#### Recommended Varieties

We trialed several different varieties of *C. chinense* to compare for productivity on our farm and popularity at our market in East New York, Brooklyn.

#### **Productivity**

- 1. Orange Habanero
- 2. Mustard Habanero
- 3. Caribbean Red





## Popularity:

- 1. Scotch Bonnet
- 2. Caribbean Red
- 3. Orange Habanero



Caribbean Red



Mustard Habanero



Yellow Scotch Bonnet

Other varieties that do well on our farm and in our market but weren't part of our initial trials include <u>Chocolate Habanero</u>, <u>Bhut Jolokia(Ghost Peppers)</u>, <u>Bird Peppers</u>, and <u>Trinidad Scorpion</u>. These peppers have some of the highest heat levels (measured in Scoville units) and attracted many repeat customers to our stand.



Ghost Pepper



Chocolate Habanero



Bird Pepper



Trinidad Scorpion

### **Seasoning Peppers**

Seasoning peppers, also known as pimentos, are cultivars of *C. chinense* that have been selected for sweetness and aroma, without the heat level of habaneros or Scotch Bonnets. These are used throughout the Caribbean in cooking. Ají Dulce is a Puerto Rican variety used in sofrito, and most other islands have distinctive varieties. Since the genes for heat are dominant in peppers, it's advisable to isolate seasoning peppers from hot varieties to prevent crossing. Seasoning peppers are comparatively rare in fresh markets, and have good marketing potential.



Ají Dulce



Yellow Seasoning Pepper



Red Seasoning Pepper

#### Seeds

**Sources**: We source our seeds from Johnny's Selected Seeds (johnnysseeds.com), Redwood City Seeds (ecoseeds.com), and saved seeds from local gardeners and farmers. Reimer Seeds (reimerseeds.com) also carries a wide selection of Caribbean seeds; we learned about this source after starting our trial.

**Saving Seed**: Peppers are an easy seed to save. Select the largest and ripest fruits from vigorous plants and remove the seed. Dry on paper towels and store in a cool, dark place. Saving seeds from locally-adapted varieties is a great way to select for hardier strains in the Northeast. Customers are often the best source for new varieties of seeds.

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# Growing Hot Peppers for the Caribbean Market

Hot peppers are an essential component of Caribbean cuisine in everything from jerk chicken to sofrito to the ubiquitous pepper sauces. *Capiscum chinense* is the dominant species of pepper in the region—popular varieties include Scotch Bonnet, Habanero, Aji Dulce, and Seasoning Peppers/Pimentos. Most of these varieties are adapted to a tropical or sub-tropical climate, but grow well in the Northeast for a limited harvest period and have good marketing potential for the growing Caribbean community.

#### Culture

**Seeding**: Peppers should be started indoors, 8-10 weeks before the last frost. *C. chinense* germinates more slowly than *C. annum* (bell peppers, jalapenos, cayenne etc.), and requires temperatures in the 80-90° range to germinate properly. This is best achieved with a heated greenhouse or a heating mat.

**Planting:** Peppers should be planted a minimum of 24" apart in rows, 30-36" is ideal. Warm soil temperatures are key—black plastic or solar mulch will significantly enhance growth. Peppers do well in rich, well-drained soil. Plants should have access to adequate phosphorus and nitrogen, but excess nitrogen can cause too much vegetative growth. Calcium is essential for plant structure in *C. chinense*, which can grow significantly larger than *C. annum*. Before planting we use compost and cover crops (hairy vetch, winter rye, and crimson clover) to provide balanced nutrient levels, and supplement with bone meal for its phosphorus and calcium content. In our USDA Zone 7b climate, we plant our peppers around June 1st. Regular irrigation is essential to establish a healthy plant, but can be reduced once ripening begins.

**Trellising:** *C. chinense* plants can grow to heights of 36" or larger (we had plants approaching 54" on our farm). Trellises or support are essential for facilitating harvest and preventing plant breakage. We use the Florida weave method on our farm because it is cost-effective, though tomato cages also work well on a smaller scale.

Harvest and Protection: Picking the first round of peppers while they are green will increase overall production on the plant, though most customers prefer fully-ripe peppers. We found no significant difference in productivity or ripening with the use of row cover fabric in our pepper trial. The size of the plants and the trellis posts makes using row cover in the fall impractical--caterpillar tunnels (4-6' high) or high tunnels are a viable option for larger operations. We had 13-15 weeks of production for unprotected plants. Our first frost often comes after our market has ended, so there isn't a great need to protect the plants, though warmer temperatures in the fall will hasten fruiting and ripening.

#### Marketing

Most of our peppers are marketed directly at the two East New York Farmers' Markets, and we've found that the color and variety of peppers help to attract customers to the stand. We market half-pints for \$1.50, or about \$5 per pound. Some vendors at the East New York Farmers Market sell Scotch Bonnets for 25¢ each. When we have excess production, we sell to Caribbean restaurants that use the peppers in dishes and for pepper sauce. Peppers hold well on the plants and in storage (between 45-50°), and customers (especially restaurants) often make large purchases at once, making them a flexible and profitable crop for direct marketing and wholesale in Caribbean markets.

