

Jalapeño and Other Hot Pepper Varieties for Florida¹

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The jalapeño (*Capsicum annuum*) is derived from the *Capsicum* genus of the family *Solanaceae* (Rhodes 2009). Jalapeños are members of a diverse group, which also include ancho poblano, cayenne, serrano, Anaheim, banana, Asian, habanero, and Hungarian wax peppers. Hot peppers are classified by their heat and shape. The heat of the pepper comes from the chemical compound *capsaicin*, which is measured by the Scoville scale (Wright 2010). Pure capsaicin has a Scoville unit between 15,000,000–16,000,000. Bell peppers have a Scoville unit of zero, while the hottest peppers have a Scoville unit greater than 1,000,000. The jalapeño is considered relatively mild, ranging from 1,000 to 8,000. Jalapeño peppers are native to Mexico and are the most popular type of Mexican hot pepper. The name comes from Jalapa, which is the Mexican state capital of Vera Cruz. The majority of jalapeño production in Mexico and the United States is picked for canning or fresh markets. Jalapeños can be used as an ingredient in cooked or raw sauces or charred and peeled to be stuffed with cheese, meat, or fish. *Chipotle* is the term used for jalapeños that are allowed to ripen on the plant to a deep red color and are then dried.





The US demand for jalapeño and other hot peppers rises every year due to the growing popularity of ethnic cuisine (Burden 2012). Consumption has increased from 5.2 lb/person in 2001 to 6.9 lb/person in 2011 (Thornsbury 2012). The production of hot peppers in the United States was valued at \$175 million dollars in 2012 with 20,800 acres harvested (USDA 2012). The average yield is 762 bushels/acre with an average price of \$10 per bushel (10-year





average). California and New Mexico produce most of the hot peppers grown in the United States, but many Florida farmers grow hot peppers as a niche crop. The growing conditions are similar to bell peppers (Stephens 2012). Seeds or transplants should be planted after the danger of frost has passed in north and central Florida, and from September to March in south Florida. Plants should be spaced 12–18 inches apart in full sun on well-drained, fertilized soil. The soil should be fertilized two to three times during the growing season. Most hot peppers take 65–75 days to mature after transplanting. Jalapeño and other hot peppers are sold during an approximate 10-month period throughout the year.





Jalapeño and Other Hot Pepper Varieties—Here is a guide of jalapeno and other hot pepper varieties used in Florida (Table 1 and 2).





1. This document is HS1241, one of a series of the Horticultural Sciences Department, UF/IFAS Extension. Original publication date October 2014. Visit the EDIS website at <http://edis.ifas.ufl.edu>.
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Table 1. Jalapeño and other hot pepper varieties for Florida

Variety	Producer	Dealer	Season (Relative Maturity)	Plant and Fruit Characteristics	Resistance	Comments
Jalapeño Peppers Shape: Short and stubby (Texas A&M University 2007) Heat: Low to Medium						
 Capsico	Sakata Seed America, Inc.	Siegers Seed Co.	Midseason	Plants are large and vigorous with a very heavy set of extra-large and very dark green fruit. The smooth fruit is very pungent with mild checking.	R to Xcv 1–3, 7, 8, and PVY 0.1.2.	Fruit has minimum corking and anthocyanin. Plants are widely adapted and perform well in California, Mexico, and the eastern United States.
 Centella	Enza Zaden	Ahern Agribusiness, Inc., and Siegers Seed Co.	Very early season	Plants have excellent cover. The large and dark green fruit is glossy and sets well.	R to Xcv 1–3, TM 0, PVY 0, and PepMo.	Plants are extremely uniform and highly productive. They are also widely adaptable for both open field and greenhouse cultivation.
 Compadre	Syngenta	Reimer Seeds, Siegers Seed Co., and Stokes	Mid-late season	Plants are vigorous and produce uniform and consistently smooth fruit. The high quality fruit is large.	R to PVY, TM, and Xcv 2, 5.	Fruit can be continuously picked with high yields, even under low temperatures. Fruit has no purpling and low cracking and has good tolerance to extreme temperatures.
 El Jefe	Sakata Seed America, Inc.	Johnny's Selected Seeds, Reimer Seeds, and Siegers Seed Co.	Mid-early season	Plants are widely adapted, large, vigorous, and uniform. The pungent and bullet-shaped fruit is large to extra large, very dark green to red, glossy, and smooth.	R to Xcv 1–3, 7, 8, and PVY 0.1.2. IR to TE.	Fruit has minimal cracking and purpling. Relative Scoville rating: 4,000 –6,000

Variety	Producer	Dealer	Season (Relative Maturity)	Plant and Fruit Characteristics	Resistance	Comments
 <p>PS 11411037</p>	Seminis Vegetable Seed, Inc.	Seminis America, Inc.	Early season	Strong and upright plants that produce fruits with excellent fruit quality and average size of 3 × 1 inches.	R to Xcv 1–3, PVY, and TM.	Relative Scoville rating: 3,500
 <p>Jalafuego</p>	Sakata Seed America, Inc.	Johnny's Selected Seeds, Organic Seed Supply, and Tomato Growers Supply Company	Midseason	Plants are large, vigorous, and strong with excellent yield. The extra-large and smooth fruit is very dark green to red. Fruit has a super high pungency and is extremely hot with excellent length.	R to Xcv 1–3, 7, 8, and PVY 0.1.2.	The extra length of the fruit makes it perfect for growing conditions that may cause fruit to shorten. Relative Scoville rating: 4,000–6,000
 <p>Magno</p>	Sakata Seed America, Inc.	Clifton Seed Company and Ripen Seeds	Midseason	Plants are vigorous and high yielding. The smooth fruit is extra-large to jumbo and has a very dark green to red pungent fruit color.	R to Xcv 1–3, 7, 8, and PVY 0.1.2.	Fruit is well adapted to Mexico and the United States.
 <p>Mammoth</p>	US Agriseeds	Reimer Seeds and Siegers Seed Co.	65–70 days	Plants produce high quality, uniform, and dark-green fruit that average 5.1 × 2 inches.	R to TM and PVY.	Relative Scoville rating: 2,500–5,000

Variety	Producer	Dealer	Season (Relative Maturity)	Plant and Fruit Characteristics	Resistance	Comments
 <p>SV7017HJ</p>	Seminis Vegetable Seed, Inc.	Seminis America, Inc.	Early to mid-season	Medium, upright plant that produces fruit with average size of 3.7 × 1.4 inches. Excellent fruit quality with no anthocyanin.	R to Xcv 1–3 and PVY.	Relative Scoville rating: 3,000
 <p>Tacana</p>	Abbott and Cobb, Inc.	Abbott and Cobb, Inc., and Siegers Seed Co.	Main season	Large and upright plants that produce very attractive and large, long fruit. The very pungent and thick-walled fruit is tapered and dark green.	R to Xcv 1–3, PVY, and TM.	Relative Scoville rating: 1,000–5,000
 <p>Telica</p>	Abbott and Cobb, Inc.	Abbott and Cobb, Inc., and Siegers Seed Co.	Midseason	Plants are strong and upright that produce high yields of smooth, very large, and dark green fruit with blunt ends.	R to Xcv 1–3, PVY, and TM.	Fruit resists cracking and purpling.
 <p>Tormenta</p>	US Agriseeds	Reimer Seeds and Siegers Seed Co.	77 days	Vigorous plants that consistently set large, dark green, and thick-walled fruit. Fruit has a smooth skin over a prolonged production cycle.	R to Xcv 1–3.	Fruit resists cracking and purpling and is usually used fresh or pickled when green. Fruit is great for making salsa. Relative Scoville rating: 3,000–4,000
<p>Ancho Poblano Peppers Shape: Flat and round with a blunt end (Texas A&M University 2007) Heat: Low</p>						
 <p>Masivo</p>	US Agriseeds	Ripen Seeds and Siegers Seed Co.	70–75 days	Plants produce fruit 7.5 × 3 inches. The dark green, extra-large, and high-quality fruit has two smooth veins that are flat and uniform in shape.	R to TM.	Relative Scoville rating: 1,500–4,000

Variety	Producer	Dealer	Season (Relative Maturity)	Plant and Fruit Characteristics	Resistance	Comments
 San Ardo	US Agriseeds	Reimer Seeds and Ripen Seeds	70–75 days	Plants are vigorous with high yields of 6 × 3 inch fruit that turns from green to red when mature.	PVY, TM, and Tobamo P ₀	Relative Scoville rating: 1,500–4,000
 Tiburon	Sakata Seed America, Inc.	Chile Plant.com, Harris Seeds, Jung, Park Seed, and Reimer Seeds	Midseason	Plants are large and vigorous with continuous fruit setting for an extended harvest. The shiny and dark green fruit is about 5–6 × 3 inches and is mildly pungent. Fruit matures red.	None	Relative Scoville rating: 1,000–3,000
Cayenne Peppers Shape: Long and curved (Texas A&M University 2007) Heat: Medium to High						
 Cheyenne	Sakata Seed America, Inc.	Harris Seeds, Johnny's Selected Seeds, Organic Seed Supply, Reimer Seeds, and West Coast Seeds	Early-season	Plants are compact and vigorous and produce wrinkled and pungent fruit. The 8- to 9-inch-long fruit has a great aroma.	None	Fruit can be harvested 10–14 days earlier than most standard varieties on the market with no sacrifice in fruit quality. Fruit is harvested early for fresh markets and processing. Relative Scoville rating: 2,000–4,000
 Iberia	Lark Seed	Seedway	71 days	Plants are strong and medium to tall in size. Plants produce dull green or red fruit that grows 11 × 2 inches.	None	Plants produce very early fruit. Fruit is similar to Mesilla in heat but has a thicker flesh.

Variety	Producer	Dealer	Season (Relative Maturity)	Plant and Fruit Characteristics	Resistance	Comments
 <p>Mesilla</p>	Seminis Vegetable Seed, Inc.	Chile Plants.com, Harris Seeds, Organic Seeds Supply, Reimer Seeds, Ripen Seeds, Siegers Seed Co., Stokes, and Tomato Growers Supply	85–90 days	Plants produce hot and very long fruit, which is about 9–11 × 1.5 inches.	R to Tobamo P ₀ and PVY 0. IR to TE and PepMo.	Fruit can be used either green or red. Relative Scoville rating: 2,000–4,000
<p>Serrano Peppers Shape: Slim and slightly club-shaped (Texas A&M University 2007) Heat: Medium to High</p>						
 <p>Camino Real</p>	Harris Moran Seed Company	Clifton Seed Company, Harris Seeds, and Seedway	Midseason	Plants produce large, green fruit.	R to PVY 1. IR to TE.	Plants have excellent yield across all growing areas. Organic seed available.
 <p>Devil</p>	US Agriseeds	Chile Plants.com, Reimer Seeds, Siegers Seed Co., and Totally Tomato	72–75 days	Plant produces 3- to 4-inch-long fruit that is dark green.	R to PepMoV, PVY, TE.	Relative Scoville rating: 3,500–6,000
<p>Anaheim Peppers Shape: Long and tapered (Texas A&M University 2007) Heat: Low</p>						
 <p>Charger</p>	US Agriseeds	Seedway and Siegers Seed Co.	Main season	Plants are erect and vigorous with excellent foliage. Plants produce fruit that grows 7.5 × 1.5 inches and matures from green to red.	R to TSW.	Fruit is flavorful with mild heat.

Variety	Producer	Dealer	Season (Relative Maturity)	Plant and Fruit Characteristics	Resistance	Comments
Habanero Shape: Small and lantern-shaped (Texas A&M University 2007) Heat: Extremely High						
	Seminis Vegetable Seed, Inc.	Chili Pepper Seeds, Tomato Growers Supply Company, and Reimer Seeds	115–120 days	Plants are strong and produce an excellent fruit set. Fruit matures from green to orange and measures approximately 2 × 1 inches.	R to Tobamo P ₀ .	Relative Scoville rating: 15,000–18,000
Chichen Itza						
Hungarian Wax Peppers Shape: Long and conical (Texas A&M University 2007) Heat: Low						
	Seminis Vegetable Seed, Inc.	Seminis America, Inc.	Early to mid-season	Strong, branching plant with concentrated fruit set. Typical hot Hungarian wax with average fruit size of 8 × 1.6 inches.	R to Xcv 1–3 and TSW.	Relative Scoville rating: 1,500
SV3301HW						
<i>Credits:</i> All images supplied by respective producers (except image of Iberia, which was supplied by Seedway).						

Table 2. Disease key to abbreviations

PepMo	Pepper mottle virus
PVY	Potato virus Y
TE	Tobacco etch virus
TM	Tobacco mosaic virus
Tobamo P₀	Tobamo virus (<i>Tobamo virus</i> P ₀)
TSW	Tomato spotted wilt virus
Xcv 1, 2, 3, 4, 5, 6, 7, 8	Bacterial leaf spot (<i>Xanthomonas campestris</i> pv. <i>Vesicatoria</i>)
R	Resistance
IR	Intermediate resistance (shows less severe symptoms than susceptible varieties)

Note: While this list includes a number of varieties currently popular with Florida growers, it is by no means a comprehensive list of all varieties that may be adapted to the state.

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