



# Creating an organic world together



Vitalis Organic Seeds, the organic division of Enza Zaden, is the global leader in organic seed production and breeding.

Vitalis offers more than 100 certified organic varieties of vegetables and culinary herbs, all screened at research stations, in Myakka, Florida, San Juan Bautista, California, and Culiacan, Mexico. A global leader in organic seed breeding and in improving industry standards for nearly three decades, Vitalis believes organic food begins with organic seed. Integrity in organic seed and food systems is what fuels our commitment to organic agricultural programs and to growers, producers and consumers across North America.

The Vitalis Organic Seeds USDA Organic certificates and non-GMO statement can be found on our website: <https://usa.vitalisorganic.com/about-vitalis>



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## Organic certification

Vitalis Organic Seeds is the organic subsidiary of Enza Zaden, breeding and producing globally 100% certified organic seed adapted to the cultural conditions of organic production systems.



### USDA NOP

We are certified as a handler for the National Organic Program of the United States Department of Agriculture with CCOF under Client Code pr1831. We are enrolled in the CCOF Global Market Access Program in compliance with NOP/COR (Canada Organic Regime) Equivalence Arrangement and the US/ EU Equivalence Arrangement.



### EKO

For the European and other select international markets our vegetable seeds are certified in compliance with EEC No 1359520\ NL-BIO-01 Regulation by Skal under number 014978.



### Lacon

For the European and other select international markets our herb seeds are certified in compliance with the EEC No 834/2007 Regulation by Lacon under certificate number DE-RP-003-00029-BCD#2020#83837-EN.

# Lettuce



## Vitalis, creating a resilient future together

Organic food production is not for the faint of heart. It demands dedication, innovation, and resilience.

As market leaders in organic seed breeding, we're committed to supporting those who make bold choices today for the benefit of tomorrow. This philosophy drives everything we do at Vitalis, part of the Enza Zaden family. We need healthier food for a growing population and in a climate, that's increasingly challenging our lands, our plants, and our people. We focus on breeding stronger, more adaptable vegetables that can thrive under organic conditions.

### Green Butterhead



#### ➤ Milagro

Milagro is a medium green butterhead with nice leaf gloss, a large frame and impressive weight that is ideal for processing. The large cap leaf and semi-filled top also make this variety compatible for carton packs. With good flexibility for full season production and improved mildew resistance, Milagro offers solid performance for multiple applications.

Resistances: HR: Bl:16-28,30-32 EU/Bl:7-9 US/Nr:0/Pb/TBSV | IR: LMV:1

### Red Butterhead



#### ➤ Alkindus

Alkindus has slightly savoyed leaves and excellent mildew and red aphid resistance. With a medium head size, Alkindus has a beautiful dark red color and is suitable for full season production. Excellent fill and good field holding capacity.

Resistances: HR: Bl:16-26,28,32 EU/Bl:7-9 US/Nr:0/TBSV | IR: LMV:1



#### ➤ Marciano

Our newest red butterhead has been a stand out in trials thanks to its impressive disease package, especially downy mildew resistance. Marciano is a more compact variety with good internal fill. Outer leaves are smooth, with an eye-catching deep burgundy red color, and contrast beautifully with the fresh green interior.

Resistances: HR: Bl:16-36 EU/Bl:7-9 US/Nr:0/TBSV | IR: LMV:1

### Green Oakleaf



#### ➤ Bauer

Bauer is an emerald green oakleaf mini head. Like its namesake, long-time organic farmer and seedsman John Bauer, this one-of-a-kind variety will win you over immediately. Bauer has a compact habit with excellent fill, offering harvest flexibility at multiple sizes. Leaves are thick, crunchy and sweet. Consistent with our full Vitalis assortment, Bauer has been selected under organic conditions and is widely adaptable, with the highest level of downy mildew resistance.

Resistances: HR: Bl:16-37 EU/Bl:7-9 US/Nr:0/TBSV | IR: LMV:1

## Greenleaf



### ➤ Bergam's Green

A large fringed traditional greenleaf with dark green color. Bergam's Green is a widely adapted variety. It is slow to bolt, strong against tipburn, resistant to heading and suitable for year-round production.

Resistances: HR: TBSV | IR: Rs



### ➤ Muir

Muir is a medium-sized, light green and slow-growing Batavia type. The heads grow very upright and the hearts are well filled. Muir has a sweet flavor and is strong against bolting and internal tipburn. With excellent downy mildew and red aphid resistance, this multi-use variety is appropriate for open field and hydroponic production.

Resistances: HR: Bl:16-26,28,32 EU/Bl:7-9 US/Nr:0/TBSV | IR: LMV:1

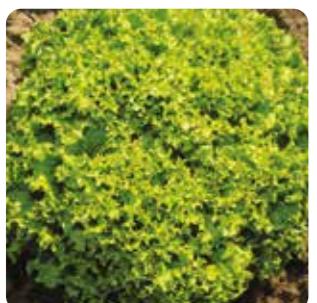


### ➤ Tropicana

Proven to be the best heat and bolt tolerant greenleaf variety in its class in trials across the country. Tropicana is tolerant to tipburn and leaf scorching, and is Corky Root resistant. With excellent uniformity and leaf texture, Tropicana can be used in fresh packs or for whole leaf production.

Resistances: IR: Rs

## Lollo Bionda



### ➤ Illema

Illema is an impressively voluminous green lollo, with a strong plant and nice leaf curliness. Illema has a unique combination of fast growth, good weight, field holding capacity and very sweet flavor. Adaptable to open field and hydroponic growing conditions.

Resistances: HR: Bl:16-33 EU/Bl:7-9 US/Nr:0/Pb/TBSV. | IR: LMV:1/Fol:1

## Romaine



### ➤ Adicamp

Adicamp is a spring season romaine for hearts production. This variety forms well-filled, hefty hearts with straight ribs and a high leaf count. Adicamp is early to fill and also works as a carton variety because of a smaller frame, wide base and excellent weight. Leaves are medium green and savoyed.

Resistances: HR: Bl:16,18-37 EU/Bl:7-9 US/Nr:0/Pb/TBSV | IR: Rs



### ➤ Coastal star

Coastal Star is a well-loved romaine with dark green color and tall stature. The variety matures early and produces large, heavy heads that can be used for hearts or fresh pack. Widely adaptable, Coastal Star can be grown spring through fall in most regions.

Resistances: IR: Rs



### ➤ Mezquite

A semi-savoy romaine with thick texture, a tapered base and straight ribs. Works well for the heart market, and the nice internal blanching provides an attractive product for the value-added segment. Performs best when planted in October through November in the desert Southwest region, and in the spring and fall slots in Northern regions.

Resistances: HR: Bl:16-32,34,36 EU/Bl:7-9 US/Fol:4 | IR: Fol:1



## Green Little Gem



### Dragoon

Dragoon is a well-filled compact little gem. This compact variety has dark green, semi-savoy outer leaves, matures slowly and keeps a short core. It is strong against bolting and internal tipburn, and is appropriate for open field or unheated greenhouse production.

Resistances: HR: Bl:16-27,29,32,34,36 EU/Bl:7-8 US/Nr:0/TBSV | IR: LMV:1



### Newham

Newham is a smooth-leaved green little gem with red aphid resistance in the Spretnak class. Excellent fill, strong tipburn resistance and a very sweet flavor make this variety a stand out. Suitable for year-round production in coastal regions, and spring, fall, and winter production in hotter areas.

Resistances: HR: Bl:16-21,23-26,28-37 EU/Bl:7-9 US/Nr:0/Pb | IR: LMV:1/Rs



### Spretnak

A beautiful and tasty little gem with compact, well-closing heads, smooth outer leaves and tightly packed, blanched hearts. Best for spring and fall cultivation, with strong field tolerance to downy mildew.

Resistances: HR: Bl:16-21,23-26,28-37 EU/Bl:7-9 US/Fol:1,4/Pb



### Bigelow NEW

Bigelow is a unique cross between a romaine and an iceberg lettuce. It is compact with upright heads that are dense and well-filled. Its glossy, wide leaves have a prominent rib and a juicy crunch with attractive, scalloped leaf margins and thick leaf texture allows this variety to maintain its crunch. It has good bolt tolerance and field holding capability and is adaptable to be grown in multiple seasons and growing conditions.

Resistances: HR: Bl:16-37EU/Bl:7-9US/Nr:0/TBSV

## Red Little Gem



### Truchas

A little gem / mini-romaine type that provides a stunning contrast between green hearts and dark cherry red leaves. The upright cylindrical shape, good uniformity and ease of cleaning make this an excellent complement to the Vitalis green little gem assortment.

Resistances: HR: Bl:16-26,28-37 EU/Bl:7-9 US/TBSV | IR: LMV:1

## Green Mini Romaine



### Xalbadora

A mini romaine with great fill, dark green color and high gloss. Xalbadora does well against tip burn and downy mildew, and is widely adaptable for full season production. More upright habit and slightly faster filling than Starhawk, which it replaces.

Resistances: HR: Bl:16-36 EU/Bl:7-9 US/Nr:0/TBSV | IR: LMV:1

## Red Mini Romaine



### Breen

Breen is a unique red mini romaine, which closes nicely in the top, resulting in a perfectly formed heart. This great-tasting variety resembles a Treviso radicchio in appearance, and has light colored veins that provide an attractive contrast with the reddish-brown leaves, and has excellent shelf life.

Resistances: HR: Bl:16-21,23-26,28-37 EU/Bl:7-9 US/Fol:4 | IR: Fol:1



### Pomegranate Crunch

This variety is a red mini romaine with an open habit and smooth texture. Faster growing than other red romaine varieties, with a brilliant poppy red color on the outside and a speckled red-green interior. Pomegranate Crunch pairs well with a solid green mini romaine variety for an attractive presentation.

Resistances: HR: Bl-EU:16-27,29,32,34,36 EU/Bl:7-8 US/TBSV





Whether you are growing for full heads or mixed blends, our Eazyleaf varieties offer great diversity of leaf shapes, stunning colors including brilliant greens and dark reds, and superior texture and loft to ensure a beautiful presentation!

## Green Oakleaf



### ➤ Hampton

Hampton is a voluminous, high leaf count, one-cut oakleaf. With dark, shiny, green leaves that have a narrow attachment, this variety is ideal for mechanical or hand harvest. Very slow to bolt, Hampton is a flexible variety for year-round production.

Resistances: HR: Bl:16-37 EU/Bl:7-8 US/Nr:0/TBSV | IR: LMV:1

## Green Tango



### ➤ Ezpark

Ezpark is our newest green tango, featuring a deep emerald color and excellent loft. Impressive yield combined with good field holding ability make this variety an easy choice for year-round production.

Resistances: HR: Bl:16-36 EU/Bl:7-9 US/Nr:0 | IR: LMV:1

## Red Tango



### ➤ Ezflor

Ezflor is an attractive Eazyleaf with a dark glossy red color and a unique leaf shape that can be used as a red tango or redleaf type. This variety maintains excellent texture and quality, even under water stress and multiple harvests.

Resistances: HR: Bl:16-37 EU/Bl:7-9 US/Nr:0/TBSV. | IR: Fol:1



### ➤ Rhone

Our most strongly incised red tango, Rhone is a great addition to the Eazyleaf assortment. This variety offers a crunchy texture, narrow leaf attachment, excellent bolt tolerance and an attractive red and green color contrast.

Resistances: HR: Bl:16-33 EU/Bl:7-9 US/Nr:0

## Arugula



### ➤ Bellezia

Bellezia has an elegant look, with a striking dark color and uniform, highly serrated leaves. Intermediate resistance to downy mildew and excellent shelf life.

Resistances: IR: Hp



Vitalis has an established CEA lettuce portfolio, and a highly collaborative breeding approach that involves extensive trialing under the precise conditions of each grower's system. Working together with growers to move CEA forward.

## Green Crispy



### Cristabel

Frilled ice lettuce leaf type with dark green color and very strong, thick leaf texture. Short core with more upright growth, this variety is high yielding. Reliable in various conditions.

Resistances: HR: Nr:0/TBSV



### Crispenza

Crispenza is an incised crispy variety with excellent yield potential, attractive straight veins and good bolting tolerance. The variety is resistant to tipburn and demonstrates a strong root system that keeps the plant healthy even in the presence of water-borne pathogens.

Resistances: HR: Bl:16-36 EU/Bl:1-9 US/Nr:0/TBSV

## Green Butterhead



### Casey

A fresh, medium green colored butterhead for indoor production under long day length. Casey is medium-fast maturity and yields jumbo sized heads with excellent weight. It has a flat, clean, closed base and a strong disease resistance package. Strong roots and good heat tolerance make Casey a great choice for summer production.

Resistances: HR: Bl:16-36EU/1-9US/Nr:0/Pb ;Bl:16-26,28-35EU/1-9US/ Nr:0



### Fairly

Fairly is a greenhouse butterhead variety for the long day season. Its fast growing heads have excellent weight and the closed, flat base makes it an easy variety to clean at harvest. This variety has a large frame, fine ribs and a fresh, medium green color.

Resistances: Bl:16-34,36EU/1-8US/Nr:0/TBSV

## Lollo Rossa



### Azirka

Azirka is a triple red Lollo type that has a very thick, crunchy leaf with nice flavor. The leaf is rounded with a very good three-dimensional structure. This variety also works well in trios.

Resistances: HR: Bl:16-36 EU/Bl:1-9 US/Nr:0/TBSV | IR: LMV:1



# Endive



## Endive



### Curlesi

Curlesi is a newer addition to our endive assortment, providing strong filling during warm season conditions and with good tolerance to tipburn. This adaptable variety has a vigorous upright habit, compact frame and is well-suited for the fresh market.



### Eliance

Eliance has a compact frame and strong bolting tolerance that is well-suited for summer and fall production. Inner leaves are long and flexible, which allows for impressive self-blanching. Characteristic of the full Vitalis endive assortment, Eliance has an upright structure which minimizes basal rot and allows for ease of harvest.



### Benefine

An impressive tres fin type with a shiny, dark green exterior color and well-balanced interior. Benefine has compact, upright, tightly filled heads that are strong against bolting. Suitable for growing in warm conditions, Benefine has impressive resistance to tipburn and produces high yields of nicely frilled leaves.

## Why organic seed matters

**Organic seeds are the cornerstone of sustainable agriculture.**

Through our Vitalis brand, we believe that organic seeds are the first step toward cultivating healthy crops that are resilient and well-suited to natural farming methods. Our seeds are specifically bred for organic farming conditions, ensuring they thrive without synthetic inputs and contribute to biodiversity.

Our commitment to organic seed production extends beyond merely avoiding synthetic crop protection products. It's about nurturing a system where crops can flourish in harmony with the environment. Vitalis seeds are developed using advanced breeding techniques that uphold organic principles, ensuring they are robust, high-yielding, and well-adapted to the unique challenges of organic farming.

# Cucumber



## Long European Type (LET)



### ➤ Poniente

Poniente offers a strong resistance package and produces uniform dark green fruit that are 12-13 in. (31-34 cm) long and nicely ribbed. The plant habit is vigorous with a dependable fruit set, 1-2 fruit per node, and early maturity. Recommended for unheated and heated greenhouse production, Poniente performs best in the spring and fall in hot climates, and does well in spring, summer and fall in cooler climates.

Resistances: HR: Ccu | IR: CMV/ CVYV/CYSDV/Px.

## American Slicer



### ➤ Corinto

Corinto is an adaptable slicer variety that sets well under cool conditions. This variety is very productive and produces cylindrical, dark green, shiny, smooth fruit of 8-10 in. (20-25 cm) in length. The excellent disease resistance package makes this variety a great choice for both open field and unheated greenhouse production.

Resistances: IR: Px/CMV/ CVYV.



### ➤ Paraiso

Paraiso is a very flexible variety adapted to varying growing conditions. The plant is vigorous and produces well in cold conditions. Fruits average 8-9 in. (20-22 cm) long, and are cylindrical, shiny and dark green. They have good shelf life and retain an attractive shine in storage.

Resistances: IR: Px/CMV/ CVYV/CYSDV

## Mini (BAT)



### ➤ Katrina F1

Katrina is a robust and productive mini cucumber with an open plant habit and only a few laterals. The fruits, 3-4 per node, are of top quality. They are glossy, nicely ribbed, very uniform and 6 in. (16 cm) in length. Good resistance package for unheated greenhouse production.

Resistances: HR: Ccu | IR: CMV/ CVYV/Px/CGMMV



### ➤ Picolino

Picolino is a widely adaptable mini cucumber variety that is the smallest of the Vitalis assortment. Produces high quality, dark green, shiny fruits of 4-5 in. (10-12 cm) that are nicely ribbed and extremely uniform. With 3-4 fruits per node, the compact, vigorous plants are early to produce.

Resistances: HR: Cca/Ccu | IR: Px



### ➤ Socrates

Socrates is a dependable variety that produces dark green fruits of 7 in. (17-18 cm), which are both tender and sweet. Adapted to open field and unheated greenhouse conditions, Socrates performs best in spring and fall.

Resistances: HR: Cca/Ccu | IR: Px

## Pickling



### ➤ Excelsior

Excelsior is a high quality pickling cucumber for both open field and unheated greenhouse production in spring and fall. It has an open and vigorous plant habit, with fruits that are medium to dark green and 4-5 in. (10-13 cm) in length.

Resistances: HR: Cca/Ccu. | IR: CMV/ CVYV/Px.

# Tomato



## Check out our Mixologist Collection on page 22!

These varieties are named for the perfect blend of heirloom goodness with a twist of the most highly coveted modern traits.

## Plum



### Granadero

An indeterminate plum tomato variety with a compact vigorous plant for the open field or unheated greenhouse production. Granadero delivers high yields of large fruit, with an average weight of 5.0 oz. (150 g), and demonstrates tolerance to cooler conditions.

Resistances: HR: ToMV:0-2/Lt/Va:0/Vd:0/Fol:0-1 | IR: TSWV/Ma/Mi/Mj

## Indeterminate round



### Caiman

This early maturing and high yielding indeterminate hybrid has a vigorous, open, compact plant with short internodes and good fruit set. The round fruit are large in size, 7.5-8.5 oz. (220-240 g), very tasty, and have an attractive deep red color. Caiman is easy to cultivate, and particularly recommended for unheated protected culture in the spring and summer.

Resistances: HR: ToMV:0-2/Ff:A-E/Va:0/Vd:0/Fol:0-1 | IR: TSWV/Ma/Mi/Mj

## Cherry



### Sakura

Sakura is a stand out cherry tomato, producing beautiful mid-sized round fruit of 0.5-0.8 oz. (15-20 g) with a sweet and tangy flavor. The fruits are tolerant to cracking, with well-attached sepals and magnificent trusses of 20 fruits or more. Well adapted to open field and unheated greenhouse production.

Resistances: HR: ToMV:0-2/Ff:A-E/Fol:0-1 | IR: Ma/Mi/Mj | TR: Si



### Toronjina

Toronjina is a highly attractive orange cherry tomato with vibrant color and good tolerance to cracking. Adaptable to open field and unheated greenhouse production, this orange cherry is an excellent addition to mixed pints of colored cherry tomatoes. Produces high yields of 0.6-0.8 oz. (18-22 g) tomatoes.

Resistances: HR: ToMV:0-2/Ff:A-E/Fol

## San Marzano



### Pozzano

A traditional looking 'San Marzano' tomato that produces a bountiful yield of smooth shaped, uniform fruit of 5.0 oz. (150 g). Fruits are robust, without green shoulders, and have good tolerance to blossom end rot. The firm fruits have excellent shelf life.

Resistances: HR: ToMV:0-2/Va:0/Vd:0/Fol:0-1

## Grape



### Bosco

This grape tomato continuously produces uniformly sized, bright red fruits. Its balanced flavor and thin skin provide for excellent eating quality. Fruits average 0.5 oz (13-15 g) and have a traditional, gently tapered shape. With a strong resistance package, this variety is suitable for protected culture and open field.

Resistance: HR: ToMV:0-2/ToANV/Ff:A-E/Fol:0 | IR: TYLCV

## Specialty



### ➤ Cuba Libre

Cuba Libre is a deep round purple tomato that combines excellent productivity and quality. Fruits average 6-10 oz. (170-283 g) and pair well with MaiTai for an attractive display. Cuba Libre is sweet tasting with smooth texture and crack-resistant exterior. Plant vigor is excellent with both leaf mold and powdery mildew resistances for very strong performance in high tunnel systems.

Resistances: HR: ToMV:0-2/ToANV/Ff:A-E/Fol:0,1 | IR: On



## Specialty



### ➤ Blue Tonic (E15B.43131) NEW

Blue Tonic (E15B.43131) produces a unique pink and indigo colored tomato. It has a very vigorous and well-balanced plant. It is adaptable for both High Tunnel and Open Field conditions. Blue tonic produces greattasting high quality fruit that are medium-sized shiny and firm.

Resistances: HR: ToMV:0-2/ToANV/Pf:A-E/Va:0/Vd:0/Fol:0,1 | IR: Ma/Mi/Mj



### ➤ GinFiz

GinFiz combines the flavor, texture and color of Striped German with the disease resistance and productivity of modern hybrids. Fruits average 10-14 oz. (283-397 g), exhibit minimal cracking and are delicious. GinFiz has excellent early fruit yields and incorporates leaf mold resistance for improved high tunnel production. GinFiz is a generative plant and benefits from grafting and single leader production.

Resistances: HR: ToMV:0-2/ToANV/Ff:A-E/Va:0/Vd:0/For



### ➤ Kardinata (E15B.43396) NEW

Kardinata (E15B.43396) is a nicely balanced red marmande variety that produces very high quality uniform fruits that are large, and attractive. The fruit are slightly ribbed with a good eating quality with deep red interior color. It has a high yield potential and the fruits are crack resistant with a small blossom end scar. It is adaptable for both High Tunnel and Open Field conditions.

Resistances: HR: ToMV:0-2/ToANV/ToBRFV/Pf:A-E/Fol:0/For | IR: Rs



### ➤ Enroza

Enroza is the newest addition to our Mixologist Collection with outstanding flavor. We trial many varieties each year, and Enroza is always the variety that ends up on our dinner plate at the end of the day. Enroza is a small round pink tomato, with high-yielding fruit that average about 6-7 oz. (170-200 g). It has an excellent disease resistance package and is well-suited for high tunnels and greenhouses, yet also productive in open field conditions.

Resistances: HR: ToMV:0-2/ToANV/Ff:A-E/Va:0/Vd:0/Fol:0,1/For | IR: Rs



### ➤ MaiTai

MaiTai is an attractive round yellow tomato with a delicate red blush at the blossom end. During trials, the sweet, tangy flavor and perfectly balanced texture of this superior eating quality tomato won us over. The eating quality of this variety won us over in our trials, with a sweet tangy flavor and melt-in-your-mouth texture. Fruits average 6-10 oz. (170-283 g). MaiTai has good vigor and productivity, with leaf mold resistance for improved high tunnel production.

Resistances: HR: ToMV:0-2/ToANV/Ff:A-E/Va:0/Vd:0/Fol:0,1/For

## Tomato Rootstock



### ➤ Espartano

This strong rootstock, maintains a balanced growth on the scion. Its endurance ensures excellent plant vigor and high fruit production until the end of the season. In long season production (8+ months), It maintains the average fruit weight, resulting in increased total yields.

Resistances: HR: ToMV:0-2/Ff:A-E/Va:0/Vd:0/Fol:0-2/For | IR: TSWV/Ma/Mi/Mj

### ➤ Estamino

A vigorous rootstock with an early generative effect on the growth of the scion. The graft has a balanced plant with steady production throughout. It control excessive vegetative growth and increases yield. This rootstock is best for short season (5-7 months) production.

Resistances: HR: ToMV:0-2/Ff:A-E/Va:0/Vd:0/Fol:0-2/For | IR: TSWV/Pl/Ma/Mi/Mj

### ➤ Fortamino

Best used when transplanting into stressed conditions. The strong root system gives extra vegetative power to the scion developing very good cover and excellent recovery after stressed conditions. Also increasing the number of flowers per truss, the average fruit weight and fruit size uniformity, It is adaptable to both short and long season production.

Resistances: HR: ToMV:0-2/Ff:A-E/Pl/Va:0/Vd:0/Fol:0-2/For | IR: TSWV/Ma/Mi/Mj

# Pepper



## Blocky Red and Yellow



### ➤ Olympus

Olympus is an extra-large, 4 in. (10 cm+) and slightly elongated blocky bell. It colors from green to dark red and has thick side walls. It is very productive and has a vigorous bush that provides plenty of shade for those long seasons. Recommended for open field production.

Resistances: HR: Xcv:1-3



### ➤ Sprinter

Sprinter produces high yields of beautiful 3.5 in. (8-9 cm) peppers for a long production period. This variety is not sensitive to blossom end rot or russetting. Sprinter will turn a brilliant red at maturity, with thick walls and sweet flavor. Recommended for open field and unheated greenhouse production.

Resistances: HR: Tm:0-3



### ➤ Abay

Abay produces large fruits of 4 in. (10 cm) with thick walls that mature from dark green to yellow. Suitable for spring and fall plantings in the open field in the Southeast, and as a late season main crop in the Northeast and Midwest. Excellent Bacterial Leaf Spot resistance.

Resistances: HR: Xcv:1-5/Tm:0



### ➤ Brocanto

Brocanto is a blocky yellow bell well-suited for high tunnel production. Fruit are a bright yellow color, with excellent uniformity and smooth skin. Plant habit is vigorous and benefits from trellising. Brocanto's color and size, averaging 3.5 in. (8-9 cm), pairs well with Sprinter and Milena to create an attractive display.

Resistances: HR: Tm:0-3 | IR: TSWV:0

## Blocky Orange



### ➤ Milena

Milena is an early maturing orange bell. High quality fruits have a dark orange color and medium size, averaging 3.5 in. (8-9 cm). The plant has a vigorous, open habit with good yield and strong resistance to viruses. Best suited for open field and unheated tunnel production. Milena is a stand out variety that delivers uniform fruits and high productivity.

Resistances: HR: PVY:0-1/Tm:0-3 | IR: TSWV:0/TEV

## Long Conical



### ➤ Oranos

This outstanding orange conical pepper is a very early variety that produces vigorous plants with fruits 7 x 1.5 in. (18 x 4 cm) in size. Oranos is especially appreciated for its high yields and easy growth habit. Staking of this variety is recommended to ensure a long harvest window.

Resistances: HR: Tm:0

## Hot



### ➤ Bastan

This flavorful pepper has good heat and matures to a beautiful chocolate color. Medium sized fruits average 5.5 x 2.5 in. (14 x 6 cm), are thick walled and have a dark green color prior to ripening. The plant produces a concentrated set of consistently high quality fruits for fresh market. Thanks to robust leaf cover and medium-early maturity, Bastan delivers excellent yields.



# Squash



## Butternut



### ➤ Havana

Havana is the largest of our butternuts, with tan fruits that average 3-4 lb. (1.3-1.8 kg). This variety is uniform and extremely productive. Blocky fruits have a thick neck and a small seed cavity. Flesh is intense orange and tasty. The plant is vigorous and semi-vining, with some tolerance to powdery mildew. Havana has good post-harvest shelf life, and ripens fairly early for its size.

Resistances: IR: Px/ZYMV.

## Yellow Summer Squash



### ➤ Yellowfin

Yellowfin has a brilliant yellow color and produces high yields of straight, cylindrical fruits. Compact plants are vigorous and have an open habit for ease of harvest. This variety has the vigor and disease resistance required to withstand tough field conditions and still produce an abundant harvest. Strong resistance to powdery mildew.

Resistances: IR: Px/CMV

## Summer Squash



### ➤ Desert

Desert produces very dark green uniform fruits that set well under a variety of conditions. Fruits are straight, uniform and slightly speckled. Open, compact plants allow for easy harvest. Desert works well under high tunnel production conditions due to early and productive flowering. It has a strong disease resistance package.

Resistances: IR: Px/CMV/ZYMV/WMV/PRSV



### ➤ Dunja

Dunja has emerged as a stand out variety for organic production. The plant has a vigorous, open growth habit, sets fruits easily and is high yielding. Fruits are medium-dark green, moderately flecked and shiny. Dunja also has a strong disease resistance package, and is appropriate for open field or tunnel production.

Resistances: IR: Px/ZYMV/WMV/PRSV



### ➤ Green Machine

Consistently a top performer in Midwest and East Coast field trials, Green Machine is a steady producer of uniform, medium green fruits of exceptional quality. With high yield potential and an open, labor-friendly plant habit, Green Machine also offers strong protection against virus and powdery mildew.

Resistances: IR: Px/CMV/ZYMV/WMV



### ➤ Renegade

Renegade has been developed specifically for the East Coast market. Fruits are medium-dark green with exceptional gloss and uniformity. In addition to the outstanding fruit quality, Renegade is easy to pick with an upright, open habit and minimal spines. Growers will also appreciate the strong disease package and high yield potential.

Resistances: HR: ZYMV/WMV/PRSV | IR: Px



### ➤ Mexicana

Mexicana offers higher yields and ease of harvest compared to the competition. Fruits are early, uniform, grey-green in color, and highly prolific. The upright, open plant habit is characteristic of the Vitalis zucchini breeding program. Mexicana's flavor is nutty and tender and definitely worth a try!

Resistances: IR: Px/CMV/ZYMV/WMV/PRSV/SLCV

# Watermelon & Melon



At Vitalis Organic Seeds we have the best seedless watermelon varieties.

This represents a unique opportunity for organic growers in multiple regions across North America to grow strong, full-size seedless organic watermelons.

## Melon



### Divergent

Divergent defies classification—part Cantaloupe, part Galia, all flavor! This variety is sweet (Brix 15-18°), juicy and ripens earliest in its class. Orange fleshed, round fruits are medium-size, and set close to the crown for a concentrated harvest. Noted for its uniformity in maturity, melons are ready to harvest when the netting begins to turn from green to tan. Divergent is an adaptable, high yielding variety that performs well in many regions, including northern areas with shorter seasons. Recommended for fresh market production only.

Resistances: HR: Fom:0,1,2 | IR: Gc:1/Px:1,2,5/Ag



### Tirreno

Tirreno is a favorite among northern growers. It was selected for its flavor, uniformity and solid production under organic conditions. Tirreno produces round to slightly high round fruits with uniform sutures and thick netting. It has excellent fruit quality with good flesh structure and a slightly thick, green rind. Brix levels average 13-15°. Exterior skin color is grey to cream with an interior orange flesh color. It produces 2.6-3.0 lb. (1.2-1.4 kg) fruits.

Resistances: HR: Fom:0-2/MNSV | IR: Px:1,2,5

## Watermelon



### Cracker Jack

Cracker Jack is our most popular watermelon with a very strong vine that has a continuous fruit setting ability and produces blocky, oval fruit. Fruit are uniform with firm flesh and a very deep red internal color. Cracker Jack is recognized by growers and brokers alike for its outstanding yields, excellent sweetness and small pips. Average weights are from 15-18 lbs. (6.8-8.2 kg).

Resistances: IR: Fon:0/Fon:1/Co:1



### Red Amber

Our first seedless organic watermelon, Red Amber is a deliciously sweet standard watermelon with crisp texture and a dark red interior. Rind pattern is a medium green background with a medium-dark green stripe. Fruit are oval shaped, uniform and average 16-20 lbs. (7.3-9.1 kg). Red Amber has a strong and vigorous plant with good performance in organic systems.

Resistances: IR: Fon:0/Fon:1/Co:1

## Mini



### Kalahari

Kalahari is a tiger stripe seedless mini for organic production! This high yielding variety produces uniform 3-5 lbs (1.3-2.3kg) round fruits with a deep red interior and sweet, crisp flesh. Adaptable to many growing regions, Kalahari (E26C.00199) has a vigorous plant that provides good fruit cover.

Resistances: IR: Co:1

## Rootstock



### Flexifort

Use of Flexifort rootstock is recommended for cucumber, melon, and watermelon growers seeking a longer, healthier crop. This rootstock brings increased vigor and a high return of quality fruits. Flexifort is an interspecific *Cucurbita maxima* x *Cucurbita moschata* cross that combines nicely with a wide number of varieties. It provides resistance to several soil borne diseases, as well as abiotic stresses such as drought, temperature extremes and high salinity.

Resistances: HR: Fom:0-2/Fom:1,2/Fon:0-1/Foc. | IR: Forc

# Fennel & Leek



## Fennel



### ➤ Preludio

Preludio is an early variety with good bolting tolerance. It produces uniform, round bulbs of standard quality and yield. Compact plants are very upright and bulbs have a narrow cutting surface for ease of harvest. With succession plantings, Preludio can be successfully harvested in spring, summer and early fall.

## Leek



### ➤ Comanche

A main season hybrid producing leeks with long shanks that are easy to peel. Comanche has dark green foliage and an upright habit. This adaptable variety has a flexible harvest window and can be marketed loose, in bunches or in cello packs.



### ➤ Oslo

Our latest maturing leek, Oslo is a late fall and early winter variety with upright, dark blue leaves and a stocky shank that is easy to peel. This variety performs very well as an over-wintered leek, with impressive bolting tolerance.



### ➤ Tadorna

Tadorna is a well-loved open pollinated standard for organic growers. This autumn-winter leek is uniform and can fit into most leek programs, given its adaptability to multiple growing regions. Tadorna has long white shanks and is easy to harvest and clean.



# Eggplant, Radish, and Cauliflower



## Eggplant



### Annina

This gorgeous striped eggplant will not fail to impress growers and eaters alike. This adaptable variety produces well in both high tunnel and open field production systems, and yields half-long, uniform fruit that average 0.7 lb. (318 g). Growers will appreciate the spineless calyx, and customers will love the deep purple color striped with fine white lines.



### Traviata

Traviata is a strong growing, well-balanced plant that produces half-long, uniform, black, shiny fruits. A high yielding and early variety recommended for spring and summer open field and unheated greenhouse production.

## Radish



### Pearl

A white, smooth, round radish with a small green neck for open field production. Pearl has very vigorous growth and good resistance to cracking. It is adaptable as a processing radish in cello bags or in fresh bunches, due to its strong tops. This variety shines when mixed with red round radishes.

## Cauliflower

### Tessaury NEW

This adaptable variety has a compact plant, with a strong wrap, and good field holding capability. Nicely domed heads deliver good curd quality even under warm conditions.



# Herbs



## Sage



### ➤ Fanni

Fanni is a quality sage selection with large leaves, excellent yield and dependable germination. Fanni produces well in open field and greenhouse conditions.

## Thyme



### ➤ German Winter

German Winter is bushy plant with broad leaves that can be used for open field or greenhouse production of fresh or dried product.

## Chives



### ➤ Nelly

Nelly is an extra thick, dark green variety for a broad range of growing purposes, including forcing and pot production. Appropriate for fresh cut and industrial markets.



### ➤ Staro

Staro is an extra thick, dark green variety for a broad range of growing purposes, including forcing and pot production. Appropriate for fresh cut and industrial markets.

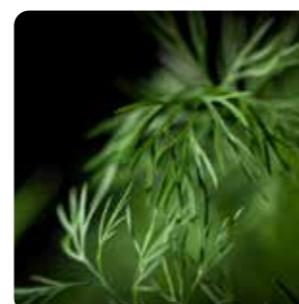
## Cilantro



### ➤ Marino

Marino is a thickly feathered leaf cilantro with excellent plant emergence, late bolting and high yielding for open field or greenhouse production.

## Dill



### ➤ Ella

Ella is an attractive dark green dill variety bred for pot and babyleaf production. Its short hypotocyl gives it a sturdy upright and compact plant habit.



### ➤ Green Sleeves

Green Sleeves is a uniform dark green dill for production of fresh bunches. Green Sleeves is resistant to bolting and is suited for year-round growing in open field and greenhouse production.

# Basil



## Evi

Evi is a downy mildew tolerant variety that can be used in many applications. Dark green, glossy leaves are medium size with traditional cupping. Plants have intermediate internodes and can be used in both open field and CEA environments. Evi offers good bolt tolerance and a nice basil flavor.

Resistances: IR: Pb



## Dolly

Our largest-leaf Genovese type basil that is very uniform and fast growing. Dolly demonstrates better tolerance against low temperatures compared to other basil varieties.



## Genoveser

Traditional cup-shaped, dark green, shiny leaved variety for field production. High yielding with strong, sweet basil aroma.

# Resistances

Lettuce		Lettuce		Lettuce	
Scientific name	English name	Code	Scientific name	English name	Code
	Virus				Insect
Lettuce mosaic virus	Lettuce mosaic	LMV	Macrosiphum euphorbiae	Potato aphid	Me
	Fungi		Nasonovia ribisnigri	Lettuce leaf aphid	Nr
Bremia lactucae	Downy mildew	Bl	Pemphigus bursarius	Lettuce root aphid	Pb
	Herbs			Winter Squash	
	Fungi			Virus	
Fusarium oxysporum	Downey mildew	Fus	Papaya ringspot virus	Papaya ringspot	PRSV
Peronospora belbarii	Downey mildew	Pb	Watermelon mosaic virus	Watermelon mosaic	WMV
Peronospora parasitica	Fusarium wilt	Pp	Zucchini yellow mosaic virus	Zucchini yellows	ZYMV
				Fungi	
			Podosphaera xanthii (ex Sphaerotheca fuliginea)	Powdery mildew	Px
	Pepper				
	Virus			Bacteria	
Chili vein mosaic virus	Chili vein mosaic	ChiVMV	Ralstonia solanacearum	Bacterial wilt	Rs
Cucumber mosaic virus	Cucumber mosaic	CMV			
Pepper mottle virus	Pepper mottle	PepMoV		Fungi	
Pepper yellow mosaic virus	Pepper yellow mosaic	PepYMV	Fusarium oxysporum f.sp. capsici	Fusarium wilt	Foc
Potato Y virus	Potato Y	PVY	Phytophthora capsici	Buckeye fruit and root rot	Pc
Tobacco etch virus	Tobacco etch	TEV	Leveillula taurica (anamorph: Oidioopsis sicula)	Leveillula taurica	Lt
Tomato spotted wilt virus	Tomato spotted wilt	TSWV		Nematoden	
Tobamovirus group			Meloidogyne incognita	Root-knot	Mi
Pepper mild mottle virus, Tobacco mild green mosaic virus, Tobacco mosaic virus, Tomato mosaic virus		Tm:0-3	Meloidogyne arenaria	Root-knot	Ma
			Meloidogyne javanica	Root-knot	Mj
	Tomato				
	Virus			Fungi	
Cucumber mosaic virus	Cucumber mosaic	CMV	Fusarium oxysporum f.sp. lycopersici	Fusarium wilt	Fol
Pepino mosaic virus	Pepino mosaic virus	PepMV	Fusarium oxysporum f.sp. radicis-lycopersici	Fusarium crown and root rot	For
Tobacco mosaic virus	Tobacco mosaic	TMV	Leveillula taurica (anamorph: Oidioopsis sicula)	Powdery mildew	Lt
Tomato spotted wilt virus	Tomato spotted wilt	TSWV	Oidium neolycopersici (ex Oidium lycopersicum)	Powdery mildew	On
Tomato mosaic virus	Tomato mosaic	ToMV	Pyrenophaeta lycopersici	Corky root rot	Pl
Tomato apex necrotic virus		ToANV	Verticillium albo-atrum	Verticillium wilt	Va
Tomato yellow leaf curl virus	Tomato yellow leaf curl	TYLCV	Verticillium dahliae	Verticillium wilt	Vd
	Bacteria			Nematoden	
Clavibacter michiganensis subsp. michiganensis	Bacterial cancer	Cmm	Meloidogyne arenaria	Root-knot	Ma
Xanthomonas vesicatoria (Xanthomonas campestris pv. vesicatoria)	Bacterial spot	Xcv	Meloidogyne incognita	Root-knot	Mi
Ralstonia solanacearum	Bacterial wilt	Rs	Meloidogyne javanica	Root-knot	Mj
	Fungi				
Fulvia fulva (ex Cladosporium fulvum)	Leaf mold	Ff (ex Cf)			
	Melon & Watermelon				
	Virus			Fungi	
Melon necrotic spot virus	Melon necrotic spot	MNSV	Podosphaera xanthii (ex Sphaerotheca fuliginea)	Powdery mildew	Px (ex Sf)
	Fungi			Insect	
Fusarium oxysporum f.sp. melonis	Fusarium wilt	Fom	Aphis gossypii	Cotton aphid	Ag
	Cucumber			Fungi	
	Virus				
Cucumber green mottle mosaic virus	Cucumber green mild mottle	CGMMV	Cladosporium cucumerinum	Scab and gummosis	Ccu
Cucumber mosaic virus	Cucumber mosaic	CMV	Colletotrichum orbiculare	Anthracnose	Co
Cucumber vein yellowing virus	Cucumber vein yellowing	CYVV	Corynespora cassiicola	Corynespora blight and target spot	Cca
Cucurbit yellow stunting disorder virus	Cucumber yellowing stunting disorder	CYSDV	Fusarium oxysporum f.sp. cucumerinum	Fusarium wilt	Foc
Papaya ringspot virus	Papaya ringspot	PRSV	Fusarium oxysporum f.sp. radicis-cucumerinum	Fusarium crown and root rot	For
Watermelon mosaic virus	Watermelon mosaic	WMV	Fusarium oxysporum f. sp. melonis		Fom
Zucchini yellow mosaic virus	Zucchini yellows	ZYMV	Fusarium oxysporum f. sp. niveum		Fon
			Fusarium oxysporum f. sp. radicis-cucumerinum		Forc
			Podosphaera xanthii (ex Sphaerotheca fuliginea)	Powdery mildew	Px
			Golovinomyces cichoracearum (ex Erysiphe cichoracearum)	Powdery mildew	Gc
	Squash				
	Virus			Fungi	
Cucumber green mottle mosaic virus	Cucumber green mottle mosaic	CGMMV	Podosphaera xanthii (ex Sphaerotheca fuliginea)	Powdery mildew	Px
Papaya ringspot virus	Papaya ringspot	PRSV	Fusarium oxysporum f.sp. cucumerinum	Fusarium wilt	Foc
Squash mosaic virus	Squash mosaic	SqMV	Fusarium oxysporum f.sp. lagenariae	Fusarium wilt	Fol
Zucchini yellow mosaic virus	Zucchini yellows	ZYMV	Fusarium oxysporum f.sp. melonis	Fusarium wilt	Fom
Watermelon mosaic virus	Watermelon mosaic	WMV			
Cucumber mosaic virus	Cucumber mosaic	CMV			

# Contacts

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## Market Grower Team



### Shaina Bronstein

Area Sales Manager

(831) 737-0525

s.bronstein@enzazaden.com



### Luke Donahue

Product Developer

(207) 383-6093

l.donahue@enzazaden.com

## Customer Service Team



### Jessica Taylor

Customer Service Manager

(831) 676-5977

j.taylor@enzazaden.com



### Angela Hernandez

Team Lead Customer Service

(831) 206-9787

a.hernandez@enzazaden.com

# Resistances

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Resistances in varieties of our crops will be coded (please, see our coding list on [usa.vitalisorganic.com](http://usa.vitalisorganic.com) for explanation), unless indicated otherwise. Varieties claiming the same level of resistance against a specific pest or pathogen may exhibit a different resistance response due to a different genetic makeup of a variety. It is to be noted that if a resistance is claimed in a plant variety it is limited to the specified biotypes, pathotypes, races or strains of the pest or pathogen.

If no biotypes, pathotypes, races or strains are specified in the resistance claim for the variety, it is because no generally accepted classification of the cited pest by biotype, pathotype, race or strain exists. In this case resistance is only claimed against certain not further specified isolates of that pathogen. New biotypes, pathotypes, races or strains that may emerge are not covered by the original resistance claim.

**Immunity:** not subject to attack or infection by a specified pest or pathogen.

**Resistance:** the ability of a plant variety to restrict the growth and development of a specified pest or pathogen and/or the damage they cause when compared to susceptible plant varieties under similar environmental conditions and pest or pathogen pressure.

Resistant varieties may exhibit some disease symptoms or damage under heavy pest or pathogen pressure.

Two levels of resistance are defined:

- **High resistance (HR):** plant varieties that highly restrict the growth and development of the specified pest or pathogen under normal pest or pathogen pressure when compared to susceptible varieties. These plant varieties may, however, exhibit some symptoms or damage under heavy pest or pathogen pressure.

- **Intermediate resistance (IR):** plant varieties that restrict the growth and development of the specified pest or pathogen, but may exhibit a greater range of symptoms or damage compared to highly resistant varieties. Intermediate resistant plant varieties will still show less severe symptoms or damage than susceptible plant varieties when grown under similar environmental conditions and/ or pest or pathogen pressure.

**Susceptibility:** the inability of a plant variety to restrict the growth and development of a specified pest or pathogen.

**Tolerance:** the ability of a plant variety to endure abiotic stress without serious consequences for growth, appearance and yield. Vegetable companies will continue to use tolerance for abiotic stress.

Full explanation available on [usa.vitalisorganic.com](http://usa.vitalisorganic.com).

## Disclaimer

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Descriptions, recommendations and illustrations in brochures and leaflets shall correspond as closely as possible to tests and practical experience and are subject to typographical and/or printing errors. This information shall be provided to assist professional growers and users, whereby variable local conditions must be taken into account. Under no circumstances shall Vitalis or Enza Zaden accept liability based on such information for deviating results in the cultivated product. Current information concerning the resistances is available on [usa.vitalisorganic.com](http://usa.vitalisorganic.com).



## Notes

## Notes

# Creating an organic world together



**vitalis**  
Organic Seeds

**Vitalis Organic Seeds, Inc.**

7 Harris Place  
Salinas, CA 93901 U.S.A.  
[customer.service@enzazaden.com](mailto:customer.service@enzazaden.com)  
Contact us toll free at tel +1 855-800-ENZA (3692)

Part of the  
**ENZA ZADEN**  
family  
