

Heirloom Hot Pepper Varieties for Florida¹

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Hot peppers are members of the *Capsicum* genus of the nightshade family *Solanaceae* (Rhodes 2009). Hot peppers are native to Central and South America where they have been part of the human diet since about 7500 BC (Bosland 1996). Hot peppers were named by Christopher Columbus, who mistakenly thought they were related to *Piper nigrum*, or black pepper, because they had a similar pungency. Columbus returned to Spain with the spice, and its popularity rapidly spread throughout Europe, India, China, Korea, Thailand, and Japan.

Hot peppers are known for their pungent flavor. The pungency is caused by the compound capsaicin, which is measured in Scoville heat units (Wright 2010). A pepper with more capsaicin will have a higher Scoville heat unit. Bell peppers have a Scoville unit of zero, while the hottest peppers have a Scoville unit greater than 1,000,000. The pungency level is genetic, but it can be influenced by environmental stress. A hot pepper from the same variety grown in hot, dry conditions would have higher capsaicin and a more pungent flavor than a hot pepper grown in cooler, humid conditions.

A hybrid hot pepper is bred from two genetically different purebred varieties to produce fruit with desirable characteristics (Culbert 2011). While hybrids are known for their vigor and hardy characteristics, such as their adaptability to environmental stress, disease resistance, and growth uniformity from plant to plant, heirloom hot peppers were selected for their superior flavor and eating quality. A hot pepper is considered an heirloom when the variety has been in use for 50 to 100 years, and it is open pollinated and

“true to type,” which means seeds will produce offspring that are identical to the parent plant (Wright 2013). Unlike hybrid plants that are not consistent from generation to generation, heirloom seeds can be saved and regrown the following year.

Heirloom hot peppers are closely related to other vegetables in the family *Solanaceae*, such as potatoes, tomatoes, tobacco, and eggplants. Many diseases for these vegetables can affect heirloom hot peppers, making them susceptible to these diseases. Bacterial leaf spot caused by *Xanthomonas campestris* *pv. vesicatoria* is the most common, and it is characterized by small, water-soaked or greasy spots on leaves and small, light green, and raised spots on fruit that enlarge and turn scabby (Pernezny and Kuchark 2011). Viruses, such as pepper mottle, potato virus Y, tobacco etch, and tobacco mosaic virus, are common problems. These diseases create stunted plants, fruit and leaf malformation, mottling, and leaf mosaics, but identifying these viruses in the field is difficult. Instead, they must be identified in a laboratory (Mossler, Aerts, and Nesheim 2012). To prevent the spread of diseases use clean transplants, control weeds and insects, such as white flies and aphids, avoid overhead irrigation, and reduce handling of the plants while they are wet.

Heirloom Hot Pepper Varieties – Here is a guide of the popular pepper varieties used in Florida (Table 1). The popularity was accessed from a survey among seed suppliers, which include Baker Creek Heirloom Seeds, Burpee, High Mowing Seeds, Southern Exposure Seed Exchange, Tomato Grower Supply Company, Seeds of Change,

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Territorial Seed Company, and My Patriot Supply. When organic seeds were available, the USDA logo was inserted. The relative Scoville rating, which measures a pepper's pungency, was also included when it was available.

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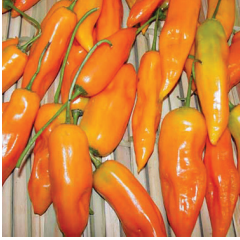



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Table 1.






Variety	Company	Season (Relative Maturity)	Plant and Fruit Characteristics	Comments
Most Popular Heirloom Hot Peppers				
Aji Dulce¹ 	Reimer Seeds and Southern Exposure Seed Exchange	90–111 days	Plant has light green leaves and white flowers. Fruit is 1.75 inches long and 1.5 inches wide and wrinkled. They turn from green to orange and from orange to red when mature.	Fruit tastes like the habanero but is sweet, spicy with little heat. Relative Scoville rating: 100–500. Organic seed available. 
Caribbean Red Habanero² 	Baker Creek Heirloom Seed Company and Burpee	110 days	Productive plants that reach 30 inches tall. Fruit is slightly wrinkled and about 1 inch wide and 1.5 inches long. Similar in shape to the habanero and ripen from lime green to a brilliant red.	Fruit has a warm, rich, and smoky-citrus taste. Relative Scoville rating: 445,000. Organic seed available. 
Cayenne Long Red² 	My Patriot Supply, Sustainable Seed Company, Seedaholic, Burpee, and Smart Gardener	70–80 days	Plants are bushy, 24 to 30 inches tall, and produce hot, narrow, and medium-walled fruit about 4 to 6 inches long that ripen to glossy deep red.	Relative Scoville rating: 30,000–50,000. Organic seed available. 
Fish² 	Southern Exposure Seed Exchange, Nature Hills Nursery, Burpee, and Smart Gardener	80 days	Plants have green and white variegated foliage producing 3 to 5 inches of tapered fruit that ripen from cream and green striped to orange and brown, and then to red.	Relative Scoville rating: 5,000–30,000. Organic seed available. 







Variety	Company	Season (Relative Maturity)	Plant and Fruit Characteristics	Comments
Hungarian Wax Hot² 	My Patriot Supply, Baker Creek Heirloom Seed Company, Smart Gardener, Seeds of Change, Burpee, High Mowing Organic Seeds, Sweet Corn Organic Nursery, and Bean Acres Seeds	70–80 days	Plants are 24 to 36 inches tall and produce 5-inch-long fruit. Fruit starts out bright yellow and turns red as it matures.	Relative Scoville rating: 750–3,500. Organic seed available. 
Poblano² 	Burpee, Local Harvest, and High Mowing Organic Seeds	65 days	Plants grow 30 inches tall and have yellow flowers. Fruit is 4 to 8 inches and turns from green to red when mature.	Called Ancho peppers when dried. Fruit is hotter when mature and red. Relative Scoville rating: 2,500–5,000. Organic seed available. 
Santa Fe Grande² 	Seminis, Bonnie Plants, Cross Country Nurseries, Burpee, Nature's Creations Award Winning Seed, and Bean Acres Seeds	75–80 days	Plants are 24 inches tall with conical fruit that grow 2 inches long. Fruit matures from yellow to orange-red.	Fruit has medium heat and slight sweetness. Relative Scoville rating: 5,000–8,000. Organic seed available. 
Serrano² 	My Patriot Supply, Country Creek Acres, Baker Creek Heirloom Seed Company, Burpee, and Bean Acres Seeds	75–80 days	Large plants with club-shaped fruit 2 to 3 inches in length. It ripens from green to red.	Relative Scoville rating: 2,500–4,000. Organic seed available. 


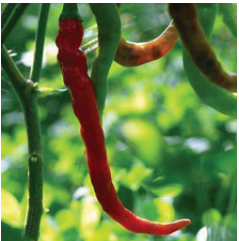




Variety	Company	Season (Relative Maturity)	Plant and Fruit Characteristics	Comments
Tabasco² 	Bean Acres Seeds, Burpee, Bonnie Plants, Nature's Creations Award Winning Seed, and Baker Creek Heirloom Seed Company	90 days	Bushy plants, 24 to 36 inches tall. Plants produce thin, oblong, and 2- to 3-inch-long fruit. It starts out green, changes to yellow, then orange, and finally turns bright red.	Relative Scoville rating: 30,000–50,000. Organic seed available. 
Thai Red Chili³ 	Smart Gardener, Sustainable Seed Company, and Baker Creek Heirloom Seed Company	90 days	Plants produce small, bright, and red-pointed fruits.	Peppers are easy to dry. Relative Scoville rating: 5,000–30,000.
Other heirloom hot peppers				
Aji Amarillo³ 	Reimer Seeds, Seeds of Change, and Solana Seeds	100 days	Plant grows 36 inches tall with green stems and leaves and white flowers with green and yellow markings. Fruit is 5 inches long by 1.25 inches wide and turns from green to orange when mature.	Fruit can be used green, ripe, or dried. Relative Scoville rating: 40,000–50,000. Organic seed available. 
Aji Colorado¹ 	Dave's Garden, Seeds of Change, Reimer Seeds and All Good Things Organic Seeds	69–80 days	Plant is 18 to 24 inches with 3- to 5-inch-long fruit that ripens from green to red.	Relative Scoville rating: 20,000. Organic seed available. 







Variety	Company	Season (Relative Maturity)	Plant and Fruit Characteristics	Comments
Anaheim² 	Burpee, Seedman, and Sustainable Seed Co.	77 days	Plants grow 18 to 24 inches tall and 16 inches wide with 6-inch-long fruit that turns from green to deep red when ripe.	Relative Scoville rating: 3000. Organic seed available. 
Ancho 101¹ 	Park Seed, Reimer Seeds, and The Chili Man	75 days	Bushy, 30- to 36-inch-tall plants that produce 4 to 6 inches of tapered fruit that matures from green to red.	Plants are vigorous and sturdy. Relative Scoville rating: 3,000.
Bhut Jolokia or Ghost³ 	Baker Creek Heirloom Seed Company, Green Earth Company, Hirt's Gardens, and Cross Country Nurseries	100–120 days	Tall plants that exceed 48 inches. Fruit is thin-walled, wrinkled and pointed. Fruits reaches 2 to 3 inches in length and ripens to red.	Relative Scoville rating: more than 1,000,000. Organic seed available. 
Big Jim³ 	Lazy Ox Farm, Sustainable Seed Company, and Smart Gardener	75–80 days	Plants are tall and productive (best staked), producing 24 to 30 tapered oblong fruit about 10 to 12 inches long. Plant ripens at the same time from green to red.	Ideal for hot, dry weather. Relative Scoville rating: 500–2,500. Organic seed available. 








Variety	Company	Season (Relative Maturity)	Plant and Fruit Characteristics	Comments
Black Hungarian⁴ 	Smart Seeds, High Mowing Organic Seeds, and Sustainable Seed Company	70–80 days	Ornamental variety 30 to 36 inches tall with purple-veined foliage and intense purple flowers. Shiny, black, and conical fruit about 3 to 4 inches long that ripens from black to red.	Fruit has mild heat when black and turns hotter as it matures. Relative Scoville rating: 1,200. Organic seed available. 
Bulgarian Carrot¹ 	Territorial Seed Company, Nature Hills Nursery, Sustainable Seed Company, Park Seed, Reimer Seeds and Lazy Ox Farm	70–80 days	Plants are 18 inches tall and produce clusters of 3.5-inch-long fruit that ripens from green to fluorescent orange.	Relative Scoville rating: 5,000–30,000. Organic seed available. 
Chiltepin³ 	Sustainable Seeds, Totally Tomatoes, and Dave's Garden	90 days	Plants grow 8 to 10 inches and produce extremely hot, 0.5-inch fruit.	It is harvested in the wild in the southwestern United States. Relative Scoville rating: more than 30,000.
Chinese Five Color¹ 	Trade Winds Fruit, Nature's Creations Award Winning Seed, Reimer Seeds, and Dave's Garden	85 days	Ornamental plant that grows 20 inches tall with conical fruit that grows about 1-2 inches. Fruit turns from purple, to cream, to yellow, to orange, and to red when matures.	Relative Scoville rating: 5,000–30,000. Organic seed available. 









Variety	Company	Season (Relative Maturity)	Plant and Fruit Characteristics	Comments
Chocolate Habanero³ 	Baker Creek Heirloom Seed Company, Urban Farmer, and Semillas	80–90 days	Plants are 36 inches tall with lantern-shaped fruit. The 2-inch fruit is dark brown.	The fruit looks like chocolate candies. Relative Scoville rating: 450,000.
Craig's Grande Jalapeño⁵ 	Lazy Ox Farm and Baker Creek Heirloom Seed Company	81 days	Plants are 12.5 inches tall and produce green fruit that turns red when ripe.	Relative Scoville rating: 2,000–4,500.
Datil³ 	Reimer Seeds	100 days	Plants produce fruit that is 1.5 inches long by 0.5 inches wide. Fruit matures from light green to orange.	Mostly grown in St. Augustine, FL. Fruit has a very distinct flavor. Relative Scoville Rating: 100,000–300,000.
Early Jalapeño² 	Bean Acres Seeds, High Mowing Organic Seeds, and Burpee	66 days	Plants are 20 to 24 inches tall and produce blunt, 3-inch-long fruit that can be harvested when dark green or red.	Relative Scoville rating: 4,000–6,000. Organic. 







Variety	Company	Season (Relative Maturity)	Plant and Fruit Characteristics	Comments
Espanola Improved³ 	Seeds of Change and Sandia Seed Co.	75 days	Plants are 18 to 24 inches long with long, tapered fruit. The 5- to 7-inch fruit matures from dark green to red.	Fruit is spicier in warmer climates. Relative Scoville rating: 2,000–4,000. Organic seed available. 
Fatalii³ 	Tomato Growers Supply Company, Seed Savers Exchange, Nature's Creations Award Winning Seed, and Sustainable Seed Co.	90 days	Plants are 30 inches tall and produce 3-inch-long fruit that is similar to a habanero. Fruit is yellow-orange in color.	Relative Scoville rating: 250,000–300,000. Organic seed available. 
Filius Blue¹ 	Baker Creek Heirloom Seed Company, Reimer Seeds, Hirt's Gardens, Bean Acres Seeds, and Pepper Seeds	60–120 days	Plants are 18 inches tall with fruit about 2.5 inches long by 1 inch wide. Fruit matures from purple (hot) to red (mild).	Relative Scoville rating: 20,000.
Goat Horn⁵ 	Baker Creek Heirloom Seed Company, Pepper Seeds, Hirt's gardens, and Evergreen Seeds	85 days	Plants are 26 inches tall with horn-shaped fruit about 3 inches long. Fruit matures from green to bright red.	Relative Scoville rating: 3,000–5,000.



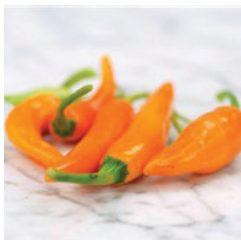

Variety	Company	Season (Relative Maturity)	Plant and Fruit Characteristics	Comments
Habanero Red Savina™³ 	Reimer Seeds	100 days	Plants grow 42 inches tall and produce fruit 2 inches long by 1.5 inches wide. Fruit matures from green to red when ripe.	Relative Scoville rating: 577,000.
India Jwala or Indian Finger³ 	Baker Creek Heirloom Seed Company and 2BSeeds	60–120 days	Umbrella-type plant that produces 4-inch-long fruit with wrinkled skin. The fruit looks green in the early stage and turns into red.	Relative Scoville rating: 5,000–30,000.
Italian Pepperoncini³ 	Smart Gardener, Garden Harvest Supply, Sustainable Seed Company, and Burpee	62–75 days	Bushy plants, 20 to 24 inches tall that produce 3- to 4-inch-long fruit that can be yellow or red.	Needs summer shade. Excellent sun-scald protection. Fruit is sweeter when red. Relative Scoville rating: 100–500. Organic seed available. 
Jalapeño² 	My Patriots Supply, Burpee and Victory Seeds	72 days	Fruit is 3.5 inches long by 1.5 inches wide. Fruit is tapered and dark green that matures to red.	Relative Scoville rating: 10,000. Organic seed available. 

Variety	Company	Season (Relative Maturity)	Plant and Fruit Characteristics	Comments
Jalapeño M² 	Sustainable Seed, Eden Brothers, Sustainable Seed Company, and Burpee	65–70 days	Plants are 18 to 24 inches long that have green and 3- to 4-inch-long fruit.	The most popular of the jalapeño peppers. Relative Scoville rating: 5,000. Organic seed available. 
Jimmy Nardello's² 	Territorial Seed Company, Reimer Seeds, Burpee and Susatinable Seed Co.	75 days	Fruit is long, slender, and tapered. Fruit is about 6 to 9 inches long.	It originated in Ruoti, Italy. It is sweet and crisp and known as a good frying pepper. Relative Scoville rating: Organic seed available. 
Lemon Drop³ 	Baker Creek, Heirloom Seed Company, Refining Fire Chiles, Peppers Seeds, and Smart Gardener	90–100 days	Plants are 24 inches tall with crinkled and conical fruit. The 2- to 3-inch-long fruit has a bright yellow color. The fruit sometimes has a dark purple blush.	Relative Scoville rating: 5,000–30,000.
Lemon Yellow Habanero¹ 	Baker Creek Heirloom Seed Company, Reimer Seeds, and Bean Acres Seeds	85 days	Plants are 24 to 32 inches tall and produce small, lantern-shaped fruit. The lemon-yellow fruit is 1 to 1.5 inches long.	Relative Scoville rating: 150,000–325,000.

Variety	Company	Season (Relative Maturity)	Plant and Fruit Characteristics	Comments
Leutschauer Paprika ³ 	Local harvest, Reimer Seeds, Smart Gardener, and Baker Creek Heirloom Seed Company	85 days	Fruit is 2 to 3 inches long and 0.25 inches wide. Fruit matures from green to a deep, glossy red.	Relative Scoville rating: 1–1,000.
Long Purple Cayenne ¹ 	Baker Creek Heirloom Seed Company, Nature Hills Nursery, Reimer Seeds and Azure Dandelion Herb N Art Store	70 days	Bushy, 20- to 24-inch-tall plants that produce bright purple fruits.	Relative Scoville rating: 5,000–30,000. Organic seed available. 
Mustard Habanero ¹ 	Baker Creek Heirloom Seed Company, Seed Savers Exchange, Nature's Creations Award Winning Seeds, Reimer Seeds, and Lazy Ox Farm	95–100 days	Habanero-type fruit that starts out a very light green color blushed with purple, and ripens to a mustard color, and then finally to fiery orange.	Relative Scoville rating: more than 30,000. Organic seed available. 
Numex Big Jim ³ 	Tomato Growers Supply Company, Local Harvest, and Dave's Garden	80 days	Plants are 18 to 24 inches long, and they produce fruit that is tapered and oblong. Fruit grows up to 12 inches long and weighs as much as 4 oz. Matures from green to red.	Relative Scoville rating: 1,000–5,000. Organic seed available. 

Variety	Company	Season (Relative Maturity)	Plant and Fruit Characteristics	Comments
Numex Conquistador¹ 	Seeds of Change, Reimer Seeds, and Dave's Garden	85 days	Plants are 18 to 24 inches tall and produce an Anaheim type fruit that is 4 to 7 inches long. Fruit matures from green to dark red.	Relative Scoville rating: 1–1,000. Organic seed available. 
Padron¹ 	Seeds of Change, Johnny's Seeds, Reimer Seeds and Baker Creek Heirloom Seed Company	75–85 days	Small and thin-skinned fruit that matures from green to red when ripen.	Relative Scoville rating: Mild 1–1,000 and Moderate 1,000–5,000. Mature and full-sized peppers will be hot. Organic seed available. 
Pasilla Bajio² 	Baker Creek Heirloom Seed Company, Nature's Creations Award Winning Seed, Burpee and Sustainable Seed Company	78 days	Plants produce wrinkled fruit 7 inches long and 1 inch in diameter with a dark green color that turns brown as it ripens.	Relative Scoville rating: 5,000–30,000. Organic seed available. 
Purple Jalapeño³ 	Pepper Joe's Inc., Baker Creek Heirloom Seed Company, Hot Pepper Seeds, Nature's Creations Award Winning Seed, and Totally Tomatoes	69–80 days	Plants are 18 to 24 inches tall and produce fruit 2 to 6 inches in length. Fruit matures from a deep purple to red.	Relative Scoville rating: 5,000–30,000. Organic seed available. 

Variety	Company	Season (Relative Maturity)	Plant and Fruit Characteristics	Comments
Red Cherry² 	Clifton Seed, Valley View Ranch-Healing Land, Harris Seeds, Hometown Seeds, and Burpee	75–80 days	Plants are 24 to 36 inches tall and produce 1.5- to 2-inch fruit that matures from green to red.	Relative Scoville rating: 5,000-15,000.
Red Mushroom¹ 	Baker Creek Heirloom Seed Company Reimer Seeds and Local Harvest	85–90 days	Plants are 24 to 30 inches tall and produce thin-skinned and mushroom-shaped fruit. The fruit is also wrinkled, squat, and wide. The 2-inch fruit matures from green to red.	Relative Scoville rating: more than 30,000.
Ring-O-Fire⁴ 	Seeds of Change, Seed Count, and High Mowing Organic Seeds	80 days	Plants are 24 to 30 inches long and produce a bright red, 4- to 6-inch fruit.	Relative Scoville rating: 20,000. Organic seed available. 
Scotch Bonnet³ 	Pepper seeds, Sustainable Seed Company, Bean Acres Seeds, and Baker Creek Heirloom Seed Company	85 days	Plants are 24 to 32 inches tall and produce fruit 1.5 to 2 inches in diameter. Fruit is long, wrinkled, and irregular-shaped. Fruit ranges in color from green to golden-yellow.	Relative Scoville rating: 150,000–325,000. Organic seed available. 

Variety	Company	Season (Relative Maturity)	Plant and Fruit Characteristics	Comments
Tam Jalapeño¹ 	Baker Creek Heirloom Seed Company, Reimer Seeds, and Sustainable Seed Company	60–120 days	Bushy plants are 24 to 36 inches tall and 18 inches wide. Plants produce small to medium fruit that matures from green to red.	Needs summer shade. Relative Scoville rating: 1,000- 1,500.
Thai Burapa⁵ 	Pepper Seeds and Baker Creek Heirloom Seed Company	90–95 days	Bushy plants are 30 to 36 inches tall and produce small peppers that turn from green to red when ripe.	Needs summer shade. Relative Scoville rating: 5,000–30,000.
Thai Yellow Chili⁵ 	Smart Gardener and Baker Creek Heirloom Seed Company	100 days	Plants are 30 to 36 inches tall and produce orange and red fruit.	Needs summer shade. Relative Scoville rating: 5,000–10,000.
Tunisian Baklouti⁵ 	Baker Creek Heirloom Seed Company, Home of Underwood Gardens, and Sustainable Seed Company	110 days	Plants are 38 to 48 inches tall and produce 4- to 6-inch-long fruit. The tapered fruit is red and medium to large in size.	Relative Scoville rating: 1,000-5,000.

¹Photo Credit: Reimer Seeds²Photo Credit: Burpee³Photo Credit: Chilipeppermadness.com⁴Photo Credit: High Mowing Organic Seeds⁵Photo Credit: Baker Creek Heirloom Seeds