

# Plant Sciences<sup>Inc.</sup>

*Advancing Agriculture through Science®*



## 2016-2017 VARIETY CATALOG



Serving our partners since 1985  
**30**  
YEARS  
Advancing Agriculture through Science



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Dear Valued PSI Partner,

As we bring closure to the year past and transition into a new year, Plant Sciences remains strongly committed to your collective success. PSI is grateful to be serving each of you, as you directly represent more than a dozen leading marketing companies, operating in approximately 50 nations, on six of the world's seven continents.

After more than thirty years in business, PSI reflects humbly on the commitment each of you has made to its burgeoning portfolio of small fruit and vegetable technology. Our CEO has said many times, "Without your commitment to adopt PSI's knowledge and intellectual property within your markets, this process would be little more than a sizeable science project."

It is your commitment to the research and development of this new technology in your unique environments that allows us to collectively introduce new solutions to the increasing list of challenges our industry faces around the globe. It is your commitment to commercializing the scientific innovations of PSI that brings value to each of the markets you serve, and collectively raises the bar for a better consumer experience. It is your commitment to your retail partners, and ultimately to the consumer, that stimulates the markets to continue to grow, providing more opportunity for us together.

While we reflect on the significance of your commitment to PSI, PSI remains dedicated to bringing you new, meaningful tools—tools you can use to better serve your customers. It is with this level of dedication we introduce this new catalog of PSI varieties. We trust you will find the new catalog a useful aid in your commitment to reach your retail partners and their consumers with the best experience possible.

We remain committed to your collective and individual success, and endeavor to make the year ahead the best yet.

On behalf of the PSI Board of Directors and the dedicated team of professionals at PSI...

Sincerely,



Daniel S. Nelson

Vice President, Chief Business Officer



# STRAWBERRY BREEDING PROGRAM

**P**lant Sciences, Inc. (PSI) is an industry leader in producing proprietary strawberry genetics. Through the use of traditional cross-breeding techniques, we facilitate four separate in-house strawberry breeding programs, designed to select cultivars adapted to specific growing regions throughout the world.

As part of the testing and selection process, PSI conducts varietal field evaluations of its genetics in grower fields in central and southern California, as well as many international test-site locations. The objective of this selection process is to choose varieties specifically adapted to the consumer markets of its partners, with improvements in both input and consumer traits such as flavor, production, fruit size, color, and resistance to pests and disease, which have desirable production timing.

Along with our field evaluations, PSI also conducts fruit quality evaluations to simulate traditional shipping and handling of the product. PSI selects for fruit with improvements in post-harvest fruit quality, flavor, color, disease and pest resistance, and overall appearance.



*Field in Oxnard, CA*



*Screenhouse in Watsonville*

The strawberry breeding department at PSI and affiliated companies also oversee research nursery propagation in both our high-elevation and low-elevation strawberry nursery facilities in Macdoel, California and Manteca, California.

The ultimate goal of PSI's strawberry breeding department is to develop high-quality, flavorful fruit with improvements that meet diverse and constantly changing global consumer demands, while bringing success to those with whom we collaborate and serve.

In 2012, PSI and Berry Genetics, Inc. developed a joint venture for breeding strawberry varieties adapted to sub-tropical growing environments. This joint venture, Strawberry Sciences, is in the early stages of varietal development, and anticipates releasing its first commercial selections within the next three to five years.

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• All data is from international research trials and commercial experience •



# REGIONAL GROWTH CHART

## LIKE REGIONS

Varietal Adaptability

### **SHORT DAY**-SOUTHERN CALIFORNIA, BAJA MEXICO AND LIKE AREAS

Australia • Jordan • Northern and South Africa • South America • Southern Europe

### **EVERBEARING**-SOUTHERN CALIFORNIA AND LIKE AREAS

Australia • Northern Europe • South Africa • South America

### **SUMMER BEARING**-CENTRAL CALIFORNIA COAST AND LIKE AREAS

Australia • Chile • Portugal

### **ULTRA-SHORT D**



# VARIETY QUICK GUIDE

VARIETY NAME	BREEDER'S CODE	VARIETY TYPE	PAGE NUMBER
Honor	BG-633	Short Day	7
Splendor	BG-959	Short Day	8
Virtue	BG-1975	Short Day	9
Liberty	BG-4315	Short Day	10
Victory	BG-4316	Short Day	11
Confidence	BG-3.324	Short Day	12
N/A	BG-4.352	Short Day	13
N/A	BG-4.367	Short Day	14
N/A	BG-4.370	Short Day	15
N/A	BG-6.3016	Short Day	16
N/A	BG-6.3024	Short Day	17
Valor	PE-1.207	Everbearing	18
Premier	PE-1.209	Everbearing	19
Prize	PE-3.211	Everbearing	20
Triumph	PE-3.221	Everbearing	21
Majesty	PE-3.222	Everbearing	22
Arabella	PE-6.2036	Everbearing	23
N/A	PE-7.2059	Everbearing	24
Endurance	PS-592	Summer Bearing	25
N/A	PS-5016	Summer Bearing	26
Bliss	PS-5298	Summer Bearing	27
Reliance	PS-9271	Summer Bearing	28
N/A	PS-3.108	Summer Bearing	29



# SHORT DAY

## BG-633: Honor



STRAWBERRY

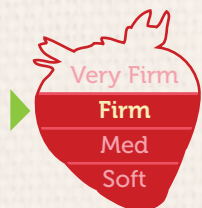
### Honor Quick Stats

Primary Production: Morocco

SIZE



FLESH FIRMNESS



KEEPING QUALITY



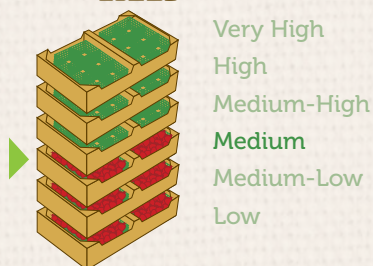
COLOR



FLAVOR



YIELD



FIRST FRUIT



#### PRODUCTION INFORMATION

- Production district: Oxnard
- Planting season: winter
- Production season: winter-spring

#### DEFINING CHARACTERISTICS

- Medium-sized plant; medium-sized fruit; fruit tends to be slightly long, conic in shape



## SHORT DAY

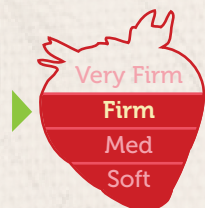
BG-959: *Splendor**Splendor Quick Stats*

Primary Production: Baja California, Spain, Australia, South Africa, Jordan

## SIZE



## FLESH FIRMNESS



## KEEPING QUALITY



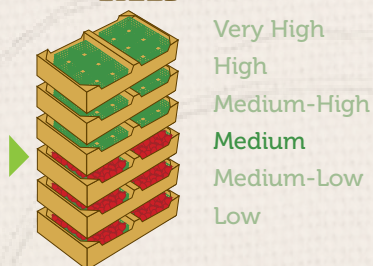
## COLOR



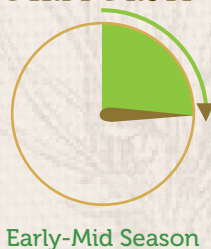
## FLAVOR



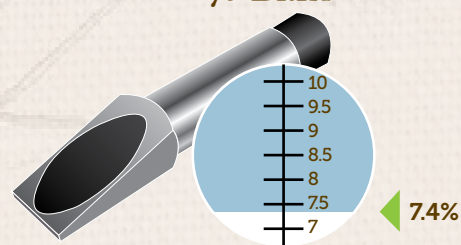
## YIELD



## FIRST FRUIT



## % BRUX



## PRODUCTION INFORMATION

- Production district: Oxnard
- Planting season: winter
- Production season: winter-spring

## DEFINING CHARACTERISTICS

- small-sized plant; fruit tends to be slightly long, conic in shape; especially adapted to the fruit production regions of southern Spain



# SHORT DAY

## BG-1975: *virtue*



STRAWBERRY

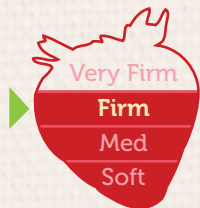
### *virtue Quick Stats*

Primary Production: California

#### SIZE



#### FLESH FIRMNESS



#### KEEPING QUALITY



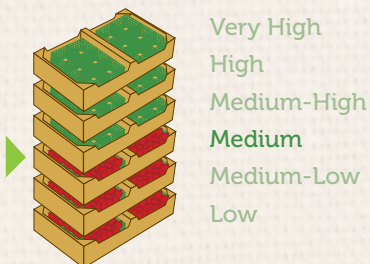
#### COLOR



#### FLAVOR



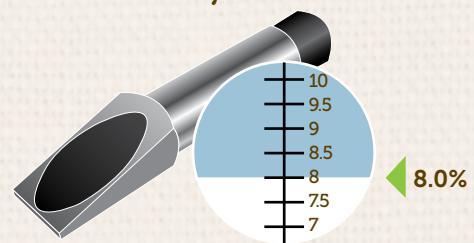
#### YIELD



#### FIRST FRUIT



#### % BRUX



#### PRODUCTION INFORMATION

- Production district: Oxnard
- Planting season: winter
- Production season: winter-spring

#### DEFINING CHARACTERISTICS

- Medium-sized plant; produces very attractive medium-sized, light red, conical fruit all season long



## SHORT DAY

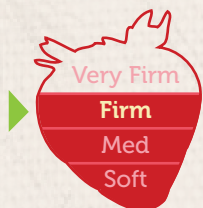
BG-4315: *Liberty**Liberty Quick Stats*

Primary Production: Spain

## SIZE



## FLESH FIRMNESS



## KEEPING QUALITY



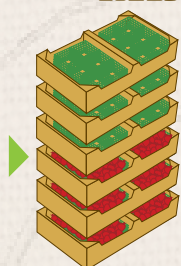
## COLOR



## FLAVOR

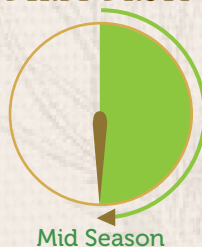


## YIELD

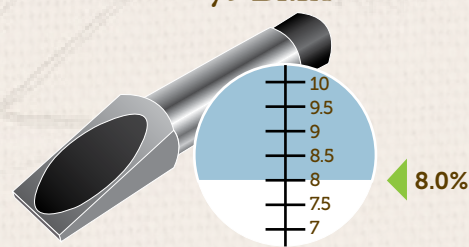


Very High  
High  
Medium-High  
Medium  
Medium-Low  
Low

## FIRST FRUIT



## % BRUX



## PRODUCTION INFORMATION

- Production district: Oxnard
- Planting season: winter
- Production season: winter-spring

## DEFINING CHARACTERISTICS

- Medium-sized plant; medium-sized, attractive, light red, conical fruit; especially adapted to the fruit production regions of southern Spain



# SHORT DAY

## BG-4316: *victory*



STRAWBERRY

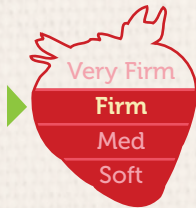
### *Victory Quick Stats*

Primary Production: Spain, California

SIZE



FLESH FIRMNESS



KEEPING QUALITY



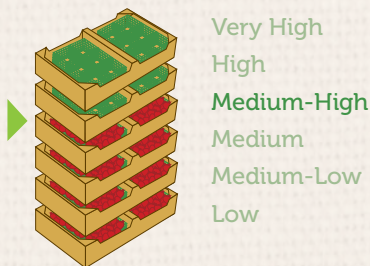
COLOR



FLAVOR



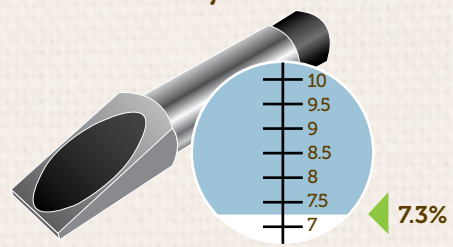
YIELD



FIRST FRUIT



% BRIX



#### PRODUCTION INFORMATION

- Production district: Oxnard
- Planting season: winter
- Production season: winter-spring

#### DEFINING CHARACTERISTICS

- Medium-sized plant; medium to high productivity; medium-sized, attractive, light red, conical fruit; especially adapted to the fruit production regions of southern Spain



# SHORT DAY

## BG-3.324: Confidence



## BG-3324 Quick Stats

Primary Production: California, Baja California

### SIZE



### FLESH FIRMNESS



### KEEPING QUALITY



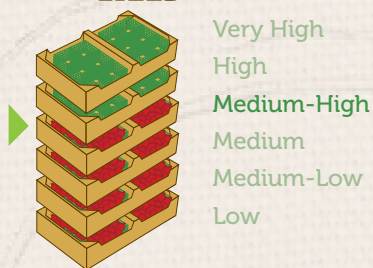
### COLOR



### FLAVOR



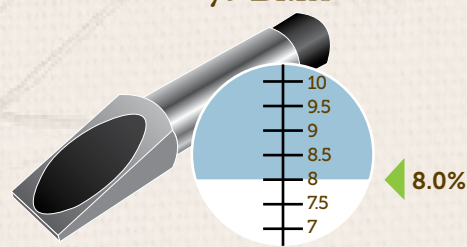
### YIELD



### FIRST FRUIT



### % BRIX



### PRODUCTION INFORMATION

- Production district: Oxnard
- Planting season: winter
- Production season: winter-spring

### DEFINING CHARACTERISTICS

- Medium-sized plant; large, light red, conical fruit; very good, early fruit production with high-yield potential



# SHORT DAY

BG-4.352

Fusarium  
Resistant



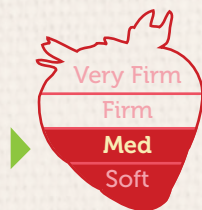
## BG-4352 Quick Stats

Primary Production: California

SIZE



FLESH FIRMNESS



KEEPING QUALITY



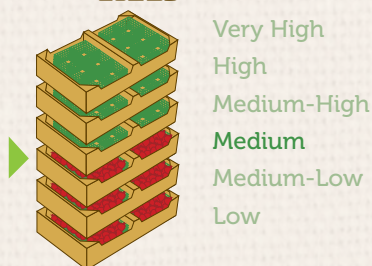
COLOR



FLAVOR



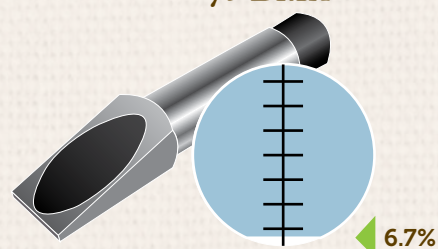
YIELD



FIRST FRUIT



% BRUX



### PRODUCTION INFORMATION

- Production district: Oxnard
- Planting season: winter
- Production season: winter-spring

### DEFINING CHARACTERISTICS

- Plant is small in size; fruit is conical to cylindrical in shape with moderate uniformity; fruit is large in size with medium keeping quality; plant demonstrates strong resistance to Fusarium disease



# SHORT DAY

BG-4.367

Fusarium  
Resistant



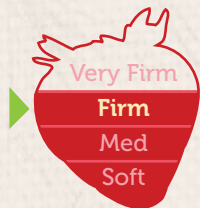
## BG-4367 Quick Stats

Primary Production: California

SIZE



FLESH FIRMNESS



KEEPING QUALITY



COLOR

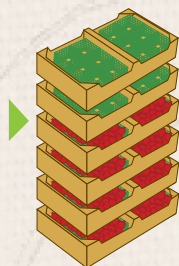


Orange Red  
Red  
Dark Red

FLAVOR



YIELD



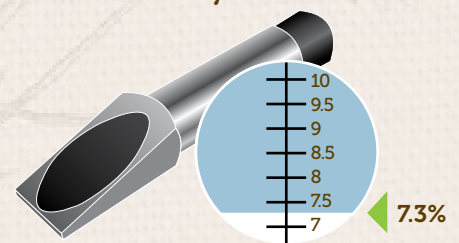
Very High  
High  
Medium-High  
Medium  
Medium-Low  
Low

FIRST FRUIT



Early Season

% BRIX



### PRODUCTION INFORMATION

- Production district: Oxnard
- Planting season: winter
- Production season: winter-spring

### DEFINING CHARACTERISTICS

- Plant is medium in size; fruit is medium in size, firm with very good keeping quality; fruit is also conical and moderate in uniformity; plant demonstrates strong resistance to Fusarium disease



# SHORT DAY

BG-4.370



STRAWBERRY

## BG-4.370 Quick Stats

Primary Production: Jordan



### PRODUCTION INFORMATION

- Production district: Oxnard
- Planting season: winter
- Production season: winter-spring

### DEFINING CHARACTERISTICS

- Small-sized plant; fruit is very large with good keeping quality; fruit and flowers are held well above the plant on short pedicels; fruit is conical and moderately uniform



# SHORT DAY

## BG-6.3016



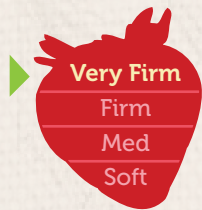
### BG-6.3016 Quick Stats

Primary Production: NEW

SIZE



FLESH FIRMNESS



KEEPING QUALITY



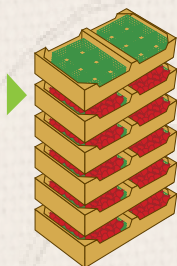
COLOR



FLAVOR



YIELD



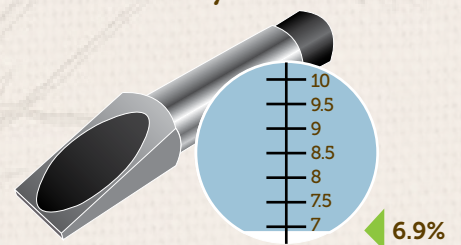
Very High  
High  
Medium-High  
Medium  
Medium-Low  
Low

FIRST FRUIT



Early Season

% BRIX



#### PRODUCTION INFORMATION

- Production district: Oxnard
- Planting season: winter
- Production season: winter-spring

#### DEFINING CHARACTERISTICS

- Medium-sized plant; medium-sized fruit that is very firm and red in color; yields are high; first fruit is early; fruit is conical and uniform in shape



# SHORT DAY

BG-6.3024



STRAWBERRY

## BG-63024 Quick Stats

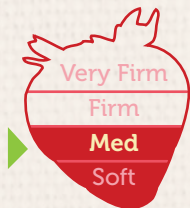
Primary Production: California, Spain

SIZE



Very Large

FLESH FIRMNESS



KEEPING QUALITY



COLOR

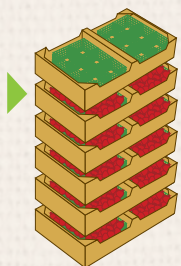


Orange Red  
Red  
Dark Red

FLAVOR



YIELD



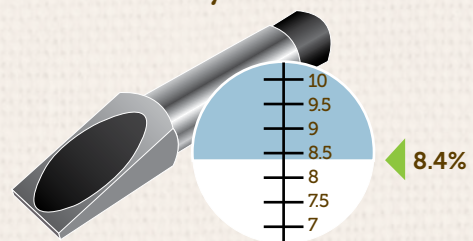
Very High  
**High**  
Medium-High  
Medium  
Medium-Low  
Low

FIRST FRUIT



Early-Mid Season

% BRIX



### PRODUCTION INFORMATION

- Production district: Oxnard
- Planting season: winter
- Production season: winter-spring

### DEFINING CHARACTERISTICS

- Medium-sized plant; very large, conical, red fruit with high-yield potential and excellent flavor



## EVERBEARING

PE-1.207: *Valor**Valor Quick Stats*

Primary Production: Belgium, South Africa, Ukraine, Australia

## SIZE



## FLESH FIRMNESS



## KEEPING QUALITY



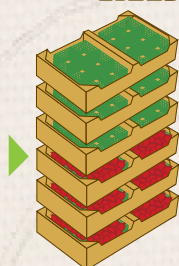
## COLOR



## FLAVOR

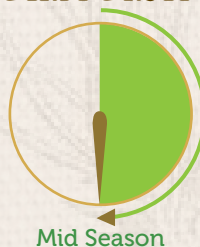


## YIELD

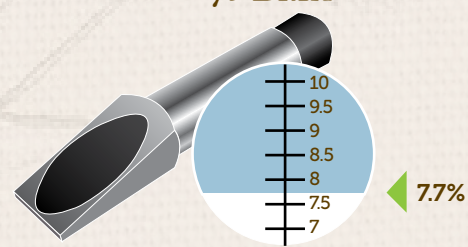


Very High  
High  
Medium-High  
Medium  
Medium-Low  
Low

## FIRST FRUIT



## % BRIX



## PRODUCTION INFORMATION

- Production district: Watsonville/Oxnard
- Planting season: winter/spring/summer
- Production season: fall-winter

## DEFINING CHARACTERISTICS

- Medium-sized plant; medium-sized, dark red, conical fruit with excellent fruit quality and shippability



# EVERBEARING

## PE-1.209: Premier



STRAWBERRY

### Premier Quick Stats

Primary Production: United Kingdom

#### SIZE



#### FLESH FIRMNESS



#### KEEPING QUALITY



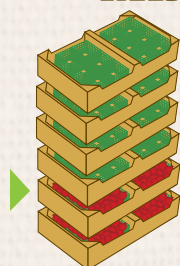
#### COLOR



#### FLAVOR



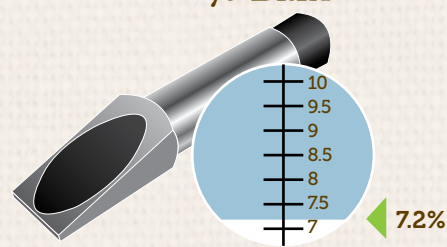
#### YIELD



#### FIRST FRUIT



#### % BRIX



#### PRODUCTION INFORMATION

- Production district: Watsonville/Oxnard
- Planting season: winter/spring/summer
- Production season: fall-winter

#### DEFINING CHARACTERISTICS

- Medium-sized plant; medium-sized, dark red, conical fruit; especially adapted to the fruit production regions of northern Europe



## EVERBEARING

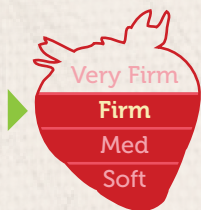
PE-3.211: *Prize**Prize Quick Stats*

Primary Production: United Kingdom, Holland, Denmark, Austria, Germany, Switzerland

## SIZE



## FLESH FIRMNESS



## KEEPING QUALITY



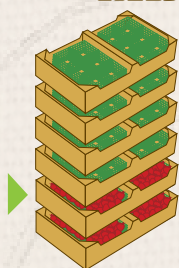
## COLOR



## FLAVOR



## YIELD

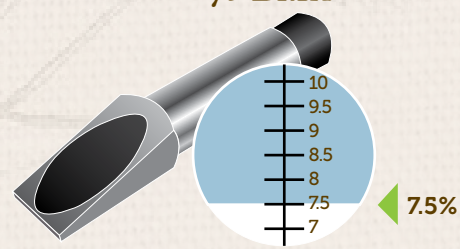


Very High  
High  
Medium-High  
Medium  
Medium-Low  
Low

## FIRST FRUIT



## % BRIX



## PRODUCTION INFORMATION

- Production district: Watsonville/Oxnard
- Planting season: winter/spring/summer
- Production season: fall-winter

## DEFINING CHARACTERISTICS

- Large-sized plant; medium-sized, firm fruit that is light in color; fruit shape is conical to ovoid and uniform in shape



# EVERBEARING

## PE-3.221: *Triumph*



STRAWBERRY

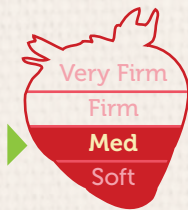
### Triumph Quick Stats

Primary Production: United Kingdom, Holland, Belgium

#### SIZE



#### FLESH FIRMNESS



#### KEEPING QUALITY



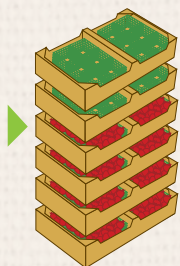
#### COLOR



#### FLAVOR



#### YIELD



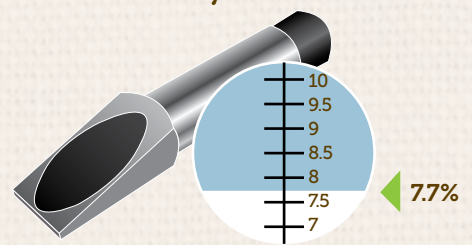
Very High  
High  
Medium-High  
Medium  
Medium-Low  
Low

#### FIRST FRUIT



Early Season

#### % BRIX



#### PRODUCTION INFORMATION

- Production district: Watsonville/Oxnard
- Planting season: winter/spring/summer
- Production season: fall-winter

#### DEFINING CHARACTERISTICS

- Medium-sized plant; medium-sized, attractive, conical fruit with moderate to high-yield potential



# EVERBEARING

## PE-3.222: Majesty



### Majesty Quick Stats

Primary Production: United Kingdom (Scotland)

#### SIZE



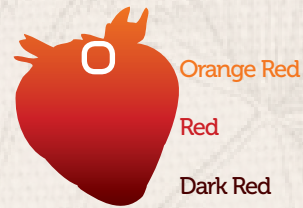
#### FLESH FIRMNESS



#### KEEPING QUALITY



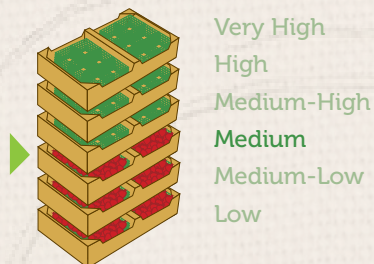
#### COLOR



#### FLAVOR



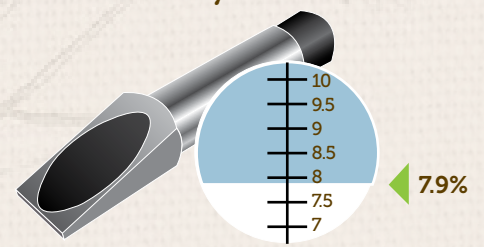
#### YIELD



#### FIRST FRUIT



#### % BRIX



#### PRODUCTION INFORMATION

- Production district: Watsonville/Oxnard
- Planting season: winter/spring/summer
- Production season: fall-winter

#### DEFINING CHARACTERISTICS

- Medium-sized plant; very large, light-colored fruit with excellent flavor; fruit uniformity is moderate and shape is conical



# EVERBEARING

PE-6.2036: *Arabella*



## Arabella Quick Stats

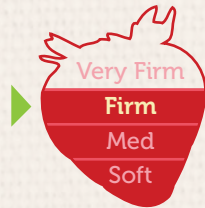
Primary Production: United Kingdom, Holland, Germany

STRAWBERRY

SIZE



FLESH FIRMNESS



KEEPING QUALITY



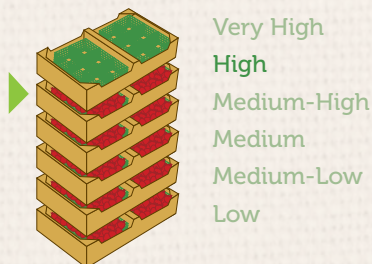
COLOR



FLAVOR



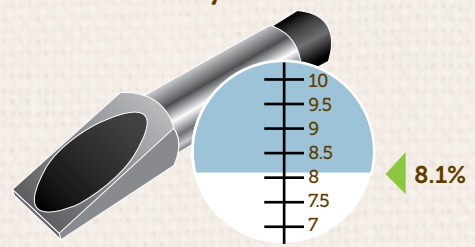
YIELD



FIRST FRUIT



% BRIX



### PRODUCTION INFORMATION

- Production district: Watsonville/Oxnard
- Planting season: winter/spring/summer
- Production season: fall-winter

### DEFINING CHARACTERISTICS

- Medium-sized plant; large-sized, light red, conical fruit with high-yield potential; fruit tends to be broad in the shoulders



# EVERBEARING

PE-7.2059



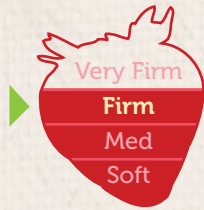
## PE-7.2059 Quick Stats

Primary Production: California

SIZE



FLESH FIRMNESS



KEEPING QUALITY



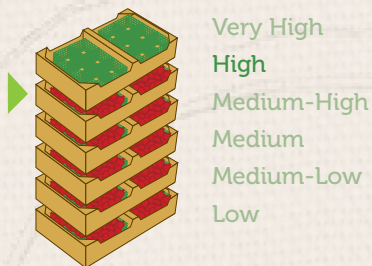
COLOR



FLAVOR



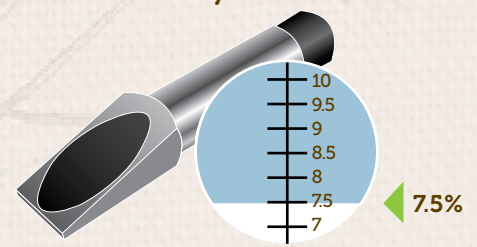
YIELD



FIRST FRUIT



% BRIX



### PRODUCTION INFORMATION

- Production district: Watsonville/Oxnard
- Planting season: winter/spring/summer
- Production season: fall-winter

### DEFINING CHARACTERISTICS

- Medium-sized plant; large-sized, firm fruit with excellent keeping quality; plant tends to have strong resistance to Anthracnose disease; fruit is well exposed for easy, fast harvest; fruit uniformity is moderate and shape is conical; seeds are held slightly above the fruit, giving fruit a slightly seedy texture



# SUMMER BEARING

## PS-592: Endurance



### Endurance Quick Stats

Primary Production: Portugal, South Africa

SIZE



FLESH FIRMNESS



KEEPING QUALITY



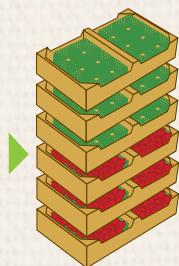
COLOR



FLAVOR

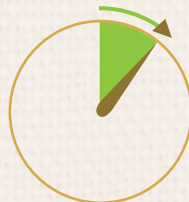


YIELD



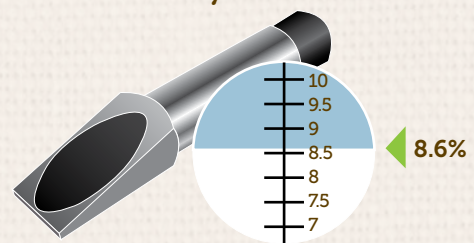
Very High  
High  
Medium-High  
Medium  
Medium-Low  
Low

FIRST FRUIT



Early Season

% BRIX



### PRODUCTION INFORMATION

- Production district: Watsonville
- Planting season: winter
- Production season: spring-fall

STRAWBERRY



# SUMMER BEARING

PS-5016



STRAWBERRY

## PS-5016 Quick Stats

Primary Production: California (for Japan)

SIZE



Small

FLESH FIRMNESS



Very Firm  
Firm  
Med  
Soft

KEEPING QUALITY



Excellent  
Very Good  
Good  
Med

COLOR



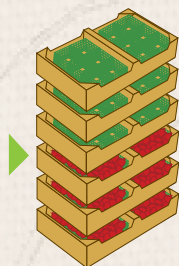
Orange Red  
Red  
Dark Red

FLAVOR



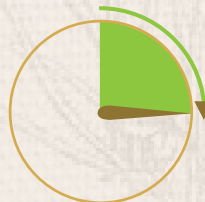
Excellent  
Very Good  
Good  
Fair

YIELD



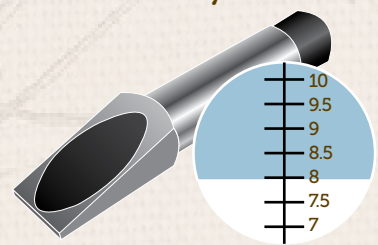
Very High  
High  
Medium-High  
Medium  
Medium-Low  
Low

FIRST FRUIT



Early-Mid Season

% BRIX



8.0%

### PRODUCTION INFORMATION

- Production district: Watsonville
- Planting season: winter
- Production season: spring-fall

### DEFINING CHARACTERISTICS

- Very large plant; small, firm, conical fruit with excellent shippability; very good flavor



# SUMMER BEARING

## PS-5298: Bliss



STRAWBERRY

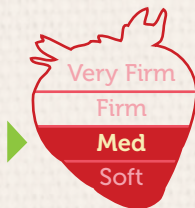
## Bliss Quick Stats

Primary Production: California (organic), South Africa, Australia

SIZE



FLESH FIRMNESS



KEEPING QUALITY



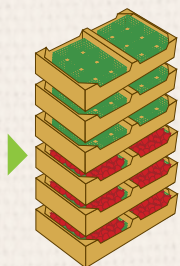
COLOR



FLAVOR

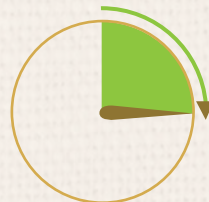


YIELD



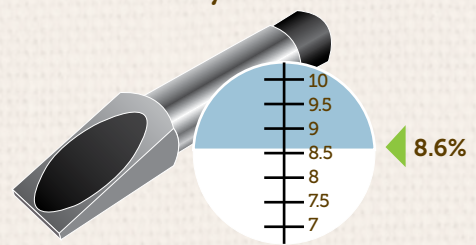
Very High  
High  
Medium-High  
**Medium**  
Medium-Low  
Low

FIRST FRUIT



Early-Mid Season

% BRIX



### PRODUCTION INFORMATION

- Production district: Watsonville
- Planting season: winter
- Production season: spring-fall

### DEFINING CHARACTERISTICS

- Very large plant; medium-sized, conical fruit with very good flavor



# SUMMER BEARING

## PS-9271: Reliance

Thrips  
Tolerant



### Reliance Quick Stats

Primary Production: California, Australia

#### SIZE



#### FLESH FIRMNESS



#### KEEPING QUALITY



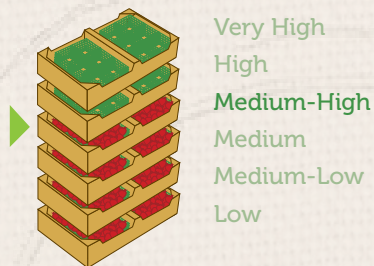
#### COLOR



#### FLAVOR



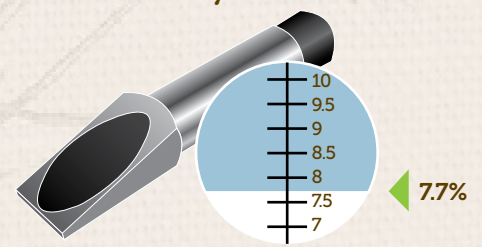
#### YIELD



#### FIRST FRUIT



#### % BRIX



#### PRODUCTION INFORMATION

- Production district: Watsonville
- Planting season: winter
- Production season: spring-fall

#### DEFINING CHARACTERISTICS

- Medium-sized plant; fast pick speeds; large, dark red fruit; tolerance to fruit bronzing with moderate to high-yield potential; fruit is conical in shape and tends to be broad in the shoulders



# SUMMER BEARING

PS-3.108



## PS-3.108 Quick Stats

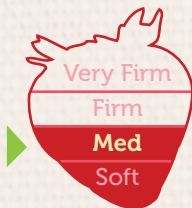
Primary Production: California

SIZE



Large

FLESH FIRMNESS



Very Firm  
Firm  
Med  
Soft

KEEPING QUALITY



Excellent  
Very Good  
Good  
Med

COLOR



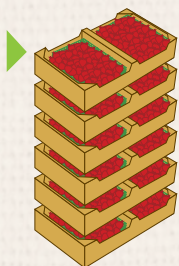
Orange Red  
Red  
Dark Red

FLAVOR



Excellent  
Very Good  
Good  
Fair

YIELD



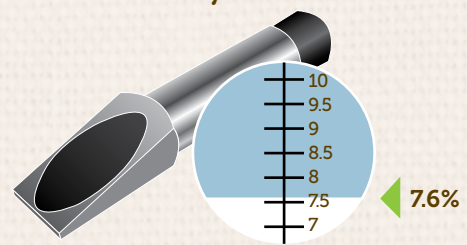
Very High  
High  
Medium-High  
Medium  
Medium-Low  
Low

FIRST FRUIT



Early Season

% BRIX



### PRODUCTION INFORMATION

- Production district: Watsonville
- Planting season: winter
- Production season: spring-fall

### DEFINING CHARACTERISTICS

- Medium-sized plant; fast pick speeds; very large, conical fruit; tolerance to fruit bronzing with very high-yield potential

STRAWBERRY



# VARIETY QUICK GUIDE

VARIETY NAME	BREEDER'S CODE	VARIETY TYPE	PAGE NUMBER
Brilliance	PS-1703	Red Raspberry	32
Radiance	PS-2430	Red Raspberry	33
Grandeur	PS-2933	Red Raspberry	34
N/A	PS-3218	Red Raspberry	35
Gleam	PS-4006	Red Raspberry	36
Bountiful	PS-5112	Red Raspberry	37
Paragon	PS-5519	Red Raspberry	38
Ovation	PS-8916	Red Raspberry	39
N/A	PS-6929	Golden Raspberry	40
N/A	PS-9514	Golden Raspberry	41
Incentive	HJ-6	Blackberry	42
N/A	HJ-7	Blackberry	43

## SIZE LEGEND

Small ..... <3 grams  
 Medium ..... 3-4 grams  
 Large ..... 4-5 grams  
 X-Large ..... 5+ grams

Raspberry ..... page 32



Blackberry ..... page 42





# CANEBERRY BREEDING PROGRAM

The Plant Sciences, Inc. red raspberry program was initiated in 1986, with the express goal of developing proprietary primocane-bearing raspberry varieties for its clients. The intent was to exceed the publicly available standards (which at the time were Ruby and Heritage), in terms of both shippability and production. Over the years since that humble start, PSI has quickly become a world leader in the development of high-quality primocane varieties for the fresh market.



*Seedling germination*



*Raspberry research facility*

Currently, germplasm from this breeding effort is being tested and/or commercially grown in many different countries worldwide. This list is growing at a rapid pace, and PSI has made every effort to understand the needs of its partners around the world, to ensure that its breeding efforts accommodate an ever-increasing spectrum of demands for fruit and plant characteristics.



*Future raspberry developments*

CANEBERRY



# PRIMOCANE RASPBERRY

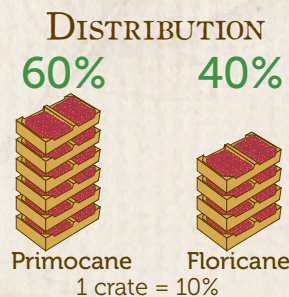
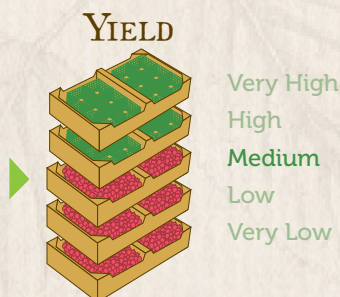
## Ps-1703: *Brilliance*



**B**rilliance is an early season primocane fruiting raspberry characterized by medium to high yields of very good-flavored fruit. Color is a classic medium to dark red. Fruit is sweet with a soft mouth feel. Its evergreen tendency has made Brilliance useful in low- to no-chill environments.



## Brilliance Quick Stats



### PRIMOCANE

- Yield: Medium
- Timing: Early season
- Production peak: Late July

### FLORICANE

- Timing: Mid-season
- Production peak: Mid-June

### PLANT CHARACTERISTICS

- Habit: Semi-upright
- Chill requirement: Low
- Defining characteristics: Early primocane production, excellent flavor, evergreen tendency



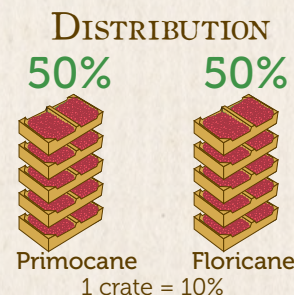
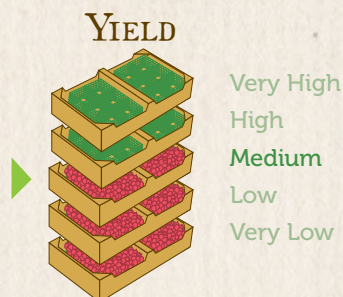
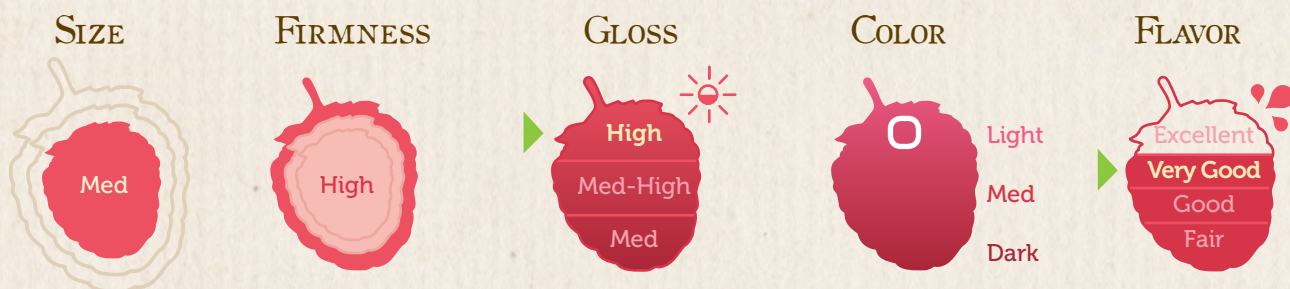
# PRIMOCANE RASPBERRY

## PS-2430: Radiance

**R**adiance is characterized by its firm, attractive, light-colored fruit. The berries are very sweet with a good acidic “zing.” Production comes mid-season with a consistent harvest size throughout the season. Radiance has proven useful in winter production systems.



## Radiance Quick Stats



### PRIMOCANE

- Yield: Medium
- Timing: Mid-season
- Production peak: Late August

### FLORICANE

- Timing: Mid-season
- Production peak: Mid-June

### PLANT CHARACTERISTICS

- Habit: Upright
- Chill requirement: Low
- Defining characteristics: Excellent fruit firmness and flavor, easy to manage plant habit, well-presented fruit



# PRIMOCANE RASPBERRY

## PS-2933: *Grandeur*



**G**randeur is an early to mid-season primocane fruiting variety with medium flavor, highly-uniform fruit color, and medium gloss. Fruit is well-presented on upright canes and has excellent receptacle release and cavity strength. Its high percentage of double buds has made Grandeur useful in a “setback” program.



## Grandeur Quick Stats

### SIZE



### FIRMNESS



### GLOSS



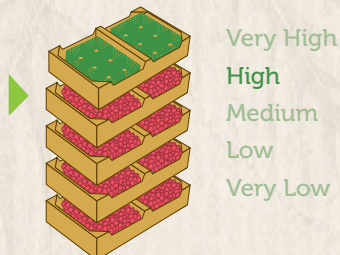
### COLOR



### FLAVOR



### YIELD



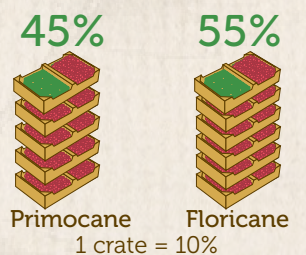
### PRIMOCANE TIMING



### FLORICANE TIMING



### DISTRIBUTION



### PRIMOCANE

- Yield: High
- Timing: Mid-season
- Production peak: Late August

### FLORICANE

- Timing: Mid-season
- Production peak: Mid-June

### PLANT CHARACTERISTICS

- Habit: Upright
- Chill requirement: Moderate
- Defining characteristics: Excellent fruit firmness and receptacle release, low suckering, high percentage of double buds



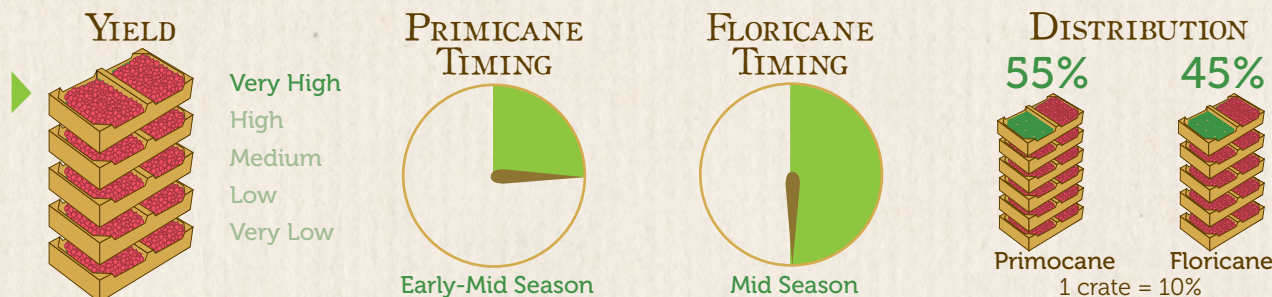
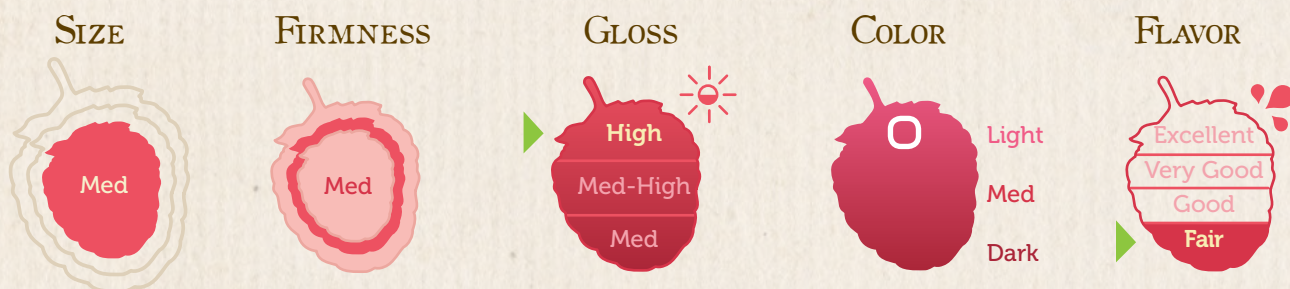
# PRIMOCANE RASPBERRY

## PS-3218

**PS-3218** is notable for its upright habit, excellent vigor, excellent fruit appearance, easy release from the receptacle and uniform shape. Internal testing has shown that PS-3218 consistently scores near the top in overall yield, with a flavor that is described as “classic raspberry”—nice berry flavor with a good bite of acidity.



## PS-3218 Quick Stats



### PRIMOCANE

- Yield: Medium
- Timing: Early-mid season
- Production peak: Early August

### FLORICANE

- Timing: Mid-season
- Production peak: Late June

### PLANT CHARACTERISTICS

- Habit: Upright
- Chill requirement: Low
- Defining characteristics: Highly uniform fruit shape, very high yield, excellent plant habit



# PRIMOCANE RASPBERRY

## PS-4006: *Gleam*



**G**leam is characterized by its very early primocane crop, excellent flavor and light-colored berries. Fruit size is on par with Grandeur, if not a tad bigger, but has a longer, conical shape. Gleam has shown itself to be earlier than Brilliance, but with much larger fruit, and is proving to be an important variety in short-season regions.



## Gleam Quick Stats

### SIZE



### FIRMNESS



### GLOSS



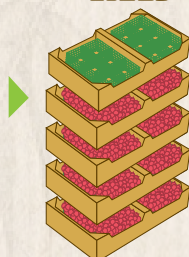
### COLOR



### FLAVOR

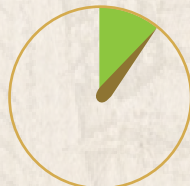


### YIELD



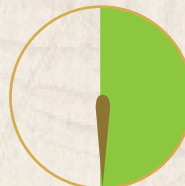
Very High  
High  
Medium  
Low  
Very Low

### PRIMOCANE TIMING



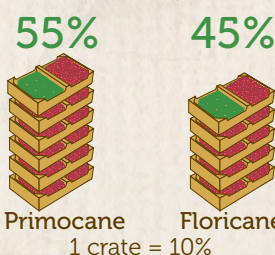
Early Season

### FLORICANE TIMING



Mid Season

### DISTRIBUTION



### PRIMOCANE

- Yield: High
- Timing: Early season
- Production peak: Late July

### FLORICANE

- Timing: Mid-season
- Production peak: Mid-June

### PLANT CHARACTERISTICS

- Habit: Upright
- Chill requirement: Low
- Defining characteristics: Early primocane production, excellent flavor, light fruit color



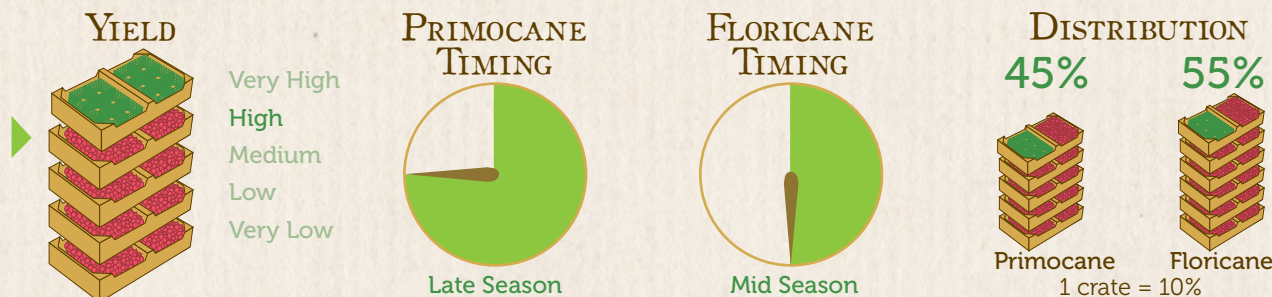
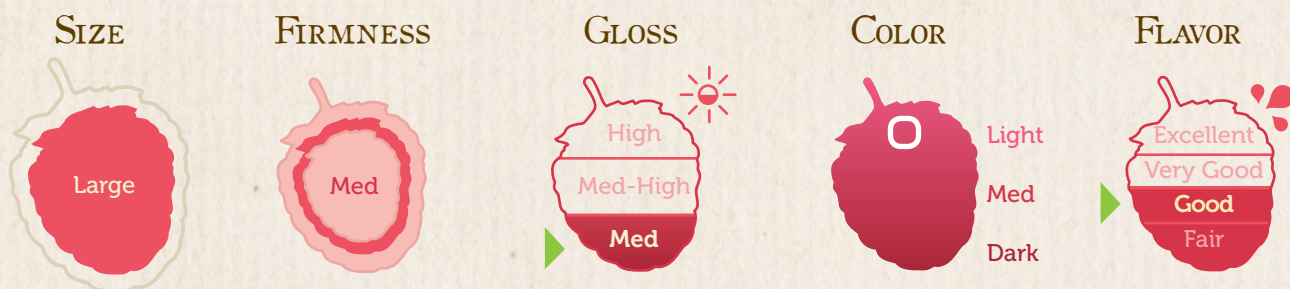
# PRIMOCANE RASPBERRY

## PS-5112: Bountiful

**Bountiful** is a new addition to the Plant Sciences raspberry program, with a production pattern that allows growers to push production late. This trait is proving extremely useful for those who produce raspberries in “off-cycle” production regions. Fruit averages nearly a gram larger than Grandeur, with slightly improved gloss and flavor, and with identical color and receptacle release.



## Bountiful Quick Stats



### PRIMOCANE

- Yield: High
- Timing: Late season
- Production peak: Mid-September

### FLORICANE

- Timing: Mid-season
- Production peak: Mid-June

### PLANT CHARACTERISTICS

- Habit: Semi-upright
- Chill requirement: Low
- Defining characteristics: Large, late yield, excellent release from receptacle, off-cycle utility



# PRIMOCANE RASPBERRY

## PS-5519: *Paragon*



**P**aragon scores extremely high in plant habit characteristics such as vigor, disease resistance and early floricanes bud break, but it is the fruit characteristics that make this variety stand out. The fruit is extremely high in sugars, very shiny and firm—this is a very special raspberry.



## Paragon Quick Stats

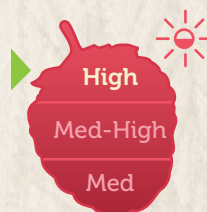
### SIZE



### FIRMNESS



### GLOSS



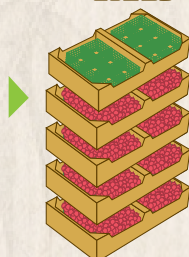
### COLOR



### FLAVOR

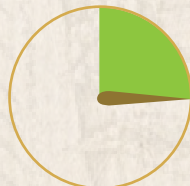


### YIELD



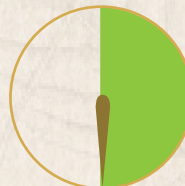
Very High  
High  
Medium  
Low  
Very Low

### PRIMOCANE TIMING



Early-Mid Season

### FLORICANE TIMING



Mid Season

### DISTRIBUTION

40% 60%



Primocane



Floricanes

1 crate = 10%

### PRIMOCANE

- Yield: High
- Timing: Early-mid season
- Production peak: Early August

### FLORICANE

- Timing: Mid-season
- Production peak: Early June

### PLANT CHARACTERISTICS

- Habit: Upright
- Chill requirement: Unknown
- Defining characteristics: Excellent fruit appearance, high brix, early bud break



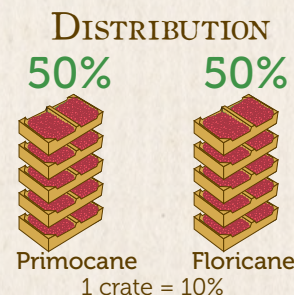
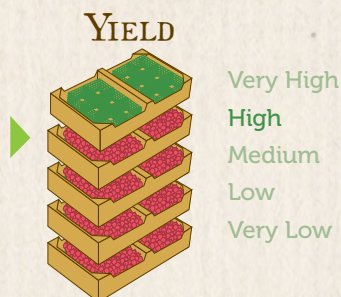
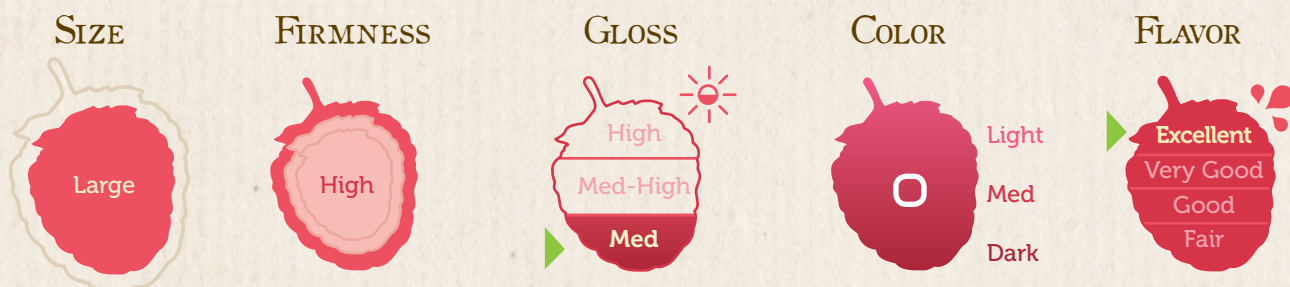
# PRIMOCANE RASPBERRY

## PS-8916: *Ovation*

**O**vation is the first raspberry release with “next-generation” size, but also possesses the same excellent flavor, appearance and firmness qualities that have come to characterize the Plant Sciences raspberry program. Ovation has a strong mid-season peak and has shown a propensity to have a good return crop at the end of the season.



## Ovation Quick Stats



### PRIMOCANE

- Yield: High
- Timing: Mid-season
- Production peak: Late August

### FLORICANE

- Timing: Mid-season
- Production peak: Early June

### PLANT CHARACTERISTICS

- Habit: Upright
- Chill requirement: Unknown
- Defining characteristics: Large fruit, excellent flavor, high bud-break percentage



# PRIMOCANE GOLDEN RASPBERRY

## PS-6929



**P**S-6929 is a medium to large-fruited golden raspberry with high yields and an excellent plant habit. PS-6929 is being trialed in a handful of locations around the world as a possible introductory bright yellow raspberry with excellent gloss and firmness. While the fruit is not large, the shipping quality is very high for a golden raspberry.



## PS-6929 Quick Stats

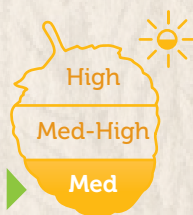
### SIZE



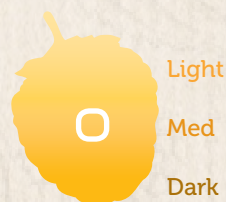
### FIRMNESS



### GLOSS



### COLOR



### FLAVOR



### YIELD



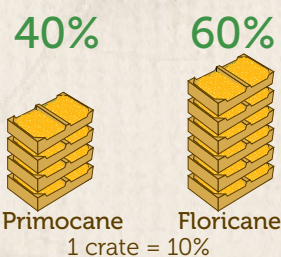
### PRIMOCANE TIMING



### FLORICANE TIMING



### DISTRIBUTION



### PRIMOCANE

- Yield: Medium
- Timing: Late season
- Production peak: Mid-June

### FLORICANE

- Timing: Mid-season
- Production peak: Mid-June

### PLANT CHARACTERISTICS

- Habit: Upright
- Chill requirement: Unknown



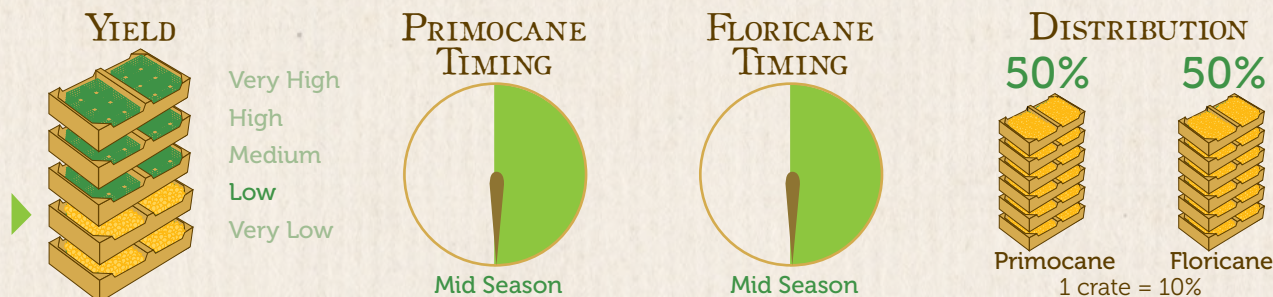
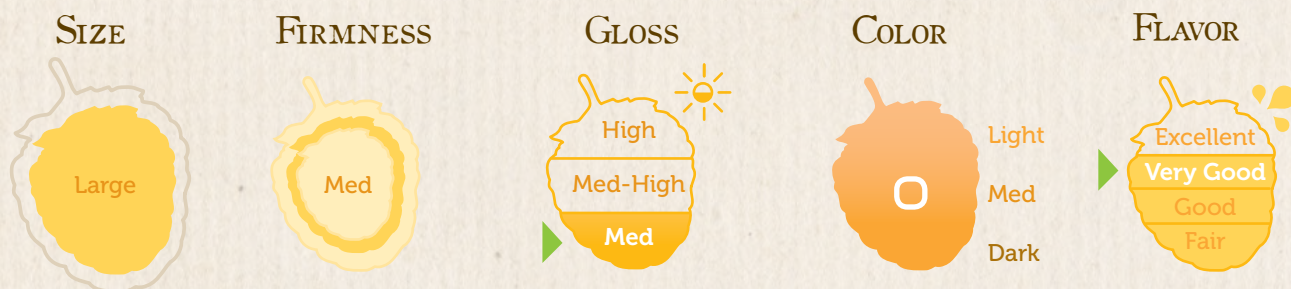
# PRIMOCANE GOLDEN RASPBERRY

## PS-9514

**PS-9514** represents the second golden raspberry release from the PSI raspberry program and the first in over 15 years. Berries are very large, sweet and firm. The color is a light orange with a tinge of pink. PS-9514 presents a real opportunity for growers looking for that “something unique.”



## PS-9514 Quick Stats



### PRIMOCANE

- Yield: Low
- Timing: Mid-season
- Production peak: Late August

### FLORICANE

- Timing: Mid-season
- Production peak: Mid-June

### PLANT CHARACTERISTICS

- Habit: Upright
- Chill requirement: Low
- Defining characteristics: Large, sweet fruit, excellent firmness, unique orange-pink coloration



# BLACKBERRY

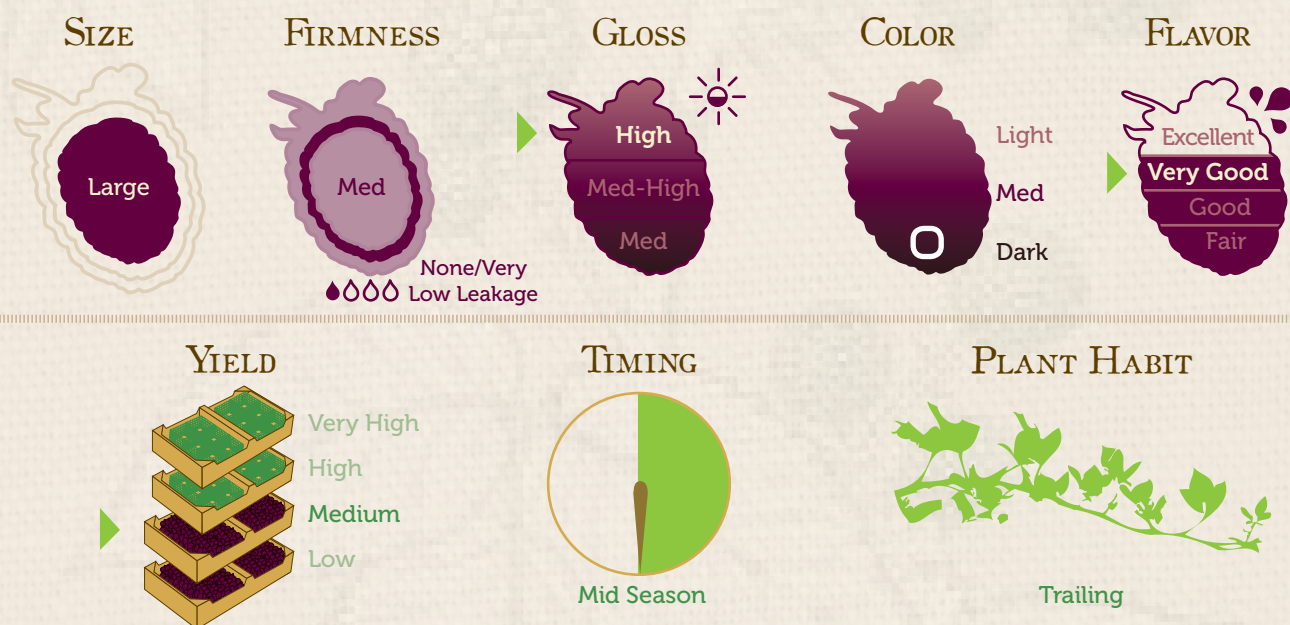
## HJ-6: Incentive



**I**ncentive is a medium-large fruited, mid-season florican trailing blackberry with good to very good flavor and excellent appearance. Fruit has excellent gloss and good shelf life. Canes are thorny and very strong. Incentive has shown to be fruitful in low chill regions (~100 hours), and has a fairly long harvest season for a florican variety.



## Incentive Quick Stats



### FLORICANE

- Yield: Medium
- Timing: Mid-season
- Production peak: May-July

### FLAVOR DESCRIPTION

- Good sugar to acid ratio; very pleasant mouth feel

### PLANT CHARACTERISTICS

- Habit: Trailing
- Chill requirement: Medium-low
- Defining characteristics: Thorny; excellent cane and lateral strength for supporting fruit load



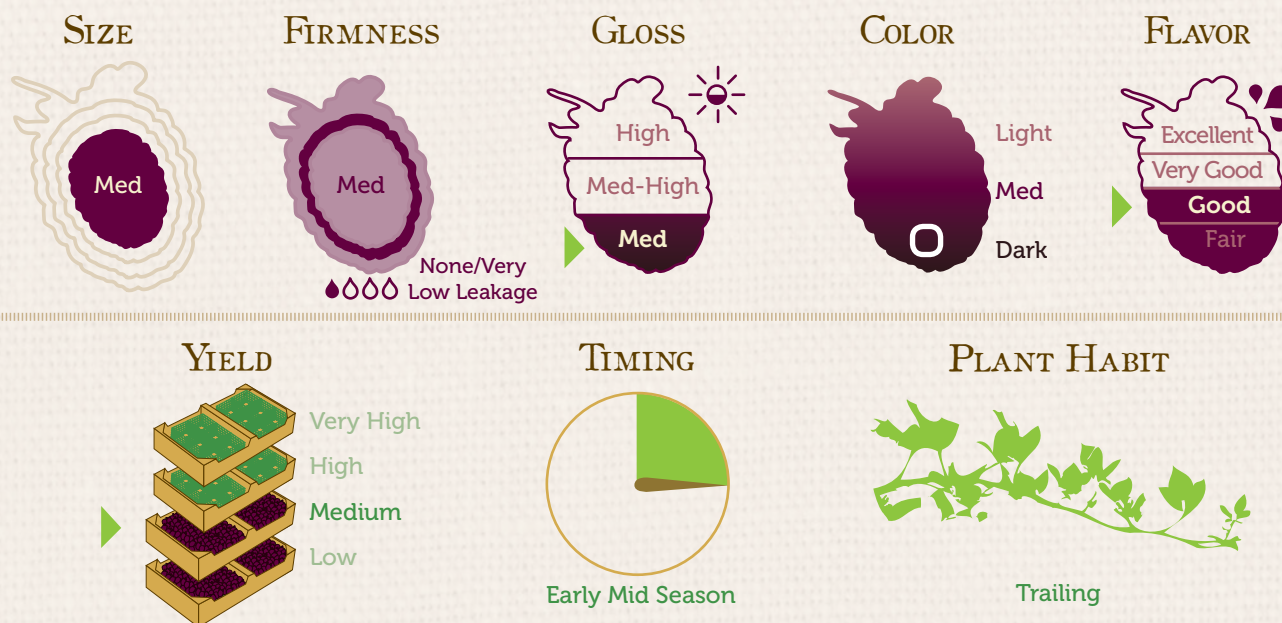
# BLACKBERRY

## HJ-7

**HJ-7** is an early-season, trailing blackberry with medium-sized, roundish fruit with good gloss and small seeds. Fruit nests easily, making for a quick and attractive pack. Canes are small in diameter, making for easy trellis work and wrapping plants.



## HJ-7 Quick Stats



### FLORICANE

- Yield: Medium
- Timing: Early mid-season
- Production peak: May-July

### FLAVOR DESCRIPTION

- Nice flavor; mild acid bite with a small seed size

### PLANT CHARACTERISTICS

- Habit: Trailing
- Chill requirement: Medium-low
- Defining characteristics: Smaller cane diameter for easy trellis work; uniform fruit size throughout season



# BLUBERRY BREEDING PROGRAM

## BLUEBERRY

**Plant Sciences, Inc.** has had great success in developing proprietary strawberry, raspberry, and blackberry cultivars for growing regions around the world, and is now bringing its knowledge and experience in berry genetics to blueberry. Blueberries have experienced a steady rise in global demand as consumers become increasingly aware of the high concentration of antioxidants in this “super fruit.” Blueberries have been found to confer health benefits and contribute to disease prevention, along with the fact they are enjoyable to eat.



*Test plot in Watsonville*

improving such traits as flavor, fruit quality, shelf life, size, yield, pest resistance, and harvestability. The goal of PSI's blueberry breeding department is to develop high-quality cultivars for its global partners who work hard to grow, pack, and ship a first-rate product to markets, where consumers can find and enjoy fresh blueberries that both nourish and delight their palate.



*Field worker picking blueberries*

To meet the needs of this growing market, PSI's breeding efforts will focus on the improvement of high bush blueberry cultivars in various global regions and climates,



*Freshly picked blueberries*



*Harvest time*



# ARTICHOKE BREEDING PROGRAM

**D**uring the course of nearly 20 years of artichoke plant breeding, PSI has worked hard to maintain the development of hybrids with good flavor. To accompany good taste, PSI always selects hybrids that have thick, fleshy bracts and large broad hearts (or bottoms). Using traditional breeding methods, PSI has been cautious to include Green Globe (the central California standard). This Green Globe is not the seeded version, but rather the original plant material that came from Europe long ago.



*Field evaluation*

In more recent years, PSI has focused its research to better serve its customers by employing characteristics that expand the artichoke eating experience—attending to the importance of preserving tender bracts, while maintaining the mildly sweet, nutty flavors. PSI has also focused on providing artichokes to its customers year-round, breeding for a number of unique traits including earliness. PSI's hybrids can be planted in a multitude of environments in different regions and they consistently perform early. Harvest dates

can be reached rapidly, which reduces agricultural inputs including reduced pesticides and even water. These hybrids allow growers to rotate their crops and optimize soil health and farming efficiency.

Finally, PSI is committed to the future of farming and advanced agronomics. PSI believes expanded efforts into disease resistance, frost resistance and increasing yields of high quality hybrids are important services to its clients. PSI's plant breeding research, in combination with commercial farming, will provide a sustainable, strong model for the future of food production, ultimately benefiting artichoke lovers around the world.

• All data from Watsonville, CA •



*Seed production*



# HIGH CHILL GREEN HYBRID

## PS-41: Pyrenees

**P**Pyrenees is a green F1 hybrid that provides the California farmer exceptional planting flexibility, outstanding vigor and reduced leaf spot. This hybrid can be field planted from early August through mid-May and provides fresh market production from late February through early November. This F1 hybrid has a green exterior with a thick, fleshy bract protecting a thick semi-concave heart.



### Pyrenees Quick Stats

#### HEAD COUNT



5.3 Average

#### HEAD QUALITY



6 7 8 9 10

#### COLOR



Green

Violet/  
Green

Violet  
Blush

#### SHAPE



Oval

#### SPINOSITY



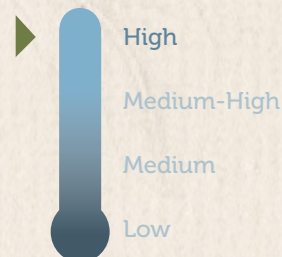
#### YIELD



#### EARLINESS



#### CHILL HOURS





# MEDIUM CHILL GREEN HYBRID

## PS-1855: Matterhorn



**M**atterhorn is a green F1 hybrid that provides the California farmer expanded planting flexibility, outstanding vigor and medium chill attributes. This hybrid can be field planted from early August through early July, and provides fresh market production from late February through mid-November. This F1 hybrid has a green exterior with thick, fleshy bract protecting a thick, concave heart.

ARTICHOKE

### Matterhorn Quick Stats

#### HEAD COUNT



#### HEAD QUALITY



#### COLOR



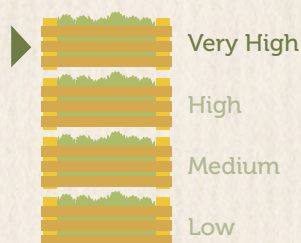
#### SHAPE



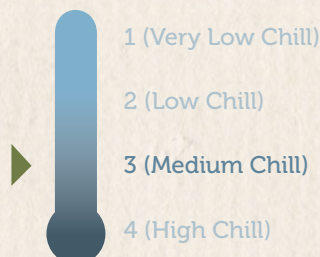
#### SPINOSITY



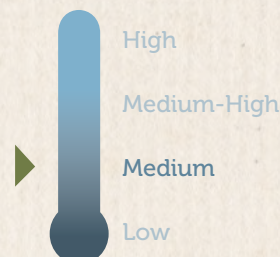
#### YIELD



#### EARLINESS



#### CHILL HOURS





# MEDIUM CHILL GREEN HYBRID

## PS-1860: *Loma*

**L**oma is a green F1 hybrid that provides the California farmer expanded planting flexibility, outstanding vigor and medium chill attributes. This hybrid can be field planted in early August through early July and provides fresh market production from late February through mid-November. This F1 hybrid has a green exterior with a thick, fleshy bract protecting a slightly reduced, concave heart.



### *Loma Quick Stats*

#### HEAD COUNT



8.2 Average

#### HEAD QUALITY



6 7 8 9 10

#### COLOR



Green  
Violet/  
Green  
Violet  
Blush

#### SHAPE



Oval

#### SPINOSITY



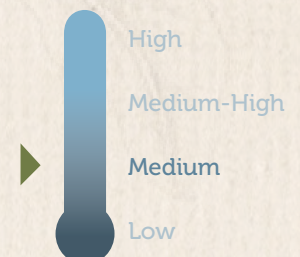
#### YIELD



#### EARLINESS



#### CHILL HOURS





# MEDIUM CHILL BLUSH HYBRID

## PS-2105: *Olympus*



**O**lympus is a green F1 hybrid that provides farmers worldwide with slightly reduced planting flexibility, outstanding vigor and medium chill attributes. This hybrid can be field planted from early August through early April and provides fresh market and cannery production from late May through mid-November (depending on the production region). This F1 hybrid has a green, strongly blushed exterior, with a thick, fleshy bract protecting a thick, concave heart.

ARTICHOKE

### *Olympus Quick Stats*

#### HEAD COUNT



6.5 Average

#### HEAD QUALITY



6 7 8 9 10

#### COLOR



Green

Violet/  
Green

Violet  
Blush

#### SHAPE

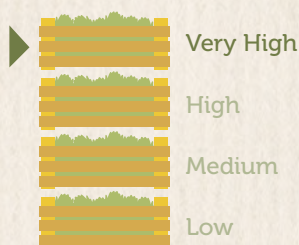


Oval

#### SPINOSITY



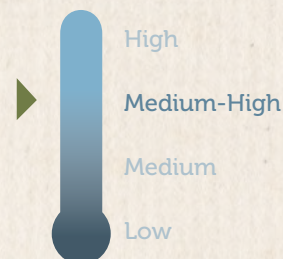
#### YIELD



#### EARLINESS



#### CHILL HOURS





# VIOLETTA HYBRID

## PS-3612

**P**S-3612 is an experimental violet F1 hybrid that provides the California farmer an expanded hybrid profile. This medium chill violet hybrid has outstanding vigor and distinct violet coloration. This hybrid can be field planted from early August through early May and provides fresh market production from late February through late October. This F1 hybrid has a violet to violet-green exterior with a thick, fleshy bract protecting a thick, reduced concave heart.



## PS-3612 Quick Stats

### HEAD COUNT



8 Average

### HEAD QUALITY



6 7 8 9 10

### COLOR



Green

Violet/  
Green

Violet  
Blush

### SHAPE



Romanesco/Oval

### SPINOSITY



Distinct

Moderate

Intermediate

Spineless

### YIELD



Very High

High

Medium

Low

### EARLINESS



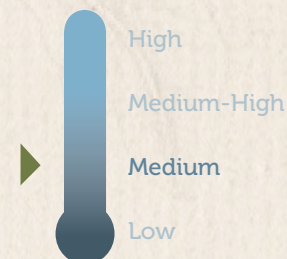
1 (Very Low Chill)

2 (Low Chill)

3 (Medium Chill)

4 (High Chill)

### CHILL HOURS



High

Medium-High

Medium

Low



# LOW CHILL GREEN HYBRID

## PS-3713

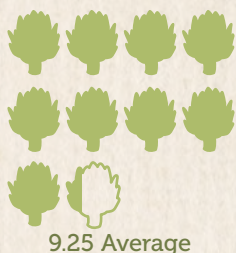


**PS-3713** is a green F1 hybrid that has the potential to provide farmers worldwide great planting flexibility due to its outstanding vigor and low chill traits. This hybrid can be field planted from early August through late June and provides fresh market production from mid-January through early December. This F1 hybrid has a green exterior with thick, fleshy bracts protecting a thick, concave heart.

ARTICHOKE

### PS-3713 Quick Stats

#### HEAD COUNT



#### HEAD QUALITY



#### COLOR



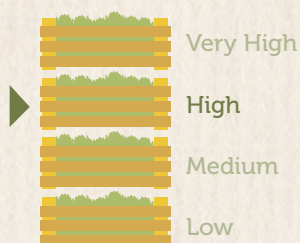
#### SHAPE



#### SPINOSITY



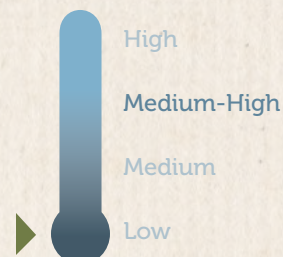
#### YIELD



#### EARLINESS



#### CHILL HOURS





# ABOUT PLANT SCIENCES, INC.



Plant Sciences, Inc. is dedicated to being the leading provider of superior genetics worldwide for berry and vegetable crops. Its focus is the development, propagation and technical support of its premier strawberry, raspberry and blackberry varieties, as well as elite artichoke hybrids. Working closely with licensed growing partners and regional master license propagators, PSI serves a discriminating portfolio of fruit and vegetable producers and marketers around the globe.



*PSI corporate headquarters*



**BERRY GENETICS™**  
Strawberry Plant Breeders

As one of four in-house strawberry breeding programs, Berry Genetics, Inc. (BGI) focuses on the research and development of short-day varieties specifically suited to moderate Mediterranean climates. Varieties from this program are currently grown in Southern California, Baja Mexico, Southern Europe, Jordan (Middle East), Northern and South Africa, South America and Australia. Through the use of traditional breeding techniques, BGI seeks to develop the highest quality, flavorful fruit with increased shelf life, improved yields, market-optimized fruit size and coloration, and reduced disease and pest susceptibility; all this to meet consumer demands and bring success to those with whom BGI collaborates and serves.



Strawberry Sciences, LLC (SBS), the newest of our in-house strawberry breeding programs, focuses on the production of ultra short-day varieties specifically suited for growing in semi-tropical climates. These climates include Florida, Mainland and Baja Mexico, Southern Europe, Northern and South Africa, South America and Australia. Through the use of traditional breeding techniques, SBS seeks to develop the highest quality, flavorful fruit, with increased shelf life, improved yields, market-optimized fruit size and coloration, and reduced disease and pest susceptibility; all this to meet consumer demands and bring success to those with whom SBS collaborates and serves.



Plant Sciences, Inc., in conjunction with Ocean Mist Farms, has developed several high-quality artichoke hybrids with an emphasis on providing premium-quality seed. These unique, uniform and productive hybrids are produced commercially in California, and are also tested and produced in Europe through the company Cynthesis, LLC., a joint venture between Plant Sciences, Inc. and Ocean Mist Farms. Hybrid artichoke development at Cynthesis continues to address the need for sustainable vegetable production systems that employ reduced inputs while maintaining the highest yields and quality artichokes available.



# NURSERY SITES

## MACDOEL

Macdoel, CA



Macdoel Nursery

- **Elevation:** 4,500 feet
- **Staff:** 30+ full-time, 300 to 1,500 seasonal
- **Size:** 850 acres
- **Production:** 200 million plants annually
- **Purpose:** Specifically geared toward commercial-level and research-level production of short day BGI strawberry varieties, PSI summer bearing strawberry varieties, as well as PSI's raspberry and blackberry cultivars.
- **Climate:** Provides a long, warm growing season during late-spring and summer, along with predictable, essential chilling hours prior to harvest in the early fall, assuring maximum performance and health of the plant stock.

Manteca, CA

★ PSI Headquarters  
Watsonville, CA

## MANTECA

- **Elevation:** 36 feet
- **Staff:** 30+ full-time, 300 to 500 seasonal
- **Size:** 400 acres
- **Production:** 45 million plants annually
- **Purpose:** Specifically geared toward research-level production of all PSI, BGI and SBS strawberry varieties, along with commercial nursery stock production of the same. Also produces the commercial nursery stock of PSI's raspberry and blackberry cultivars, and commercial plant stock of PSI's everbearing strawberry varieties, licensed globally.
- **Climate:** Provides a uniquely-long, warm growing season during spring, summer and early fall, and predictable and essential chilling hours prior to the annual winter harvest, assuring maximum performance and health of the plant stock produced.



Manteca Nursery



# PLANT SCIENCES AND NON-PROFIT PARTNERSHIPS

**Plant Sciences, Inc.** and Lifesong for Orphans continue to partner in the way they know best – berry farming. In Zambia, widow orphan caregivers receive the gift of farm jobs while berries delight the 400 children. Fruit and jams line the grocery shelves of not only Zambia, but also its bordering countries. PSI and Lifesong Zambia are grateful for their partners, Môrester Landgoed and Stargrow Nurseries, who faithfully supply plants from South Africa. The PSI vision to harbor the Lifesong children included sending a contractor from California to help build dormitories now filled with the sounds of laughter and busy house parents.

The Lifesong Ukraine farm now includes hydroponic strawberries in tunnels and a new crop – blueberries. The 1,500 Lifesong children in this war-torn country are blessed with a rainbow of fresh berries. We thank partners El Pinar Medioambiente (Spain) and FruiTech (Ukraine) for supplying plants, and The Greenery growers for hosting the young Lifesong farmers who visited over ten farms in The Netherlands—what an opportunity!

If your heart reaches out to orphans and widows and you are interested in partnering with PSI and Lifesong, please visit PSI's website and select the Lifesong link or contact Dr. Judith Johnson (Lifesong Advocate) at [jjohnson@plantsciences.com](mailto:jjohnson@plantsciences.com), +1.831.728.7771x204.



*Lifesong's newest farm product:  
jam from Zambia*



*PSI founders Richard and Vicki Nelson  
with a Lifesong family in Zambia*



*Orphan grads at work on the Ukraine farm*



*Farm berries on their way to  
markets in Ukraine*

**PSI** is also partnered with Corban University. Stay tuned for updates on our developing relationship.



**CORBAN**  
UNIVERSITY

**Plant Sciences**  Inc.  
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