10.00 per 1000 plants (all tray sizes)
All transplant deliveries are subject to a $3.00 per tray charge for trays not returned.
Tray deposit of $3.00 per tray required on all spot orders of 20,000 plants or less. Return trays within 21 days to receive a tray deposit credit.

Vincent Farms, Inc.

ADDRESS
12487 Salt Barn Rd
Laurel, DE 19956
Phone: (302) 875-5707
Fax: (302) 875-5723

CONTACTS
Ray Vincent
Haley Keenan
Jen Riehl

FREIGHT TERMS*
Transplant delivery is the responsibility of the grower.
Growers are responsible for making freight arrangements directly with the greenhouse.
Contact Vincent Farms for freight and rate quotes.

PLANTS SHIPPED - TYPE
72 CT disposable trays
98 CT disposable trays

* Products shipped to You will be shipped Ex Works, shipping point (as defined in Incoterms version 2010), at which time (i) shipped Products will be deemed accepted by You, and (ii) title and risk of loss for the shipped Products will pass to You (excluding any embedded proprietary or patent-protected technology which is offered under license only). Syngenta shall not be responsible for duties, import and export licenses and permits, custom charges and duty fees, taxes, excises, freight, boxes, insurances and other shipping expenses. Shipped products cannot be returned for credit by Syngenta.
Transplant Producer Information
2022

MIDWEST

Cox Farms, Inc.

ADDRESS
7484 W. CR 750 N.
Gaston, IN 47342
Phone: (765) 358–3434
Fax: (765) 358-8386
info@coxfarmsinc.com

CONTACTS
Greg Cox: Cell (765) 744-7241
Jenna Cox Scott: Cell (765) 744-4837
Rita Whited: Office (765) 358-3434,
Cell (765) 730-6093

Kietzer Farms, Inc.

ADDRESS
67267 90th Ave.
Hartford, MI 49057
Phone: (269) 424–3428
Fax: (269) 424–5387

CONTACTS
Betty Jordan, Accounts Manager
Eric Kietzer
Rock Kietzer

FREIGHT TERMS*
Transplant delivery is the responsibility of the grower.
Growers are responsible for making freight arrangements directly with the greenhouse.
Contact Cox Farms for freight and rate quotes.
Freight and box charges may be invoiced by Cox Farms directly.

PLANTS SHIPPED - TYPE
53’ box semi trailer shipping:
2,464 trays per load
Trays: 800 to 1,200 trays per load via Cox Farms trailers
Larger shipments (10 trays or more) in 3 tray boxes at $2.25 per tray boxing fee, palletized and delivered via LTL freight services.
Smaller shipments (10 trays or less) in 2 tray boxes at $2.25 per tray boxing fee, delivered via express ground services. (subject to change).
All plants grown in disposable trays.

UPCHARGE

Ends of trays marked white for seeded and SPs: $0.25 per tray
**Headstart Nursery, Inc.**

**ADDRESS**
4860 Monterey Rd.
Gilroy, CA 95020
Phone: (408) 842–3030
Fax: (408) 847–4365

92–555 Avenue 70
Mecca, CA 92254
Phone: (760) 396–3030
Fax: (760) 396–3031

**CONTACTS**
Lisa Branco, Sales Manager
lbranco@headstartnursery.com
(831) 214–5252

Melissa Wark, Cust. Service Manager
mwark@headstartnursery.com
(408) 425–4269

Cole Iten, General Manager, Desert
citen@headstartnursery.com
(760) 469–6594

Don Lydick, Sales Representative
dlydick@headstartnursery.com
(760) 902–0016

**UPCHARGE**
Organics: add $15.50/ks
Organic Ellepots: add $15.75/ks
Ellepots: add $10.00/ks

**FREIGHT TERMS**
Please contact your sales representative for freight rates and options.

**PLANTS SHIPPED - TYPE**
Plants shipped via bins:
Forklift required for bin offloading
Boxing option available for additional charge

**KW Transplants**

**ADDRESS**
1903 East 4th Street
Holtville, CA 92250
Phone: (760) 356–9983
Fax: (760) 356–9948

**CONTACTS**
Matt DiCori: U.S. Sales Manager
Sandi Claverie: Customer Service

**FREIGHT TERMS**
Please contact your local Keithly-Williams sales rep to place orders.
Contact KW Transplants for freight rates and options.

**UPCHARGE**
Organics: add $11.00/ks

**PLANTS SHIPPED - TYPE**
Plants shipped via bins or boxes.

**Westside Transplants**

**ADDRESS**
15796 Dorris Rd.
Huron, CA 93234
Phone: (559) 945–7584
Fax: (559) 945–3103

16839 Iona Ave.
Lemoore, CA 93245
Office: (559) 924–1506
Fax: (559) 924–1635

**CONTACTS**
Conner Tollenaar

**FREIGHT TERMS**
Freight is included within a 60-mile radius of the subject if taken in bins and in full loads (18 or more bins considered a full load).
For smaller loads, freight is required.
Please contact Westside for rates.
Contact Westside Transplants for freight rates and options.

**UPCHARGE**
Organics: add $15.50/ks

* Products shipped to You will be shipped Ex Works, shipping point (as defined in Incoterms version 2010), at which time (i) shipped Products will be deemed accepted by You, and (ii) title and risk of loss for the shipped Products will pass to You (excluding any embedded proprietary or patent-protected technology which is offered under license only). Syngenta shall not be responsible for duties, import and export licenses and permits, custom charges and duty fees, taxes, excises, freight, boxes, insurances and other shipping expenses. Shipped products cannot be returned for credit by Syngenta.
ARIZONA

KW Transplants

ADDRESS
6885 W. County 11th St.
Yuma, AZ 85365
Phone: (928) 955-0162

CONTACT
Sean Foy: Nursery Division Manager
Matt DiCori: U.S. Sales Manager
Sandi Claverie: Customer Service

FREIGHT TERMS*
Please contact your local Keithly-Williams sales rep to place orders. Contact KW Transplants for freight rates and options.

PLANTS SHIPPED - TYPE
Plants shipped via bins or boxes.

UPCHARGE
Organics: add $11.00/ks

Tropical Star Vegetable Transplants

ADDRESS
814 N. Border Rd.
Alamo, TX 78516
Phone: (956) 461-5151
Fax: (956) 461-5141

CONTACTS
Bob Huck: Owner
Flor Garcia

FREIGHT TERMS*
Customers are responsible for making freight arrangements. Contact Tropical Star for freight rates and options.

PLANTS SHIPPED - TYPE
Trays: Returnable
Trays are the property of Tropical Star and are to be returned promptly; any broken or unreturned trays will be billed by Tropical Star at $3.50 per tray.

Boxes: Non-returnable
Pull and Pack add $3.10 per box
Box fee $4.00 per box

TEXAS

Speedling, Inc.

ADDRESS
1.5 Mile South FM 907
Alamo, TX 78516
Phone: (956) 787-1911
Fax: (956) 787-5556

CONTACTS
Erika Limon: Office Manager
Phone: (956) 787-1911
Charlie Rodriguez: Production Manager
Cell: (956) 764-0216

FREIGHT TERMS*
Speedling, Inc. will invoice customer directly. Contact Speedling, Inc. for freight rates and options.

PLANTS SHIPPED - TYPE
Trays in boxes
$3.00 per unreturned tray, $3.68 per box
Boxes
Plants pulled and packed, $3.68 per box (approx. 400 - 450 plants per box)

UPCHARGE
Organics: add $11.00/ks

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46  |  2022 Syngenta Full Count Plant Program Guide
## Plant Order Form

Fax to: (208) 327-9312

### Contacts:
- **Julie Kyzer**  
  Phone (208) 327-7263  
  julie.kyzer@syngenta.com
- **Raylene Kerschensteiner**  
  Phone (208) 327-9355  
  raylene.kerschensteiner@syngenta.com
- **Lorrie Wilder**  
  Phone (208) 327-7234  
  lorrie.wilder@syngenta.com
- **Jackie Trowbridge**  
  Phone (208) 327-7296  
  jackie.trowbridge@syngenta.com
- **Valerie Mueller**  
  Phone (208) 327-7249  
  valerie.mueller@syngenta.com

### Plant Order Form Details:

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<th>Variety</th>
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### Other Instructions:
- *Order Type Key*
  - Single Plants
  - SP Bundles @ 3:1
  - Deuces
  - Duals
  - Blended Pollenizers

### Available Ratios for Duals & Blended Pollenizers:
- 50/50 SP/Seeded
- 75/25 SP/Seeded
- 25/75 SP/Seeded

Dealers represent that they have provided Growers a copy of the Full Count Plant Program Terms and Conditions. No plant returns will be accepted. The acceptance of this order by Syngenta is subject to Grower returning the Full Count Plant Program Terms and Conditions properly signed.

### Freight Delivery Charge May Apply:
- Sub total $0.00
- Freight $0.00
- Pre-Payment $0.00
- Balance due $0.00 (plus freight if applicable)

### By making a checkmark Grower acknowledges that they have read and understand the Terms and Conditions.

### Grower Signature:
- Print Name
- Date

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Syngenta Seeds, LLC  
600 N Armstrong Pl, Boise, ID 83704  
Phone: (208) 322-7272

Full Count®, Super Pollenizer™, and Syngenta® are trademarks of a Syngenta Group.
NOTICE TO BUYER: These Full Count® Plant Program terms and conditions (this “Agreement”) constitutes a legal agreement between you, as the buyer, licensee or user (“You”) and Syngenta Seeds, LLC (“Syngenta”). This Agreement shall govern the use, by You, of: (i) Syngenta branded watermelon and cantaloupe plants (“Transplants”); (ii) Syngenta's proprietary processes (including, but not limited to, “Duals” and “Deuces”); and (iii) Syngenta's plant genetics, including without limitation, the fruit, seed, plant tissue, cells, any other derived plant part, whether patented or not (collectively, “Syngenta Technology”) for use in the production of watermelon and cantaloupe fruits (collectively, “Products”).

BY SUBMITTING THIS ORDER, INITIALIZING/SIGNING BELOW YOU ACKNOWLEDGE THAT YOU HAVE READ, UNDERSTAND AND AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT, THEREFORE YOU ARE ENCOURAGED TO CONSULT AN ATTORNEY BEFORE SUBMITTING THIS ORDER.

1. Orders.
1.1 You will obtain Transplants by submitting this written order to a Syngenta-authorized dealer (“Dealer”). Notwithstanding Dealer’s acceptance of the written order, Syngenta may accept or reject any order in whole or in part, in its sole discretion.
1.2 Any cancellation, increase, or decrease in the quantity and/or changes in the variety of Transplants in this order may alter the volume pricing terms for the entire order and must be received by Dealer and confirmed by Syngenta prior to plants being sown.

2. Price.
You agree that Dealer, at its sole and exclusive discretion, shall establish pricing for the sale of Transplants purchased under this order. You agree to pay Dealer the full balance due on the reverse side regardless of whether You cancel all or any part of the order.

3. Shipment.
Transplants will be shipped CVX (Incoterms 2010) shipping point, at which time (i) shipped Transplants will be deemed accepted by You, and (ii) title and risk of loss for the shipped Transplants will pass to You (excluding any embodied Syngenta Technology). Syngenta shall not be responsible for duties, import and export licenses and permits, custom charges and duty fees, taxes, excises, freight, boxes, insurances and other expenses. Shipped Transplants cannot be returned for credit to Syngenta.

The Transplants ordered under this order shall not be planted in growing areas where economic damage from Acidovorax avenae subsp. citrulli (“bacterial fruit blotch”) has occurred. Please refer to Limitations of Warranties and Remedies below.

5. Limitation of Warranties.
You acknowledge and agree that crop yield, purity, and quality are dependent upon many factors beyond the control of Syngenta. Syngenta makes NO WARRANTY for crop yield, purity, or crop quality. All risks of nonperformance, reduced performance, or crop damage due to environmental or other factors beyond Syngenta's control are assumed by You. SYNGENTA DOES NOT WARRANT THAT ANY TRANSPLANTS ARE FREE OF SEED BORNE PATHOGENS, INCLUDING BUT NOT LIMITED TO BACTERIAL FRUIT BLOTCH, AND SYNGENTA SPECIFICALLY DISCLAIMS ANY WARRANTY AS TO ALL TRANSPLANTS' AND PRODUCTS' FREEDOM FROM SUCH DISEASE. YOU EXPRESSLY ASSUME THE RISK THAT SEED BORNE DISEASES MAY OR WILL BE PRESENT IN THE TRANSPLANTS AND/OR PRODUCTS, INCLUDING THE RISK OF SEED BORNE DISEASE BEING PRESENT FOR ANY REASON BY SYNGENTA OR SOME OTHER ENTITY. THE WAIVER OF LIABILITY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT AND ANY WARRANTIES ARISING OUT OF COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE OR ANY FIDUCIARY OBLIGATION, ALL OF WHICH ARE HEREBY EXPRESSLY DISCLAIMED. TO THE EXTENT PERMITTED BY LAW, ALL PRODUCT SOLD BY SYNGENTA IS SOLD "AS IS".

6. Claims.
Syngenta must have prompt notice of any claim arising from the Transplants or Products so that an immediate inspection of any allegedly affected Transplants or Products can be made. You have 15 days from delivery to report any condition to Syngenta that may lead to a Transplants or Products claim or loss, including, without limitation, crop yield, purity, or crop quality. Failure to report such condition within the 15-day period shall mean any claim arising from the condition is barred.

7. Limitation of Liability.
THE EXCLUSIVE REMEDY AND SYNGENTA’S SOLE LIABILITY FOR ANY CLAIM OR LOSS, INCLUDING, WITHOUT LIMITATION, CLAIMS RESULTING FROM BREACH OF WARRANTY, BREACH OF CONTRACT, STRICT LIABILITY OR NEGLIGENCE, SHALL BE LIMITED TO REPAYMENT OF THE AMOUNT OF THE PURCHASE OR LICENSE PRICE OF THE TRANSPLANTS THAT ARE THE SUBJECT OF THE CLAIM, IN NO EVENT SHALL SYNGENTA OR ITS DEALERS BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES.

8. Syngenta Technology License.
In consideration for the payment of fees charged by Syngenta for use of the Syngenta Technology, Syngenta hereby grants You a limited, non-transferable, non-exclusive license, without the right to sublicense, to use the Syngenta Technology solely for producing Products in the upcoming growing season and to be harvested no later than one (1) year from the date of this order.

You shall not: (i) propagate the Transplants; (ii) harvest fruit, seed or plant parts derived from Syngenta’s proprietary watermelon pollenizers or other proprietary Syngenta varieties except to produce Products; (iii) sell, transfer or in any way distribute the Syngenta Technology to a third party; (iv) use the Syngenta Technology for plant breeding, research, to produce plants or fruits with non-Syngenta genetics, or for any purpose not specifically provided for herein; (v) disclose, transfer, publish or divulge any data or information about the Syngenta Technology unless expressly authorized to do so in writing by Syngenta; (vi) export or re-export any Transplants; (vii) use a trademark confusingly similar to any trademark or service mark owned or used by Syngenta, including but not limited to, “Full Count®”, “Duals”, “Deuces” or “Super Pollenizer™”; or (viii) challenge any right of Syngenta in patents or other intellectual property related to Syngenta Technology.

10. Destruction.
At the end of the growing season for which the Transplants were delivered, You agree to destroy all unused Transplants and unsold Products produced using the Syngenta Technology, seeds and plant parts thereof and provide written verification of such destruction to Syngenta upon request.

11. Access and Audits.
You agree Syngenta may access the property, facilities and personnel involved with the Transplants, Products or use of the Syngenta Technology to ensure compliance with this Agreement.

12. Ownership.
You acknowledge and agree that Syngenta shall have exclusive ownership of any Syngenta Technology embedded in the Transplants or used to produce the Products, including without limitation, Syngenta Technology related to watermelon pollenizers, seedless watermelon varieties, other proprietary Syngenta watermelon and cantaloupe varieties as well as proprietary processes, and including any United States or foreign patents or pending applications and any other form of intellectual property relative to any Syngenta Technology. You shall notify Syngenta whenever You have a basis for concluding that Syngenta’s property rights in any Syngenta Technology may be infringed.

13.1 Under the laws of several states, arbitration, conciliation or mediation may be required as a prerequisite to maintaining a legal action based upon the failure of the Transplants to produce. A complaint (sworn in some states), along with the required filing fee (where applicable), must be filed with the Department of Agriculture, Seed Commissioner, State Plant Board, or Commissioner of Agriculture within such time to permit an inspection of the Transplants, or crops by the designated agency and the representative from whom the Transplants were purchased. A copy of the complaint must be sent to Syngenta by certified or registered mail or as otherwise provided by individual state law.
13.2 Please consult your state Department of Agriculture for specific requirements as soon as You believe there may be a claim and before any legal action is initiated. Failure to follow this procedure could limit the legal rights You may have or limit the amount of damages that may be recovered. Compliance with all such requirements is Your responsibility.

This Agreement shall be construed under the laws of the State of North Carolina without regard to any conflict of law provisions.

15. Entire Agreement.
This Agreement is the entire agreement between You and Syngenta with regard to the subject matter hereof and supersedes all other agreements, express or implied. Any modifications made by You to this Agreement will have no effect even if the order is accepted by the Dealer or Syngenta.

Grower signature ______________________________
Print name ______________________________
Date ______________________________

Full Count®, Super Pollenizer™ and Syngenta® are trademarks of a Syngenta Group.
Dealer Contract rev. 2020.08.28
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For comprehensive disease resistance information, please visit [www.SyngentaUS.com/vegetables](http://www.SyngentaUS.com/vegetables).