

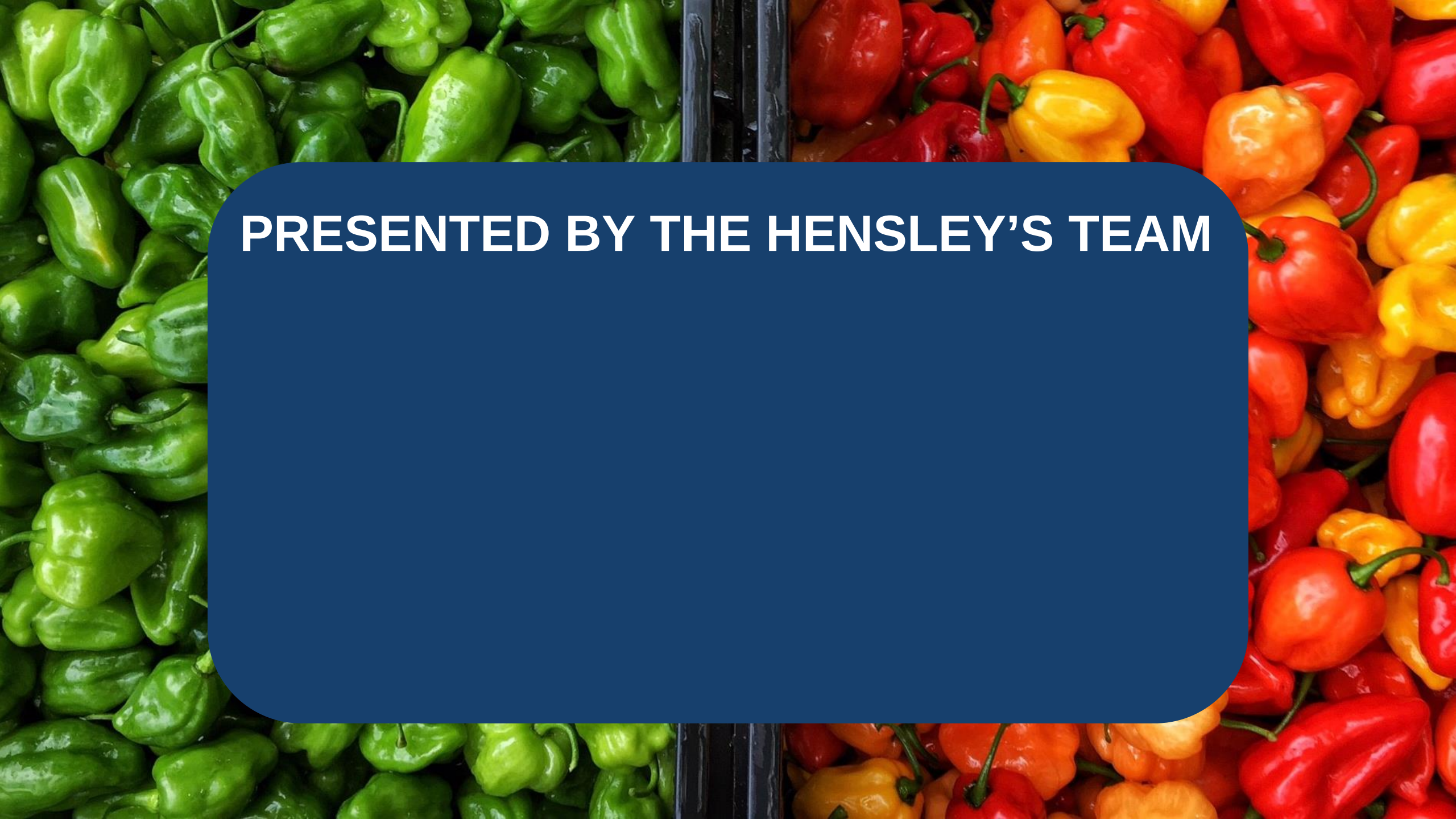
Pepper Picks

Bells & Jalapeños

and more!

Hensley's SEED CO. DENVER · COLORADO

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PRESENTED BY THE HENSLEY'S TEAM


Original
Research Farm

the original research farm

Trial site in USDA zone 5b

- **200 Acres Managed**
- **11 Farm Sites**
- **80+ Acres Consisting of:**
  - **Trial Crops**
  - **Breeding & Seed Production**
  - **Cover Crops**



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2023 SEED VARIETY TRIALS

Does not include regional trials across the U.S.

3,396 Varieties planted and evaluated at our farm

49,901 Bed feet sown for our trials (9.5 miles)

150+ New varieties selected for the 2024 season





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Goals of This Webinar

- Discuss our pepper assortment in general.
- Discuss in greater detail some of our larger categories, such as green to red bell peppers and jalapeños.
- Briefly discuss three major pepper diseases.
- Talk about some underutilized varieties.
- Answer questions about our pepper assortment.



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Pepper Assortment Overview

- We strive to have a reasonably sized assortment that includes the major classes and quite a few specialty types.

- The varieties we offer have been selected for:
  - Good eating quality
  - High yield potential
  - Adaptability to different regions

- For important classes such as bells and jalapeños, we offer several varieties with regional adaptability and improved disease resistances.

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Pepper Assortment Overview

- Our assortment includes quite a few varieties from the original source pepper breeding program, several of which have won awards.
- Beyond the home farm: We conduct variety trials in regional locations such as Georgia, Florida, and California to ensure that we have the best varieties for each growing area.
- Peppers varieties are known for performing differently in different locations.
  - *We suggest trialing several varieties in your area to see which ones work best.*

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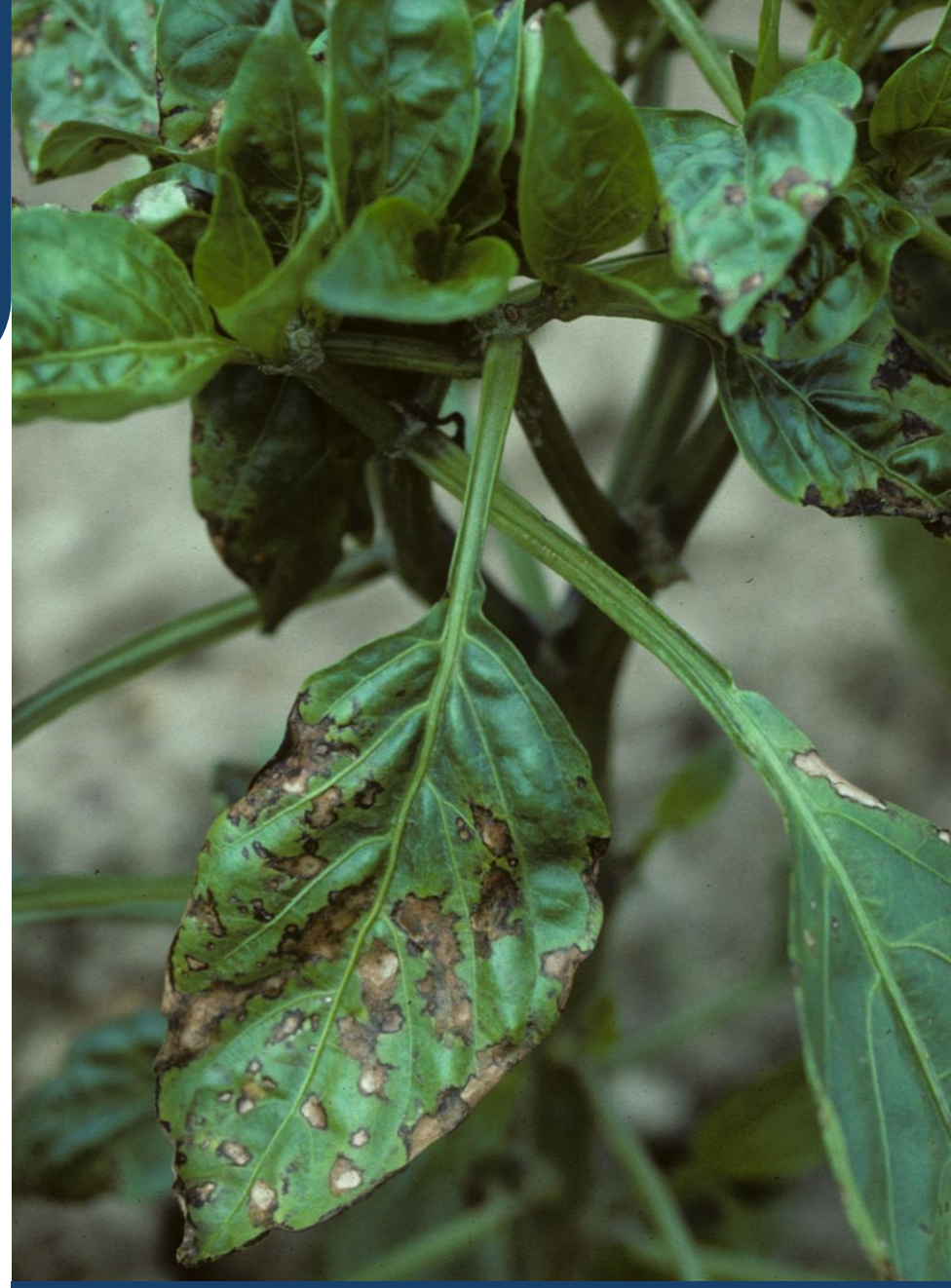
Major Pepper Diseases

Phytophthora, Bacterial Leaf Spot & Tomato Spotted Wilt

- For more detailed information on the 3 diseases we will discuss (as well as a multitude of other pepper diseases):
  - Contact your local extension agent.
  - Review the many university and extension articles available online.

- Identifying diseases is tricky and sometimes impossible by sight alone. We send samples to a lab, as this is the best way to properly diagnose diseases. Contact your local extension agent to help identify diseases in your area.

- If a pepper in this presentation has resistance to any of these diseases, we will note it on the slide. If a variety does not, then there will be no disease notation.



Bacterial Leaf Spot.
Photo courtesy of UMass Extension Vegetable Program

Major Pepper Diseases

Phytophthora, Bacterial Leaf Spot & Tomato Spotted Wilt

- We will use these abbreviations throughout the presentation:
  - PC = Phytophthora
  - BLS (followed by a list of races) = Bacterial Leaf Spot
  - TSWV = Tomato Spotted Leaf Virus
  - IR = Intermediate Resistance
  - HR = High Resistance.
- For example:
  - IR: BLS 1-10 means intermediate resistance to BLS races 1-10
  - HR: BLS 1-3, 7, 8 means high resistance to these races.



Bacterial Leaf Spot.
Photo courtesy of Perdue College of Agriculture

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Major Pepper Diseases

Phytophthora, Bacterial Leaf Spot & Tomato Spotted Wilt

- Resistance can reduce the likelihood of disease but not completely eliminate it. Under severe pressure even HR varieties can contract these diseases, though the symptoms are usually milder.

- Finally: It's important to note that, in many areas, none of these diseases significantly affect pepper crops.

  In fact, many of the varieties in this presentation don't have resistances to any of these diseases and are successfully grown by commercial growers and home gardeners.

  - At the original source, we grow hundreds of pepper varieties in our trials every year, many with no formal disease resistances at all, and it is rare for us to have major disease issues.



Tomato Spotted Wilt.
Photo courtesy of UF Institute of Food and Agriculture

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Phytophthora Blight (PC)

- Caused by fungus-like organism *Phytophthora capsici*.
- PC thrives in warm, wet conditions and can be particularly severe in situations with saturated soils and standing water.
- Occurs in areas that are warm and rainy during the growing season.
- Can cause root, stem and fruit rot.
- Mild to moderate infections can reduce a crop's yield. A major infection can completely destroy it.
- Crop rotation (minimum 3-4 years) and planting resistant varieties are the best tools to manage PC.
    - Grafting onto a resistant rootstock can offer some benefits as well.



PC susceptible plants center left row. Resistant plants center right row

Bacterial Leaf Spot (BLS)

- Bacterial leaf spot is caused by the bacterium *Xanthomonas campestris pv. Vesicatoria*.
- BLS, like Phytophthora, also thrives in warm, wet conditions, particularly when there is high humidity and leaves stay wet for long periods of time.
- It can be seedborne and can persist in plant debris.
  - At the original source we test all pepper seeds lots and only offer those that have tested negative for BLS.
- BLS causes spots and lesions on leaves and fruits and, under severe infections, can result in defoliation and crop loss/failure.
- Crop rotation (minimum 3-4 years) and planting resistant varieties are good tools to manage BLS



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Tomato Spotted Wilt Virus (TSWV)

- Despite its name, Tomato Spotted Wilt Virus can infect peppers as well as tomatoes.
- Symptoms are yellowing and necrosis of leaves and bumpiness or ringspots on fruits. Severe infections can cause heavy crop losses.
- Most prevalent in the South and the West and occurs in wet and dry regions
- Spread by tiny insects called thrips
- Mild to moderate infection can reduce a crop's yield whereas a major infection can destroy it
- Managing thrips and planting resistant varieties are the good tools to manage TSWV



Photo courtesy of Utah State University Extension


Sweet Peppers
Bells, Snacks, Corno di Toros,
& Specialty Types

Ace

- 50 days green, 70 red.
- Smaller and somewhat tapered variety for a Bell pepper.
- Highly productive in cool, wet, spring weather when later varieties sometimes struggle to set fruits.
- Excellent for home gardens, plant sales at garden centers and early fresh market sales before the larger fruited varieties are mature.
- Turns red very early.



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Sailfish

- **IR:(BLS) 1-10 & PC.**
- 57 days green, 77 red.
- Our best full-sized bell for red fruit production as fruits are very fast to turn color.
- Needs adequate fertility to achieve good fruit size. Underfed crops or those grown south of its recommended planting area will likely produce fruits too small to be marketable.
- For Canada, the Northeast, the Mid-Atlantic and the Midwest.
- Not adapted for the West, Southeast or South.



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Red Knight & King Arthur

- **Both varieties are HR: BLS 1-3, 7, 8.**
- Red Knight- 57 days green, 77 red.
- King Arthur- 59 days green, 79 red.
- Both are widely adapted, early maturing “workhorse” varieties.
- Long record of performing well under variable, less than optimal conditions.
- Large and blocky fruits are suitable for green or red harvest.
- Excellent choices for early plantings



Red Knight

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Autry, Green Machine, Yankee Bell & Olympus

- **Olympus**-**IR: BLS 1-3, 7 & 8.** 65 days green, 85 red. Widely adapted and performs well most years. Available as organic or conventional seeds.

- **Yankee Bell** - 60 days green, 80 days red. Bred by Original-source and introduced in 1993. An excellent early maturing open-pollinated variety that performs well in northern areas.

- **Autry**-**IR: 1-10 & TSWV.** 60 days green, 80 red. Autry is an excellent choice for spring and summer plantings in the Southeast, especially in Georgia, where disease pressure can be very high.

- **Green Machine**-**IR: BLS 1-10 & TSWV resistance.** 60 days green, 80 red. Like Autry, it also does well for spring and summer plantings in the Southeast, particularly in Florida.



Olympus

Orange Bells

- **SVPB8500-IR: BLS 1-10 resistance.** 91 days. Plants are strong and sturdy with a leafy canopy that protects the fruits from sunburn. Adapted for the East Coast from Quebec all the way down to Florida. Works well in Georgia for spring and summer planted crops and in Florida for spring, fall and winter.

- **Gourmet-85 days.** No resistances but widely adapted and with above average flavor. A good choice if BLS resistance is not needed as the seeds are much less expensive than SVPB8500.
    - *Seed not available this spring.*



(*L-R*) Gourmet, SVPB8500

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Yellow Bells

- Sweet Sunrise - 85 days. Bred by the original source and available as organic seeds. Medium large fruits mature early. Performs well in the North.

- **SVPB8415 -IR: BLS 1-10.** 93 days. Excellent for areas such as the Southeast, where BLS pressure is high. Plants have a good canopy to protect the fruits from sunscald. Also has performed well in the East.

- **Flavorburst** - 87 days. Available as organic or conventional untreated seeds. Fruits sometimes may be a bit tapered. Our best tasting yellow bell. A widely adapted "workhorse" variety.



(L-*R*) Sweet Sunrise, SVPB8415, & Flavorburst

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Purple and “White” Bells

- **Lilo** - 60 days. Dark purple bell. Available as organic seeds.
- **Islander** - 56 days. Light lavender bell.
- **Snowball**- 65 days. “White” or cream-colored bell.
- These three varieties are unripe at their purple/cream stages and thus are not very sweet but rather have a mild pepper flavor.
- Since they are picked unripe, they are earlier to reach their harvest stage than our red, yellow and orange varieties.
- High yield potential as they will keep producing as long as the plants are promptly harvested.



(*L-R*) Lilo, Islander, Snowball

High Tunnel & Greenhouse Bells

- **Olly** – 74 days. Organic seeds. Fruits are a bit smaller than Sprinter, but they mature nearly a week sooner. Medium-large plant.
- **Sprinter** - 80 days. Organic or conventional seeds. Tall, strong plants. Perform best with heat but will still do well in unheated tunnels.
- **Milena** - 80 days. Organic or conventional seeds. Tall, strong plants with an excellent yield potential. Very good flavor.
- **Brocanto** - 80 days. Organic or conventional seeds. Strong, tall plants. Good adaptability.
- **Lilo** - 60 days. Organic or conventional seeds. Excellent color. Temperatures must be below 65° F at night, or fruits may be brownish purple.



(*L-R*) Lilo, Olly, Milena, Brocanto, Sprinter

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Frodo

- **IR: TSWV.** 62 days green, 82 days red.
- A red Lamuyo traditionally grown in Spain and Italy. Better flavor than a typical blocky bell. Typically eaten when red.
- Fruits are very large and avg 5-6” long X 3 ½-4” wide and nicely elongated, true to type.
- Frodo is late maturing. In short season areas it is best grown indoors as it will mature very late in the open field.
- In warm, long season regions without significant disease pressure, it may be grown successfully out of doors.
- Coming soon (mid-Feb.) to hensleyseeds.com.



Mini Bells

- **Eros**-Golden yellow mini bell
- **Cupid**-Red mini bell

• Bred by the original source

- 73 days red and yellow
- Fruits avg 2” L X 1 ¾” W
- Nice specialties that are both attractive and flavorful.
- Good in salads or stuffed
- Big, sturdy plants



Eros (yellow) & Cupid (red)

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Snack Peppers

- **Lunchbox Red, Yellow and Orange** -75-83 days. Snack peppers available as organic seeds. These varieties were bred to be smooth, attractive and, most importantly, of superior eating quality. Better flavor than the SVPS varieties. 2-3" fruits, with the reds being on the smaller end of the scale.

- **SVPS0897, SVPS0953 & SVPS1263 -IR: BLS 1-10.** 73 days. Not as tasty as our Lunchboxes but very nice and attractive. Fruits avg 3-4". Recommended for areas that require BLS 1-10 resistance.



(*Top*) Lunchbox Trio. (*Bottom*) SVPS0897, SVPS0953 & SVPS 1263

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Corno di Toro & Cornitos

- Corno di Toro means “horn of the bull” in Italian and “Cornito” is our name for smaller cornos.
- All of these varieties were bred by the source program and are available as organic seeds.
- All are staff favorites due to their superior flavor that is clearly better than any of our bells.
- Easier to grow and with better flavor than bell peppers when ripe.
- **Carmen and Escamillo** corno di toros-80 days. Our AAS winning corno di toros. Attractive 6-7” long fruits.
- **Rosso, Giallo and Arancia Cornitos**- 75-80 days. our red, yellow and orange Cornitos. Avg 5” fruits.



(*l-r*) Carmen, Escamillo, Cornito Rosso, Cornito Giallo, Cornito Arancia

Shishitos

- Shishitos are a traditional Japanese pepper. Excellent sauteed or in tempura. Traditionally cooked in Japan when green but also excellent red.
- Avg 3 ½-4” long fruits have a nice, mild green pepper flavor.
- Huge yield potential if promptly harvested.
- **Mellow Star** - 60 days. Very popular Japanese shishito type pepper. Very productive.
- **Shishito** - 60 days. Organic seeds. An open-pollinated sweet variety similar to Mellow Star but with fruits that are a bit narrower and a slightly paler green.
- **Shishimai** – 60 days. Mildly spicy.



(Back: *L-R*) Mellow Star, Shishimai (Front) Shishito

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Banana & Cubanelle

- **Goddess**-Banana pepper. 63 days. A sweet banana excellent for frying, pickling whole or as rings. Becoming very popular. Early maturing and performs quite well in cool, wet weather.

- **Nassau**-Cubanelle pepper. 64 days. A classic Caribbean frying type pepper. Typically used when unripe and light green, allowing for an earlier harvest. Available online only.



(Top) Goddess (Bottom) Nassau

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Hot Peppers

Jalapeño, Serrano, Poblano, Anaheim,
& Specialty Types

Jalapeños



- **Black Magic** - Available as organic seeds. Smaller size with early, traditional checking and a beautiful very dark green color. 3 ½- 3 ¾" fruits. Reduced pungency in cool, wet weather. Online only.
- **Arriba** - 63 days. Also known as a Caribe type. Yellow when immature, ripens to Red. Use like a green jalapeño. 3 ½-4" fruits. Online only.
- **Jedi** - **HR: BLS 1-3, 7, 8.** 72 days. Our most popular jalapeño. High yielding main season type. Very large continuous set type plant. Only fungicide treated seeds are available this year, so not suitable for organic growers. Widely adapted. 4-4 ½" fruits. A real "workhorse."
- **Jalafuego** - **BLS 1-3, 7,8 resistance.** 70 days. Smooth, shiny fruits are of the smaller traditional size and shape and relatively early to mature. 3 ½-4" fruits.
- **Early Jalapeño** (*not pictured*) - 60 days. An older, very early, open-pollinated variety. Traditional size 2 ½ fruits are fast to check. We have a nice, uniform strain.

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PS11435807

- **IR: PC, TEV; HR: PVY**
- Fruits large and blockier -4-4.5”
- Big, continuous set plants have high yield potential
- Good plant canopy
- Widely adapted-east and west
- If PC resistance is not needed, we suggest growing Pantera or Jedi instead as the fruit quality is usually a bit better



SVHJ5816

- **IR: BLS 1-10; HR: PVY**
- Fruits large-3.5-4” and tend to be plumper and blockier than a typical jalapeño.
- Medium-large plant with a more concentrated set.
- Adapted for East Coast from Canada to Florida.
- If BLS 1-10 resistance is not needed, we suggest growing Pantera or Jedi instead as the fruit quality is usually better.



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Pantera

- Similar to Jedi. We are offering Pantera as untreated seed this year, as Jedi is only available as treated seed for 2024.
- **HR: BLS 1-3, 7, 8.**
- Fruits large-avg 4.5” and of a similar size to Jedi.
- Large, continuous set plant with a high yield potential like Jedi.
- Some growers will likely prefer Pantera and others Jedi, depending on local conditions.
- Widely adapted-East and West.



Serranos

- Similar, but narrower and hotter, than jalapeños.
- For more heat, substitute serranos for jalapeños in food or hot sauce recipes.
- Excellent for cooking, salsas, and chipotles.
- Both of these varieties are widely adapted and suitable for growing throughout the US.
- **Altiplano** - 57 days. Large, 4 ½-5" fruits with excellent flavor and pungency.
- **Santo Domingo** - 62 days. Similar to Altiplano, but later maturing with a bigger plant and higher yield potential.



(Top) Santo Domingo (Bottom) Altiplano

Poblano/Ancho

- Use fresh for chile rellanos or dried for powder or flakes in dishes such as moles.
- Called poblanos when green and anchos when dried.
- **Sargento** - **IR: PC.** 65 days green, 85 red. Big plants with high yield potential. Fruits are similar to Baron but slightly bigger, averaging 5-6" long. An excellent variety worth trying even if you don't have PC pressure in your area.
- **Bastan**- 65 days green, 85 brown. Organic seed. Fruits start green and ripen to a chocolate brown rather than the more common green to red, otherwise very similar to our other varieties. Use fresh green or brown or make into brown powder or flakes.
- **Baron**- 65 days green, 85 red. Similar to Sargento but with slightly smaller fruits and no PC resistance. Widely adapted and tends to perform well under less-than-ideal conditions.



(*clockwise from top*) Sargento, Bastan, Baron

Anaheim/Numex

- Very popular in the Southwest where they are fried or roasted at the green stage.

- May also be allowed to ripen to red and dried to make flavorful, mildly hot flakes/powder.

- **Spitfire - IR: PC**. 65 days green, 85 red. Large plants have a very good canopy to protect the fruits from sunscald and have a high yield potential. Fruits are a bit bigger than our other Anaheims and avg 7-9" x 2 ½-3." An excellent variety worth trying even if you don't have PC pressure in your area.

- Highlander - 65 days green, 85 red. the original source bred variety. Organic seeds. Widely adapted, performs well in cooler areas. Mostly 2-lobed fruits avg 7" x 2."

- **Charger-IR: TSWV**. 65 days green, 85 red. Widely adapted, generally performs well in the East and the West. Good plant canopy to protect the fruits from sunscald. Fruits avg 7" x 2."



(*clockwise from top*) Spitfire, Highlander, Charger

Fresno & Santa Fe

- **Flaming Flare** - 77 days. Widely adapted Fresno type. Fruits avg 4" fruits and are sweet, with medium heat and a nice, bright red color. Great for stir fries, sauteing, hot sauce and grinding into powder or flakes.

- **Havasu** - 60 days. Very early Santa Fe type. Bright yellow when immature, fruits ripen up to red. Conical fruits avg 3 ½" and are suitable for stuffing, stir frying or pickling.



(*top*) Flaming Flare (*bottom*) Havasu

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Specialty Hots



Padron



Capperino



Mad Hatter



Mojo

- **Padron** - 60 days. Organic seeds. Traditional Spanish heirloom. Harvest fruits while small, 1-1 ½" long. Sauté in oil with a bit of salt and sliced garlic gloves (optional) as an appetizer as is done in Spain. If the fruits get larger (2-3") and turn red they will be very hot but still great for cooking.

- **Capperino** - 60 days green, 85 days red. Nice cherry suitable for whole pickling green or red, stuffed or unstuffed. Avg fruit size 1 ½" in diameter. Medium heat.

- **Mad Hatter** -105 days. AAS winner. Slightly hot Bishop's Crown type. Originally from the Caribbean.

- **Mojo** – 90 days. Organic seeds. Nice, 4-6" long, crunchy fruits with floral notes and just a touch of heat. Good fresh in salads, cooking, hot sauce or dried and ground into powder or flakes.

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Cayenne/Thai



Red Ember



Red Rocket



Red Flame



Bottle Rocket

- **Red Ember - 75 days. Organic seeds. Bred by the original source. Our most versatile Cayenne. Red Ember is a great multipurpose pepper** suitable for fresh eating, stir fries, sauteing, hot sauce and drying for flakes and powder. It has excellent flavor and is very sweet with moderate heat. Early for a cayenne. Staff favorite.

- **Red Rocket - 75 days. Organic seeds. Bred by the original source Extra early. It is our earliest drying cayenne and most suitable for** regions with a short growing season. Earlier but lower yielding than Red Flame. The thin-walled fruits avg 5-6" and dry quickly. Medium heat. For drying.

- **Red Flame - 80 days. Organic seeds. Bred by the original source . AAS winner. Similar to Red Rocket but a few days later, with bigger** fruits and a higher yield potential. For drying.

- **Bottle Rocket – 90 days. Organic seeds. Developed by the original source. Thai type. Originally this variety was found in a market in** Budapest, Hungary. We selected it for earlier maturity, an improved, more upright plant and uniform fruit size. Not technically a Thai pepper but it looks like one, has a similar flavor, and packs the same heat. For fresh use or drying.

Habenero

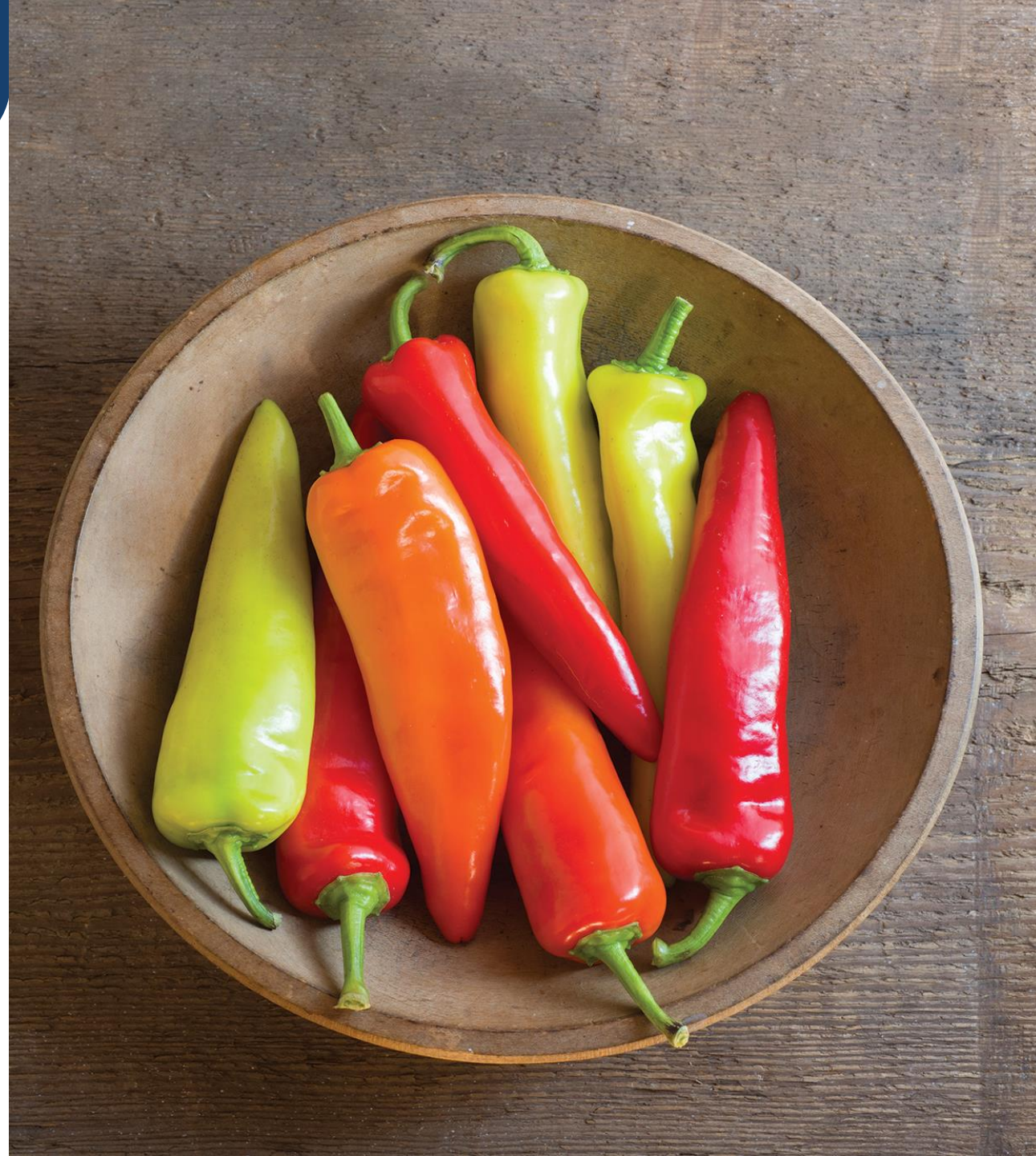
- Our Hottest peppers (except for Roulette)
- Flavor is floral, reminiscent of tropical fruit, and delivers very high heat.
- **Habanero** - 100 days. Organic seeds. The standard orange open-pollinated habanero. Extremely hot. Nice, but late.
- **Helios** - 87 days. Similar to our OP Habanero, but a couple of weeks earlier and with larger fruits. Excellent for those living in regions with a short growing season.
- **Hot Paper Lantern** - 90 days. Organic seeds. Bred by the original source. Early, 3-4" tapered red fruits with a typical habanero flavor and heat.
- **Roulette** - 90 days. Looks like a typical red habanero type but is heatless. It has the same floral notes as a standard habanero. A great choice for those who like the flavor profile but not the heat of a habanero.



(*clockwise from top right*) Roulette, Habanero, Hot Paper Lantern, Helios

Hungarian Hot Wax

- 58 days yellow; 83 days, red ripe. Organic seeds. A the original source improved strain introduced last year.
- We found that the stains in the marketplace were poor, with variable fruit size and shape, variable heat level and poor floppy plants.
- We spent 6 years refining it and are now proud to offer our high-quality, improved strain!
- Fruits avg 5 ½," borne on sturdy, upright plants. Yellow when immature and ripen through orange into bright red coloration when fully ripe.
- Very early maturing, will set abundant quantities of fruits, even in early during cool, wet, cloudy weather.
- If you have trouble with hot peppers setting fruits in cool, wet springs, try our strain of Hungarian Hot Wax.
- Moderate heat level makes them excellent for frying, roasting and pickling when orange or red.

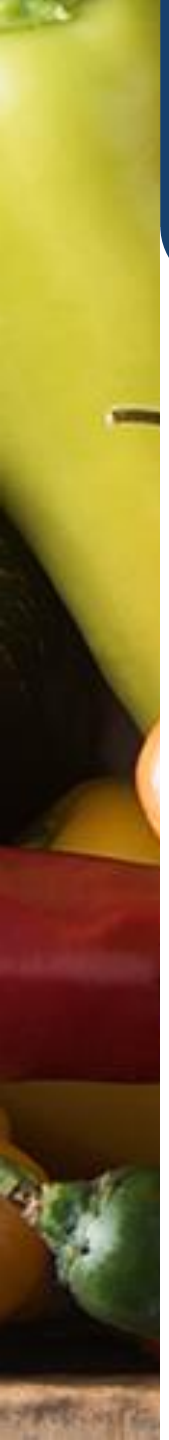


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RESOURCES





Browse pepper varieties

Browse pepper varieties

Browse pepper varieties

Browse pepper varieties

About our seeds

Peppers – Key Growing Information

How to Grow Great Pepper Seedlings

Growing resources

Growing resources

Preventing Resistance Buildup in Pests & Pathogens

Open-pollinated pepper stewardship



THANK YOU

We hope you enjoyed this presentation!

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