SEIPASA
PRODUCT CATALOGUE

THE POWER OF NATURE

seipasa®
natural technology

INDEX

The vision of anticipating change

Pedro Peleato, CEO of Seipasa.

Seipasa is the result of a vision that anticipated the changes transforming agriculture. Although the company was founded in 1998 amid the opportunities arising from Spain's integration into the European Economic Community in the late 1980s –a development that shaped the current European Union's economic, social, and political framework– **the real turning point came in 2001**.

That year, the University of Alicante organised a business visit to Cuba, which was subject to the US embargo through the Helms-Burton Act at that time. This made it very difficult for Cuban farmers to import phytosanitary products to control pests and diseases on their farms, among other consequences.

In response, **producers developed alternatives for biological control and pest control**, a development that quickly caught the attention of Seipasa's founding partners, Pedro Peleato and Pepe Morales, during their first visit to a farm in Havana.

They witnessed first-hand the transformation currently taking place in the agricultural sector through bio-based agriculture, sustainability, and the production of food free of chemical residues.

At that time, bio-based agriculture was still in its infancy in Europe. It was a market that was absolutely dominated by chemical synthesis solutions in phytosanitary treatments.

Nevertheless, **Pedro Peleato and Pepe Morales began to turn the entrepreneurial dream that began in Havana into reality**. They chose l'Alcúdia, a small town just 30 km from Valencia that met the necessary conditions for setting up and growing the business.

The rest is history, and Seipasa has grown to become a global company with a presence in more than 30 countries and has been recognised with the most prestigious National Innovation Award by the Spanish Ministry of Science, Innovation and Universities.

We are natural technology®

Natural Technology combines science, technology and innovation to serve knowledge agriculture. **Our production model is based on botanical and microbiological active ingredients that have existed in nature for millions of years. However, we at Seipasa have learned to work with these ingredients in a unique way** using our own internationally recognised ***Natural Technology*** model.

Natural Technology enables us to identify and select the most efficient and effective active ingredients. We then apply the most advanced technology to maximise their effectiveness under any application conditions anywhere in the world.

In other words, our *Natural Technology* model originates from the raw materials provided by nature, but uses the most innovative and cutting-edge technology of the 21st century. This is why we are **standard-bearers in knowledge farming, where the way in which tools are used and combined is as important as the tools themselves**.

Industrial complex in l'Alcúdia

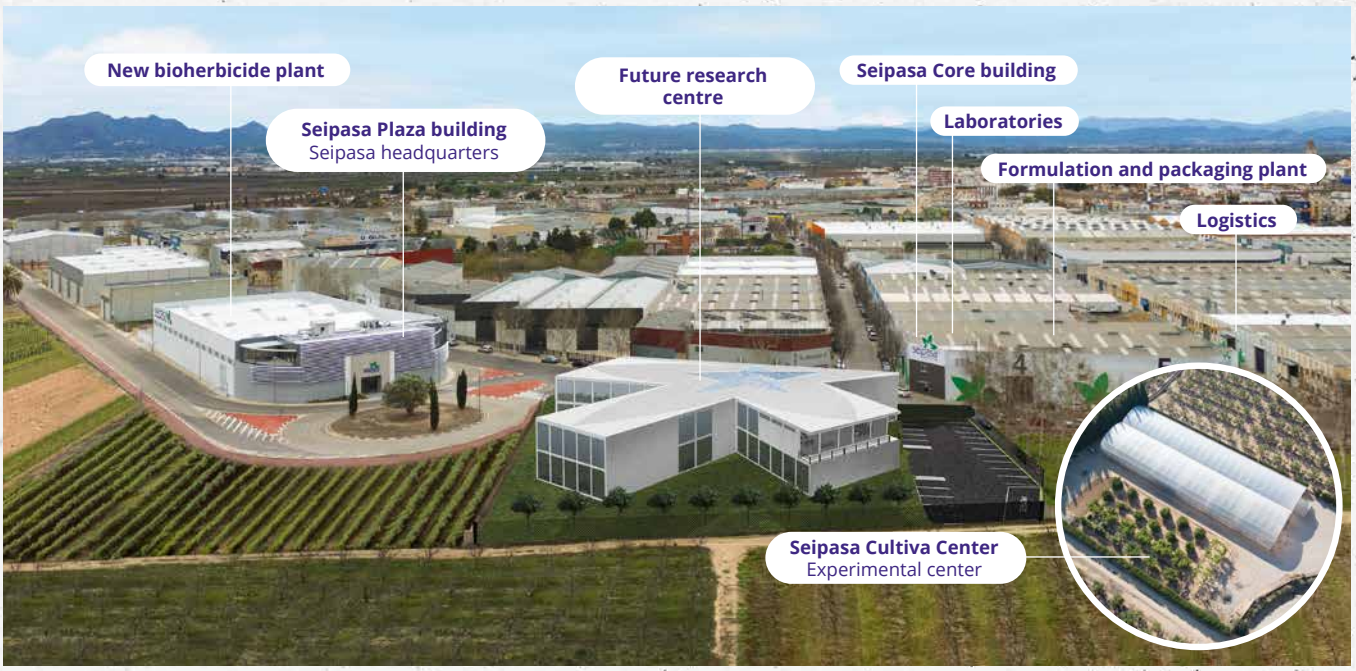
Our industrial complex in l'Alcúdia, Valencia, comprises three nerve centres spanning over 21,000 m^2.

The **Seipasa Plaza** building **is where science, innovation and people converge**. Representing our destiny, it is a metaphor for the road that has brought us here. Every encounter here is an opportunity to shape the ideas that are transforming agriculture.

The **Seipasa Core** building **represents the beginning of our journey, as it is the site where Seipasa was founded in 1998**. We are at the heart of what drives our Natural Technology and the R&D that we bring to agriculture. Our mission is to seek out the most effective active ingredients in nature and apply the most advanced technology to convert them into efficient, sustainable and humane solutions.

The **Seipasa Cultiva Center connects our R&D with real-life applications**. The experimental centre completes the product development that begins in the laboratory, enabling us to apply and evolve our *Natural Technology* model to the same challenges, pests and diseases that farmers face daily.

Seipasa industrial complex in l'Alcúdia.



Seipasa in figures

Facilities

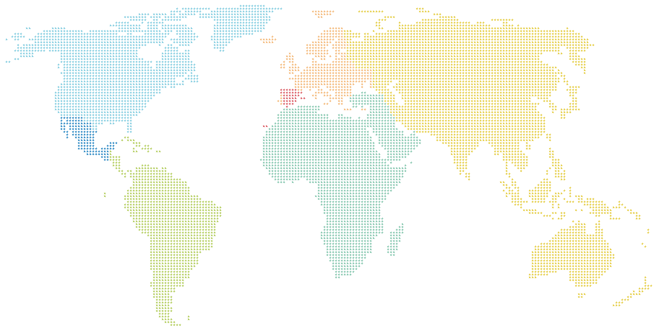
21,700 m²	700 m²	3,000 m²	1,500 m²
Industrial complex	Laboratory	Experimental center	Headquarters

Global market

+30 countries

8 business units

SPAIN · EUROPE · MEXICO · LATAM
AFRICA · USA · APAC · GARDEN



5 product lines

BIOINSECTICIDES · BIOFUNGICIDES · BIOHERBICIDES · BIOSTIMULATION · NUTRITION

Research

30 % of staff dedicated to R&D

5 patents:

Pirecris

PATENT ES2444991A1

Fungisei

PATENT ES2520615B2

PATENT EP3167717

Dasword

PATENT ES3018295T3

PATENT EP3610727B1

Sustainability

100 % green energy

40 % of electricity consumed generated by solar panels

95 % of residues generated has a second life

Certifications

ZERYA · CAAE INSUMOS UNE · OMRI LISTED · Approved by ECOCERT INPUTS · JAS · demeter · IMOcert · ÖKO-GARANTIE BCS AGRINPUT

A real commitment to phytosanitary registrations

If there is one defining feature of Seipasa's product catalogue, it is the company's commitment to the phytosanitary registration of biocontrol products. This commitment has enabled Seipasa to build a **global portfolio of over 70 registrations in more than 30 countries worldwide**.

Our business model is based on providing farmers with new, biologically based, registered tools capable of replacing chemically synthesised active ingredients, which are gradually being phased out by increasingly strict international regulations.

Alongside technology, sustainability and innovation, Seipasa's business model relies on **phytosanitary registrations as a strategy for international expansion and growth**.

This means that, before entering a new market, the company carries out important prospecting work, analysing the needs of farmers and gaining knowledge of the country's agronomic reality.

Therefore, **phytosanitary registration provides Seipasa with in-depth knowledge of the product being developed**, guaranteeing quality, confidence and safety for the end farmer.

Seipasa's R&D department and laboratory.

INNOVATION in capital letters

Seipasa has been recognised with the National Innovation Award. This prestigious award, granted by the Spanish Government's Ministry of Science, Innovation and Universities, recognises the company's efforts to develop a Natural Technology model that is successfully applied to high-value crops and the most demanding agricultural systems on the planet.

This recognition also underscores Seipasa's ability to design and develop **innovative solutions based on natural resources and make them available to producers in a highly regulated sectors such as farming**.

Pedro Peleato, CEO of Seipasa, receives the National Innovation Award from King Felipe VI and Queen Letizia.

An ESG company

Seipasa is at the heart of a large community of people, businesses and organisations that work together in perfect harmony to provide solutions to thousands of farmers around the world every day. **We are responsible for caring for and protecting this community, and for improving its quality of life and well-being, by promoting the production and consumption of healthy, residue-free food**. This is all within the framework of a healthy lifestyle and respect for the environment, based on solid principles of ethics, transparency and corporate responsibility.

Our commitment to people, the environment and governance is also reflected in our support for the **United Nations Global Compact**. By doing so, Seipasa reaffirms its commitment to aligning all its strategies and operations with the 10 universal principles concerning human rights, labour standards, the environment, and anti-corruption.

Seipasa's ESG projects in the framework of organic farming, social inclusion and the promotion of healthy eating and lifestyle.

Close to the sector

Seipasa carries out a wide range of technical, training and commercial activities, enabling us to maintain close ties with the sector by participating in congresses, international fairs and specialised conferences.

The Seipasa brand and its *Natural Technology* model participate in the most important events of the fruit and vegetable sector every year. In addition, our headquarters in l'Alcúdia, Valencia, Spain, hosts numerous technical training sessions for our customers and distributors, aiming to share experiences and advance knowledge of and handling of our product portfolio.

Seipasa's presence at trade fairs, congresses and training days.

Partnership synergies

Seipasa actively promotes strategic synergies with the main agricultural associations. By constantly sharing knowledge and experiences, we work together to identify and **address common challenges, drive innovation and build a stronger, more collaborative future for the entire sector**.

AEFA · IBMA · bpia · cepbio · biovegen · AMPBIO, A.C. · QUIMACOVA · ecovalia · COIAL · AECJ · guíaverde · FRESHUELVA · SIGFITO · valorfito · ibmcp · AMHPAC


seipasa.com
Radisei
Pirecris
Fungisei
Multisei nt
SeiZen
RIGUER flow
seipasa

PRODUCTS

Seipasa's products combine all the innovation of the *Natural Technology* model with the tools made available by knowledge-based agriculture. They are designed to provide farmers with effective, sustainable and safe solutions to **ensure the production of chemical-free, high value-added, residue-free fruit, vegetables and cereals** in the world's most demanding farming systems.

FEATURED PRODUCTS

The featured products highlight new applications for the bioinsecticide **Pirecris, which has expanded its phytosanitary registration** to include pest control in crops such as red fruits, stone and pome fruit trees, nuts and citrus fruits. Seipasa's commitment to providing farmers with new biological biocontrol alternatives has also materialised in the **extension of the Fungisei biofungicide** label for the control of diseases in berries, tropical fruit and stone fruit trees. **Meanwhile Septum has established itself as a high-value reference in disease control**, further strengthening the portfolio of biofungicidal solutions. In the field of biostimulants, **SeiZen has obtained European registration under the PFC 6 (B) category (non-microbial plant biostimulant)** in accordance with the new EU Regulation 2019/1009. This certification enhances the product line's added value, placing it at the centre of Seipasa's market strategy.

Pirecris

THE MASTER SHOT AGAINST PESTS

Maximum efficacy: Optimised formulation with a perfect balance of active molecules.

Prolonged protection: Natural antioxidants that increase stability and longevity.

Plant innovation: Direct action that removes insect protective barriers and improves control.

No resistance problems.

Patented formulation, unique in its class. Patent number **ES2444991A1**.

With **Sun protect** technology.

SPAIN PHYTOSANITARY REGISTRATION NO.: **ES-00225**

Fungisei

THE BIOLOGICAL FUNGICIDE FOR THE NEW GENERATION

Stability and ease of use: Liquid formulation, stable for more than two years without phase separation.

Environmental tolerance: Effective in extreme conditions.

Quick and preventive effectiveness: Effective in early stages and as a preventive treatment.

Low risk: Classified as Low Risk by the European Commission; suitable for organic farming and IPM.

Compatibility: Compatible with formulations based on copper.

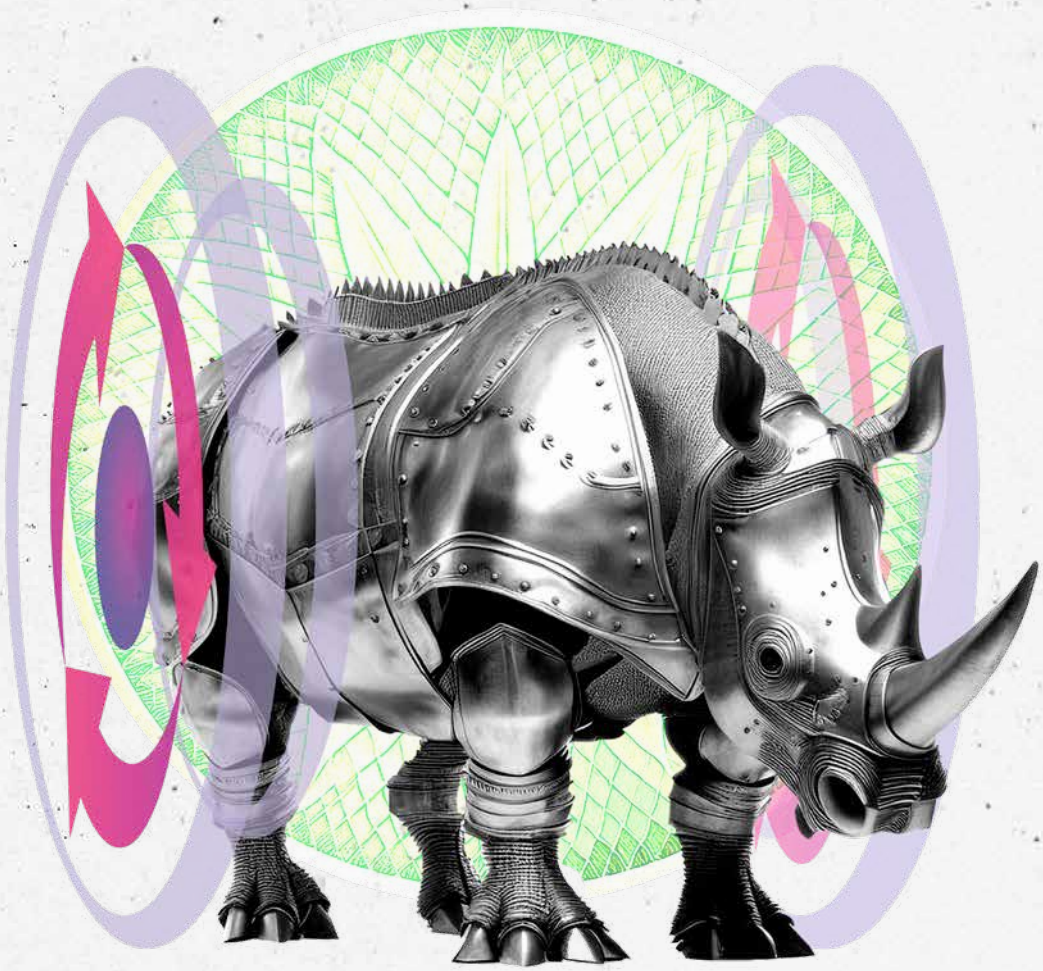
Safety: It does not stain the fruit, prevents resistance and uses Furity technology.

PHYTOSANITARY REGISTRATION NO. SPAIN: **ES-01404**

PATENTED FORMULATION EUROPEAN PATENT NO: **EP3167717**

Septum

BASIC PROTECTION FOR CROPS



100% of the characterised extract (organic and inorganic fractions).

The active ingredients have been identified and quantified.

Formulation: Stable and homogeneous batches with durability over time.

There is no fermentation or clogging of nozzles.

CLASSIFIED AS A
BASIC SUBSTANCE IN THE **EU**
SANCO/12386/2013

CAAE INSUMOS UNE 315500

Approved by ECOCERT INPUTS

SeiZen

VITALITY

YOUR CROPS, AT PEAK PERFORMANCE

WITH EUROPEAN REGISTRATION
ON THE BASIS OF REGULATION
(UE) 2019/1009 - CFP 6 (B)
NON-MICROBIAL PLANT BIOSTIMULANT

PK-Tech TECHNOLOGY

PHOTOASSIMILATES KYNETICS TECHNOLOGY (Patent pending)

ACTS DIRECTLY

ASM
ANTI-SENESCENCE MOLECULE

- Neutralises oxygen free radicals (OFR), preventing oxidative damage.
- Enhances photosynthetic activity
- Delays senescence

seipasa

UPCOMING RELEASES

Seipasa completes its biocontrol portfolio with a new line of **bioherbicide products to position itself as a real alternative to chemical synthesis solutions for weed control**. Seipasa has designed a broad-spectrum contact bioherbicide that acts precisely, forcefully and lethally against the targets.

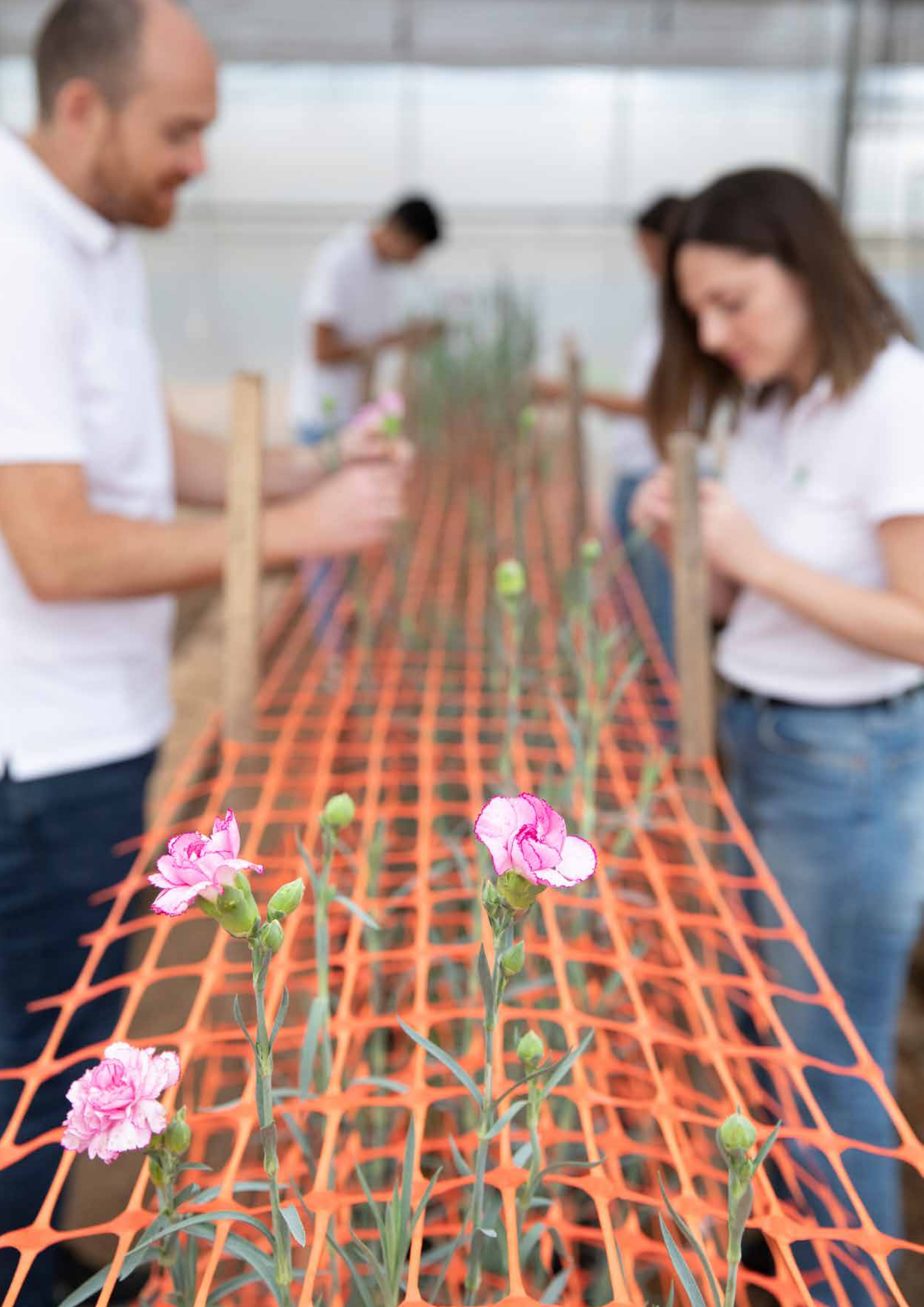
Seithor

THE FINAL BLOW AGAINST WEEDS

Seithor is a naturally occurring herbicide for early post-emergence control of broadleaf and narrowleaf weeds. It has broad-spectrum contact herbicidal activity and acts by physically stripping the waxy cuticle of the leaf and lowering the internal pH to cause cell rupture, leaf loss and death by desiccation. **Seithor causes a rapid and non-selective desiccation of the green plant tissues: damage becomes evident in about 60 minutes and plant collapse occurs within 1-3 hours**.

Why Seithor?

- **Comprehensive effectiveness**. Monocotyledonous and dicotyledonous species.
- **Control** from the earliest stages.
- **Compatibility** with BCOs.
- Excellent **cuticular penetration** properties.
- Suitable for resistance management programmes. Ideal in **IPM**, **sustainable** and **ZR** programmes.
- **Minimal risk**. Active ingredient Food Grade Quality.
- **Biodegradable**. Preserves soil fertility.



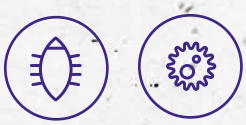
INFORMATIVE NOTE

This catalogue provides general information about Seipasa products. The products listed have been or are in the process of being registered in various markets worldwide. Please note that some of the products shown in the catalogue may not be registered in a particular country and may not be available for sale. Therefore, the information contained in this document is for informational purposes only.

After registration has been obtained, the sale of any product must be based solely on the approved product labels, and any claims regarding the product's safety and efficacy will be resolved solely by the label. Users must always read and follow the instructions on the product label.

The uses described on the product pages of this catalogue are recommendations based on the experience of Seipasa technicians working in specific environmental and growing conditions, which may affect how the product is applied. Changes to these conditions could produce unforeseen or different effects. It is therefore advisable to use the product under the supervision of a knowledgeable technician, and to carry out a test application on a small area immediately before treating any new surface.

The information contained in this catalogue is non-binding and changes may occur without prior notice.



BIOCONTROL

The biocontrol line offers innovative phytosanitary solutions based on natural active ingredients of botanical and microbiological origin. **Seipasa develops, formulates and markets highly effective bioinsecticides and biofungicides for comprehensive crop protection against the most limiting pests and diseases**. Our products contribute to sustainable agriculture, free of chemical residues and compatible with beneficial fauna, in line with integrated management strategies.

BIOINSECTICIDES

Seipasa's bioinsecticides represent an advanced phytosanitary solution developed from substances of natural origin. Faced with the evolution of pests and the limitations of chemically-synthesised phytosanitary tools, our *Natural Technology* offers an alternative of **high efficacy, safety and performance backed by phytosanitary registration** and experience in the world's most demanding agricultural systems.

seipasa natural technology

Pirecris

Properties

Pirecris is a contact bioinsecticide that blocks sodium and potassium channels in insects, disrupting nerve impulse transmission. This causes hyperactivity and abnormal movements, resulting in rapid pest elimination after application.

EMULSIFIABLE CONCENTRATE (EC) INSECTICIDE

Composition

Pyrethrins 2 % [EC] w/w

Exact balance of PI/PII molecules

Mode of action: IRAC 3A

Registration No.

Registered in the R.O.P.M.F. (Register of Phytosanitary Products and Materials) under number: ES-00225

Available in:

Benefits

- Broad-spectrum natural insecticide.
- Shock effect: neurotoxic and physical.
- Facilitates the introduction of auxiliary fauna.
- Does not increase spider populations.
- Can be used at any time of the day: Sun-Protect technology.
- Maximum stability in different conditions of use.
- Low safety period.

Seals and certifications:

Uses

USE	AGENT	DOSE (L/ha)	SOLUTION VOLUME (L/ha)	SPECIFIC CONDITIONING
Stone fruit trees	Aphids, Aphididae	0,75-1,5	300-1000	Outdoor use. Except cherry and plum.
Apricot trees	*Spotted vinegar fly, Drosophila suzukii*			Outdoor use.
Pome fruit trees	Aphids, Aphididae			Outdoor use.
Ornamental apple trees				
Nuts (including almond, hazelnut, walnut, pistachio and chestnut)		1-1,5		
Cherry and plum tree				Outdoor use. Cherry tree: Including the sour cherry (*Prunus cerasus*).
Citrus fruit				Outdoor use. Lemon tree: Includes cedrate (*Citrus medica*). Orange tree: Includes bitter orange (*Citrus myrtifolia*) and bergamot (*Citrus bergamia*). Mandarin tree: Includes clementine and hybrids.
Strawberry patch	*Spotted vinegar fly, Drosophila suzukii*	0,75-1,2		Greenhouse use.
Fruit bushes		0,75-1,5		Greenhouse use on blackberry, arctic blackberry, raspberry and blueberry.
Persimmon	*Spotted vinegar fly, Drosophila suzukii*	0,75-1,5		Outdoor use.
	Thrips, *Scirtothrips* spp.			
Pepper	Aphids, Aphididae	0,7-1,2		Outdoor and greenhouse use. Includes *Myzus persicae* and *Aphis gossypii*.
Tomato	Whiteflies, Aleyrodidae	0,9-1,5		Outdoor and greenhouse use. Including *Bemisia tabaci* and *Trialeurodes vaporarorium*.
Aubergine				
Spinach and similar	Aphids, Aphididae	0,7-1,5	300-750	Outdoor use. Including *Nasonovia ribisnigri*, *Myzus persicae* and *Hyperomyzus lactucae.*
Lettuce and similar				
Vine	Leafhoppers, Cicadellidae		200-800	Suitable for table grapes and outdoor vinification.
Chrysanthemum	Aphids, Aphididae	1-1,5	300-1000	Outdoor use.
Hibiscus				
MINOR USES				
Chard*, chicory (leaves)*, celery*, barberries*, watercress*, cress*, pepperwort*, sprouts, including brassica species*, lamb's lettuce*, cardoon*, endive*, aromatic herbs and edible flowers*, fennel*, Chinese mustard*, parsley*, chervil*, rocket*, rhubarb*, purslane*	Aphids, Aphididae	0,7-1,5	300-750	Outdoor use only. Celery: For the production of celery leaves and stalks only. Chicory: For chicory leaves and bitter or red chicory leaves. Tender shoots: Includes Brassica species (tender leaves and petioles of Brassica, harvested up to the stage of the eighth true leaf).
Okra, lady's finger*	Whiteflies, Aleyrodidae	0,9-1,5	300-1000	Greenhouse only.

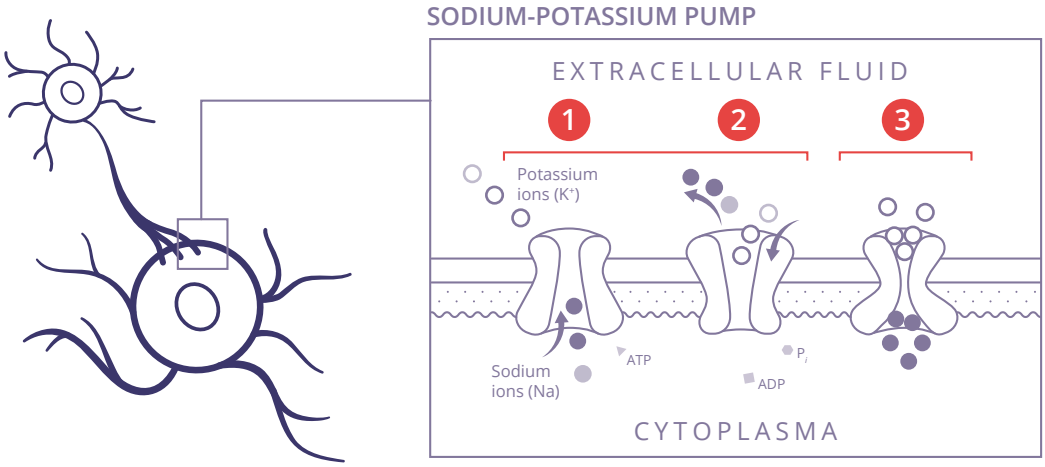
*Minor use authorised under national procedure, see section on "other regulatory information".

Safety period: Grapevine: 3 days Other crops: 1 day For ornamental apple trees, chrysanthemums and hibiscus: not applicable.

Maximum 3 applications per season with a 7-day interval between applications.

Mode of action

The IRAC 3A mode of action is by contact. Touching the insects blocks their sodium and potassium channels. In this way, the insect's nerve impulse transmission is disturbed and it then shows symptoms of hyperactivity and abnormal movements until it dies.



CC by InfluentialPoints.com

1 2

Normal operation. Active transport.

CC by InfluentialPoints.com

3

Blocking of sodium-potassium channels in the synapse through the action of pirecris. Strong neurotoxic effect.

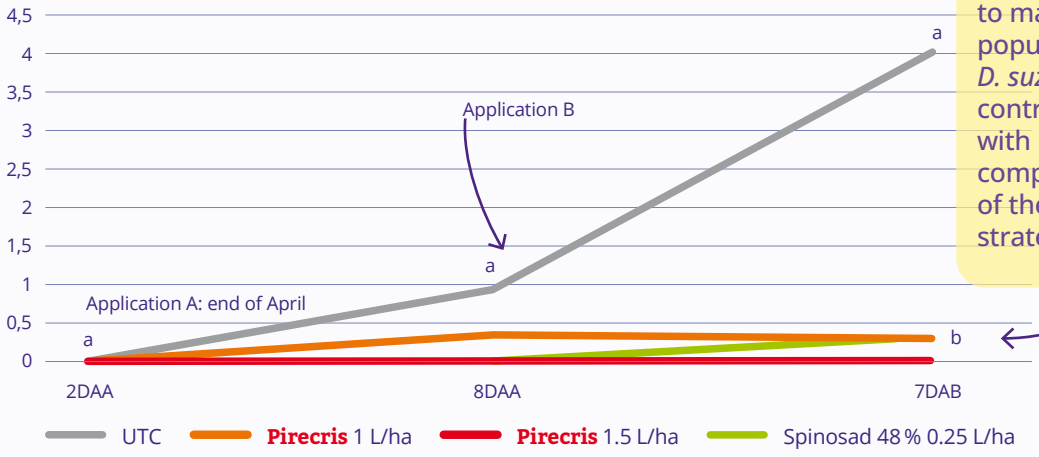
Nervous shock and death of the insect

Efficacy trials

seipasa trials

Pirecris. Results on blueberry Fruit Fly (*Drosophila suzukii*)

Number of larvae *Drosophila suzukii*



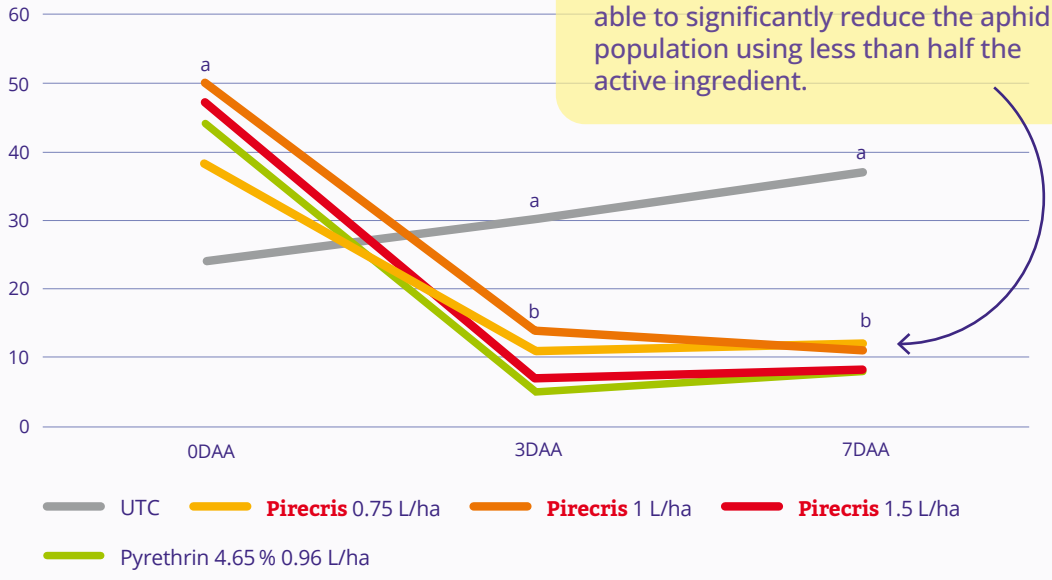
With Pirecris, we have been able to maintain the population of *D. suzukii* under control by 70 %, with results comparable to those of the conventional strategy.

8DAA: 8 days after application A. **7DAB**: 7 days after application B. **Application interval**: 7 days.
A: first application. **B**: second application.

seipasa trials

Pirecris. Results on peach Aphids *(Aphis gossypii)*

No. Aphids



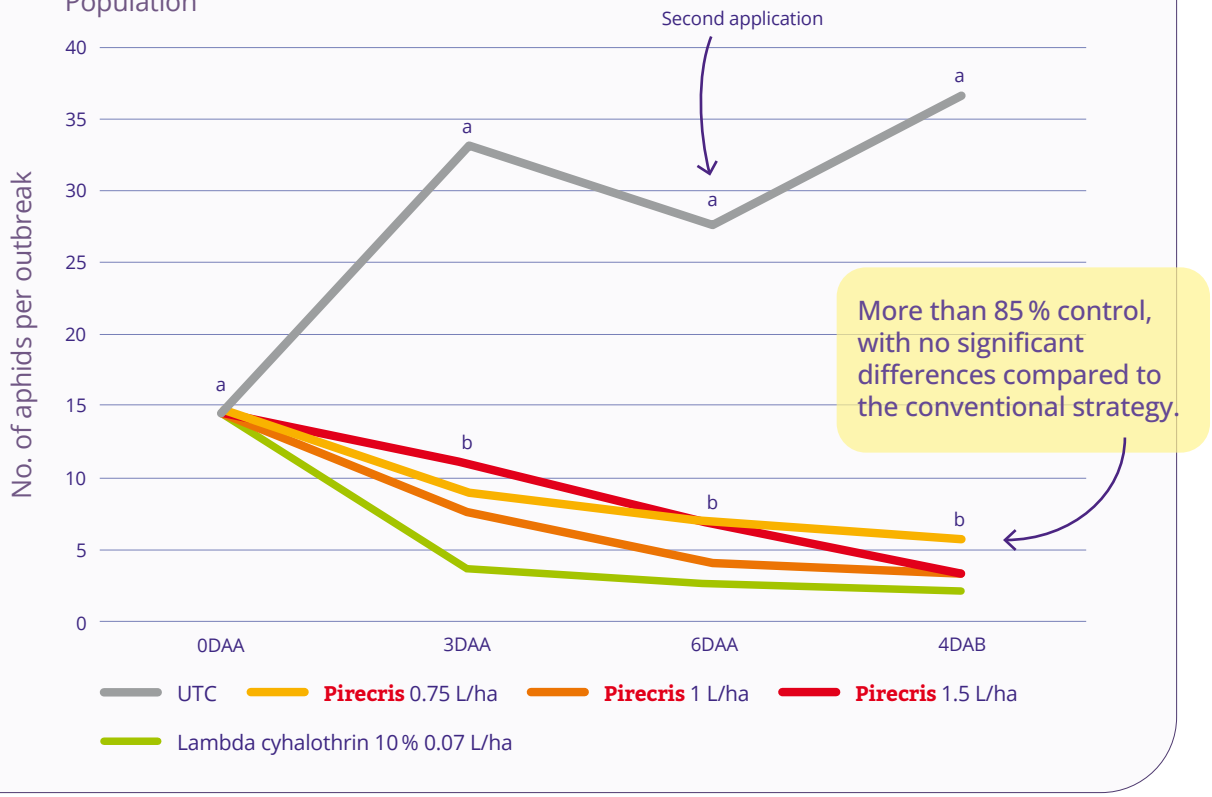
With a shock effect after 3 days and control maintained at 7DAA, we were able to significantly reduce the aphid population using less than half the active ingredient.

0DAA: 0 days after first application.

seipasa trials

Pirecris. Results on apple Aphids *(Aphis pomi)*

Population



More than 85 % control, with no significant differences compared to the conventional strategy.

seipasa natural technology

Nakar

Properties

Nakar is a contact bioinsecticide for whitefly control. Its potassium soap-based formulation in soluble liquid form contains potassium salts 416 g/L (40.8 % w/w) of vegetable fatty acids. It is particularly recommended for use as an insecticidal soap against soft-shelled insects (*Bemisia tabaci, Trialeurodes vaporiarorum*) in solanaceous crops (greenhouse tomato).

Nakar can be applied at any stage of the crop cycle. It does not affect the waxy coating of the leaves even after repeated applications and does not burn the leaves or cause foaming.

SOLUBLE LIQUID (SL)
INSECTICIDE

Composition

Potassium salts of vegetable fatty acids 41.6 % w/v (40.8 % w/w)

Registration No.

Registered in the R.O.P.M.F. (Register of Phytosanitary Products and Materials) under number ES-00123

Available in:

Benefits

- There are no safety periods.
- It can be applied the day before harvest.
- Compatible with BCOs.
- Valid tool for IPM systems and organic production.
- Valid for resistance management programmes.

Seals and certifications:

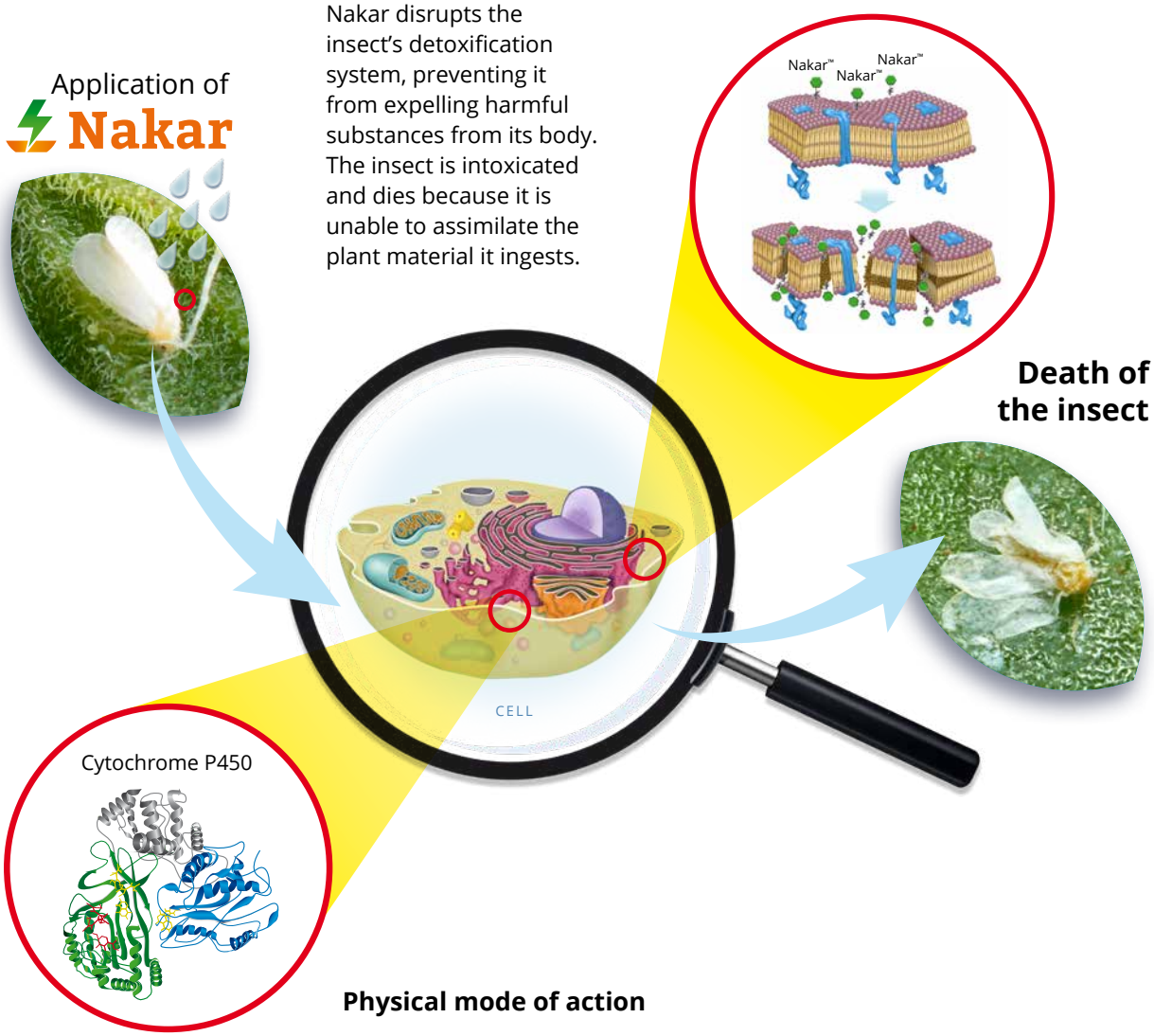
Uses

CROP	PEST	FOLIAR DOSE	NO. OF APPLICATIONS	INTERVAL
Tomato	Whitefly (*Bemisia tabaci, Trialeurodes vaporariorum*)	7 L/ha Solution volume 1000 L/ha	3	5-7 days

Mode of action

Mode of action biochemical

Nakar disrupts the insect's detoxification system, preventing it from expelling harmful substances from its body. The insect is intoxicated and dies because it is unable to assimilate the plant material it ingests.



Physical mode of action

The length of the carbon chains selected from vegetable oleins guarantees Nakar's maximum effectiveness. The product penetrates the insect cell membrane and denatures the lipoprotein matrix. The loss of cell contents leads to dehydration and death of the insect.

BT 32
SEIPASA

Properties

Seipasa's biological insecticide BT 32 guarantees excellent dissolution, adherence and efficacy. The subspecies strain present in its formulation (*Kurstaki* strain PB-54) has a high potency and allows for selective activity against a broad spectrum of Lepidoptera.

BIOLOGICAL INSECTICIDE
WETTABLE POWDER (WP)

Composition

Bacillus thuringiensis var. *kurstaki* (strain PB-54) 32 % ($32x10^6$ I.U./g) (w/w)

Registration No.

Registered in the R.O.P.M.F. (Register of Phytosanitary Products and Materials) under number ES-22423

Available in:

1 Kg

Benefits

- ULV protectors.
- Optimal solubility and suspensibility.
- Supports combinations with other PPPs.
- No impact on auxiliaries.
- Accepted in IPM programmes.
- Broad spectrum.
- Certified for use in organic farming.
- IRAC Group: Microbial disruptor of insect digestive membranes.
- No MRL problems.

Seals and certifications:

Uses

CROPS	AGENT	DOSE (kg/ha)	NO. OF APPLICATIONS	SOLUTION VOLUME (L/ha)
Citrus (outdoor use)	Cacoecia (*Cacoecia rosana*), carnation caterpillar (*Cacoecimorpha pronubana*). Prays, citrus moth (*Prays citri*)	0.5-1	Max. 2	800-1500
Artichoke, cucurbits with edible peel, spinach and similar, lettuce and similar (use in lettuce and other salads including Brassicacea) (outdoor use)	Heliothis (*Helicoverpa spp.*) Plusia (*Autographa gamma*). Plusia (*Chrysodeixis chalcites*). Green Cutworm (*Spodoptera exigua*). Black Cutworm (*Spodoptera littoralis*)	0.5-1	Max. 3	500-1000
Strawberry patch (outdoor and greenhouse use)	Heliothis (*Helicoverpa* spp.). Plusia (*Autographa gamma*). Plusia (*Chrysodeixis chalcites*). Green Cutworm (*Spodoptera exigua*). Black Cutworm (*Spodoptera littoralis*)	0.5-1	Max. 2	500-1000
Nut trees (outdoor use)	Shoot and fruit leaf miner (*Anarsia lineatella*). Leafroller, tobacco beetle (*Archips* spp.) Caterpillar (*Aglaope infausta*)	0.5-1	Max. 2	800-1500
Almond and stone fruit trees (outdoor use)	Spider mite, spinner caterpillar (*Yponomeuta* spp.). Oriental Moth (*Grapholita molesta*). Shoot and fruit leaf miner (*Anarsia lineatella*). Lackey caterpillar (*Malacosoma neustria*). Leafroller, tobacco beetle (*Archips* spp.). Tussock moth (*Orgyia antiqua*)	0.5-1	Max. 2	800-1500
Pome fruit trees (outdoor use)	Apples and pears moths (*Cydia pomonella*). Spider mite, spinner caterpillar (*Yponomeuta* spp.). Lackey caterpillar (*Malacosoma neustria*). Leafroller, tobacco beetle (*Archips* spp.). Tussock moth (*Orgyia antiqua*)	0.5-1	Max. 2	800-1500
Brassica vegetables (use in inflorescence and outdoors)	Heliothis (*Helicoverpa* spp.). Plusia (*Autographa gamma*). Plusia (*Chrysodeixis chalcites*). Green cutworm (*Spodoptera exigua*). Black cutworm (*Spodoptera littoralis*). Diamondback moth (*Plutella xylostella*). Cabbage butterflies (*Pieris* spp.)	0.5-1	Max. 3	500-1000
Olive tree (outdoor use)	Prays, olive moth (*Prays oleae*)	0.5-1	Max. 2	800-1500
Pepper (outdoor and greenhouse use)	Heliothis (*Helicoverpa* spp.). Plusia (*Autographa gamma*). Plusia (*Chrysodeixis chalcites*). Green cutworm (*Spodoptera exigua*). Black cutworm (*Spodoptera littoralis*)	0.5-1	Max. 3	500-1000
Tomate (outdoor and greenhouse use)	Heliothis (*Helicoverpa* spp.). Plusia (*Autographa gamma*). Plusia (*Chrysodeixis chalcites*). Green cutworm (*Spodoptera exigua*). Black cutworm (*Spodoptera littoralis*). Tomato moth (*Tuta absoluta*)	0.5-1	Max. 3	500-1000
Vine (outdoor use)	Grapevine moth (*Eupoecilia ambiguella*). Grape moth (*Lobesia botrana*)	0.5-1	Max. 3	500-1000
Cottonwood, blueberry, bilberry, bilberry, raspberry, blackberry (outdoor use)	Heliothis (*Helicoverpa* spp.). Plusia (*Autographa gamma*). Plusia (*Chrysodeixis chalcites*). Green cutworm (*Spodoptera exigua*). Black cutworm (*Spodoptera littoralis*)	0.5-1	Max. 2	500-1000
Kiwi (outdoor use)	Leafroller moth (*Argyrotaenia ljungiana*)	0.5-1	Max. 2	500-1000
Banana tree (outdoor use)	Lepidoptera	0.5-1	Max. 2	800-1500
MINOR USES*				
Celery, parsley, cabbage, borage and cardoon (outdoor use), **cucumber** (greenhouse use), **aubergine** (outdoor and greenhouse use)	Heliothis (*Helicoverpa spp.*). Plusia (*Autographa gamma*). Plusia (*Chrysodeixis chalcites*). Green cutworm (*Spodoptera exigua*). Black cutworm (*Spodoptera littoralis*)	0.5-1	Max. 3	500-1000

*For the minor uses of this authorisation; thistle, borage, cucumber, cabbage, celery, parsley and aubergine, as referred to in the third paragraph of Article 51(5) of Regulation (EC) 1107/2009, the responsibility for failures of efficacy or phytotoxicity of the product, in these crops, lies with the person using the plant protection product.

Intervals between applications: 7-14 days all crops.

Form and time of application: Citrus: Use against *Cacoecia rosana*. **Nut trees:** Use agains *Archips rosanus* and *Archips podanus*. **Minor uses:** In celery, production may be for consumption of stalks and/or leaves. **In all crops:** It can be applied at all stages of crop development.

Dasword

Properties

Dasword stands out as a revolutionary formulation offering exceptional efficacy against pests. Acting as a potent combined insecticide and acaricide, it presents a unique duality of action that combines biological science with practical efficiency to protect your crops in a natural and sustainable way.

This innovative green formulation from Dasword contains a high concentration of four molecules from the organosulfur family that directly interfere with the pest's sensory faculties, giving it a unique pest-fighting complexity.

MICROEMULSION (ME)

Composition

Garlic extract 6 %

Available in:

Benefits

- Highly repellent.
- Ideal for IPM, organic farming, sustainable and zero residues programmes.
- Compatible with most BCO (Biological Control Organisms).
- Suitable for resistance management due to different insecticide class and biological mode of action.
- Does not affect the sensory quality of the crop.
- Low risk tool. No residues.

Uses

	FIRST INDIVIDUALS	AVERAGE DOSE	HIGH PRESSURE	
Dose per area	1.5 L/ha	2 L/ha	3 L/ha	3,5 L/ha
Dose between 100-1000 L/ha	150-200 ml/hl	200-300 ml/hl	300-400 ml/hl	
Interval	5-7 days	5-10 days	5-7 days	

Mode of action

1 Neurotoxic action:

It causes neuromotor damage in pests by inhibiting the enzyme acetylcholinesterase, affecting their nervous system and ability to move.

2 Disruption of development and reproduction:

It interferes with mating, egg-laying and larval development, causing stunted growth and premature death through physiological disturbances.

3 Structural damage to the cuticle:

It generates physical alterations in the epidermal tissue of insects, affecting the integrity of their exoskeleton and causing dehydration or death.

4 Repellent and anti-feeding effect:

It acts as a natural repellent and blocks feeding by interfering with the insect's sensory systems, reducing crop damage.

BIOFUNGICIDES

Seipasa's bioguncides are born from the heart of the *Natural Technology* model to halt and control the spread of fungal and bacterial diseases. Developed from proprietary formulations, and backed by patented technologies, our biofungicides are **ideal tools for inclusion in integrated management strategies aimed at reducing the chemical load of treatments** and achieving chemical residue-free harvests.

Fungisei

Properties

Fungisei is a broad-spectrum, preventative, liquid biological fungicide developed from a proprietary strain of *Bacillus subtilis*. Its advanced technological formulation, exclusive to Seipasa, offers high efficacy, safety and flexibility in its use, without residues in the harvest.

CONCENTRATED SUSPENSION (CS)

Composition

Bacillus subtilis (STRAIN IAB/BS03) $1x10^8$ CFU/mL

Registration No.

Registered in the R.O.P.M.F. (Register of Phytosanitary Products and Materials) under number ES-01404

Available in:

1 L

5 L

Benefits

- Stability and ease of use: Liquid formulation, stable for more than two years without phase separation.
- Environmental tolerance: Effective in extreme conditions.
- Rapid and preventive effectiveness: Effective in early stages and as a preventive treatment.
- Low risk: Classified as *Low Risk* by the European Commission; suitable for organic farming.
- Compatibility: Compatible with copper-based formulations.
- Safety: It does not stain the fruit, prevents resistance and uses Furity technology.
- Maintains its effectiveness by reducing the chemical load on the crop.
- Easy integration into Integrated Pest Management (IPM) programmes.

Seals and certifications:

THE POWER OF FORMULATION

- **European Patent EP3167717 A1**: Exclusive and protected formulation.
- **High stability**: Stable over a wide range of storage conditions (2-3 years).
- **Optimum dissolution**: Compatible with different types of water and excellent wettability.
- **Rapid establishment**: The strain establishes quickly in the crop, irrespective of the mode of application.
- **Perfect mix**: It mixes well in tanks and integrates perfectly into agronomic management.

Uses

GENERIC GROUP	CROP	USE	DOSE
Cucurbits (OG)	Cucumber, gherkin	Downy mildew of cucurbits	1-3 L/ha
	Watermelon, melon, courgette	Oidium	
	Pumpkin	Cucurbit downy mildew and powdery mildew	
Solanaceae	Tomato, pepper and aubergine (OG)	*Botrytis cinerea* (grey rot)	
	Tobacco (O)	*Botrytis cinerea* (grey rot) and oidium	
Brassicaceae (OG)	Sprouts, including brassica species	*Botrytis cinerea* (grey rot)	
	Brassica vegetables	*Botrytis* spp. and *Botrytis cinerea* (grey rot)	
Legumes	Grain legumes, green legumes (OG)	Botrytis	
	Green pea (O)	Botrytis and downy mildew	
Horticultural bulbs	Garlic, spring onions (OG)	Botrytis and downy mildew	
	Shallot (O)	Mildew	
Leafy vegetables	Lettuce and similar	Botrytis and downy mildew on lettuce (O)	
		Botrytis on watercress, lamb's lettuce, endive, rocket and Chinese mustard (OG)	
	Spinach and similar (OG)	Botrytis and downy mildew	
Artichoke (O)	-	Mildew	
Nut trees (O)	Almond, walnut, pistachio, hazel and chestnut trees	Botrytis	
	Almond tree	Botrytis and apple scab (*Venturia inaequalis*)	
	Hazel, chestnut	Oidium	
Tropical and sub-tropical plantations (OG)	-	Botrytis and powdery mildew	
Stone fruit trees (O) (except peach)	-	Botrytis, powdery mildew and powdery mildew of apricot (*Podosphaera tridactyla*)	
Pome fruit trees (O)	-	Mottling and apple scab (*Venturia inaequalis*)	
Vine (O)	-	*Botrytis cinerea* (grey rot)	
Spices and infusions (OG)	-	Botrytis and powdery mildew	
Fruit bushes (OG)	-	Botrytis and powdery mildew	
Aromatic herbs and edible flowers	-	Botrytis (AI) and downy mildew (A)	
Herbaceous ornamentals (OG)	-	Botrytis and powdery mildew	
Industrial (O)	Chicory roots (industrial), stevia, textiles, poppy, sugarcane, lavender	Botrytis	
Roots and tubers (O) (Except sugar beet and potato)	-	Botrytis	
Young stems (OG)	-	*Botrytis cinerea* (grey rot)	
Hops (OG)	-	Botrytis	
Oilseeds (OG)	-	Botrytis	

Application: Foliar. **Interval:** 5-7 days. **Safety period:** N.P. **Maximum number of applications**: 5 for all crops except almond, apple, pear, quince, loquat and Japanese loquat which are 7.

(O) Outdoors. **(OG)** Outdoors and Greenhouse.

Mode of action (FRAC: BM02)

Fungisei has a triple mode of action:

1 Direct antagonism due to nutrient and space competition: rapid colonisation of the strain hinders the development of the pathogen.

2 Production of lipopeptides (natural antibiotics), the most important families of which are:

- Iturins: strong antifungal action against a broad spectrum of fungi and yeasts. They work by weakening their structure until they are eliminated.
- Surfactins are powerful natural compounds that damage cell membranes, breaking down their structure.
- Fengicins are very effective against filamentous fungi, acting by damaging their cell membrane.

3 Induction of systemic resistance (ISR) of the host plant against subsequent pathogen challenge.

CONTROL

The construction of a viable biofilm allows:

- » Culture/bacteria dialogue › Colonisation
- » Microbiological establishment
- » Defensive induction
- » Growth promotion

*«**Fungisei**® inhibits the growth of the fungus, creating a biological barrier that prevents it from developing, thus protecting the plant from the disease»*

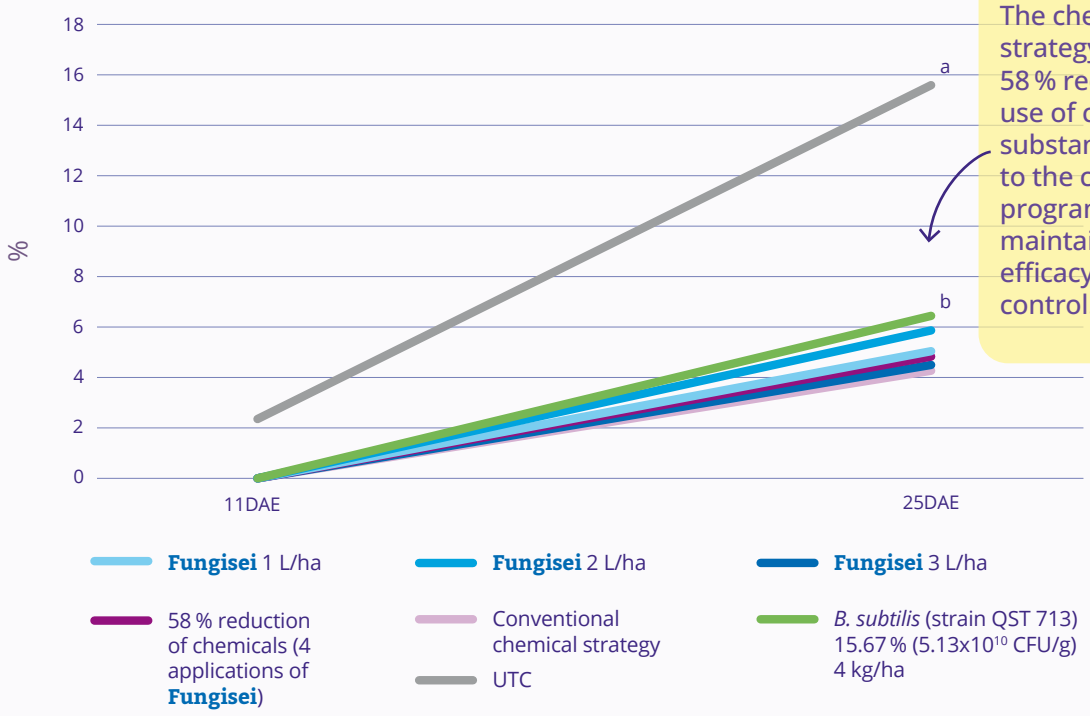
(Seipasa Microbiology Department))

Efficacy trials

seipasa trials

Fungisei. Results on grapes
Botrytis *(Botrytis cinerea)*

Evolution of pest incidence on bunches of grapes

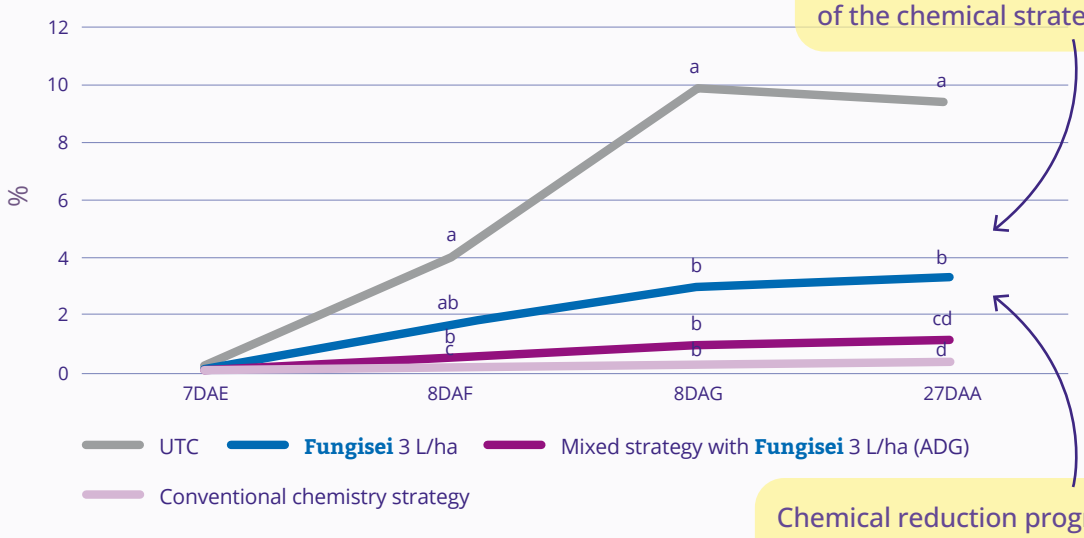


The chemical reduction strategy has led to a 58 % reduction in the use of chemical active substances compared to the conventional programme, while maintaining excellent efficacy in disease control.

seipasa trials

Fungisei. Results on pome fruit
Mottling *(Venturia inaequalis)*

Leaf severity



A: First application. **D**: Fourth application. **G**: Seventh application.

The IMP strategy achieved more than 90 % control, statistically equivalent to that of the chemical strategy.

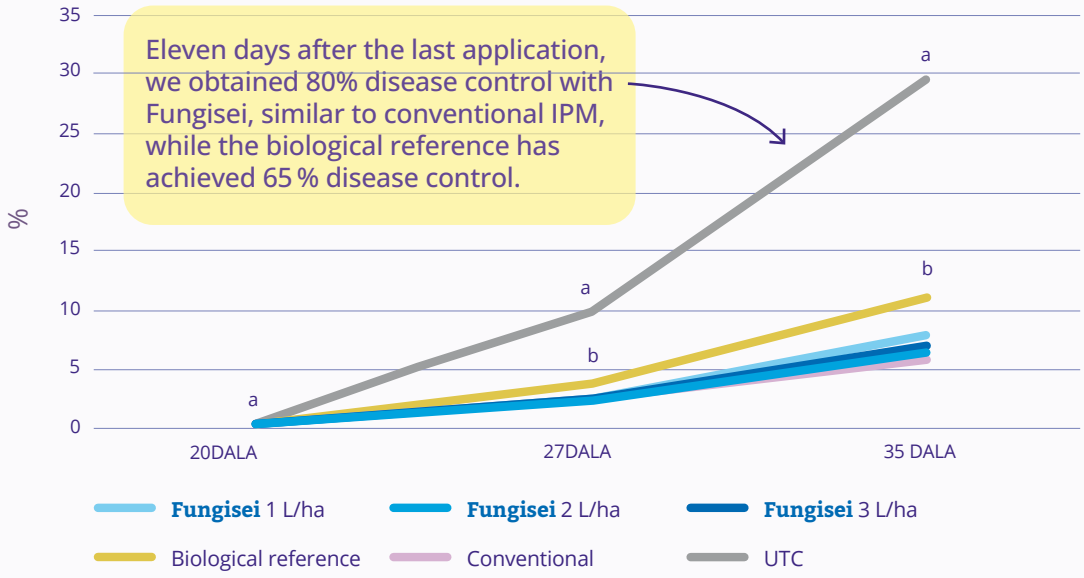
Chemical reduction programme replacing 3 applications with Fungisei, achieving a 40 % reduction in chemical use while maintaining efficacy.

seipasa trials

Fungisei. Results on lettuce
Downy mildew *(Bremia lactucae)*

Leaf severity

Eleven days after the last application, we obtained 80% disease control with Fungisei, similar to conventional IPM, while the biological reference has achieved 65 % disease control.



DALA: Days after the last application.

seipasa natural technology

Septum

Properties

Septum is a liquid biological formulation that has a broad fungicidal effect, with a double preventive and curative action, designed from the base substance *Equisetum arvense* and characterised 100 % by Seipasa. Its knowledge and formulation ensure batch homogeneity, safety, efficacy and stability over time.

BASIC SUBSTANCE

Composition

Equisetum Arvense L.

Concentration of active matter 2 g/L. pH 6.5

Registration No.

Classified as
Basic Substance in the EU
SANCO/12386/2013

Available in:

1 L

5 L

Benefits

- Curative and preventive action in a single product.
- Immediate action.
- Excellent results in Integrated Management strategies.
- There is no fermentation or clogging of nozzles.
- No residues, no MRLs.
- Does not retard crop development thanks to its bioactive compounds.
- Broad spectrum.
- Prevents resistance.
- Suitable for organic farming.

Seals and certifications:

Uses

CROP	PATHOGENS	DOSE	RECOMMENDATIONS
Fruit trees (apple and peach)	Rust or scab (*Venturia inaequalis*), powdery mildew (*Podosphaera leucotricha*), peach leaf curl (*Taphrina deformans*)	200-400 ml/hl (1-3 L/ha)	Start foliar applications at the beginning of sprouting with favourable environmental conditions for disease development. 2-6 applications every 7 days during cultivation.
Vines	Downy mildew (*Plasmopara viticola*), powdery mildew (*Erysiphe necator*)	200-500 ml/hl (1-4 L/ha)	
Cucurbits (cucumber)	Powdery mildew (*Podosphaera xanthii*), root fungus (*Pythium* sp.)	200-400 ml/hl (1-3 L/ha)	Foliar application for powdery mildew: 2-3 applications every 3-4 days. Root application for root and seedling diseases: 2-3 applications every 3-4 days.
Tomato	Early blight (*Alternaria solani*), septoria leaf spot (*Septoria lycopersici*)		Apply from the first visible inflorescences when environmental conditions are favourable for disease development. 2 applications every 14 days.
Strawberry and raspberry	*Botrytis cinerea*, powdery mildew (*Podosphaera aphanis*), *Phytophthora fragariae* and other fungi such as *Colletotrichum acutatum*	200-500 ml/hl (2-4 L/ha)	Applications can be made throughout the crop cycle. Apply 4-8 times every 5-14 days.
Potato	*Phytophthora infestans*, *Alternaria solani*, powdery mildew (*Erysiphe cichoracearum*)		Apply when environmental conditions favourable for disease development appear. 2-4 applications with an application interval of 5-15 days are recommended.
Ornamentals	*Marsonia* spp., *Phragmidium mucronatum*, powdery mildew and downy mildew		1 foliar application when the first symptoms of the disease appear.

Mode of action

100 % of the characterised extract. Organic fraction and inorganic fraction.

1 MoA: Preventive effect

(Silicic Acids + Proteins + Carbohydrates)

Physical effect: protective layer under the cuticle. ISR activation against pathogens, favouring the priming state.

2 MoA: Curative effect

(Saponins - Silicic Acids + Proteins + Phenolic Compounds)

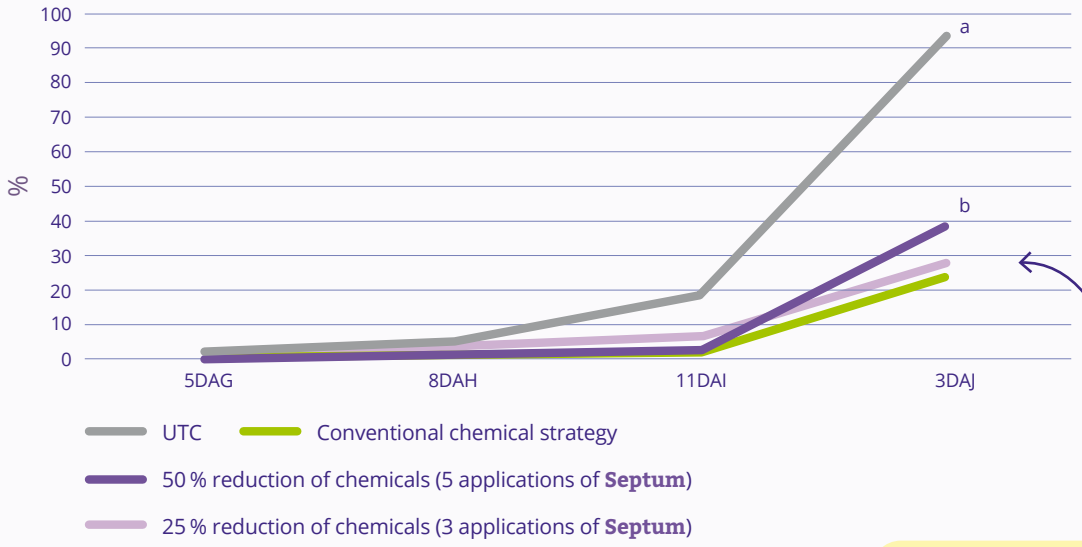
Acts through contact by disrupting the plasma membrane. Interrupts the reproductive phase of pathogens. Reduces the mitochondrial activity of pathogens. Antioxidant activity (REDOX).

Efficacy trials

seipasa trials

Septum. Results on the vineyard
Downy mildew *(Plasmopara viticola)*

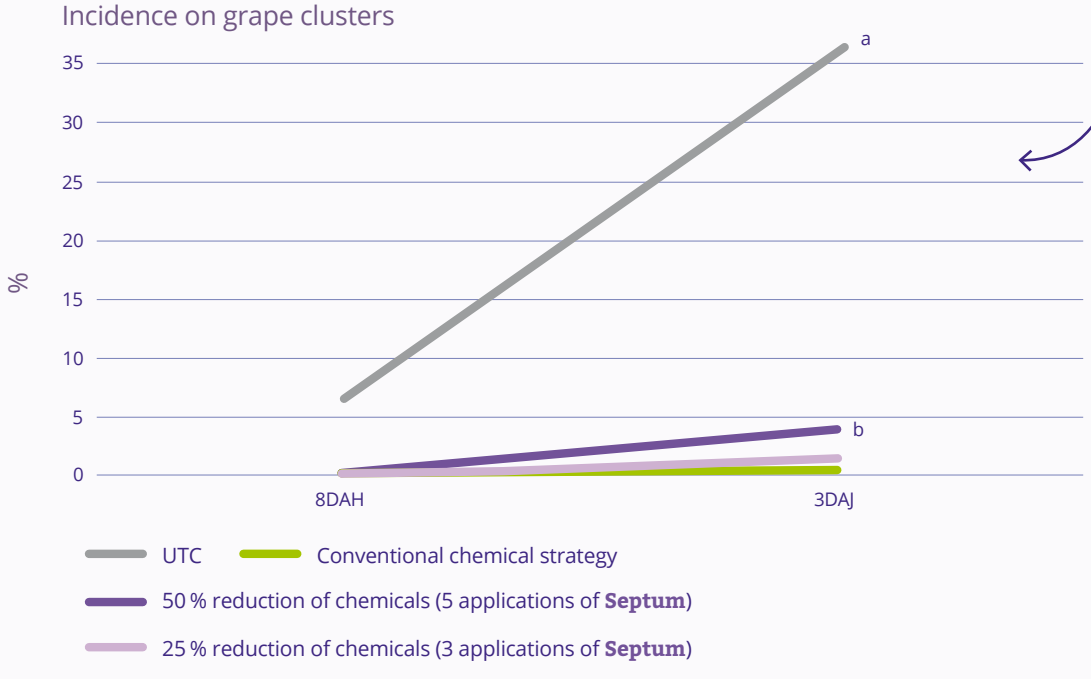
Leaf incidence



Control was achieved without significant differences by reducing 25-50 % of chemicals compared to the conventional strategy.

Septum. Results on the vineyard
Downy mildew *(Plasmopara viticola)*

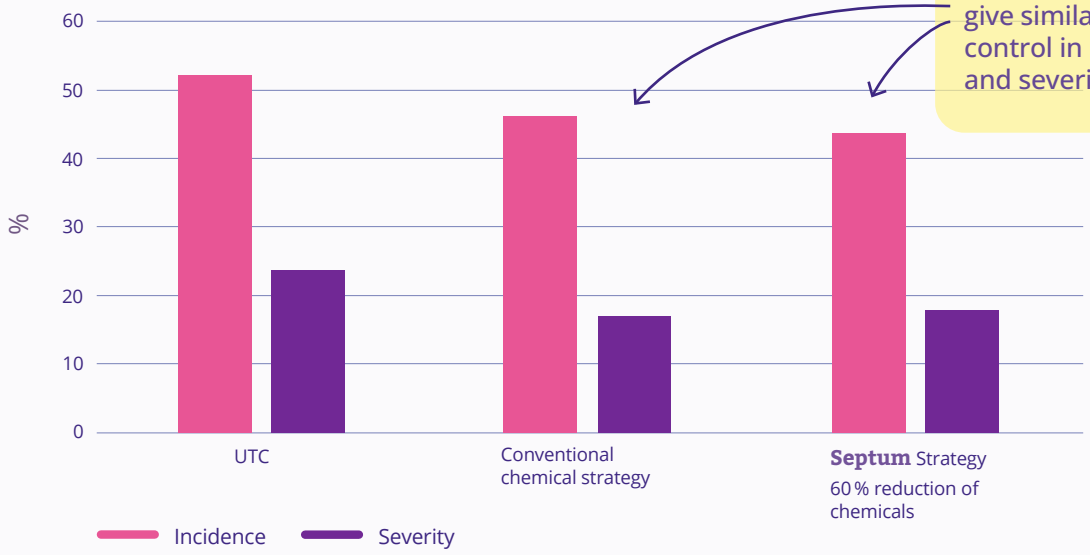
Incidence on grape clusters



Septum. Results on potato
Alternaria solani

seipasa trials

Assessment of the incidence and severity of alternaria at 11DC



Both conventional and chemical reduction strategies give similar disease control in incidence and severity.

seipasa natural technology

Seitylis

Properties

Seitylis is a naturally occurring, biological fungicide formulated with a strain of *Bacillus subtilis* that controls a broad spectrum of diseases in a preventive and healing way.

WETTABLE POWDER (WP) FUNGICIDE

Composition

Bacillus subtilis strain IAB/BS03
(1 % w/w - min. $1x10^8$ CFU/g)

Registration No.

Registered in the R.O.P.M.F. (Register of Phytosanitary Products and Materials) under number ES-01308

Available in:

1 Kg 5 Kg

Benefits

- Broad spectrum of antifungal action.
- No residue.
- Suitable for organic farming.
- Prevents the development of resistance.
- Effective as preventive treatment and first symptoms of the disease.
- Optimum results in Integrated Pest Management strategies.
- Formation of a biological protective barrier that is installed on the leaves.
- Very short safety period between 0 and 1 day.
- Environmentally friendly.

Seals and certifications:

Approved by ECOCERT INPUTS

Uses

CROP	AGENT	APPLICATION DOSE	NO. OF APPLICA-TIONS	INTERVAL BETWEEN APPLICA-TIONS	SOLUTION VOLUME	METHOD AND TIME OF APPLICATION
Cucurbits with edible peel (greenhouses)	Powdery mildew (*Golovinomyces cichoracearum* and *Podosphaera fuliginea*)	0.5-1.5 kg/ha	5	5-7 days	500-1500 L/ha	First application before the first attack (preventive application). Applications should be made at night to try to ensure a longer period of high humidity. After planting (BBCH 17-89).
Pome fruit trees	*Mottled (Venturia inaequalis)*	0.5-1.5 kg/ha	8	7-14 days	500-1500 L/ha	Start spraying in pre-flowering at 14 day intervals and then 6 sprays post-flowering at 7-14 day intervals. Apply on BBCH 10-72.
Lettuce and similar	Mildew (*Bremia lactucae*)	0.4-1.2 kg/ha	5	7-14 days	400-1200 L/ha	Effective against *Bremia lactucae*. After planting (BBCH 14-46).
MINOR USES*						
Apricot, cherry and plum trees	Apricot powdery mildew (*Podosphaera tridactyla*)	1.5 kg/ha	1-8	7-14 days	500-1500 L/ha	Apply during BBCH 10-72.
Fruit bushes	Blackcurrant powdery mildew (*Microsphaera grossulariae* and *Podosphaera mors-uvae*)					
Hazelnut	Hazelnut powdery mildew (*Phyllactinia guttata*)					
Chestnut	Powdery mildew (*Microsphaera penicillata*)					
Mango	Mango powdery mildew (*Oidium mangiferae*)					
Aromatic herbs and edible flowers (outdoors)	Powdery mildew	1.2 kg/ha	3-5	7-14 days	400-1200 L/ha	Apply during BBCH 14-46.

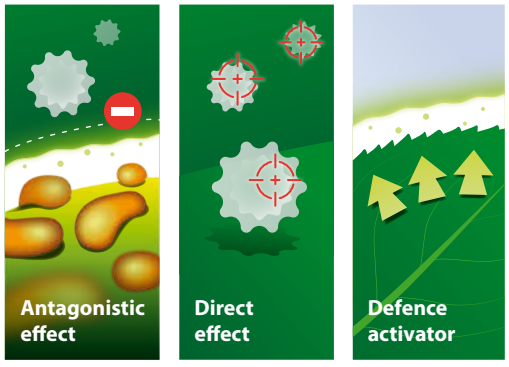
*Minor uses authorised by national procedure. See section on "other regulatory information" for minor uses.

Mode of action

Antagonistic effect
It competes for space and nutrients with pathogenic organisms by displacing them from their ecological niche and preventing them from developing.

Direct effect (antibiosis)
Produces specific lipopeptides that act as natural antibiotics with the ability to perforate the cell walls of the fungus causing its death.

Defence activator
Setting up the plant's integral defence system, improving and preventing attacks by pathogenic agents.



Basei 2C

Properties

Basei 2C is a biofungicide with preventive and healing action. Its formulation incorporates different compounds and natural surfactants that provide excellent dissolution, ease of application and strong adherence to the plant, achieving maximum effectiveness.

BASIC SUBSTANCE

Composition

Sodium bicarbonate

Active substance concentration 99 % w/w

Registration No.

SANTE/10667/2015

Available in:

5 Kg

Benefits

- Healing effect against different types of powdery mildew.
- Alternative and complement to sulphur.
- It does not generate hydrogen sulphide compounds in the grape must and does not interfere with winemaking.
- Effective at high temperatures, no risk of phytotoxicity.
- No safety period. It leaves no residue.
- Included in the Organic Farming Regulation 889/2008. Does not affect the environment or auxiliary fauna.

Seals and certifications:

Uses

CROP	PATHOGENS	DOSE	NO. OF APPLICATIONS	INTERVAL
Horticulture	Powdery mildew (*Sphaerotheca* spp., *Oidium* spp.)	333-1000 g/hl Adjust the dose according to the volume of water. Maximum concentration 1%.	1-8	10 days
Red berries				
Ornamentals				
Grapes	Powdery mildew (*Uncinula necator*)	420-2000 g/hl Concentrations higher than 1-2 % may cause phytotoxicity in some cases.		
Apple tree	Apple scab (*Venturia inaequalis*)	500-1000 g/hl Concentrations higher than 1-2 % may lead to phytotoxicity in some cases.		
Fruit trees	Storage diseases such as green mould (*Penicillium digitatum*) and blue mould (*Penicillium italicum*)	1.000-4000 g/hl	1-2 (on harvested fruit)	
Potted plants	Bryophytes, *Lunularia cruciata*	122 kg/ha The product is used for post-emergency application. This use has not been tested for phytotoxicity; test on a small number of plants before widespread use.	-	

Safety period: NP.

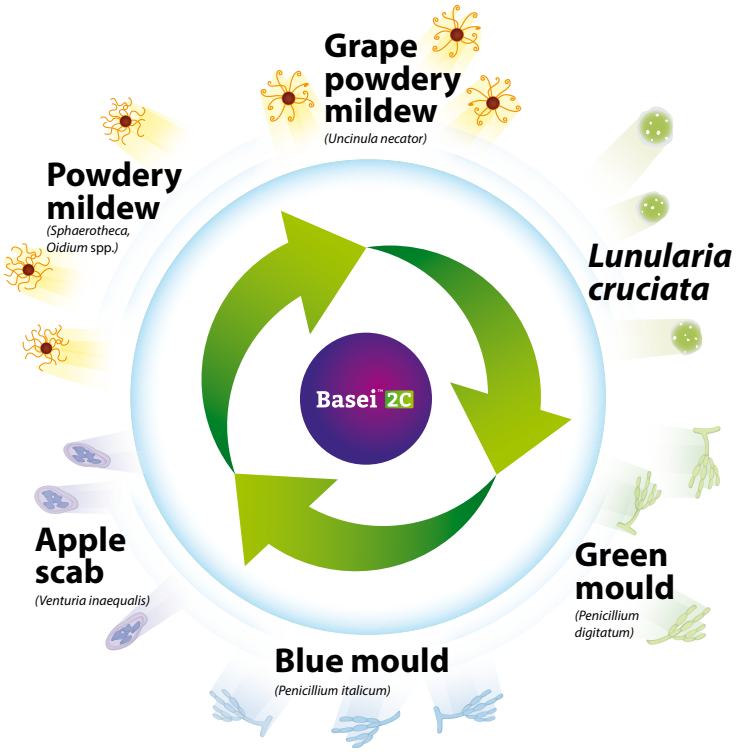
Mode of action

Curative action

Carbonate and bicarbonate ions dissociate in the leaf zone and exert a direct osmotic pressure which damages the cell walls of the conidia and hyphae, causing them to collapse and die.

Preventive action

Mycelial development is inhibited by pH variation in the leaf zone. Thanks to the different surfactants and coadjuvants contained in Basei 2C, a mechanical barrier is created in the leaf area that prevents the penetration of the hyphae of ascomycetous fungi.



Basei LEC

Properties

Basei Lec is a product based on lecithin activity for use as a fungicide in vineyards, fruit, horticultural and ornamental crops. Basei Lec offers the powerful effect of phospholipids for the control of powdery mildew and certain types of downy mildew. The product has an excellent drying capacity which inactivates the germ tube and prevents propagation on crops.

BASIC SUBSTANCE

Composition

Lecithin

Active substance concentration 99-103 % w/w

Registration No.

SANCO/12798/2014

Available in:

Benefits

- Preventive action: provides strength and protection, activates defences and increases vigour.
- Curative action: degradation of pathogen membrane, healing.
- Broad spectrum: on different types of powdery mildew and downy mildew in different crops.
- Valid in IPM strategies and resistance management programmes.
- Coadjuvant effect: reduces surface tension and increases the contact area between droplet and leaf.
- Post-harvest: improves quality, gloss, firmness and reduces dehydration.

Seals and certifications:

Approved by ECOCERT INPUTS

Uses

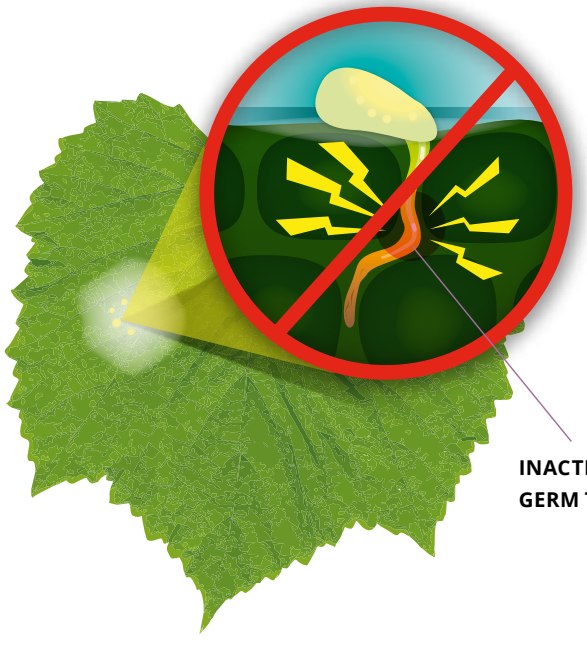
CROP	PATHOGENS	DOSE	NO. OF APPLICATIONS	INTERVAL
Apple and peach trees	Powdery mildew (*Podosphaera leucotricha*) Leaf curl (*Taphrina deformans*)	75 ml/hl	3-12	5 days
Blackberry	Powdery mildew (*Microsphaera grossulariae*)	200 ml/hl	2-4	
Vegetables such as cucumber	Powdery mildew (*Podosphaera xantii*)	150 ml/hl	2-6	
Lettuce	Powdery mildew (*Erysiphe cichoracearum*)		2	7 days
Lamb's lettuce	Powdery mildew (*Erysiphe polyphaga*)		1	-
Tomato	Downy mildew (*Phytophthora infestans*)		2-6	7 days
Endive	Fungi (*Alternaria cichorii*)			
Ornamentals	Powdery mildew and other fungal diseases	75 ml/hl	3-12	5 days
Grape	Powdery mildew (*Erisyphe necator*) Downy mildew (*Plasmopara vitícola*)			
Strawberry and raspberry	Powdery mildew and other fungal diseases (*Podosphaera aphanis* and *Phytophthtora fragariae*)	200 ml/hl		
Potato	Downy mildew (*Phytophthora infestans*)			
Carrot	Powdery mildew (*Leveillula táurica*)		1-4	2 weeks

Safety period: 5 days for apple and peach trees, blackberry, horticultural vegetables such as cucumber, lettuce, lamb's lettuce, tomato, endive and ornamentals. For strawberry, raspberry, potato and carrot there is no safety period.

Mode of action

It works by preventing the elongation of the fungal hyphae and reducing the ability of the fungus to penetrate the plant. This fact provides a differential advantage to combat and prevent the development of infections.

Basei Lec has been developed to provide a natural, residue-free solution to complement fungicide treatment programmes, reducing the use of chemically synthesised products through Integrated Pest Management strategies.



Seican

Properties

3-in-1 biosolution, liquid acaricide, insecticide and fungicide, with curative and contact action. Designed for fast action in the control of various pests and pathogens. Its unique formulation provides precision, speed, reliability and flexibility of use with no residue on the crop.

EMULSIFIABLE CONCENTRATE (EC)

Composition

Cinnamic aldehyde 238.78 g/L (22.96 % w/w)

Additives: q.s.p. 1 L

Available in:

Benefits

- Highly effective as a curative and eradicant treatment.
- Knock-down effect against mites.
- Compatible with biological control.
- Seican is a tool to be included in IPM (Integrated Pest Management) strategies, organic farming, sustainable programmes and zero residue.
- No safety period.
- Useful for resistance management.
- Fast acting.

Uses

CROP	PESTS	DOSE	RECOMMENDATIONS
 **Tomato** (***Lycopersicum esculentum***)	Mites *(Tetranychus* sp.*)*	2-4 ml/L (2.5-3.2 L/ha)	It is important to ensure good application coverage. Indicative application volumes of 400-600 L/ha.
 **Rose** (***Rosa*** **sp.)**	Red mite *(Tetranychus urticae)*	2-4 ml/L (2.5-3.5 L/ha)	It is important to ensure good application coverage. Indicative volume of application of 1000 L/ha.
 **Banana** (***Musa*** **spp.)**	Black Sigatoka *(Pseudocercospora fijensis Morelet)*	0.5-1 L/ha	It is important to ensure good application coverage. Indicative application volume of 150 L/ha.
 **Avocado** (***Persea americana***)	Mites *(Oligonychus yothersi)*	2.0-2.5 cc/L	It is important to ensure good application coverage. Indicative application volumes of 600-800 L/ha.

Mode of action (FRAC: BM03)

Acaricide / insecticide

- Nervous system disruption: inhibition of acetylcholinesterase, inhibition of neuronal ion transport and neuromotor incoordination, resulting in death.
- Anti-feedant and repellent effect.
- Physical effects: asphyxia due to sealing of the spiracles, dehydration, softening and disintegration of the exoskeleton.

Fungicide

- Eradicant: interrupts sporulation and dries the spots, thus cutting off the spread of the disease.
- Curative: promotes changes in the enzymatic activity of the pathogen's cell wall. Inhibits fungal growth. Prevents penetration and colonisation of mycelia and spores.

BIOSTIMULANTS

The biostimulant line is designed to **unlock the potential of crops and take them to a higher quality level**. Formulated from natural active ingredients, our solutions act by supporting key physiological processes in the plant and contribute decisively to improving soil health. Seipasa's biostimulants provide increased vigour, improve yield and crop quality, unlock essential micro and macronutrients and help crops to perform at their best in challenging and energy-hungry situations.

SeiZen

Properties

SeiZen is a liquid biostimulant designed to increase crop productivity. It helps prepare plants for challenging situations and increased energy demands by acting as a physiological enhancer: stimulating cell division, growth and differentiation, enabling improved crop yields.

BIOSTIMULANT DESIGNED TO INCREASE CROP YIELD

SL - SOLUBLE CONCENTRATE

Composition

PFC 6(B): Non-microbial plant biostimulant

Liquid in solution formulated with
PK-Tech Technology by Seipasa

WITH EUROPEAN REGISTRATION
ON THE BASIS OF REGULATION
(UE) 2019/1009 - CFP 6 (B)
NON-MICROBIAL PLANT BIOSTIMULANT

Available in:

1 L 5 L

Benefits

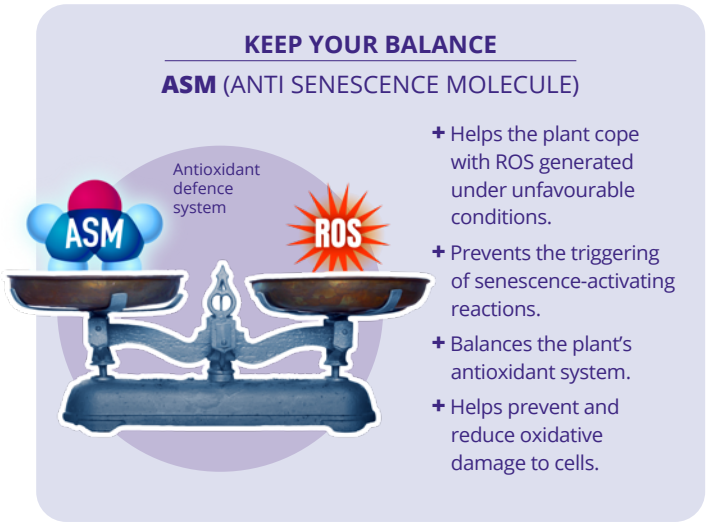
- Optimised photosynthesis: Improves photosynthetic efficiency, protects the photosystem, stabilises PSII-LHCII super-complexes and slows down chlorophyll degradation, ensuring greater uptake and use of light energy.
- Antioxidant protection: Neutralises reactive oxygen species (OFR), preventing oxidative damage at the cellular level.
- Increased vitality: Stimulates metabolic function, respiration and synthesis of RNA, protein and starch, promoting vigorous growth and increased productivity.
- Anti-ageing: Activates genes that delay leaf ageing, prolonging the youth and vitality of the plant.
- Resistance to adverse situations: Helps the plant overcome adverse conditions such as abiotic stress and increased ethylene production.
- Flexibility in harvesting: Reduces fruit response to increased ethylene synthesis, extending fruit life and providing greater flexibility at harvest.
- Increased yield and crop quality: By optimising photosynthesis and plant metabolism.

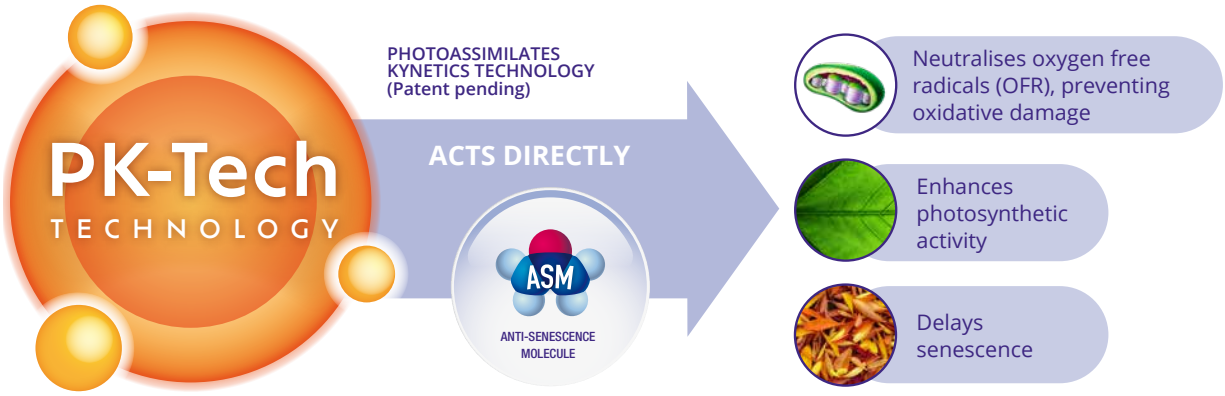
Uses

CROPS	DOSE AND RECOMMENDATIONS FOLIAR APPLICATION	
Extensive crops	1 L/ha	Apply a maximum of 2 applications during the crop cycle.
Woody crops	1-1.5 L/ha	Apply 2 to 4 times during the crop cycle.
Horticultural crops, ornamental and medicinal/ aromatic crops	0.5-1.5 L/ha	

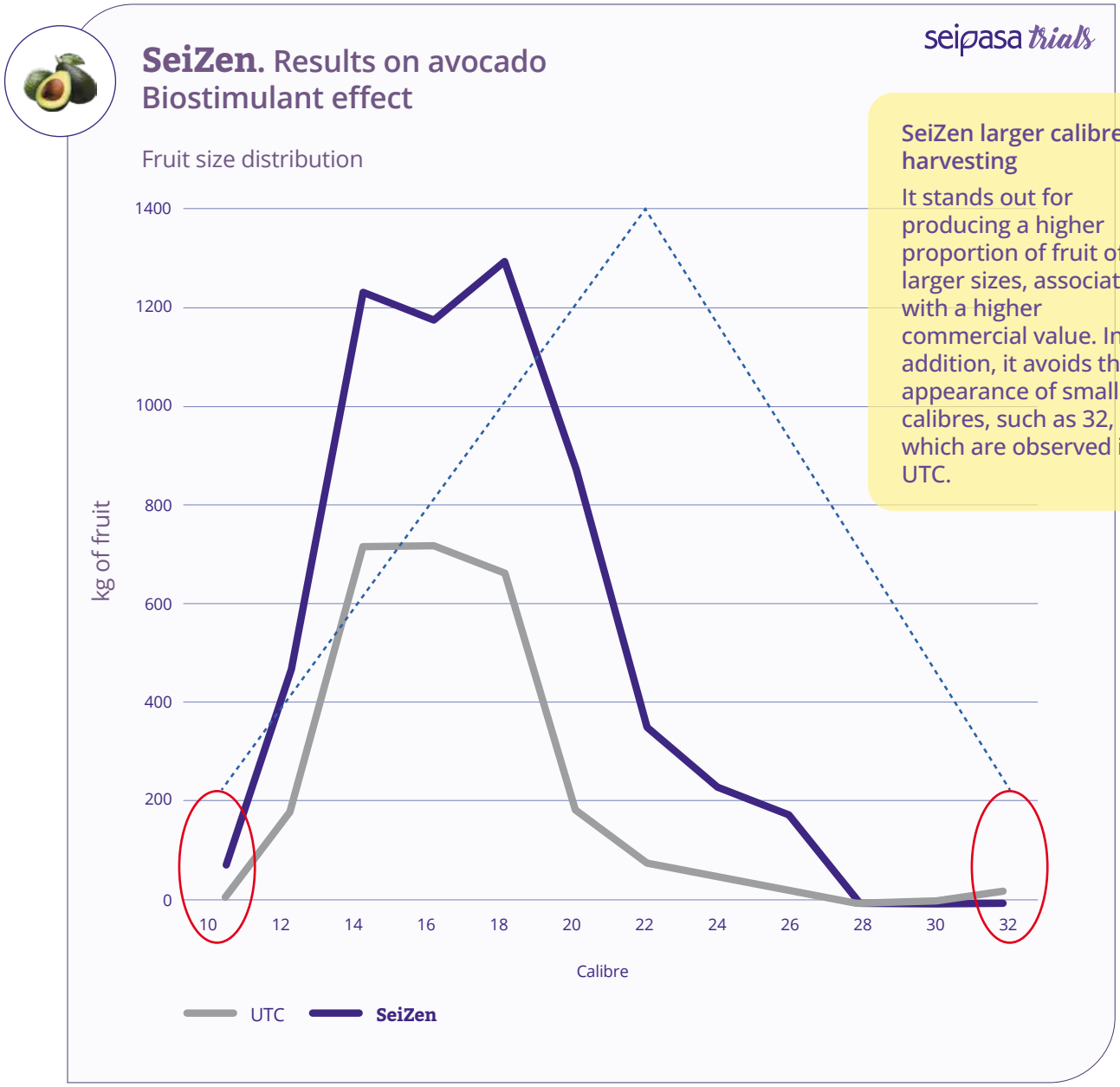
Mode of action

- Improves photosynthetic efficiency.
- Protects photosystem and essential biomolecules.
- Delays chlorophyll degradation.
- Maintains cell membrane integrity.
- Stabilises PSII-LHCII super complexes.
- Induces RNA, protein and starch synthesis.
- Antagonises ABA and ethylene, delaying senescence.
- Activates genes that delay the foliar ageing.





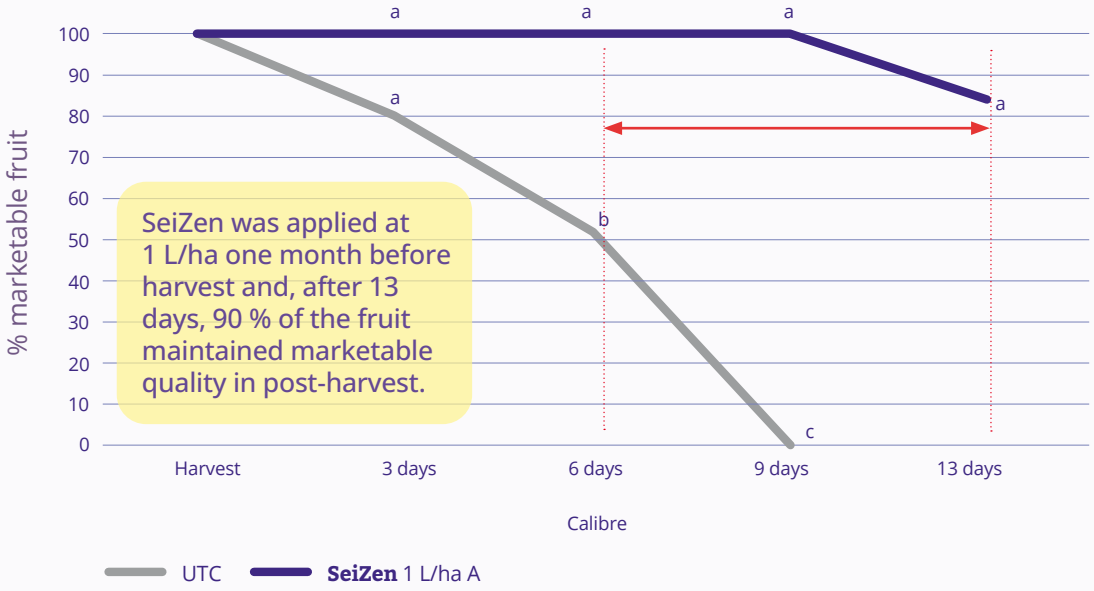
Efficacy trials



seipasa trials

SeiZen. Trial design on flat peach
Biostimulant trial

Shelf life of fruit

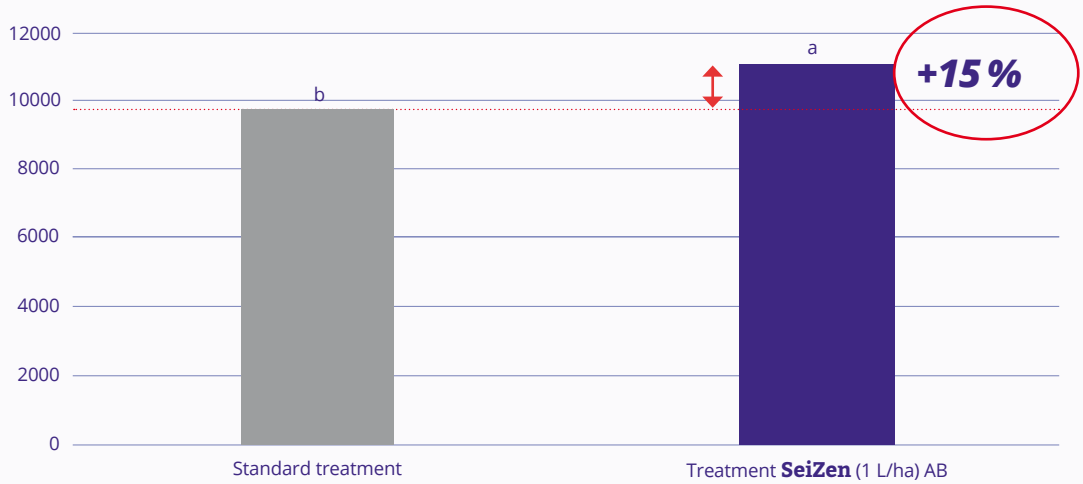


SeiZen was applied at 1 L/ha one month before harvest and, after 13 days, 90 % of the fruit maintained marketable quality in post-harvest.

seipasa trials

SeiZen. Study on rice
Biostimulant trial

Harvest



SeiZen increased yields up to 11,079 kg/ha in the J. Sendra variety, exceeding the standard treatment by 15 % and demonstrating its effectiveness in optimising crop production.

Radisei

Properties

Radisei is a unique, balanced formulation of plant-derived amino acids and *Bacillus subtilis* (SEIPASA's proprietary strain SEIBS23) that performs specific functions in the root environment: fixing nitrogen, generating siderophores and solubilising potassium in the soil.

Radisei increases crop quality and quantity. It can be used in drip irrigation systems, sprinkling, spraying, injection and in mixtures with substrates, with good homogenisation of the mixture being essential.

Registration No

F0004121/2029

Available in:

1 Kg 5 Kg

WSP - WATER SOLUBLE POWDER

Composition

Bacillus subtilis SEIBS23 $\geq 10^7$ UFC/g
Free amino acids 35 % w/w
Total nitrogen 8.40 % w/w

Free amino acids obtained from the enzymatic hydrolysis of soya plant proteins

Lys: 0.43 %	Ala: 0.94 %	Pro: 1.86 %
Asp: 1.53 %	Glu: 5.00 %	Val: 0.93 %
Thr: 11.48 %	Ser: 2.58 %	Gly: 7.40 %

Benefits

- Enhances root architecture.
- Promotes nutrient assimilation.
- Resilience to adverse conditions.
- Provides an additional metabolic boost (bio-boost effect), optimising photosynthetic efficiency and reserve mobilisation.

Seals and certifications:

Uses

CROPS	DOSE VIA SOIL	RECOMMENDATIONS FOR USE
All woody crops such as: Almond, walnut, pistachio, hazelnut Stone and pip fruit: peach, nectarine, apricot, cherry, plum, apple, pear, quince Citrus fruits: orange, mandarin, lemon, lime, grapefruit Olive tree Vines and table grapes Blueberry, raspberry, blackberry, gooseberry Mango, avocado Banana Pineapple, papaya, kiwi	2.5-5 kg/ha	Apply 2 to 4 applications, every 2-3 weeks starting at the beginning of the cycle (*) (**) and at times of maximum energy demand of the crop: sprouting, fruit set and fruit swelling. Apply during the last third of irrigation to localise the product in the wet bulb and avoid washout. Can be applied with a spike. Dose subject to fertilisation.
All soil-based horticulture (open air and greenhouse) such as: Tomato, pepper, courgette, cucumber Lettuce, pre-prepared convenience food and similar Strawberry Melon, watermelon Potato, onion, leek, carrot, garlic Broccoli, cauliflower, cabbage Bean, pea, broad bean Artichoke, celery, chard, spinach, asparagus, parsley, radish, fennel, mushroom and others	2.5 kg/ha	Apply four applications at one- to two-week intervals, starting two weeks after transplanting. Apply during the last third of the irrigation to localise the product in the wet bulb and avoid washout. Can be applied with a spike. Dose subject to fertilisation.

(*) We recommend a higher number of applications using lower doses. This ensures the soil and roots are reinoculated, extending the viability of the micro-organisms.

(**) In case of application by blanket irrigation or with a dribble, increase the dose by 30 to 50 % depending on the need of crops.

ADVANCED BIOLOGICAL TECHNOLOGY: EFFECTS AND BENEFITS OF RADISEI

- Applied microbiology: Radisei incorporates PGPR technology (Plant Growth Promoting Rhizobacteria) to improve plant-soil interaction by activating key biological processes.
- Optimisation of nutrient assimilation: Radisei improves the efficiency of nutrient uptake by promoting the fixation of atmospheric nitrogen, which reduces dependence on nitrogen fertilisers. It also solubilises phosphorus and potassium, improving their availability in the soil, and produces siderophores, increasing the uptake of iron, which is essential for plant growth.
- Root biostimulation: The product favours an increase in root biomass, promoting a greater proliferation of absorbent hairs.
  This creates a symbiotic relationship with the plant that stimulates more vigorous root growth and more efficient nutrient uptake.
- Resilience and adaptation to challenging conditions: Radisei enhances osmotic regulation and modulates plant epigenetics, which improves photosynthetic efficiency. This enables plants to adapt more effectively to adverse environmental conditions, ensuring optimal performance.
- Contribution of bioactive compounds: With an optimal C/N ratio, Radisei provides organic acids, amino acids and vitamins, stimulating the growth and development of the plant and strengthening its natural system.
- The biofilm generated throughout the root system establishes a powerful biological and physical barrier, as well as a unique symbiotic relationship.

Kynetic4

Properties

Kynetic4 is a biostimulant of plant origin, specially designed to stimulate and optimise the natural flowering process: flower development, pollination, fertilisation and fruit set (whether these phases occur consecutively or separately). Its application promotes the synthesis of specific proteins at times of peak energy demand in crops.

SL - SOLUBLE CONCENTRATE

Composition

Free amino acids 24.0 % w/w
Total nitrogen (N) 3.8 % w/w
Organic nitrogen (N) 3.5 % w/w

Aminogram

Ala: 0.94 %	Arg: 0.25 %	Asp: 0.73 %	Glu: 7.00 %
Gly: 4.40 %	His: 0.48 %	Ile: 0.04 %	Leu: 0.57 %
Lys: 5.40 %	Met: 0.05 %	Phe: 0.41 %	Pro: 1.78 %
Ser: 0.25 %	Thr: 0.44 %	Tyr: 0.05 %	Val: 0.46 %

Available in:

1 L 5 L

Benefits

Flowering
- Improves the quality of flowering.
- Secures against stressful situations.
- Increases effective pollination time.

Nectar
- Higher nutritional quality of nectar.
- More attractive to pollinators.

Pollen
- Promotes the formation of the pollen tube.
- Increases pollen viability.
- Improves the quality and secures the fruit set.

Pollinator
- Promotes pollination.
- Provides energy and increases the activity of pollinators.

Seals and certifications:

Uses

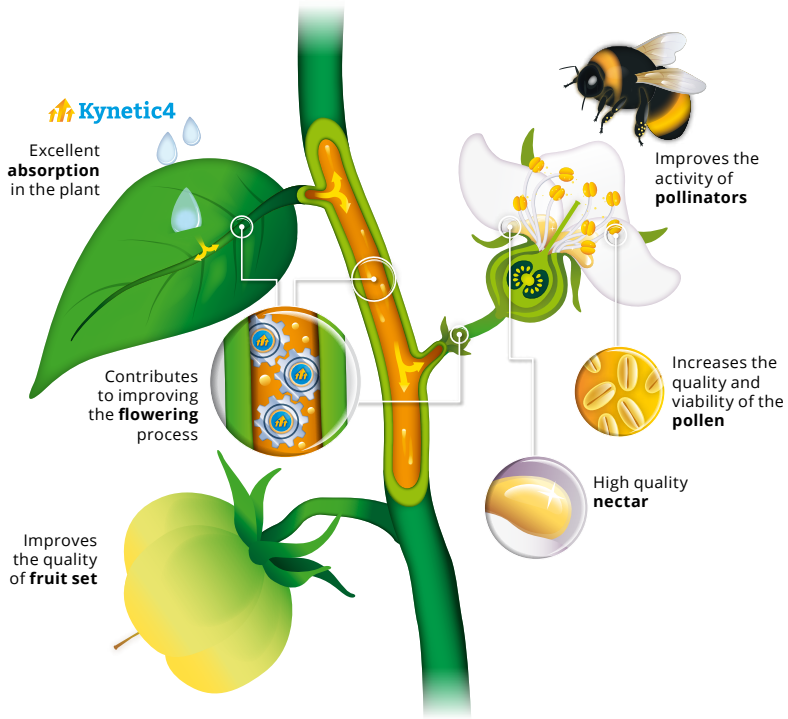
CROPS	DOSE		RECOMMENDATIONS
	FOLIAR APPLICATION	ROOT APPLICATION	
Horticultural crops	200-400 ml/hl 2-3 L/ha per application	5-15 L/ha*	Foliar: Apply 2-3 times from the onset of the flowering period. Root: Apply 3-4 times starting in the pre-flowering stages.
Berries			
Citrus fruit	100-300 ml/hl 2-3 L/ha	15-25 L/ha*	1st application between 25-50% of open flower; 2nd application between 75-85% of open flower; 3rd application optional to ensure fruit set.
Nuts and seeds			1st application 25% of open flower (pink button); 2nd application 75% open flower.
Fruit trees			Bud movement, pre-flowering and fruit set.
Vines and table grapes	100-200 ml/hl 1.5-2.5 L/ha	10-20 L/ha*	Foliar: 1st application in pre-flowering; 2nd application at the capping or fruit set. Root: Throughout the whole cycle. Performing 2-4 applications during periods of high energy demand.
Olive tree	100-300 ml/hl 2-4 L/ha	15-25 L/ha*	1st application in pre-flowering; 2nd application at petal fall.
Extensive and industrial crops: cereals, rice, corn...	1-3 L/ha	5-10 L/ha*	Implementing in the phases of growth.
Enhancer for conventional treatments	0.5-1.5 L/ha	-	Use in combination with traditional treatments in a single application.

*Spread across the various applications.

Mode of action

Kynetic4 has an extraordinary effect on plant metabolism, activates the plant's physiological processes, promotes flowering, improves the source-to-sink ratio of the plant, increases vegetative development and improves final production.

It also provides a greater adaptive capacity against adverse conditions of salinity, drought, temperature and transplanting. Stimulates the restoration of plant tissues after stress.



Bryosei

Properties

Bryosei is a sprouting and vegetative development booster as well as an effective regenerator and healer of plant tissues. It provides plants with energy, activates their defence system and corrects copper, manganese and zinc deficiencies, all thanks to its structure in the form of a complex organic polymer enriched with nutrients.

SL - SOLUBLE CONCENTRATE

Composition

Water-soluble copper (Cu) 1.8 % w/w
Copper (Cu) complexed by LSA 1.8 % w/w
Water-soluble manganese (Mn) 0.8 % w/w
Manganese (Mn) complexed by LSA 0.8 % w/w
Water-soluble zinc (Zn) 0.6 % w/w
Zinc (Zn) complexed by LSA 0.6 % w/w

Complexing agent LSA: lignosulphonic acid

Available in:

Benefits

- Improves plant architecture.
- Rapid absorption by leaves, stems and roots.
- Easy to use, complete and stable.
- Healthy and protected crops.
- Corrects nutritional deficiencies.
- Increases photosynthetic leaf area.

Seals and certifications:

Uses

CROPS	DOSE		RECOMMENDATIONS
	FOLIAR APPLICATION	ROOT APPLICATION	
Horticultural crops	200-400 ml/hl (2-3.5 L/ha)	1.5-4 L/ha	Foliar: Make a first application at the beginning of the cycle and repeat in periods of high activity 1 or 2 more times (before entering full production and during full production). Root: Make 3-5 applications during periods of high activity to ensure crop vigour and potency.
Berries			
Stone and pome fruit trees	200-400 ml/hl (2-4 L/ha)	3-5 L/ha	Foliar: 3 applications, the first at the onset of sprouting to stimulate development and promote balance, the second after fruit set and the last at the beginning of fruit colour change to ensure quality harvests. In nuts and seeds, apply after petal fall, when the endocarp begins to form and harden, and when the fruit begins to change colour. Root: Make 2-4 applications during periods of high activity to stimulate the crop.
Nuts and seeds			
Citrus fruit			
Tropical crops			
Vines and table grapes	100-300 ml/hl (1-3 L/ha)	4-5 L/ha	Foliar: 2-3 applications, the first at sprouting and/or pre-flowering, the second coinciding with spring treatments and the third 30 days before harvesting. For ornamentals, apply during the budding phase. Root: Make 2-4 applications during periods of high activity to stimulate the crop. After harvest apply at maximum dose, wetting trunk and branches, as a system strengthener against stress.
Ornamentals			
Olive trees	300-400 ml/hl (2-4 L/ha)	3-6 L/ha	Foliar: 3 applications, the first at sprouting and/or pre-flowering, the second coinciding with spring treatments and the third 30 days before harvesting. Root: apply 2-4 times during periods of high activity to stimulate the crop. After harvest apply at maximum dose, wetting trunk and branches, as a system strengthener against stress.
Industrial and extensive crops (cereals, rapeseed, cotton, etc.)	200-300 ml/hl (1-2 L/ha)	1-3 L/ha	Foliar: Apply during the growth phase of the crop. Root: Apply according to crop needs.

Mode of action

Sprouting booster

Bryosei provides high penetration, both via the foliar and root system. Applied at the time of sprouting, the sap flows faster within the vascular bundles, achieving a balanced vegetative development between the aerial and root parts.

Activation of the defensive system

Bryosei induces the plant's immune system, promoting a state of priming. The product activates the plant's natural defences, inducing the activation of different genes. These genes promote the synthesis of endogenous plant proteins and secondary metabolites involved in the immune system.

Regeneration and healing of plant tissues

Bryosei improves and accelerates wound healing after harvesting.

Sweetsei

Properties

Sweetsei is a product specially designed to induce and promote the increase of sugars, ripening and swelling of the fruit. Its balanced formulation makes it a product of the highest quality and efficacy thanks to a selection of different components prepared for an optimal balance.

SL - SOLUBLE CONCENTRATE

Composition

Free amino acids 5.2 % w/w
Total nitrogen (N) 0.6 % w/w
Organic nitrogen 0.6 % w/w
Water-soluble phosphorus pentoxide (P_2O_5) 4.7 % w/w
water-soluble potassium oxide (K_2O) 6.8 % w/w

Aminogram

Asp: 0.15 %	His: 0.01 %	Ser: 0.23 %
Glu: 0.37 %	Lys: 0.04 %	Try: 0.01 %
Ala: 0.09 %	Met: 2.21 %	Thr: 0.95 %
Gly: 0.87 %	Pro: 0.17 %	Val: 0.07 %

Available in:

1 L 5 L

Benefits

- Activator of cellular respiration processes.
- Rapid assimilation.
- Improves fruit size and turgidity.
- Promotes colour and crop uniformity.
- Improves post-harvest handling and transport.
- Promotes the formation of sugars and increases the Brix index.
- Homogenises fruit ripening.
- Extends the shelf life of the fruit.

Uses

CROPS	DOSE		RECOMMENDATIONS
	FOLIAR APPLICATION	ROOT APPLICATION	
Horticultural crops	200-300 ml/hl (1-3 L/ha)	2-4 L/ha	Foliar: 2 to 4 applications, one every 7-10 days. Root: 1 to 3 applications every 7-15 days.
Berries			
Citrus fruit	300-400 ml/hl (2-6 L/ha)	3-5 L/ha	Foliar: In times of sensitivity. 2 to 4 applications every 10-15 days. Root: 2 to 4 applications, one every 10-15 days.
Tropical crops			
Stone and pome fruit trees	200-400 ml/hl (2-4 L/ha)	3-4 L/ha	
Nuts and seeds			
Vines and table grapes			
Olive trees			

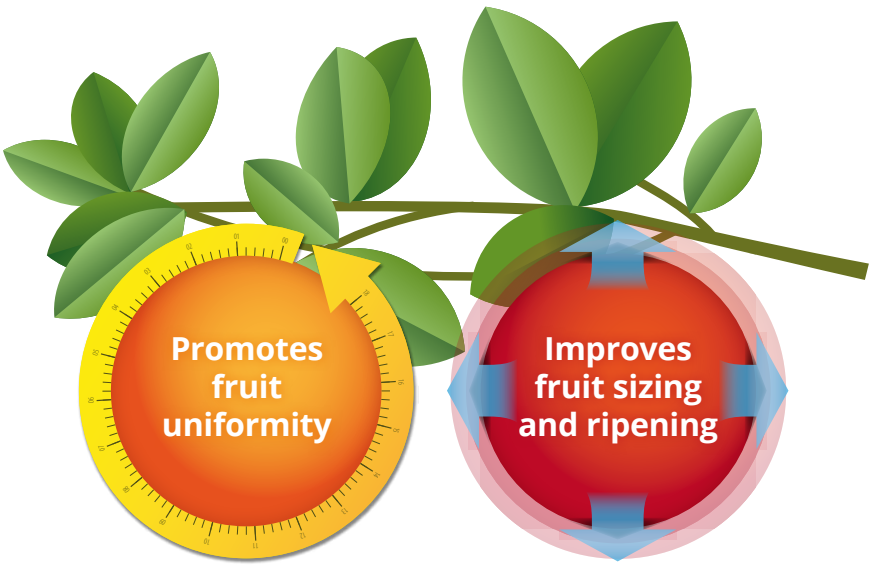
Mode of action

Sweetsei is a biostimulant necessary during the fruiting phase, which reduces competition between fruits for available carbohydrates, improving their organoleptic quality.

Sweetsei's formulation is designed based on an organic matrix that integrates the main biochemical intermediates of the metabolic pathways responsible for ripening and colour:

- Potassium: mobilises sugars and promotes fruit swelling.
- Methionine: intermediary of the Yang cycle and the ethylene cycle, which favours, in climacteric fruits, a greater synthesis of ethylene for ripening.
- Phenyl-alanine: metabolic intermediate of the shikimic acid pathway, responsible for the generation of flavonoids, anthocyanins and tannins, compounds responsible for colour.
- Polysaccharides: the contribution of this type of sugars favours an increase in the degrees Brix in the fruits.

All this makes Sweetsei an effective promoter of perfect ripening.



Actysei

Properties

Actysei is a natural biostimulant formulated from extracts of the algae *Ascophyllum nodosum*. Actysei acts as a natural activator of the biological and physiological processes of plants, balancing their hormone levels and improving their metabolic action and enhancing their tolerance to abiotic stress.

SL - SOLUBLE CONCENTRATE

Composition

Free amino acids 2.00 % w/w, Total nitrogen (N) 1.00 % w/w, Organic nitrogen (N) 1.00 % w/w, Water-soluble phosphorus pentoxide (P_2O_5) 1.00 % w/w, Water-soluble potassium oxide (K_2O) 8.00 % w/w, Mannitol 0.77 % w/w

Available in:

5 L

20 L

Uses

CROPS	DOSE		RECOMMENDATIONS
	FOLIAR APPLICATION	ROOT APPLICATION	
Fruit trees	200-300 ml/hl	3-7 L/ha	Perform 3-4 treatments: 1st bud break; 2nd pre-flowering, 3rd fruit set and 4th early stages of fruit development.
Citrus fruit	200-300 ml/hl	2-5 L/ha	Carry out 3 treatments: 1st at the onset of flowering, 2nd at petal fall and 3rd at fruit set. Repeat application at the beginning of ripening on varieties that need an increase in size.
Olive tree	150-300 ml/hl	-	Carry out 2-3 treatments, in pre-flowering and post setting. Promotes the correct development of sprouting. Depending on summer conditions and the crop, another one can be carried out in early autumn.
Vines and table grapes	150-300 ml/hl	2-4 L/ha	Apply every 3-4 weeks after sprouting: 1st application after sprouting on bunches of 6-9 cm in length. 2nd in 3 mm diameter berry size and 3rd in pea-size berry size. Depending on variety, use and characteristics, a 4th can be carried out at the beginning of veraison.
Horticultural crops	200-300 ml/hl	2,5-5 L/ha	First application from 5-7 true leaves, at fruit set and fruit development stages. Repeat applications according to the needs of the crop, every 15-20 days.
Berries	150-300 ml/hl	2-6 L/ha	First application from the moment of pre-flowering and then repeat applications every 10-15 days depending on fruit set and development.
Extensive crops: cereals and industrial	1-3 L/ha	2-4 L/ha	Cereals: Application under stress conditions and according to critical periods in the different crops: tillering, grain filling, stalk development Industrial: First application after the appearance of the 6th fully expanded leaf, application under stress conditions and according to critical periods in the different crops. Apply after each cut.
Seedbeds	100 ml/hl	2 L/ha	Apply after the plants have taken root.

Foliplant

Properties

Foliplant is a specific and balanced formula of microelements and amino acids, which acts on plant growth, providing the necessary energy to obtain a higher quantity and quality of production, both in organic and conventional agriculture.

SL - SOLUBLE CONCENTRATE

Composition

Total nitrogen (N) 2.70 %, Organic nitrogen (N_{org}) of vegetable origin 2.70 %, Boron (B), as acid, water soluble 0.18 %, Iron (Fe), as sulphate, water soluble 1.00 %, Manganese (Mn), as sulphate, water soluble 0.75 %, Molybdenum (Mo), as sodium salt, water soluble 0.02 %, Zinc (Zn), as sulphate, Water soluble 0.90 %, Organic carbon (C_{org}) 15.00%, Dry matter 37 %

Available in:

Seals and certifications:

Uses

CROPS	DOSE		RECOMMENDATIONS
	FOLIAR APPLICATION	ROOT APPLICATION	
Extensive cereals and industrial crops: wheat, rice, maize, barley, oats, triticale, rye, sorghum, sugar beet, cotton, etc.	2-5 L/ha	3-6 L/ha	Perform a minimum of 1 application per cycle. In winter cereals apply mixed with conventional treatments. In summer cereals apply approximately 30-35 days after sowing. One-off applications can be made to combat stress at a dose of 5-15 l/ha.
Outdoor Horticultural crops	100-300 ml/hl (1-3 L/ha)	5-10 L/ha	In leaf crops apply mainly at the vegetative growth stage. In fruit crops, apply continuously throughout the cycle: depending on the state of the soil, degree of stress, environmental conditions, etc.
Legumes: alfalfa, vetch, peas, chickpeas, soya, lentils, broad beans, etc.	2-5 L/ha	3-6 L/ha	Apply 1-3 applications per cycle to stimulate the vegetative activity of the plants at times of maximum energy demand.
Oilseeds and protein crops: sunflower, rapeseed, dry peas, etc.	3-5 L/ha	4-6 L/ha	
Traditional olive grove	150-250 ml/hl (2-3 L/ha)	2-3 L/ha	Apply at sprouting, at the beginning of winter, pre-flowering and after fruit set.
Fruit trees	150-300 ml/hl		
Citrus fruit	100-300 ml/hl		
Vine	200-300 ml/h	2-3 L/ha	Apply at the beginning of vegetative development and make 2-3 applications from after fruit set until veraison.
Seedbed	100-300 ml/hl (1-3 L/ha)	1-3 L/ha	Apply after plant emergence when the plant has 2-4 true leaves to stimulate growth and development before transplanting.
Enhancer for conventional treatments	1-3 L/ha	-	Due to its rapid absorption and its high ability to supplement, Foliplant has many advantages when mixed with conventional treatments, as it enhances their effect and absorption and helps to reduce the stress caused by them.

Dinamico 150

Properties

Dinámico 150 is a product that stimulates the physiological functions of sprouting, flowering, pollination, fruit set and fruit development. Helps the fruit recover from stressful conditions (regenerator in adverse conditions) and nourishes the crops with the micronutrients (Fe, Mn and Zn) provided by the formulation. This product is especially recommended for all types of crops, both foliar and root application.

SL - SOLUBLE CONCENTRATE

Composition

Total nitrogen (N) 4.23 % w/v, Iron (Fe) 2.54 % w/v, Manganese (Mn) 0.73 % w/v, Zinc (Zn) 0.48 % w/v, Amino acids 15.13 % w/v

Available in:

Uses

CROPS	DOSE ml/200 L	TIME OF APPLICATION	METHOD AND FREQUENCY OF APPLICATION
Corn	500	When the plant has 5 to 8 leaves or presents phytotoxicity effects.	Foliar and edaphic (drench and fertigation). The day following an adverse condition adverse condition or stage of high energy demand, and then repeat after 5 days.
Tomato		Vegetative growth Pre-flowering. Phytotoxicity.	
Potato		Vegetative development of 4 to 6 leaves. Phytotoxicity or adverse frost conditions.	
Mandarin		Before flowering. Fruit set. Phytotoxicity.	
Rice		Floral primordium. Onset of flowering Filling of grain. Phytotoxicity.	
Onion		Vegetative development 8 cm. Phytotoxicity.	
Garlic		Vegetative development 8 cm. Phytotoxicity.	
Pepper		Post transplant. Pre-flowering. Fruit setting.	
Asparagus		Vegetative development 15 to 30 cm. Pre-cut or pruning 10 days before.	
Blueberry		Vegetative growth Pre-flowering. Phytotoxicity.	
Grape		Before flowering. Fruit set. Phytotoxicity.	
Broccoli		Post transplant. Vegetative growth. Phytotoxicity.	
Avocado		Before flowering. Fruit set. Phytotoxicity.	
Cocoa		Before flowering. Fruit set. Phytotoxicity.	

Seals and certifications:

Inspeccionado por ECOCERT INSUMOS

Seinema

Properties

Seinema is a formulation that activates biological processes in soil and roots. Its application promotes soil microbial activity and achieves a better development and protection of the root system against abiotic factors, as well as improved nutrient uptake. Seinema allows quick vegetative development, early establishment and rapid entry into production.

SL - SOLUBLE CONCENTRATE

Composition

Total nitrogen 0.6 % w/w, Organic nitrogen 0.6 % w/w, Free amino acids 6.0 % w/w (Glutamine 4.5 % and Glycine 1.5 %)

Available in:

Uses

CROPS	DOSE		RECOMMENDATIONS
	FOR MAINTENANCE	FOR ATTACK	
Solanaceae (tomato, husk tomato, aubergine, chilli, pepper, potato) **Cucurbits** (courgette, melon, cucumber, watermelon)	3-6 L/ha	5-10 L/ha	Carry out 3 to 5 treatments during the season. Start applications at transplanting and repeat every 15-21 days to stimulate increased root uptake.
Treatment of bulbs for planting	1-3 L/ha		Wet the bulb-seed with the amount of water appropriate to the preparation technique. Treat just before sowing.

Seiland

Properties

Seiland is a biostimulant formulated to activate the biological processes in the soil and promote root development from the earliest stages of the crop Its application stimulates the microbiota of the rhizospheric environment, improves soil structure and optimises the uptake of essential nutrients.

The use of Seiland results in faster crop establishment, balanced vegetative growth and earlier entry into production. Its formulation is especially indicated to favour recovery after stress or transplanting situations, as well as to boost development in key phases of the crop cycle.

Available in:

1 Kg 5 Kg

WSP - WATER SOLUBLE POWDER

Composition

Free amino acids 6.0 % w/w, Total nitrogen (N) 11.6 % w/w, Organic nitrogen (N) 0.5 % w/w, Ammoniacal nitrogen (N) 11.0 % w/w

Uses

CROPS		ROOT DOSE	RECOMMENDATIONS
Horticultural crops outdoors and in greenhouses		2.5-5 kg/ha(*)	2-5 applications: one every 2-4 weeks starting at transplanting. Apply at the end of each irrigation to avoid washout.
Olive tree			Perform 2 to 4 applications: every 2-3 weeks starting at the beginning of the cycle. Can be applied with a spike.(**)
Citrus fruit			
Stone and pip fruit trees			
Tropical fruits			
Seedbeds and nurseries	Mixtures with substrates	500-800 g/m^2	Carry out dry mixing. Use within 1 month after mixing.
	Application to trays and pots	0.03-0.05 g/pl	Apply at the end of irrigation on wet substrat.
Seed treatments		20 g/kg seed	Wrap with seed prior to sowing.
Hydroponic crops		0.5-1 kg/ha	Make a greater number of applications at 7 to 12 days intervals at lower doses. Fundamentally, in those moments of greatest energy demand such as crop implantation, fruit filling or overcoming stresses.

(*) In case of maximum crop need, up to 10 kg/ha per application can be applied.
(**) In case of application by blanket or drip irrigation, increase the dose by 50 % and by 30 % respectively.

Rasmia

Properties

Rasmia is a liquid fertiliser designed for correct root development. The product provides macro and micronutrients to the plant which, together with the amino acids, produce a high development of both the root system and the aerial part of the plants, resulting in an increase in production.

SL - SOLUBLE CONCENTRATE

Composition

Free amino acids 8.0 % w/w, Total nitrogen (N) 4.8 % w/w, Organic nitrogen (N) 1.1 % w/w, Urea nitrogen (N) 3.4 % w/w, Water-soluble phosphorus pentoxide (P_2O_5) 4.8 % w/w, Water-soluble potassium oxide (K_2O) 4.0 % w/w, Water-soluble iron (Fe) 0.4 % w/w, Iron (Fe) chelated EDTA 0.4 % w/w

Available in:

Uses

CROPS	DOSE		INTERVALS AND CONDITIONS
	ROOT	FOLIAR	
Horticultural crops	2-3 L/ha	150-300 ml/hl	Root: Apply 2 to 4 applications every 6 to 8 days after transplanting. In established crops, apply every 15 days. Foliar: Apply 3 to 4 times every 15 to 20 days.
Ornamentals			
Woody crops	2-5 L/ha	100-250 ml/hl	Root: Apply 2 to 3 times every 10 to 15 days after transplanting. In established crops, apply every 20 days. Foliar: Apply 4 to 5 times every 15 to 20 days. Avoid applications during flowering.
Seedbeds and nurseries	0.5-1 L/ha	-	Apply weekly to trays and pots at the end of watering, on already wet substrate. Avoid foliar applications in sensitive crops and situations.

Till-up

Properties

Till-up is a biostimulant specifically designed to meet the demands of grass crops. The combined action of its components enhances grain formation and promotes protein synthesis. Treatment with Till-up allows for optimal plant growth and development, resulting in high yields. Moreover, with the application of Till-up the crop develops a larger tillering and a higher number of ears. It also increases the amount of protein in the grain, increasing its weight. It also provides the crop with an optimal nutritional balance that allows it to better cope with abiotic stresses such as heat stress.

Available in:

SL - CONCENTRADO SOLUBLE

Composition

Mannitol 0.6 % w/w, Water-soluble boron (B) 0.3 % w/w, Water-soluble manganese (Mn) 1.0 % w/w, Manganese (Mn) complexed by GA 1.0 % w/w, Water-soluble molybdenum (Mo) 3.0 % w/w, Water-soluble zinc (Zn) 3.0 % w/w, Zinc (Zn) complexed by GA 3.0 % w/w

Complexing agent: GA gluconic acid

Uses

TYPE OF APPLICATION	DOSE	RECOMMENDATIONS
Foliar spraying	0.5-2 L/ha	Two applications per cycle are recommended. Apply the 1st application before tillering, during phenological stage 13-15 of the ZADOKS scale (between 3 and 5 leaves). Make the 2nd application at phenological stage 37-39 of the ZADOKS scale (flag leaf).

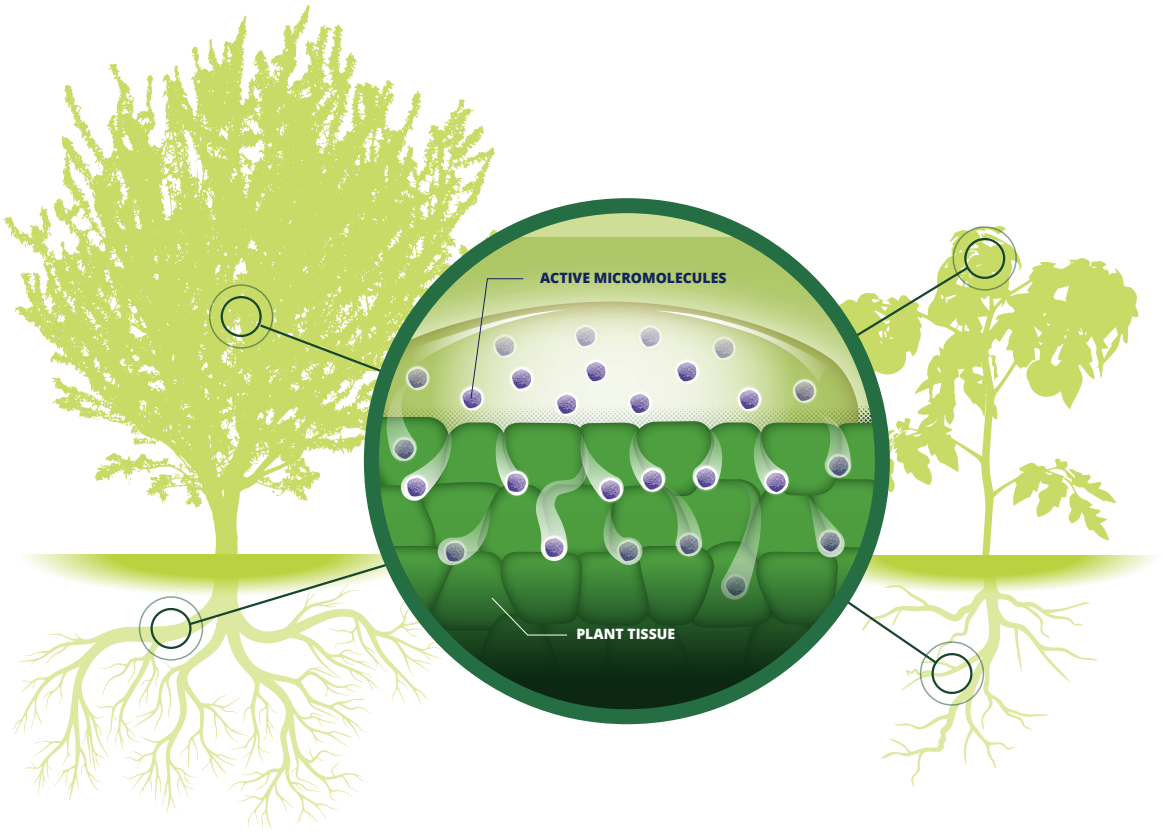
BIOACTIVE LINE

The BioActive line is presented as a **complete nutrient solution for the different phenological stages of the crop**. It acts both on the rhizospheric environment of the soil and on the metabolic processes of the plant and allows a higher **quality and quantity of harvest to be obtained, ensuring maximum profitability for the farmer**.

The BioActive line comprises a set of technologically advanced formulations that optimise the dissolution and absorption of nutrients by reducing their effective particle size to drive crops towards comprehensive nutrition.

Exclusive formulation developed by Seipasa based on the

BIOACTIVE-NATURAL TECHNOLOGY



Active micromolecules designed to get to the heart of the crop.

Optimum dissolution and maximum nutrient absorption.

Liquid formulation: easy handling and application.

RIGUER flow

Properties

Riguer flow improves soil structure, increases the assimilation of essential nutrients and reduces water, salt and heat stress, thus activating the processes involved in plant development.

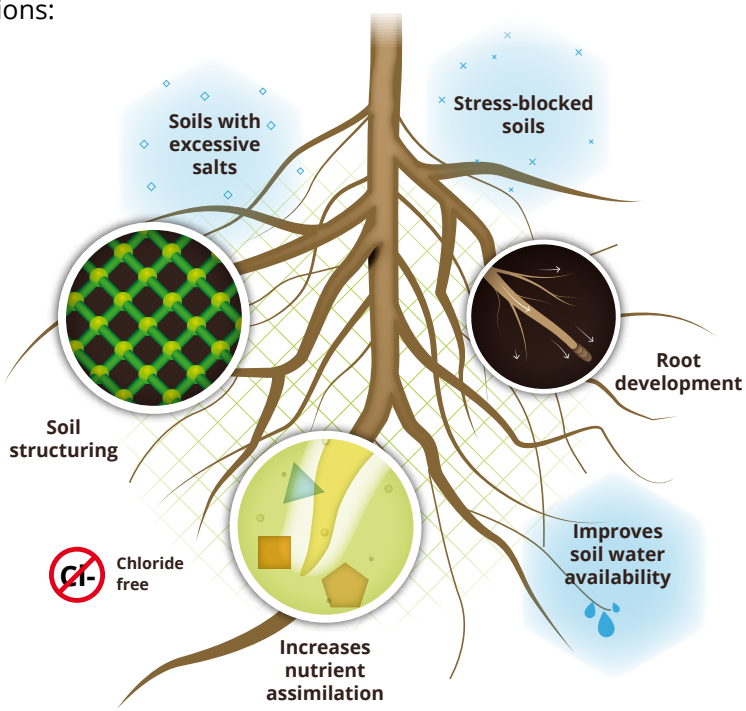
Benefits

- Promotes the availability of nutrients in the soil.
- Combats water and salt stress in sensitive soils.
- Improves crop quality.
- Enhances the processes involved in root development.
- Improves water efficiency in the soil.
- Favours evapotranspiration mechanisms.
- Prevents stress suffered by fruits due to high temperatures and radiation.

Available in:

1 L 5 L 10 L

Seals and certifications:



Uses

CROPS	METHOD OF APPLICATION	DOSE	RECOMMENDATIONS
For all crops	Root	2-8 L/ha	Number of applications 2-5. Interval 10-15 days
	Foliar	7-15 L/ha	1st application after fruit formation before the onset of high temperatures. Perform the necessary applications.

ROKER flow

Properties

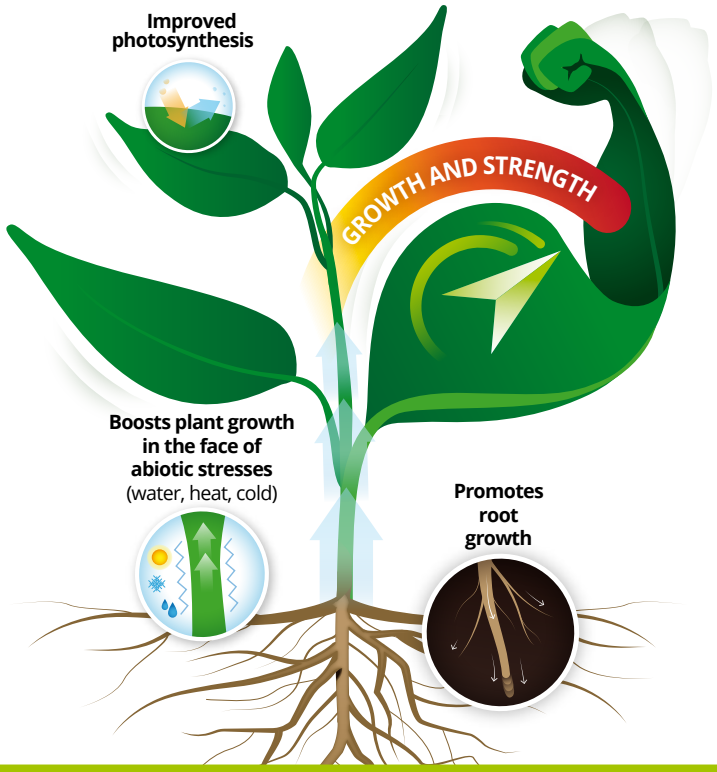
Roker flow is designed for immediate absorption and action favouring the orderly formation of plant tissue, activating growth, optimising photosynthesis in the aerial part of the plant and helping to combat different types of stress.

Benefits

- Constant and sustained stimulation of energy for cultivation.
- Prevention and recovery from stressful situations.
- Favours the proper assimilation of nutrients by the plant.
- Improves overall crop yield.
- Orderly and balanced plant growth.
- Root growth promoter.

Available in:

Seals and certifications:



Uses

CROPS	DOSE		NO. OF APPLICATIONS
	FOLIAR APPLICATION	ROOT APPLICATION	
Woody crops	200-500 ml/hl 2-5 L/ha	5-10 L/ha	2-5
Arable crops	200-400 ml/hl 2-4 L/ha	3-8 L/ha	

FILER flow

Properties

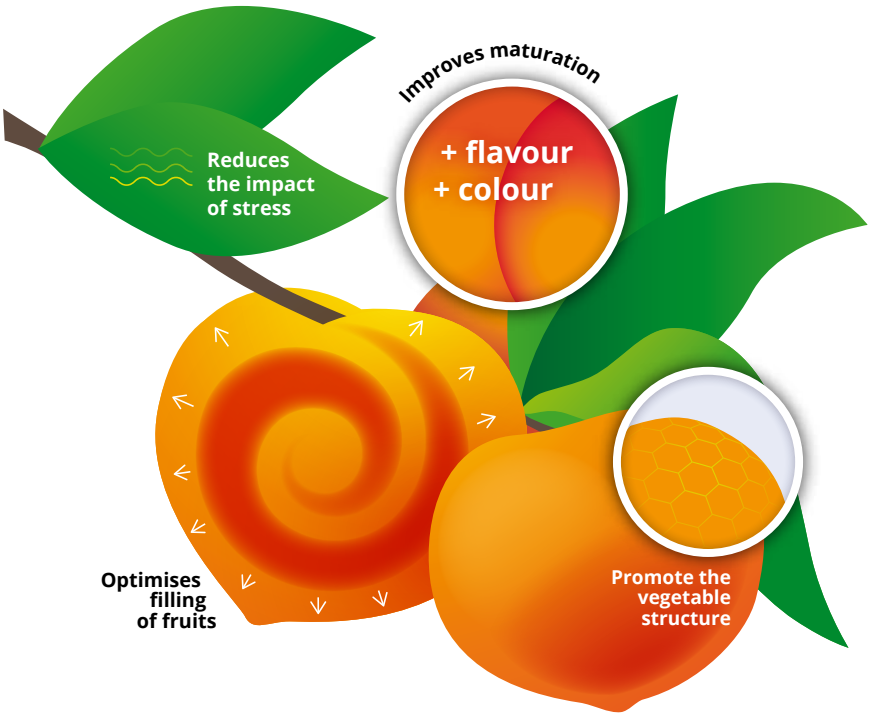
Filer flow promotes the fruit filling process, ensuring maximum final harvest quality. It reduces the impact of environmental imbalances, nutritional balance or water deficiencies.

Benefits

- Promotes fruit swelling and filling.
- Improves plant structure and stiffness.
- Limits the effect produced by abiotic stresses such as water deficit.
- Improves the quality of the final harvest.
- Does not basify the application solution.

Available in:

Seals and certifications:



Uses

CROPS	DOSE	METHOD OF APPLICATION	NO. OF APPLICATIONS
For all crops	200-400 ml/hl	Foliar	2-4
	5-10 L/ha	Root	

CROP NUTRITION

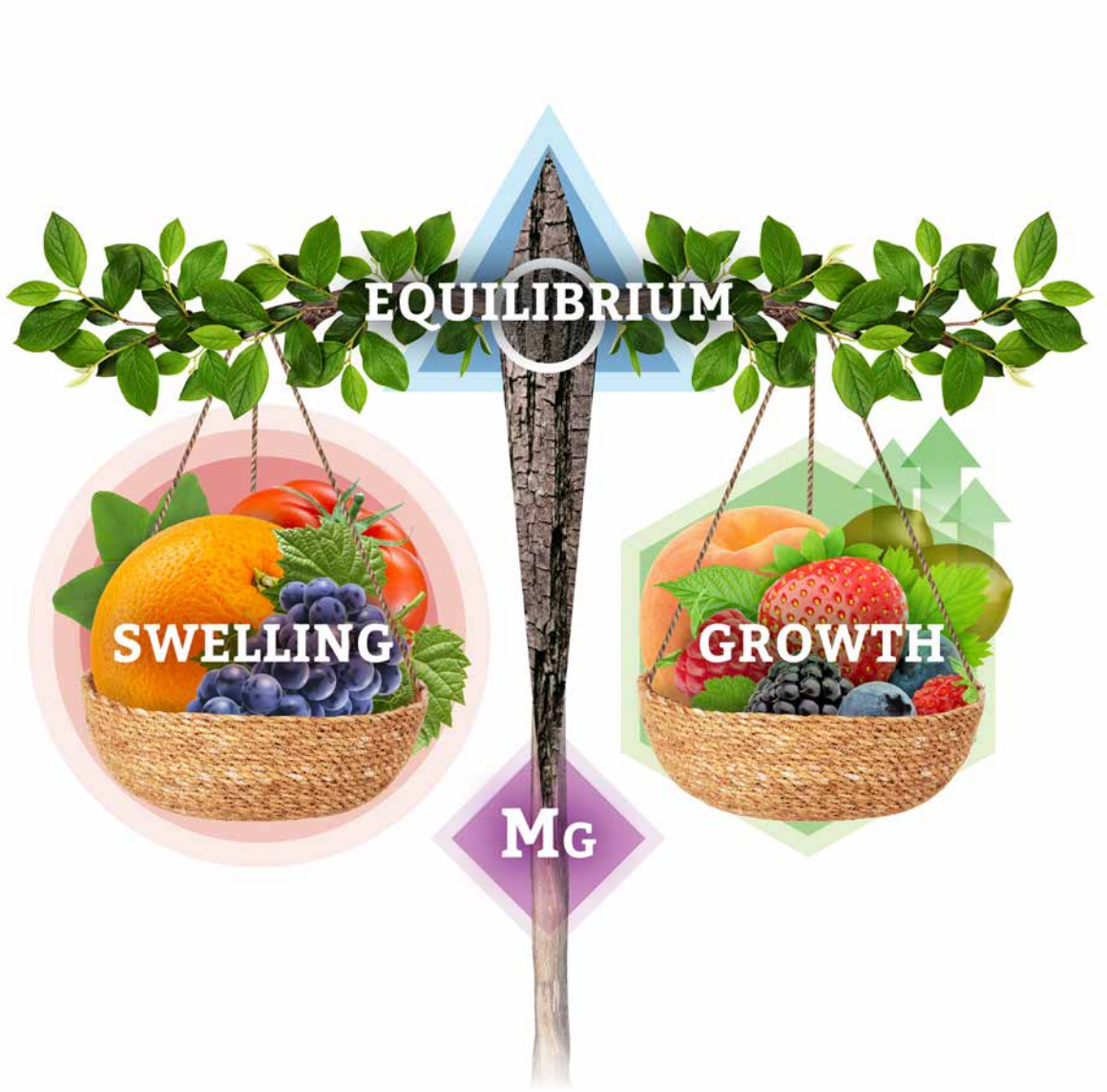
The nutritional line provides crops with the essential elements for a balanced and healthy development. These products are designed to **optimise plant nutrition by improving the absorption and utilisation of essential elements**. Thus, they contribute significantly to increasing yields and improving the final quality of the crop.

seipasa natural technology

Terrasei line

Liquid organo-mineral fertilisers

The Terrasei line is the answer to the nutritional needs of crops at different phenological stages, combining mineral nutrition with the energetic and soil structuring contribution of organic fertilisation. In addition to the macronutrient-organic matter ratio, they incorporate in their composition a percentage of amino acids that translate into an energy surplus for the crops, allowing the plant to dedicate metabolic resources to primary physiological functions. The various formulations of the Terrasei line are one of the main allies in the basis of plant nutrition.



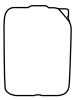
Terrasei CRECIMIENTO

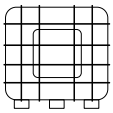
Properties

Bioactivator of sprouting and vegetative development

Specially designed to optimise the most demanding nutritional programmes, Terrasei Crecimiento can be used both by foliar and root application. The correct proportions of glycine and glutamic acid promote the formation of plant tissue by stimulating growth and physiological processes in young leaves, thereby promoting the formation of new shoots. Its N-P-K ratio, set at 18-5.1-2, complements the power of the organic complex and fulvic acids to create a crucial balance and boost in the early stages of growth. Adequate vigour and extra energy to maximise productivity. Can be mixed with other mineral fertilisers to improve nutrient absorption. Do not mix with alkaline or acid reaction products.

Available in:


20 L


1000 L - IBC

Composition

Free amino acids 5.0 % w/w, Total nitrogen (N) 18.0 % w/w, Organic nitrogen (N) 1.0 % w/w, Urea nitrogen (N) 17.0 % w/w, Water-soluble phosphorus pentoxide (P_2O_5) 5.1 % w/w, Water-soluble potassium oxide (K_2O) 2.0 % w/w

Uses

CROPS	DOSE		RECOMMENDATIONS
	ROOT APPLICATION	FOLIAR APPLICATION	
Fruit trees	5-15 L/ha	200-400 ml/hl (5-10 L/ha)	Apply at the beginning of sprouting and during vegetative growth.
Citrus fruit			
Olive trees		100-300 ml/hl (3-5 L/ha)	Apply in pre-flowering and during vegetative development for optimal nutritional absorption.
Vine			
Horticultural crops	2-8 L/ha		Root application: At transplanting and during vegetative growth. After that, every 10-20 days for powerful vegetative development and plant formation. Foliar application: From the 5-leaf stage and during the whole process of plant formation. At intervals of 7 to 15 days.
Berries			
Tropical crops	2-10 L/ha	200-300 ml/hl (3-8 L/ha)	Apply at the beginning of sprouting and during vegetative growth.
Extensive and industrial crops	2-5 L/ha	200-400 ml/hl (3-8 L/ha)	Apply at times of maximum vegetative growth.

Terrasei EQUILIBRIO

Properties

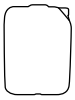
Bio-activator of nutritional balance

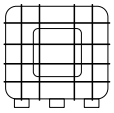
Terrasei Equilibrio is a liquid fertiliser for foliar and fertigation application, designed to provide a balanced supply of essential nutrients for crop development. Its 7-7-7 composition of nitrogen, phosphorus and potassium, together with amino acids, promotes harmonious plant growth. Its use contributes to optimal development at all stages of the crop, improving the quality and uniformity of production.

Composition

Free amino acids 6.0 % w/w, Total nitrogen (N) 7.0 % w/w, Organic nitrogen (N) 0.6 % w/w, Ureic nitrogen (N) 6.4 % w/w, Water-soluble phosphorus pentoxide (P_2O_5) 7.0 % w/w, Water-soluble potassium oxide (K_2O) 7.0 % w/w

Available in:


20 L


1000 L - IBC

Uses

CROPS	DOSE		RECOMMENDATIONS
	ROOT APPLICATION	FOLIAR APPLICATION	
Fruit trees	3-15 L/ha	200-400 ml/hl (5-10 L/ha)	Root application: Use in pre-flowering and during crop development to promote root-flourishing balance. Foliar application: Perform applications in pre-flowering and vegetative growth to maintain an adequate flow of sap and correct energy supply for crop development and fruit set.
Citrus fruit			
Olive trees	5-15 L/ha	100-300 ml/hl (3-5 L/ha)	Root application: Use in pre-flowering and during vegetative development for optimal nutritional absorption. Foliar application: First application in pre-flowering. Continue applications when the fruit is already set for proper vegetative and fruit development.
Vines and table grapes	5-10 L/ha	100-200 ml/hl (3-5 L/ha)	Root application: Throughout the whole cycle, especially when the crop needs a balanced energy support to improve the fertilisation programme. Foliar application: Carry out the first treatment in pre-flowering and continue during development and growth.
Tropical crops	2-10 L/ha	200-300 ml/hl (3-8 L/ha)	Root application: Start the applications from the onset of flowering. Foliar application: Apply during vegetative development to ensure correct crop quality.
Horticultural crops	2-8 L/ha	100-300 ml/hl (3-5 L/ha)	Root application: Apply from the first settings to improve the homogeneity and quality of the crop. Foliar application: Throughout the entire crop cycle for a uniform and high quality harvest.
Berries			
Extensive and industrial crops	2-5 L/ha	200-400 ml/hl (3-8 L/ha)	Root application: During the whole cycle from the onset of flowering Foliar application: As a support at times of peak nutritional needs.

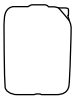
Terrasei ENGORDE

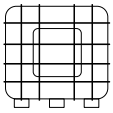
Properties

Fruit filler bioactivator

Terrasei Engorde is a fertiliser specially designed to optimise the development and quality of production. Its potassium-rich formulation favours the accumulation of sugars and enhances the process of ripening, contributing to larger and more uniform fruit. In addition, its glutamic acid content plays a key role in tissue formation and chlorophyll synthesis, which enhances photosynthesis and improves fruit quality. In addition, its phosphorus and nitrogen content contributes to a more balanced nutrition, favouring optimal development of the crop. Can be applied using both foliar and fertigation methods.

Available in:


20 L


1000 L - IBC

Composition

Free amino acids 6.0 % w/w, Total nitrogen (N) 2.8 % w/w, Organic nitrogen (N) 0.8 % w/w, Ureic nitrogen (N) 2.0 % w/w, Water-soluble phosphorus pentoxide (P_2O_5) 1.0 % w/w, Water-soluble potassium oxide (K_2O) 15.0 % w/w

Uses

CROPS	DOSE		RECOMMENDATIONS
	ROOT APPLICATION	FOLIAR APPLICATION	
Fruit trees	4-10 L/ha	200-300 ml/hl (2-3 L/ha)	Root application: Apply from 15 days after the end of flowering until 1 month before harvest. Foliar application: Applications from fruit set to end of swelling.
Citrus fruit			
Vines and table grapes		100-200 ml/hl (2-4 L/ha)	
Olive trees	5-10 L/ha	200-400 ml/hl (3-5 L/ha)	Root application: From bone hardening to maturation. Foliar application: Applications from fruit set onwards.
Tropical crops	2-10 L/ha	150-350 ml/hl (1-4 L/ha)	Root application: From swelling. Foliar application: Applications from fruit set to end of swelling.
Horticultural crops	5-12 L/ha	100-300 ml/hl (3-5 L/ha)	Root application: From the onset of fruit swelling until harvest. Foliar application: Applications from fruit growth to the end of swelling.
Berries			
Extensive and industrial crops	2-6 L/ha	200-400 ml/hl (2-5 L/ha)	Root application: During the whole cycle from the onset of flowering. Foliar application: Support at times of peak nutritional needs.

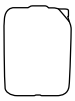
Terrasei Mg

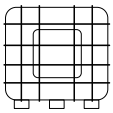
Properties

Bioactivator of the photosynthetic process

Terrasei Mg integrates the perfect combination of amino acids of vegetable origin and magnesium in a formulation with a high organic matter content. Magnesium is involved in many critical physiological and biochemical processes, so that if magnesium deficiencies occur, crop growth and yield are affected. Moreover, Mg is a fundamental molecule in the synthesis of chlorophyll, which makes Terrasei Mg the necessary supplement for a good photosynthetic process, providing an intense green to the crops, mainly in leaves. Terrasei Mg applied in irrigation facilitates the assimilation of magnesium by the plants and its rapid distribution to the consumption points.

Available in:


20 L


1000 L - IBC

Composition

Total nitrogen (N) 8.0 % (organic nitrogen (N_{org}) from amino acid glycine 1.0 %, nitric nitrogen (N) 7.0 %), Water-soluble magnesium oxide (MgO) 9.5 %, Organic carbon (C_{org}) 30.0 %, Dry matter 64.0 %

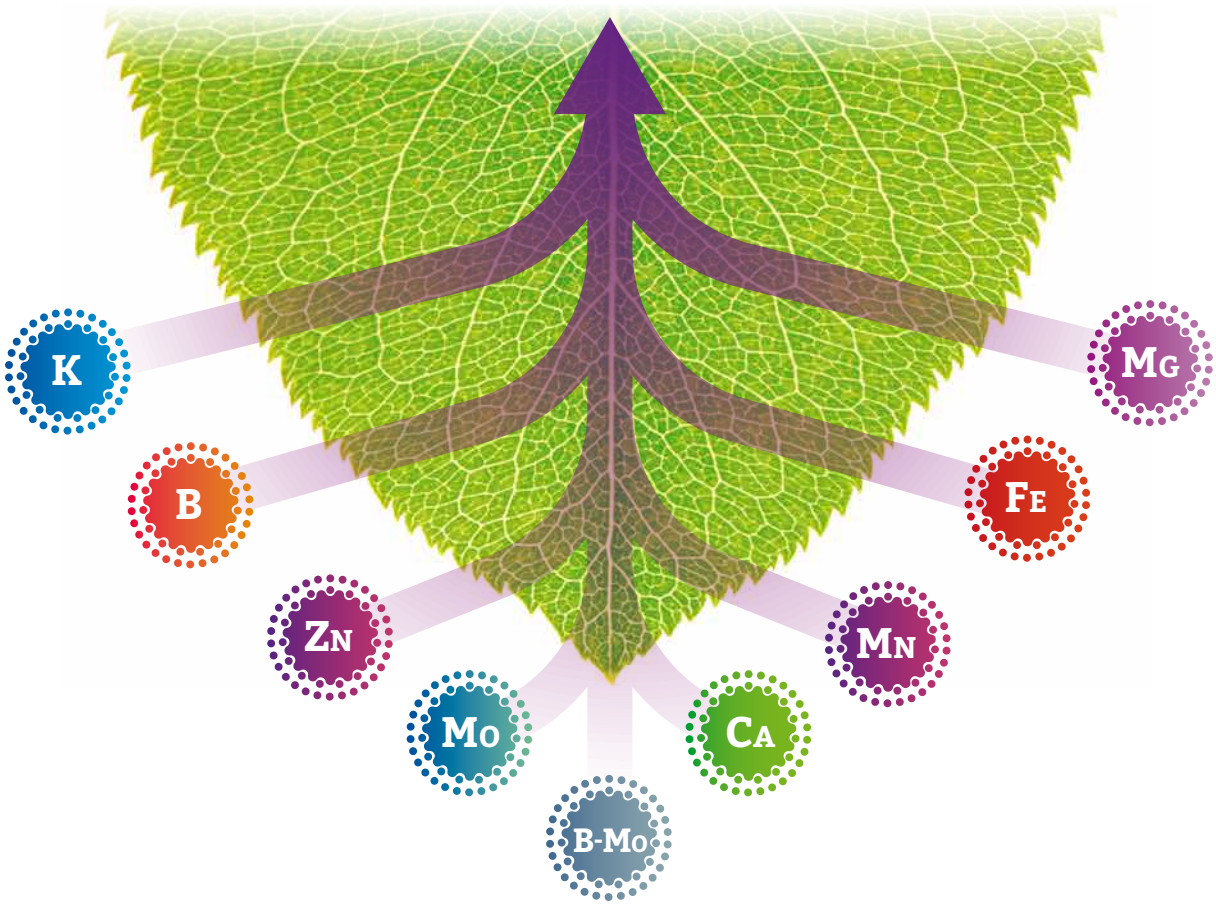
Uses

CROPS	DOSE		RECOMMENDATIONS
	ROOT APPLICATION	FOLIAR APPLICATION	
Horticultural crops	5-12 L/ha per application	100-300 ml/hl (3-5 L/ha)	Root application: 3-4 applications distributed during the cycle. Foliar application: Supported at times of peak nutritional requirements.
Berries			
Stone and pome fruit trees	4-10 L/ha per application	200-300 ml/hl (2-3 L/ha)	Root application: 3-4 applications distributed during the cycle. Foliar application: Applications from germination and at times of peak demand.
Nuts and seeds			
Citrus fruit	2-10 L/ha per application	150-350 ml/hl (1-4 L/ha)	Root application: 3-4 applications from sprouting. Foliar application: Applications from sprouting to the end of swelling.
Tropical crops			
Vines and table grapes	4-10 L/ha per application	100-200 ml/hl (2-4 L/ha)	Root application: 2-3 applications every 10-15 days starting 1 month before harvest. Foliar application: Applications from vegetative development until the end of fruit swelling.
Ornamentals	5-12 L/ha per application	100-300 ml/hl (3-5 L/ha)	Root application: 3-4 applications distributed during the cycle. Foliar application: Supported at times of peak nutritional requirements.
Olive tree	5-10 L/ha per application	200-400 ml/hl (3-5 L/ha)	Root application: 2-3 applications from the beginning of the cycle until hardening. Foliar application: Applications from the beginning of the cycle.
Industrial and extensive crops (cereals, rapeseed, cotton, etc.)	2-6 L/ha per application	200-400 ml/hl (2-5 L/ha)	Root application: 3-4 applications during the whole cycle from the beginning of vegetative development. Foliar application: Supported at times of peak nutritional requirements.

Seipafol line

Liquid foliar correctors

Seipafol line is the most complete range of liquid deficiency correctors, specially designed to be used by foliar application on all types of crops. The complexing and chelating agents used in this product line are incorporated into the micronutrients within their chemical structure, protecting them and preventing them from changing their oxidation state and precipitating in the form of oxides or hydroxides in the soil, thus keeping them in a state of availability for plant uptake.



Seipafol B

Properties

Seipafol B, liquid fertiliser rich in boron (B). Boron is one of the essential micronutrients for plant production as it is involved in many vital processes in plants, such as pollen production and meristematic growth. The application of Seipafol B is ideal for use in the prevention and correction of deficiencies of this micronutrient.

Composition

Water-soluble boron (B) 10.0 % w/w

Uses

CROPS	DOSE FOLIAR APPLICATION	RECOMMENDATIONS
Outdoor crops: olive trees, vines, fruit trees, horticulture, cucurbits and extensive crops	100-400 ml/hl	Apply at times of increased boron demand or when the first symptoms of boron deficiency have been detected.

Available in:

5 L 20 L

Seals and certifications:

Seipafol CALCIO

Properties

Seipafol Calcio, a deficiency corrector based on EDTA chelated calcium. Indicated both as a preventive measure and in deficiency states. It can be applied by foliar application or dissolved in irrigation water. Its application prevents calcium deficiencies, thus avoiding problems such as apical rot and internal necrosis, bitter pit fruit cracking, etc.

Composition

Water-soluble calcium oxide (CaO) 5.1 % w/w,
EDTA chelated calcium oxide (CaO) 5.1 % w/w
EDTA chelating agent: Ethylenediaminetetraacetic acid

Uses

CROPS	DOSE FOLIAR APPLICATION
Fruit and citrus trees	250-350 ml/hl
Horticultural and ornamentals crops	200-300 ml/hl

Available in:

5 L 20 L

Seipafol Fe

Properties

Seipafol Fe, a formulation recommended for use in iron deficiency states. The iron present in Seipafol Fe is found in complexed form with gluconic acid, achieving greater absorption and persistence. The amino acid content gives it biostimulating properties of physiological processes.

Composition

Free amino acids 6.0 % w/w, Total nitrogen (N) 1.0 % w/w, Organic nitrogen (N) 1.0 % w/w, Water-soluble iron (Fe) 5.0 % w/w, Iron (Fe) complexed by GA 5.0 % w/w

Complexing agent GA: Gluconic acid

Uses

CROPS	DOSE FOLIAR APPLICATION
Horticultural and ornamentals crops	200-400 ml/hl
Grapevine and citrus fruit	400-600 ml/hl

Available in:

5 L 20 L

Seipafol K

Properties

Seipafol K, a special formulation in the form of an organic salt with a practically neutral pH that guarantees rapid absorption by the plant and high efficacy in a short time. Potassium plays a crucial role in carbohydrate and protein synthesis, enhancing fruit ripening, reserve organ formation and shoot lignification.

Composition

Water-soluble potassium oxide (K_2O) 25 % w/w

Uses

CROPS	DOSE		RECOMMENDATIONS
	FOLIAR	ROOT	
Horticultural crops and berries	200-400 ml/hl (2-4 L/ha)	2-5 L/ha	Foliar application: Apply at the first signs of deficiency and at times of high demand. Root application: Apply 3 to 4 times with emphasis on peak demand.
Stone and pome fruit trees and nuts	200-300 ml/hl (2-3 L/ha)	5-10 L/ha	
Olive trees	250-400 ml/hl (2.5-4 L/ha)		
Citrus and tropical crops	200-400 ml/hl (2-4 L/ha)		
Vines and table grapes	150-350 ml/hl (1.5-3.5 L/ha)	4-8 L/ha	
Ornamentals	150-300 ml/hl (1.5-3 L/ha)	1-4 L/ha	
Extensive and industrial crops	3-4 L/ha	-	Foliar application: Apply 3-4 times at times of maximum need for this nutrient.

Available in:

5 L 20 L

seipasa natural technology

Seipafol B-Mo

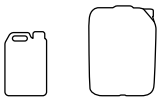
Properties

Seipafol B-Mo, a product that stimulates and increases plant resistance to adverse conditions. The product contains amino acids and is highly enriched with B and Mo, which makes it especially suitable for crops with deficiencies in these trace elements. Recommended for all types of crops, both foliar and root applications.

Composition

Free amino acids 9.5 % w/w, Total nitrogen (N) 7.9 % w/w, Organic nitrogen (N) 0.9 % w/w, Urea nitrogen (N) 7.0 % w/w, Water-soluble boron (B) 5.0 % w/w, Water-soluble molybdenum (Mo) 0.17 % w/w

Available in:



5 L 20 L

Uses

CROPS	DOSE		RECOMMENDATIONS
	FOLIAR	ROOT	
Horticultural crops and berries **Stone and pome fruit trees and nuts** **Citrus and tropical crops** **Vines and table grapes** **Ornamentals** **Olive trees**	200-250 ml/hl (2-2.5 L/ha)	3-5 L/ha	Foliar application: Perform 1 to 2 applications per crop cycle. Root application: Apply 2 to 3 times per crop cycle.
Industrial and extensive crops (alfalfa, beet, sunflower, etc.)	100-200 ml/hl (1-2 L/ha)	-	Foliar application: Apply 1 to 3 times per crop cycle.

Seipafol Mg

Properties

Seipafol Mg is a fertiliser rich in magnesium (Mg) complexed with heptagluconic acid. The application of complexed magnesium guarantees an optimal absorption of this element very quickly, especially via the stomata. In contrast to aminopolycarboxylates, heptagluconates are highly phytocompatible.

Composition

Water-soluble magnesium oxide (MgO) 4.5 % w/w, Magnesium oxide (MgO) complexed by HGA 4.5 % w/w. Complexing agent HGA: Heptagluconic acid

Uses

CROPS	FOLIAR DOSE	RECOMMENDATIONS
Stone and pome fruit	200-400 ml/hl	Apply 2 to 5 times during the crop cycle. Apply at times of peak demand or when the first deficiency symptoms of the element in question appear in the crop. Adjust the dose according to the crop and the level of deficiency.
Nuts and seeds		
Tropical crops		
Citrus fruit		
Vines and table grapes		
Horticultural crops	200-300 ml/hl	
Berries		
Ornamentals		
Industrial crops	1-2 L/ha	

Available in:

5 L 20 L

Seipafol Mo

Properties

Seipafol Mo is a water-soluble molybdenum-based fertiliser solution derived from sodium molybdate. Recommended for the prevention of deficiency states due to deficiencies in the assimilation of this nutrient. It also improves crop setting, increases chlorophyll concentration in plants, decreases nitrate accumulation and increases protein content, creating favourable conditions for nucleic acid biosynthesis.

Composition

Water-soluble molybdenum (Mo) 8.5 % w/w

Uses

MODE OF APPLICATION	DOSE
Foliar	100-200 ml/hl

Available in:

5 L 20 L

Seipafol MIX

Properties

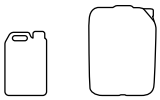
Seipafol Mix is an effective solution of rapidly absorbed micronutrients. Designed as a source of essential micro-elements for crop development, its formula prevents, controls and corrects deficiency states and improves plant physiology. Suitable for foliar and root use. Its richness in iron, manganese, molybdenum, zinc and boron make it particularly suitable for maintaining a balanced crop at optimum micronutrient levels.

Composition

Water-soluble boron (B) 0.6 % w/w, Water-soluble iron (Fe) 3.5 % w/w, Iron (Fe) complexed by GA 3.5 % w/w, Water-soluble manganese (Mn) 2.5 % w/w, Manganese (Mn) complexed by GA 2.5 % w/w, Water-soluble molybdenum (Mo) 0.05 % w/w, Water-soluble zinc (Zn) 3.0 % w/w, Zinc (Zn) complexed by GA 3.0 % w/w

Complexing agent GA: Gluconic acid

Available in:



5 L 20 L

Uses

CROPS	DOSE		RECOMMENDATIONS
	FOLIAR	ROOT	
Horticultural crops	150-250 ml/hl (2-3 L/ha)	2-4 L/ha	Apply 2 to 5 times during the crop cycle. Apply at times of peak demand, such as at the beginning of early fruit set.
Berries			
Stone and pome fruit trees	200-300 ml/hl (2-3 L/ha)		Apply between 2 and 4 applications throughout the crop cycle where the demand for these elements is greatest, such as from post-flowering onwards.
Nuts and seeds			
Citrus fruit	200-400 ml/hl (3-5 L/ha)	3-5 L/ha	
Tropical crops			
Olive trees		2-4 L/ha	Apply 2 to 4 times during flowering, fruit formation and vegetative development, when the demand for these elements is highest.
Vines and table grapes	150-300 ml/hl (2-3 L/ha)	2-5 L/ha	Perform 2 to 3 applications per cycle at times of high energy demand for these elements, such as pre-flowering.
Ornamentals		2-4 L/ha	Apply 2 to 4 times during vegetative growth.
Industrial and extensive crops (cereals, rapeseed, cotton, etc.)	100-300 ml/hl (2-5 L/ha)		Apply 2 to 4 applications when there is a higher demand for these elements such as vegetative development, flowering and grain filling.

Seals and certifications:

Seipafol ZnMn

Properties

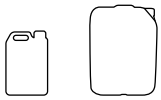
Seipafol ZnMn is a product that provides the crop with the necessary amount of zinc, essential for the formation of important hormones such as auxins, growth hormones that promote cell elongation, ensuring a good development of the aerial part of the plant, as well as the roots. This extra supply of zinc also promotes the synthesis of various proteins and vitamin C. In addition, the influence of manganese associated with iron for the synthesis of chlorophyll is enhanced by the use of this product, which also provides manganese to the crop.

Composition

Water-soluble manganese (Mn) 3.5 % w/w, Manganese (Mn) complexed by GA 3.5 % w/w, Water-soluble zinc (Zn) 3.5 % w/w, Zinc (Zn) complexed by GA 3.5 % w/w

Complexing agent GA: Gluconic acid

Available in:



5 L 20 L

Uses

CROPS	DOSE		RECOMMENDATIONS
	FOLIAR	ROOT	
Horticultural crops	200-400 ml/hl (2-4 L/ha)	2-5 L/ha	Apply 2 to 4 times during vegetative growth.
Berries			
Ornamentals			
Stone and pome fruit trees	200-400 ml/hl (3-5 L/ha)	3-7 L/ha	Apply during sprouting, before and after flowering and at the peak of crop development.
Nuts and seeds			
Citrus fruit			
Tropical crops			
Vines and table grapes	100-300 ml/hl (1-4 L/ha)	2-6 L/ha	Carry out 2 applications: at sprouting and during crop development.
Olive trees	200-400 ml/hl (3-5 L/ha)		Apply 3 times after flowering at intervals of 2-3 weeks.
Industrial and extensive crops (cereals, rapeseed, cotton, etc.)	200-400 ml/hl (2-5 L/ha)	3-5 L/ha	Apply in the first third of the crop.

Seals and certifications:

Calcisei line

Calcium-based compound fertilisers

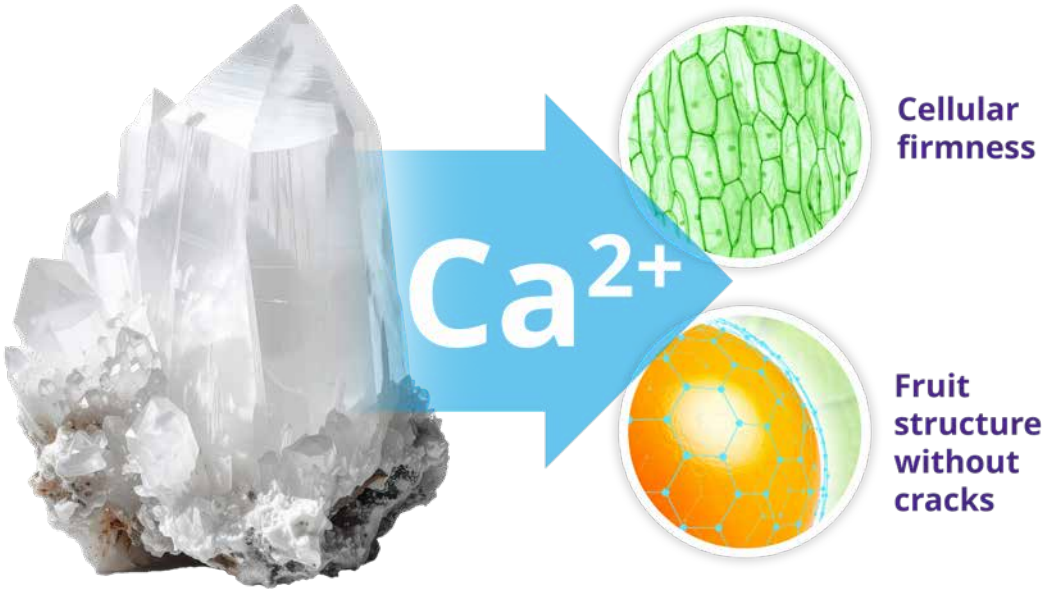
The Calcisei line provides various calcium-based products formulated for plants. This diversity is intended to facilitate the customer's choice of one reference or another according to their specific needs.

All of them are a pillar for the good development of the crop due to the influence of calcium for the plants, both in the division and growth of the cells. In addition to being a structural element of cell walls and membranes, calcium in plants plays a fundamental role in the absorption of plant nutrients.

The Calcisei line presents four products so effective in the prevention and correction of deficiencies such as the washing of salts from agricultural soils: Calcisei 10, Miñosal, Calimax and Guadal Ca.

Their functions are:

- Prevention of common deficiencies such as BER, tip burn, bitter pit and fruit cracking in tomato and apple.
- Structural strengthening of cell walls and membranes.
- Management of soils with high salt content.



Calcisei 10

Properties

Calcisei 10 is an ideal product for preventing deficiencies and correcting calcium deficiencies. It is designed to combat physiopathologies related to this element (BER, tip burn, bitter pit fruit cracking, etc.), as well as to improve the quality of the harvest. Calcisei 10 provides high quality calcium of natural origin, mobile and easily assimilated by all crops. Especially recommended for times of maximum energy demand, especially in growing organs with low transpiration, such as fruits.

Composition

Water-soluble calcium oxide (CaO) 10.0 % w/w

Uses

CROPS	METHOD OF APPLICATION	DOSE
All crops	Foliar	200-400 ml/hl

Available in:

20 L

1000 L - IBC

Miñosal

Properties

Miñosal is a fertiliser that combines calcium and organic matter with a high percentage of humic extract, designed to correct calcium deficiencies. When applied to the soil, it favours interaction with the clay-humic compound, displacing sodium (Na) ions that are lost through leaching, which helps to reduce excess salts in the root zone. Its formulation, enriched with organic matter, provides nitrogen, organic carbon and humic extracts, elements that are essential for vegetative growth and healthy plant development.

Composition

Total nitrogen (N) 4.7 % (nitrogen as nitrate nitrogen 4.4 %, nitrogen as ammoniacal nitrogen 0.3 %), Water-soluble calcium oxide (CaO) 8 %, Organic carbon 21.2 %, Dry matter 40 %

Uses

METHOD OF APPLICATION	DOSE
Foliar application	300-400 ml/hl
Root application	20-40 L/ha per application

Available in:

20 L

1000 L - IBC

Calimax

Properties

Calimax is a fertiliser with a high concentration of calcium, specially designed to prevent deficiencies of this nutrient and to combat various physiopathologies in crops. Its formulation displaces the sodium accumulated in the soil via direct exchange with calcium. The content of organic matter, nitrogen, organic carbon and humic extracts support vegetative growth and healthy plant development.

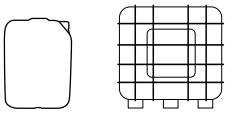
Composition

Total nitrogen (N) 6.6 % (nitrogen as nitrate nitrogen 6.2 %, nitrogen as ammoniacal nitrogen 0.4 %), Water-soluble calcium oxide (CaO) 12 %, Organic carbon 12.4 %, Dry matter 50 %

Uses

METHOD OF APPLICATION	DOSE	
	EXTENSIVE	INTENSIVE
Foliar application	300-400 ml/hl	
Root application	4-8 L/ha per application	10-30 L/ha per application

Available in:



20 L — 1000 L - IBC

Guadal CA

Properties

Guadal Ca is a foliar fertilizer highly concentrated in calcium, designed for its rapid assimilation through the stomata of the leaves, making it an ideal product for foliar application in the prevention and correction of calcium deficiencies and imbalances in the plant. Its formulation, enriched with organic matter, provides nitrogen, organic carbon and humic extracts, essential elements for vegetative growth and healthy plant development. The combination of these components in Guadal Ca ensures fast and efficient absorption, especially at times when the plant requires extra calcium.

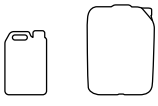
Composition

Total nitrogen (N) 8.3 % (nitrogen as nitrate nitrogen 7.8 %, Nitrogen as ammoniacal nitrogen 0.5 %), Water-soluble calcium oxide (CaO) 14 %, Organic carbon 13.2 %, Dry matter 60 %

Uses

METHOD OF APPLICATION	DOSE
Foliar application	200-400 ml/hl

Available in:



5 L — 20 L

Multisei line

Liquid organic fertilisers

The Multisei line includes Seipasa's liquid organic fertilisers for agriculture. This is a range of soil regenerating products that not only nourish but also improve the structure, composition and microbial activity of the soil. The supply of organic matter restores the soil by balancing its content.

- The liquid organic fertilisers of the Multisei line release macro and micronutrients and facilitate their absorption.
- They increase the cation-exchange capacity and nutrient storage in the soil.
- Activate nutrient mineralisation processes.
- They promote the formation of aggregates in the soil that improve the friability of the soil, facilitating agricultural work, avoiding waterlogging and root asphyxia.
- Multisei nt and Multisei K are an important source of macro and micronutrients, especially relevant in intensive crops, nurseries and seedbeds.
- They improve the efficiency of chemical fertilisers.
- The liquid formulation has an advantage over organic solids, as it manages to reach exactly the main root absorption zone.
- Multisei nt and Multisei K incorporate in their formulation raw materials of vegetable origin with a high degree of refinement, which avoid problems of precipitates and clogging in drip irrigation systems.

Synergies:

- The combined use with Biosei, Ferrosei or other microelements considerably improves the availability of these microelements by favouring their absorption by the roots.
- They enhance Seiland's root protection action by providing a dynamic substrate rich in organic matter.

Multisei nt

Properties

Multisei nt is a highly soluble and easy to handle liquid organic fertiliser, excellent for inclusion in plant nutrition programmes. It feeds and stimulates while improving the structure, composition and microbial activity of the soil and therefore of the crop.

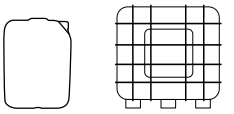
Composition

Total nitrogen (N) 2 % (organic nitrogen (N_{org}) from plant origin 2 %), Total potassium oxide (K_2O) 3.5 %, Organic carbon (C_{org}) 18 %, Dry matter 35 %, C_{org}/N_{Total} 9

Uses

CROPS	ROOT APPLICATION DOSE	RECOMMENDATIONS
Horticultural crops and berries **Ornamentals** **Industrial and extensive crops (cereals, rapeseed, cotton, etc.)**	20-40 L/ha	Particularly recommended in the implantation and development phases of crops. It is advisable to apply at least twice per cycle; the optimum is between 3 and 6 applications, depending on the cycle and time of year. More frequent application will improve the physical and biological properties of the soil.
Stone and pome fruit trees and nuts **Vines and table grapes** **Olive trees**	30-50 L/ha	
Citrus and tropical crops	40-80 L/ha	

Available in:



20 L 1000 L - IBC

Truck:
10x1000 L - 20x1000 L

Seals and certifications:

Multisei K

Properties

Multisei K is a fertiliser rich in potassium and organic matter, designed for easy assimilation at root level. Thanks to its composition, it is a highly effective product for preventing and correcting nutritional deficiencies and improving soil structure, avoiding imbalances that may occur in plants throughout their growth cycle.

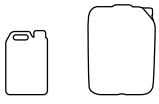
Composition

Total potassium oxide (K_2O) 16 %, Water-soluble potassium oxide (K_2O 16 %, Organic carbon (C_{org}) 16 %, Dry matter 45 %

Uses

CROPS	DOSE ROOT APPLICATION	RECOMMENDATIONS
Horticultural crops and berries, citrus and tropical crops, stone and pome fruit trees and nuts, vines and table grapes, ornamental olive groves, extensive crops	200-350 ml/hl (2-3.5 L/ha) 15-30 L/ha per application	Root application: Adjust the dose and the frequency of application according to the specific requirements of the crop.

Available in:



5 L 20 L

Biosei

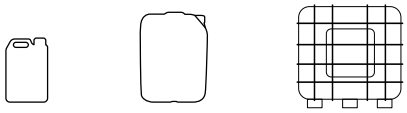
Properties

Biosei is a highly soluble liquid organic fertiliser especially suitable for improving the structure of intensively used soils. Its components represent a direct source of energy for the plants and bring a significant benefit to the yield and final quality of the crop.

Composition

Total potassium oxide (K_2O) 2.3 %, Water-soluble potassium oxide (K_2O) 2.0 %, Organic carbon (C_{org}) 7.0 %, Dry matter 16.3 %

Available in:



5 L | 20 L | 1000 L - IBC

Truck:
10x1000 L - 20x1000 L

Uses

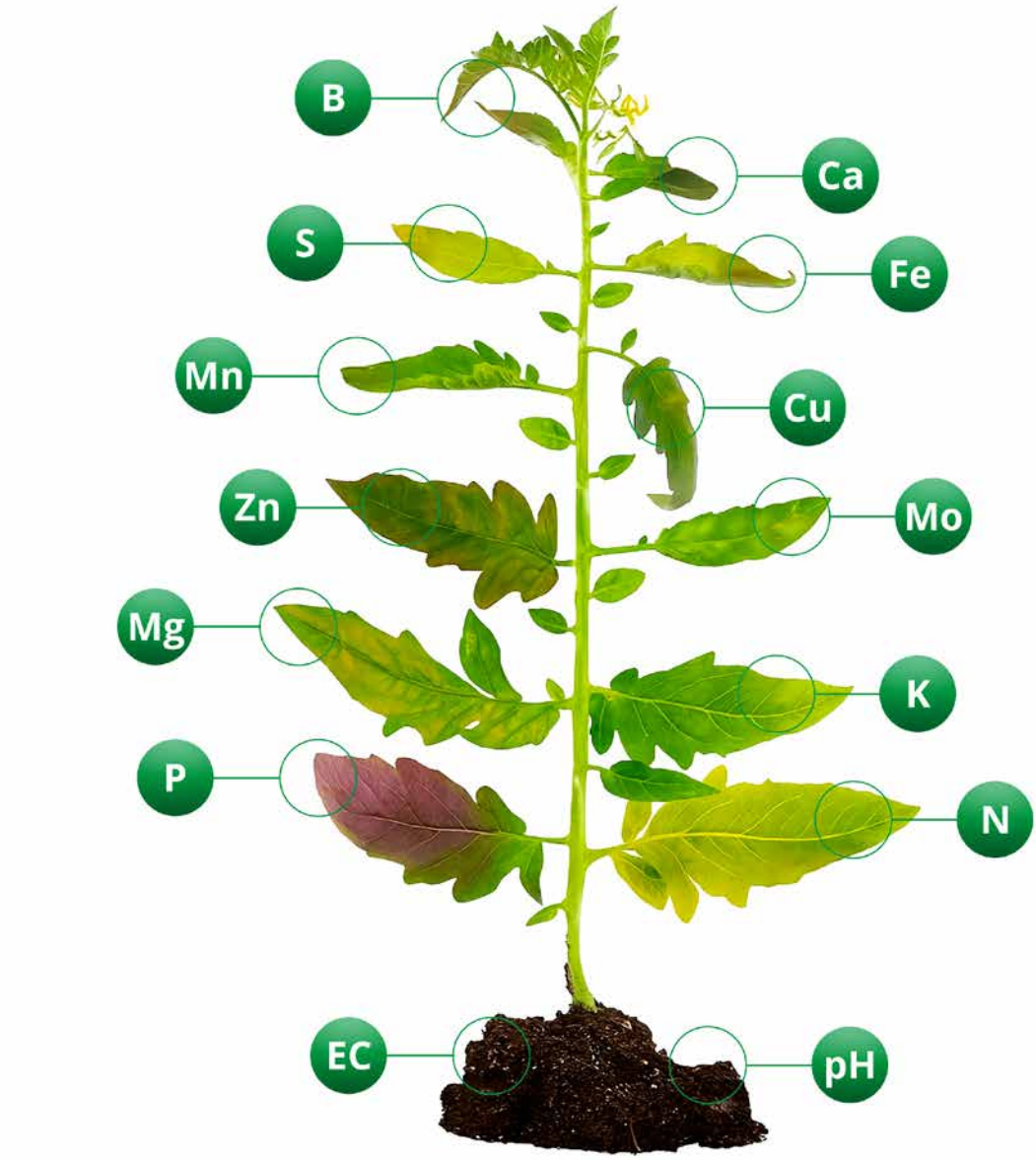
CROPS	DOSE		RECOMMENDATIONS
	FOLIAR APPLICATION	ROOT APPLICATION	
Horticultural crops	200-350 ml/hl (2-3.5 L/ha)	10-25 L/ha	Foliar application: As a foliar fertiliser booster and during periods of stress. Root application: Apply at transplanting and during the crop cycle.
Berries			
Stone and pome fruit trees	200-300 ml/hl (2-3 L/ha)	10-20 L/ha	Foliar application: As a foliar fertiliser booster and during periods of stress. Root application: Applications in pre-flowering, fruit set and onset of swelling.
Nuts and seeds			
Olive trees			
Citrus fruit	200-400 ml/hl (2-4 L/ha)	10-20 L/ha	Foliar application: As a foliar fertiliser booster and during periods of stress. Root application: Applications in spring and summer bud break, pre-flowering, fruit set and onset of swelling.
Tropical crops			
Vines and table grapes	150-300 ml/hl (1.5-3 L/ha)	6-15 L/ha	Foliar application: As a foliar fertiliser booster and during periods of stress. Root application: Pre-sprouting applications, before and after flowering and at veraison.
Ornamentals	100-150 ml/hl (1-2 L/ha)	10-25 L/ha	Foliar application: As a foliar fertiliser booster and during periods of stress. Root application: Apply at transplanting and throughout the crop cycle as crop development requires.
Extensive and industrial crops	10-15 L/ha	-	Foliar application: Apply 3-4 times by spray or pivot.

Seals and certifications:

Deficiency correctors

Effective prevention and correction of nutritional deficiencies

This group comprises a range of products aimed at comprehensively combating nutrient deficiencies in crops. These are references created on the basis of different and studied combinations of what in fertilisation are called trace elements or micronutrients.



Glucosei

Properties

Glucosei is an innovative formulation based on organic copper salts. As a complexing agent for copper, gluconic acid has been used, which is part of many natural substances and ensures optimal assimilation by the plant.

Composition

Water-soluble copper (Cu) 8.00 % w/w, Total copper (Cu) complexed by GA 8.00 % w/w

Complexing agent GA: Gluconic acid

Available in:

1 L 5 L

Uses

CROPS	DOSE		RECOMMENDATIONS
	FOLIAR APPLICATION	ROOT APPLICATION	
Horticultural crops	100-200 ml/hl (1-2 L/ha)	1-3 L/ha	Foliar application: Apply every 8-10 days depending on severity. Root application: Apply according to crop needs.
Berries			
Stone and pome fruit trees	150-300 ml/hl (1-4 L/ha)	2-5 L/ha	Foliar application: Apply every 8-12 days depending on severity in swollen bud and pre-flowering. At the end of the growing season at maximum doses it causes defoliation in fruit trees. Root application: Apply 2-3 times depending on the needs of the crop.
Nuts and seeds			
Citrus, kiwi and tropical crops			
Vines and table grapes	300-500 ml/hl (1-3 L/ha)	2-4 L/ha	Foliar application: Apply every 6-8 days depending on severity. Root application: Apply according to crop needs.
Ornamentals	100-200 ml/hl (1-2 L/ha)		
Olive trees	200-400 ml/hl (1-4 L/ha)	2-5 L/ha	Foliar application: 1-2 applications in spring and autumn. Root application: Apply according to crop needs.
Industrial and extensive crops (cereals, rapeseed, cotton, etc.)	100-200 ml/hl (1-2 L/ha)	1-3 L/ha	Foliar application: Apply every 6-8 days depending on severity. Root application: Apply according to crop needs.

Seals and certifications:

Turisei K

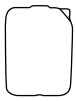
Properties

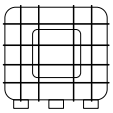
Turisei K is a fertiliser rich in potassium, rapidly absorbed and easily assimilated by the stomata and roots. Its special formula makes it essential for maturation and swelling processes. It is recommended to use Turisei K during the phases of highest demand of this element: fruit ripening, formation of reserve organs (bulbs, tubers, etc.), lignification of shoots, etc. It is also very suitable for the prevention and correction of potassium deficiencies and imbalances in the plant.

Composition

Water-soluble potassium oxide (K_2O) 32.0 % w/w, Chloride <0.004 % w/w

Available in:


20 L


1000 L - IBC

Uses

CROPS	DOSE			RECOMMENDATIONS
	ROOT		FOLIAR	
	APPLICATION	CYCLE	APPLICATION	
Fruit trees	4-10 L/ha	15-50 L/ha	150-250 ml/hl (1-3 L/ha)	Root application: 2-3 applications every 10-15 days from 1 month before harvest. Foliar application: Applications from fruit set until the end of swelling.
Citrus fruit				
Olive trees			200-400 ml/hl (3-5 L/ha)	Root application: 2-3 applications from pit hardening to maturation. Foliar application: Applications from fruit set onwards.
Vines and table grapes			100-200 ml/hl (2-4 L/ha)	Root application: 2-3 applications every 10-15 days from 1 month before harvest. Foliar application: Applications from growth of the fruit until the end of swelling.
Tropical crops	2-10 L/ha	15-50 L/ha	150-300 ml/hl (1-4 L/ha)	Root application: 3 and 4 applications per cycle from swelling onwards. Foliar application: Applications from fruit set until the end of swelling.
Horticultural crops	5-12 L/ha	20-60 L/ha	100-200 ml/hl (3-5 L/ha)	Root application: Apply every 7-10 days from the onset of swelling until the end. Foliar application: Applications from growth of the fruit until the end of swelling.
Berries				
Extensive and industrial crops	2-8 L/ha	15-40 L/ha	200-400 ml/hl (3-6 L/ha)	Root application: 3-4 applications over the course of the cycle from the onset of flowering. Foliar application: Support at times of peak nutritional needs.

Seisil

Properties

Seisil is a specific and balanced formulation of silicon and potassium that helps to correct deficiencies caused by high crop demand. Seisil ensures correct grain filling, fruit ripening and post-harvest.

Composition

Water-soluble potassium oxide (K_2O) 9.5 %

Available in:

5 L

Uses

CROPS	DOSE		RECOMMENDATIONS
	FOLIAR APPLICATION	ROOT APPLICATION	
Horticultural crops	100-300 ml/hl (1-3 L/ha)	3-5 L/ha	Foliar application: Apply at the first signs of deficiency and at times of high demand. Root application: Apply 2 to 3 times with emphasis on peak demand.
Berries			
Stone and pome fruit trees	150-300 ml/hl (1.5-3 L/ha)	5-10 L/ha	
Nuts and seeds			
Olive trees			
Citrus fruit			
Tropical crops			
Vines and table grapes			
Ornamentals	100-300 ml/hl (1-3 L/ha)	1-4 L/ha	
Industrial and extensive crops (cereals, rapeseed, cotton, etc.)	150-300 ml/hl (1.5-3 L/ha)	-	Foliar application: Make 2-3 applications at times of maximum demand for this nutrient.
Enhancer	100-300 ml/hl (1-3 L/ha)	-	Use in mixture with phytosanitary treatments to complement its action.

Oleomax

Properties

Oleomax is a liquid blend of micronutrients, manganese and zinc. Its use is recommended in deficiency states of these micronutrients. Manganese and zinc act as essential constituents of several enzymes and play an important catalytic role in the plant. They are key elements in the synthesis of nucleic acids and proteins such as auxin metabolism.

Composition

Water-soluble manganese (Mn) 1.4 % w/w, Water-soluble zinc (Zn) 1.1 % w/w

Uses

CROPS	DOSE		RECOMMENDATIONS
	ONLY FOLIAR	AS SYNERGIST	
Greenhouse and outdoor horticultural crops	700-1000 ml/hl (7-10 L/ha)	1-2 L/ha (100-300 ml/hl)	Start applications when the first symptoms are observed. Every 7-10 days depending on severity.
Citrus fruit	500-1000 ml/hl (7-10 L/ha)	1-3 L/ha (200-400 ml/hl)	It is advisable to apply at the beginning of the winter shutdown, coinciding with the winter treatment. During the vegetative growth phase, apply according to needs.
Stone and pome fruit trees and nuts and seeds			
Olive tree			
Table grapes and vines	800-1000 ml/hl	1-3 L/ha (200-400 ml/hl)	End of flowering, bunch closure, veraison and pre-harvest.

Available in:

5 L

Naphos

Properties

Naphos is a liquid inorganic fertiliser with a high content of fertiliser elements such as nitrogen (N) and phosphorus (P_2O_5). Naphos has a slightly acidic pH which reduces the risk of phytotoxicity and improves miscibility.

Composition

Total nitrogen (N) 2.0 % w/w, Ammoniacal nitrogen (N) 1.9 % w/w, Water-soluble phosphorus pentoxide (P_2O_5) 7.2 % w/w

Uses

CROPS	DOSE FOLIAR APPLICATION	RECOMMENDATIONS
Horticultural crops and berries	800-1000 ml/hl	Apply 2 to 4 foliar applications every 7-15 days depending on needs.
Stone and pome fruit trees and nuts	400-600 ml/hl	Foliar application in mixture with other products.
Citrus and tropical crops	100-150 ml/hl	Application to improve wettability conditions during application.
Vines and table grapes		
Ornamentals		
Olive trees		
Industrial and extensive crops (cereals, rapeseed, cotton, etc.)		

Available in:

5 L

Lecisei

Properties

Lecisei is a copper-based solution. The copper in Lecisei is formulated in such a way as to facilitate foliar absorption and penetration. Copper is an essential element in numerous biological processes such as lignin formation, carbohydrate and nitrogen metabolism.

Composition

Water-soluble copper (Cu) 3,0 % w/w
Mineral anions: sulphates

Available in:

5 L

Uses

CROPS	DOSE FOLIAR APPLICATION	RECOMMENDATIONS
Horticultural crops	200-350 ml/hl (2-3 L/ha)	Apply 3 to 4 times every 8-10 days depending on severity.
Berries		
Stone and pome fruit trees	200-400 ml/hl (2-4 L/ha)	Perform 2-3 applications every 8-12 days depending on the severity in swollen bud and pre-flowering.
Nuts and seeds		
Citrus fruit		
Tropical crops		
Vines and table grapes	200-500 ml/hl (2-4 L/ha)	Apply 2-3 times every 6-8 days depending on severity.
Ornamentals	200-350 ml/hl (2-3 L/ha)	
Olive trees	300-500 ml/hl (2-4 L/ha)	Apply 1-2 times in spring and autumn and repeat depending on severity.
Industrial and extensive crops (cereals, rapeseed, cotton, etc.)	200-300 ml/hl (1-2 L/ha)	Apply 3 to 4 times every 8-10 days depending on severity.

Fixar

Properties

Fixar is a product formulated with zinc, which provides the necessary amount of this element for a balanced development of the crops, being essential in the formation of certain growth hormones such as auxins, and is responsible for the synthesis of several proteins and vitamin C. Fixar is a product compatible with most treatments and can be used with all types of spraying machinery, including those with reduced volumes.

Composition

Water-soluble zinc (Zn) 3.0 % w/w

Uses

CROPS	DOSE FOLIAR APPLICATION	RECOMMENDATIONS
Stone fruit, pome fruit, nuts, tropical crops and citrus fruits **Vines and table grapes** **Horticultural crops and berries** **Ornamentals** **Industrial crops**	0.5-1 L/ha	Apply as a foliar spray to improve application efficiency. Adjust the dose according to the solution volume, for 200-400 L/ha use a dose of 0.5 L/ha; for 800-1000 L/ha use 1 L/ha.

Available in:

1 L 5 L

Organitro

Properties

Organitro is a solid organic fertiliser in accordance with Regulation (EU) 2018/848 and therefore suitable for use in organic farming. Organitro has a NPK 9-6-1 balance and its application ensures correct fertilisation, as well as maintaining the levels of organic matter necessary for the creation of fertile soils. It provides a high content of organic nitrogen.

Composition

Total nitrogen (N) 9.0 % w/w, Organic nitrogen (N) 9.0 % w/w, Total phosphorus pentoxide (P_2O_5) 6.0 % w/w, Total potassium oxide (K_2O) 1.0 % w/w, Total calcium oxide (CaO) 10.0 % w/w, Organic matter 80.0 % w/w, Organic carbon (C) 46.4 % w/w, C/N ratio 5.2, Humic acids 16.0 % w/w, Minimum-maximum moisture content 2-14 %

Uses

CROPS	DOSE PER CROP CYCLE	RECOMMENDATIONS
Fruit and citrus trees	800-2000 kg/ha	Apply as a basal fertiliser. It is recommended to carry out a small amount of work after application.
Olive tree and vine	500-1500 kg/ha	Apply to the soil after harvest or at the onset of vegetative activity.
Horticultural crops	1500-3000 kg/ha	Apply as a basal fertiliser in pre-transplanting.
Industrial crops	400-2000 kg/ha	Apply as a basal fertiliser in pre-sowing.

Available in:

25 kg

Seals and certifications:

Q'sei

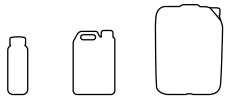
Properties

Q'sei is a fertiliser formulated with amino acids and boron, designed to quickly and effectively correct deficiencies of this micronutrient. It favours the assimilation and distribution of boron to the growing points, promoting the proper development of harvestable organs.

It is particularly suitable for extensive crops with high boron demands such as alfalfa, beet, sunflower and rape, especially on limy soils or soils poor in organic matter. In alfalfa, it improves protein quality; in sugar beet, it increases sugar levels; in sunflower, it corrects early symptoms of deficiency, and in oilseed rape it boosts yields and seed quality.

In addition, in olive groves it improves the transport of sugars and promotes fertilisation thanks to its effect on the formation of the pollen tube.

Available in:



Composition

Free amino acids 15.6 % w/w, Total nitrogen (N) 2.5 % w/w, Organic nitrogen (N) 2.5 % w/w, Water-soluble boron (B) 2.0 % w/w

Uses

CROPS	DOSE		RECOMMENDATIONS
	FOLIAR APPLICATION	ROOT APPLICATION	
Alfalfa	2-3 L/ha	2-4 L/ha	Apply after each cut, alone or with other treatments.
Sunflower	300-600 ml/hl 2-3 L/ha	2-3 L/ha	Apply from 5-7 leaves.
Cotton	200-400 ml/hl	2-3 L/ha	Apply at the onset of vegetation.
Beetroot	200-400 ml/hl	2-3 L/ha	Apply from 6-8 leaves.
Rapeseed	200-300 ml/hl	2-3 L/ha	Apply between the rosette and stem elongation stage.
Olive tree	300-500 ml/hl 1-2 L/ha	1-2 L/ha	Apply 20 days before flowering and in autumn.

Seivital K

Properties

Seivital K is a solid organo-mineral NPK fertiliser, with a NPK 3-3-10 balance, and its application ensures correct fertilisation, as well as maintaining the levels of organic matter necessary for the creation of fertile soils.

Composition

Total nitrogen (N) 3.0 % w/w, Organic nitrogen (N) 3.0 % w/w, Phosphorus pentoxide (P_2O_5) soluble in neutral ammonium citrate and in water 3.0 % w/w, Water-soluble potassium oxide (K_2O) 10.0 % w/w, Organic carbon (C) 13.0 % w/w, Humic acids 4.0 % w/w

Uses

CROPS	DOSE
Vineyard and olive grove	750-1500 kg/ha
Other crops	1000-2000 kg/ha

Seals and certifications:

Available in:

25 kg

Foliplant CALCIO FLOR

Properties

Foliplant Calcio Flor contains water-soluble calcium and zinc complexed with carboxylic acids, as well as soluble boron in a formula that guarantees the assimilation of calcium in the fruit. Prevents and corrects calcium and microelement deficiencies, producing a decisive effect on the quality, firmness and conservation of the fruit.

Composition

Water-soluble calcium oxide (CaO) 9.0 % w/w, Calcium oxide (CaO) complexed by GA 9.0 % w/w, Water-soluble zinc (Zn) 2.0 % w/w, Zinc (Zn) complexed by GA 2.0 % w/w, Water-soluble boron (B) 1.0 % w/w

Complexing agent GA: Gluconic acid

Uses

CROPS	FOLIAR DOSE*	RECOMMENDATIONS
Pome fruit trees	0.3-0.4 % (3-4 L for 1000 L of water)	Apply 3 to 5 times every 15 days from petal fall to half fruit size.
Stone fruit trees		Apply as soon as petals fall, 2-3 applications every 15 days, also on certain varieties it is advisable to make 2 applications one month before harvesting.
Grape		From fruit set onwards 3 applications every 15-20 days.
Citrus fruit		Apply from petal fall onwards 3 to 5 applications every 15-20 days.
Horticultural crops		In fruit crops, start applications after the first fruits have set for 10-15 days. In other vegetables apply during critical periods.

Available in:

1 L 5 L 20 L

* Given the limited capacity of the fruit to take up calcium via the roots, we recommend foliar applications.

Chelates

Soluble products formulated with chelated Fe for rapid assimilation

Iron is a vital element for crops. Despite being the fourth most abundant element in the earth's crust, iron is not always found in a form that can be assimilated by plants. This is due to a multitude of factors including the effect of the soil pH, the mineral components of the soil or the limestone and bicarbonate content of the soil.

Iron deficiency in plants is called iron chlorosis, and the use of iron chelates is essential to filling this gap. Seipasa's iron chelates are developed using Akzo Nobel technology to convert iron into an element that can be assimilated by the plant. In addition to rapid assimilation, Seipasa's iron chelates are easy to handle and provide ample stability and a high degree of water solubility.

Ferrosei PLUS 5.0 ORTO-ORTO EDDHA

Properties

Ferrosei Plus 5.0 is a state-of-the-art iron chelate (FeEDDHA) developed to prevent and correct iron chlorosis in the plant. It is an easy to handle solution, very soluble in water and quickly assimilated by the plant.

Composition

Water-soluble iron (Fe) 6.0 % w/w, Total iron (Fe) chelated by EDDHA 5.0 % w/w, Iron (Fe) chelated by [o.o] EDDHA 5.0 % w/w

Chelating agent [o.o] EDDHA: Ethylenediamine acid- N,N'-di[(ortho-hydroxyphenyl)acetic]

Available in:

1 kg 5 kg

Uses

DOSE (g/tree)	YOUNG PLANTING SEEDLINGS	PLANTING START OF PRODUCTION PLANTING DENSITY:		PLANTATION IN FULL PRODUCTION PLANTING DENSITY:	
		HIGH	LOW	HIGH	LOW
Citrus fruit	5-20	15-30	30-50	50-75	75-100
Pear tree, apple tree	10-20	10-20	15-25	30-50	60-80
Peach	5-15	15-25	25-50	50-75	75-100
Plum	5-10	5-15	10-25	25-35	35-45
Apricot	5-10	5-15	10-25	25-35	35-45
Table grapes	5-10	5-10	10-15	10-15	15-20
Vines	3-5	3-5	5-7	5-7	7-10
Olive tree	5-15	15-25	20-30	30-50	50-90
Horticultural crops	0.5-2 g/plant	6-8 kg/ha vegetables short 10-15 kg/ha vegetables long cycle			
Strawberries and berries	3-6 kg/ha				
Nurseries	1-3 g/plant				
Floriculture	0.5-2 g/plant				

Seals and certifications:

CAAE INSUMOS UNE 142500

Ferrosei 4.2 ORTO-ORTO EDDHA

Properties

Ferrosei 4.2 can be applied by any system: Injection, tillage, blanket irrigation, localised irrigation, etc., as its special formulation is based on totally soluble micro-granules (solubility in water higher than 99 %), so that Ferrosei 4.2 is totally dissolved in a few seconds. It is also recommended to apply the mixture immediately. In cases where Ferrosei 4.2 is not applied with the irrigation water, it is advisable to irrigate after application.

Composition

Water-soluble iron (Fe) 6.0 % w/w, Total iron (Fe) chelated by EDDHA 6.0 % w/w, Iron (Fe) chelated by [o.o] EDDHA 4.2 % w/w

Chelating agent [o.o] EDDHA: ethylenediamine- N,N'-di[(ortho-hydroxyphenyl)acetic acid]

Available in:

1 kg 5 kg

Uses

DOSE (g/tree)	YOUNG PLANTING SEEDLINGS	PLANTING START OF PRODUCTION PLANTING DENSITY:		PLANTATION IN FULL PRODUCTION PLANTING DENSITY:	
		HIGH	LOW	HIGH	LOW
Citrus fruit	10-30	20-40	40-60	50-75	75-100
Pear tree, apple tree	15-25	10-20	20-40	40-60	60-80
Peach	10-30	15-30	30-60	50-75	75-100
Plum	5-15	5-15	15-30	30-40	40-50
Apricot	5-15	5-15	15-30	30-40	40-50
Table grapes	5-10	5-10	10-15	10-15	15-20
Vines	3-5	3-5	5-7	5-7	7-10
Olive tree	5-15	15-25	20-30	30-50	50-90
Horticultural crops	0,5-3 g/plant	6-8 kg/ha vegetables short cycle 10-15 kg/ha vegetables long cycle			
Strawberries and berries	5-7 kg/ha				
Nurseries	1-3 g/plant				
Floriculture	0,5-3 g/plant				

Seals and certifications:

CAAE INSUMOS UNE 142500

seipasa natural technology

Gresca ID

Properties

POLYMICRO

Gresca ID Polymicro is a multi-corrector with chelated elements in the form of highly soluble micro-granules, specially prepared to prevent and correct chlorosis caused by iron, zinc and manganese deficiencies.

HIERRO

Correctors for iron deficiencies (iron chlorosis), caused either by a lack of this element in the soil or because it is in a form that cannot be assimilated by plants.

Available in:

1 kg 5 kg

Seals and certifications:

Gresca Polymicro
Gresca Hierro 5.0
Gresca Hierro 5.3

Composition

	POLYMICRO	HIERRO 5.5	HIERRO 5.3	HIERRO 5.0	HIERRO 4.2
Iron (Fe) chelated by [o,o] EDDHA	4.5 w/w	5.5 w/w	5.3 w/w	5.0 w/w	4.2 w/w
Zinc (Zn)	0.70 w/w	-	-	-	-
Manganese (Mn)	1.25 w/w	-	-	-	-

Uses

POLYMICRO

CROPS	DOSE g/plant or g/m²	
	PREVENTION	CORRECTION
Fruit trees New plantation Full production	 5 - 15 40 - 60	 5 - 15 60 - 80
Citrus fruit Saplings Trees in full production	 5 - 15 60 - 80	 30 - 50 40 - 100
Strawberry	0.5 g/m²	4-5 g/m²
Horticultural crops	2 g/m²	5 g/m²

HIERRO

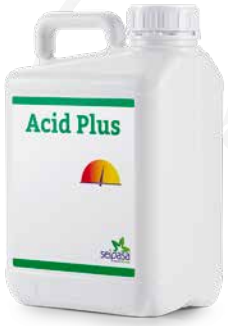
CROPS	DOSE
Citrus, fruit and olive trees Trees before going into production At the onset of production In full production Highly developed trees	 5-15 g/tree 15-25 g/tree 30-50 g/tree 50-100 g/tree
Trees in nurseries	1-3 g/plant 3-5 g/m² of surface area
Vineyards Newly planted In production	 3-5 g/plant 5-10 g/plant
Horticultural crops and ornamentals	0.5-1 g/m² of surface area

pH regulator

Treatment efficacy enhancers

Agricultural water is characterised by highly variable hardness and pH values. In many cases, the efficacy of plant protection and nutritional formulations can be conditioned by these characteristics of the water used. In its pH regulator line, Seipasa offers the product Acid Plus to solve this type of difficulties.

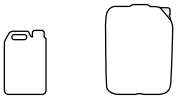
Acid Plus



Properties

Acid Plus is a solution regulator suitable for hard water conditioning (> 300 ppm). Acid Plus blocks the metal cations present in the water, favouring the formation of a homogeneous solution. It avoids the problems caused by this type of hard water such as: filter clogging and floc formation. In addition, Acid Plus is a natural pH regulator for waters with basic final pH values. It is formulated with a component that changes colour with pH variation, which makes it easier to identify the correct pH and makes the use of a pH meter unnecessary. This colour change allows a fast and effective pH control to be maintained.

Available in:



Composition Degree of acetic acid 18,0 % w/w

Uses

TYPE OF WATER	INITIAL pH OF WATER	FINAL pH REQUIRED	ml NECESSARY/1000 L	EQUIVALENCE IN %
Type A **Hardness 20 ppm;** **Ca ratio: Mg=50:50**	6.0	5.0	50 ml/1000 L	0.005 %
		4.3	100 ml/1000 L	0.01 %
Type B **Hardness 20 ppm;** **Ca ratio: Mg=80:20**	8.5	8.0	50 ml/1000 L	0.005 %
		7.5	100 ml/1000 L	0.01 %
		7.0	150 ml/1000 L	0.015 %
		6.5	250 ml/1000 L	0.025 %
		6.0	400 ml/1000 L	0.04 %
		5.5	600 ml/1000 L	0.06 %
		5.0	850 ml/1000 L	0.085 %
Type C **Hardness 500 ppm;** **Ca ratio: Mg=80:20**	7.5	6.0	50 ml/1000 L	0.005 %
		5.6	100 ml/1000 L	0.01 %
		5.2	150 ml/1000 L	0.015 %
		4.5	250 ml/1000 L	0.025 %
Type D **Hardness 342 ppm;** **Ca ratio: Mg=80:20**	6.5	5.5	50 ml/1000 L	0.005 %
		5.0	100 ml/1000 L	0.01 %

NATURAL ORIGIN

The Natural Origin line combines the full potential of the *Natural Technology* focused on knowledge-based agriculture. Here we find solutions that, based on the essence of nature, allow you to enhance the balance and vitality of your crops. These products are **formulated to strengthen the general condition of the plant, favouring its internal processes**: they help optimise the state of the crop, allowing it to develop its maximum potential in a natural way.

Carmine

Properties

Unlock the full potential of your crops with Carmine, a special solution designed to increase crop yields. Its unique formulation enriched with *Bacillus subtilis* boosts crop production. Start your way to agricultural success with Carmine and enjoy bountiful harvests.

Composition

Bacillus subtilis SEIBS23 ≥ 10^8 CFU/ml

Available in:

1 L 5 L

Mitsei

Properties

Mitsei is a liquid solution recommended for zinc (Zn) deficiencies in crops. Zinc contributes to enzymatic processes in plants, is involved in chlorophyll synthesis and carbohydrate formation, and promotes the formation and development of new tissues.

Composition

Water-soluble zinc (Zn) 3.0 % w/w. Mineral anion: nitrate

Available in:

1 L 5 L

Abenta nt

Properties

Abenta nt is a product that provides zinc to crops. It is recommended for deficiency states of this essential micronutrient for crops. It is designed to achieve proper plant growth and development.

Composition

Water-soluble zinc (Zn) 3 % w/w. Mineral anion: sulphates

Available in:

1 L 5 L

Astral

Properties

Astral is a liquid blend of calcium (Ca) and magnesium (Mg) nutrients for foliar application. Its use is recommended for deficiency states of these nutrients. Calcium and magnesium play an important role in the proper development and growth of the plant by providing consistency and improving the photosynthetic activity of crops.

Composition

Water-soluble calcium oxide (CaO) 0.5 % w/w, Water-soluble magnesium oxide (MgO) 1.5 % w/w

Available in:

Amicos COMBI

Properties

Amicos Combi is a liquid blend of micronutrients, recommended for manganese (Mn) and zinc (Zn) deficiency states in crops. These micronutrients act as essential components of several enzymes and play an important catalytic role in the plant. They are key elements in the synthesis of nucleic acids and proteins as well as in auxin metabolism.

Composition

Water-soluble manganese (Mn) 1.0 % w/w, Water-soluble zinc (Zn) 1.0 % w/w

Available in:

Organic references

ORGANIC REGULATION	BR						JAS						NOP						UE					
	COMPLIANCE CERT IN TABLE						COMPLIANCE CERT IN TABLE						COMPLIANCE CERT IN TABLE						COMPLIANCE CERT IN TABLE					
Product	CAAE	CAAE-UNE 142500	CAAE-UNE 315500	ECOCERT	FIBL	OMRI	CAAE	CAAE-UNE 142500	CAAE-UNE 315500	ECOCERT	FIBL	OMRI	CAAE	CAAE-UNE 142500	CAAE-UNE 315500	ECOCERT	FIBL	OMRI	CAAE	CAAE-UNE 142500	CAAE-UNE 315500	ECOCERT	FIBL	OMRI
Abenta nt																						●		
Amicos COMBI																				●				
Basei 2C																					●			
Basei LEC																						●		
Biosei																				●				
Bryosei																		●		●				
BT 32 SEIPASA													●								●			
Carmine																				●				
Dinamico 150																						●		
Ferrosei PLUS																				●				
FILER flow																				●				
Foliplant																				●				
Fungisei				●						●						●		●			●	●	●	
Glucosei													●					●		●		●		
Gresca ID POLYMICRO HIERRO 5.0 HIERRO 5.3																				●				
Kynetic4																		●		●				
Mitsei				●																●				
Multisei nt				●														●		●			●	
Nakar																					●			
Organitro										●			●							●				
Pirecris				●														●			●	●	●	
Radisei																				●				
RIGUER flow																				●				
ROKER flow																				●				
Seipafol B																				●				
Seipafol Fe																		●						
Seipafol MIX																				●				
Seipafol ZnMn																				●				
Seitylis																						●	●	
Seivital K																				●				
Septum				●																	●		●	
Terrasei ENGORDE																		●						

BR: Brazilian organic standard (IN 46), regulated by the Brazilian Ministry of Agriculture.

JAS: Japanese Agricultural Standard. Organic production regulations in Japan.

NOP: National Organic Program. US organic farming regulations, administered by the USDA (US Department of Agriculture).

UE: This refers to the European Union's organic legislation, which regulates how organic products must be produced, labelled and controlled within the member countries.

UNE:

142500: Fertiliser usable in organic farming (could also be: usable in organic plant production) according to Regulation (EU) 2018/848 in accordance with UNE 142500.

315500: Phytosanitary/Basic substance usable in organic farming (could also be: usable in organic plant production) according to Regulation (EU) 2018/848 in accordance with UNE 315500.

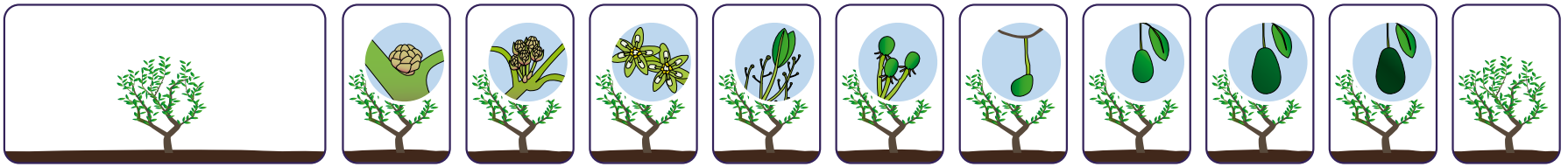
ECOCERT: Product suitable for use in organic farming according to [as appropriate, Regulations (EU) No 2018/848 and 2021/1165 and/or the NOP Regulation and/or the JAS Regulation].

Certifications

CROP PROGRAMMES*

* These charts are provided for information purposes only. Any use of the above products should be based only on the approved labels and any claims regarding the safety and efficacy of the product should be resolved only by the label. Seipasa is not responsible for mixtures of products not expressly approved. Always read and follow the instructions on the label. The information is based on SEIPASA's technical experience under certain environmental conditions and therefore represents typical approximations. The information in these data sheets is not binding.

AVOCADO CROP PROGRAMME



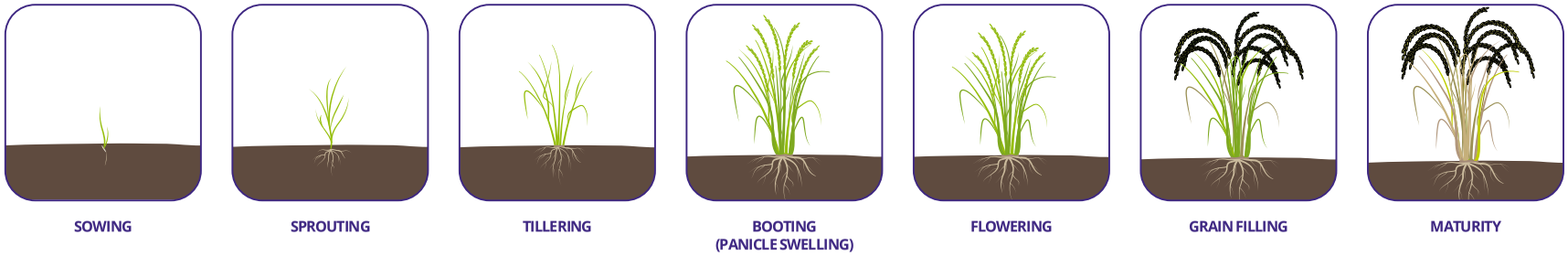
	FLOWER INDUCTION - DORMANCY	PRE-FLOWERING - FLOWERING - BUDDING	FRUIT SET	DEVELOPMENT OF THE FRUIT	FRUIT AT THE STAGE OF MATURATION	MATURITY	HARVEST	POST-HARVEST
PROTECTION	Fungisei F: 1-3 L/ha	Fungisei F: 1-3 L/ha			Fungisei F: 1-3 L/ha			
BIOSTIMULATION	Bryosei F: 2-4 L/ha Radisei R: 2.5-5 kg/ha	SeiZen F: 0.5-1.5 L/ha Kynetic4 F: 100-300 ml/hl		SeiZen F: 0.5-1.5 L/ha Radisei R: 2.5-5 kg/ha	Sweetsei F: 300-400 ml/hl			
BIOACTIVE LINE		ROKER flow R: 5-10 L/ha	RIGUER flow F: 7-15 L/ha		FILER flow R: 5-10 L/ha			
CROP NUTRITION	Glucosei R: 2-5 L/ha	Seipafol MIX F: 2-3 L/ha R: 2-4 L/ha Seipafol B-Mo F: 2-2.5 L/ha R: 3-5 L/ha Seipafol ZnMn F: 3-5 L/ha R: 3-7 L/ha Seipafol CALCIO F: 250-350 ml/hl Gresca ID POLYMICRO R: 5-100 g/plant Multisei nt R: 40-80 L/ha in total per season		Mitsei F: 2-5 L/ha Seipafol K F: 150-300 ml/hl		Glucosei R: 2-5 L/ha		

Applications:
F: foliar R: root

Certifications:

seipasa

RICE CROP PROGRAMME



BIOSTIMULATION

- Bryosei F: 1-2 L/ha
- SeiZen F: 0.5-1.5 L/ha
- Kynetic4 F: 1.3 L/ha
- SeiZen F: 0.5-1.5 L/ha
- Sweetsei F: 2-5 L/ha

BIOACTIVE LINE

- ROKER flow F: 5-10 L/ha
- RIGUER flow F: 7-15 L/ha
- FILER flow F: 5-10 L/ha

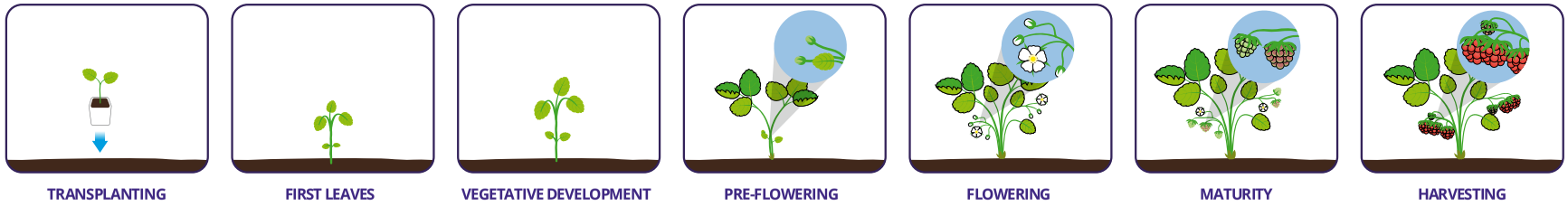
CROP NUTRITION

- Seisil F: 1.5-3 L/ha
- Seipafol MIX F: 2-5 L/ha
- Seipafol CALCIO F: 3-5 L/ha
- Seipafol ZnMn F: 2-5 L/ha
- Seipafol CALCIO F: 3-5 L/ha
- Carmine F: 2 L/ha
- Turisei K F: 3-6 L/ha
- Multisei nt F: 10-16 L/ha per application or 40-50 L/ha total

Applications:
F: foliar R: root

Certifications:

BERRY CROP PROGRAMME



TRANSPLANTING | FIRST LEAVES | VEGETATIVE DEVELOPMENT | PRE-FLOWERING | FLOWERING | MATURITY | HARVESTING

PROTECTION

- Septum F: 2-4 L/ha
- Fungisei (Except strawberry) F: 1-3 L/ha
- Pirecris F: 0.75-1 L/ha
- Septum F: 2-4 L/ha
- Fungisei (Except strawberry) F: 1-3 L/ha
- Pirecris F: 0.75-1 L/ha

BIOSTIMULATION

- SeiZen F: 0.5-1.5 L/ha
- Kynetic4 F: 2-3 L/ha
- SeiZen F y R: 0.5-1.5 L/ha
- Sweetsei F: 2-4 L/ha
- Radisei 2.5 kg/ha
- Radisei R: 2.5 kg/ha
- Radisei R: 2.5 kg/ha

BIOACTIVE LINE

- FILER flow F: 1-4 L/ha R: 3-8 L/ha
- RIGUER flow F: 7-15 L/ha R: 2-8 L/ha
- ROKER flow F: 2-4 L/ha R: 3-8 L/ha

CROP NUTRITION

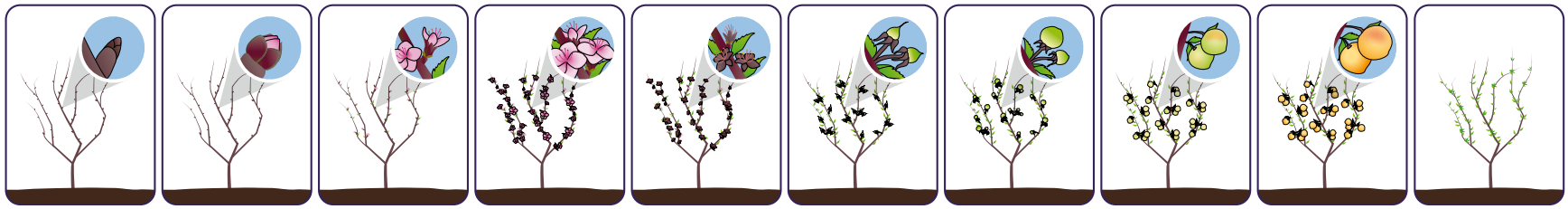
- Mitsei F: 1.5-3 L/ha
- Amicos SEC F: 1.5-3 L/ha
- Abenta nt F: 2-3 L/ha
- Abenta nt F: 2-3 L/ha
- Multisei nt R: 20-40 L/ha
- Carmine F: 2-3 L/ha R: 1-4 L/ha
- Carmine F: 2-3 L/ha R: 1-4 L/ha

Applications:
F: foliar R: root

Certifications:

seipasa

STONE AND POME FRUIT CROP PROGRAMME



BUDS CLOSED | SWELLING OF BUDS | ONSET OF FLOWERING | IN FULL BLOOM | PETAL FALL | FRUIT SET | SWELLING PHASE | ONSET OF MATURATION | COLLECTION | POST-HARVEST

PROTECTION

- Fungisei F: 1-3 L/ha (Except peach) — PETAL FALL
- Pirecris F: 0.75-1.5 L/ha — IN FULL BLOOM
- Septum F: 1-3 L/ha — PETAL FALL
- Fungisei F: 1-3 L/ha (Except peach) — ONSET OF MATURATION
- Basei 2C F: 10-40 g/L — ONSET OF MATURATION

BIOSTIMULATION

- Radisei R: 2.5-5 kg/ha — SWELLING OF BUDS
- Kynetic4 F: 2-3 L/ha R:15-25 L/ha (distributed among several applications) — ONSET OF FLOWERING
- Bryosei F: 2-4 L/ha R: 3-5 L/ha — BUDS CLOSED
- Bryosei F: 2-4 L/ha R: 3-5 L/ha — PETAL FALL
- Radisei R: 2.5-5 kg/ha — FRUIT SET
- Sweetsei F: 2-4 L/ha y R: 3-4 L/ha — ONSET OF MATURATION
- SeiZen F: 1-1.5 L/ha — COLLECTION
- Radisei R: 2.5-5 kg/ha — POST-HARVEST

BIOACTIVE LINE

- FILER flow F: 2-4 L/ha R: 5-10 L/ha — SWELLING PHASE
- RIGUER flow F: 2-8 L/ha R: 7-15 L/ha — SWELLING PHASE
- ROKER flow F: 2-5 L/ha R: 5-10 L/ha — PETAL FALL

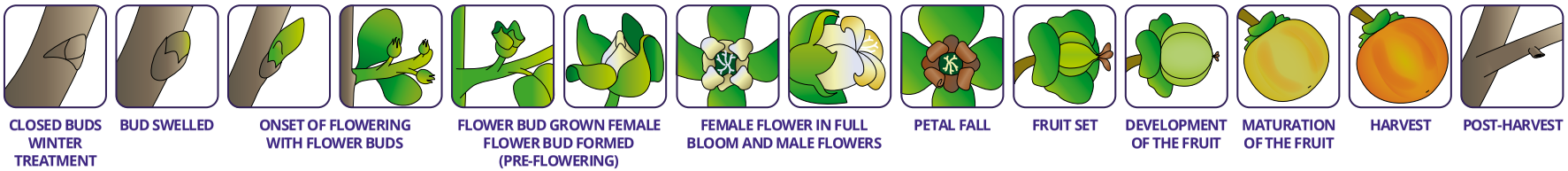
CROP NUTRITION

- Seipafol ZnMn F: 2-4 L/ha R: 3-5 L/ha — SWELLING OF BUDS
- Seipafol ZnMn F: 2-4 L/ha R: 3-5 L/ha — ONSET OF MATURATION
- Gresca ID POLYMICRO R: 5-25 g/plant — PETAL FALL
- Gresca ID POLYMICRO R: 5-25 g/plant — POST-HARVEST
- Multisei nt R: 30-50 L/ha — SWELLING OF BUDS
- Glucosei F: 1-4 L/ha R: 2-5 L/ha — BUDS CLOSED
- Astral F: 2.5-3.5 ml/L — IN FULL BLOOM
- Glucosei F: 1-4 L/ha R: 2-5 L/ha — POST-HARVEST

Applications:
F: foliar R: root

Certifications:

PERSIMMON CROP PROGRAMME



CLOSED BUDS WINTER TREATMENT | BUD SWELLED | ONSET OF FLOWERING WITH FLOWER BUDS | FLOWER BUD GROWN FEMALE FLOWER BUD FORMED (PRE-FLOWERING) | FEMALE FLOWER IN FULL BLOOM AND MALE FLOWERS | PETAL FALL | FRUIT SET | DEVELOPMENT OF THE FRUIT | MATURATION OF THE FRUIT | HARVEST | POST-HARVEST

PROTECTION

- Pirecris F: 0.75-1.5 L/ha
- Fungisei F: 1-3 L/ha

BIOSTIMULATION

- SeiZen F y R: 1-1.5 L/ha
- SeiZen F y R: 1-1.5 L/ha
- Kynetic4 F: 2-3 L/ha R: 15-25 L/ha
- Kynetic4 F: 2-3 L/ha R: 15-25 L/ha
- Kynetic4 F: 2-3 L/ha R: 15-25 L/ha
- Radisei R: 2.5-5 kg/ha
- Radisei R: 2.5-5 kg/ha

CROP NUTRITION

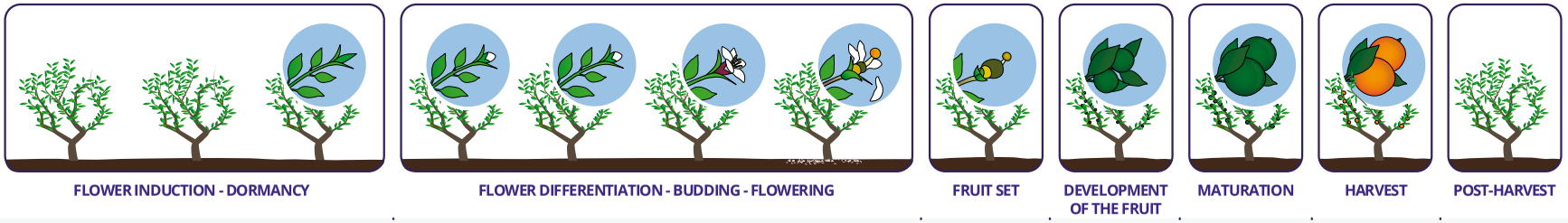
- Glucosei F: 1-4 L/ha R: 2-5 L/ha
- Glucosei F: 1-4 L/ha R: 2-5 L/ha
- Abenta nt F: 1-3 L/ha R: 2-4 L/ha
- Abenta nt F: 1-3 L/ha R: 2-4 L/ha
- Glucosei F: 1-4 L/ha R: 2-5 L/ha
- Seipafol MIX F: 2-3 L/ha R: 2-4 L/ha
- Seipafol ZnMn F: 3-5 L/ha R: 3-7 L/ha
- Seipafol CALCIO F: 2.5-3.5 L/ha
- Seipafol CALCIO F: 2.5-3.5 L/ha
- Seipafol CALCIO F: 2.5-3.5 L/ha
- Seipafol K F: 2-4 L/ha R: 5-10 L/ha
- Seipafol K F: 2-4 L/ha R: 5-10 L/ha
- Carmine F: 2-4 L/ha
- Gresca ID POLYMICRO R: 60-80 g/plant
- Gresca ID POLYMICRO R: 60-80 g/plant
- Seisil F: 1.5-3 L/ha R: 5-10 L/ha
- Seisil F: 1.5-3 L/ha R: 5-10 L/ha
- Multisei nt R: 40 L/ha/month

Applications:
F: foliar R: root

Certifications:

seipasa

CITRUS CROP PROGRAMME



FLOWER INDUCTION - DORMANCY | FLOWER DIFFERENTIATION - BUDDING - FLOWERING | FRUIT SET | DEVELOPMENT OF THE FRUIT | MATURATION | HARVEST | POST-HARVEST

PROTECTION

- Pirecris F: 0.7-1.5 L/ha

BIOSTIMULATION

- Bryosei F: 2-4 L/ha R: 3-5 L/ha
- Sweetsei R: 3-4 L/ha
- Foliplant F: 1-3 L/ha
- Kynetic4 F: 2-3 L/ha
- SeiZen F: 1-1.5 L/ha
- Radisei R: 2.5-5 kg/ha
- Radisei R: 2.5-5 kg/ha

BIOACTIVE LINE

- ROKER flow R: 5-10 L/ha
- RIGUER flow R: 2-8 L/ha
- FILER flow F: 2-4 L/ha R: 5-10 L/ha

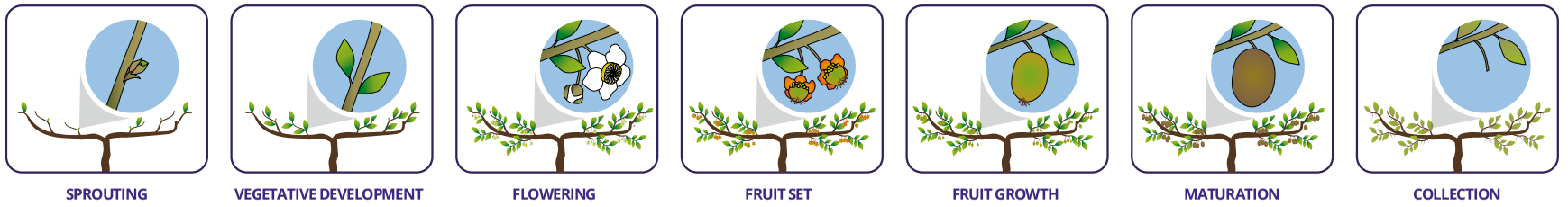
CROP NUTRITION

- Carmine R: 1-4 L/ha
- Mitsei F: 2-5 L/ha
- Abenta nt F: 2-6 L/ha R: 2-5 L/ha
- Glucosei R: 2-5 L/ha
- Glucosei R: 2-5 L/ha
- Foliplant CALCIO FLOR F: 1-3 L/ha
- Seisil F: 1.5-3 L/ha R: 5-10 L/ha
- Glucosei R: 2-5 L/ha
- Seipafol B-Mo F: 2-2.5 L/ha R: 3-5 L/ha
- Seipafol ZnMn F: 3-5 L/ha
- Seipafol CALCIO F: 2.5-3.5 L/ha
- Gresca ID POLYMICRO R: 5-100 g/plant
- Gresca ID POLYMICRO R: 5-100 g/plant
- Gresca ID POLYMICRO R: 5-100 g/plant
- Multisei nt R: 40-80 L/ha

Applications:
F: foliar R: root

Certifications:

KIWI CROP PROGRAMME



SPROUTING | VEGETATIVE DEVELOPMENT | FLOWERING | FRUIT SET | FRUIT GROWTH | MATURATION | COLLECTION

PROTECTION

- Fungisei F: 1-3 L/ha

BIOSTIMULATION

- Bryosei F: 2-4 L/ha - R: 3-5 L/ha
- Kynetic4 F: 2-3 L/ha R: 15-25 L/ha
- Radisei R: 2.5-5 kg/ha
- SeiZen F: 0.5-1.5 L/ha
- Radisei R: 2.5-5 kg/ha
- Radisei R: 2.5-5 kg/ha

BIOACTIVE LINE

- RIGUER flow R: 2-8 L/ha
- FILER flow R: 5-10 L/ha
- ROKER flow R: 5-10 L/ha

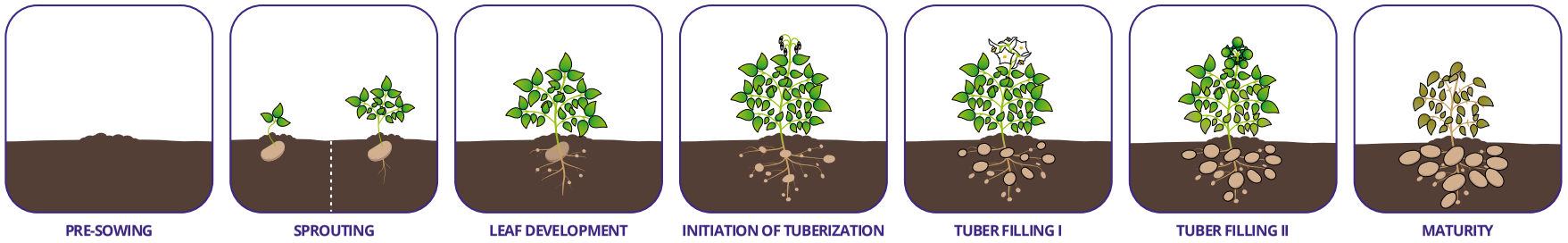
CROP NUTRITION

- Carmine R: 1-4 L/ha
- Mitsei F: 2-5 L/ha
- Seipafol CALCIO F: 2.5-3.5 L/ha
- Seipafol K F: 2-4 L/ha R: 5-10 L/ha
- Glucosei F: 1-4 L/ha R: 2-5 L/ha
- Abenta nt F: 1-3 L/ha
- Glucosei F: 1-4 L/ha R: 2-5 L/ha
- Seisil F: 1.5-3 L/ha R: 5-10 L/ha
- Multisei nt R: 30-50 L/ha

Applications:
F: foliar R: root

Certifications:

POTATO CROP PROGRAMME



PROTECTION

- Septum F: 2-4 L/ha

BIOSTIMULATION

- Radisei R: 2.5-5 kg/ha
- Radisei R: 2.5-5 kg/ha
- Radisei R: 2.5-5 kg/ha

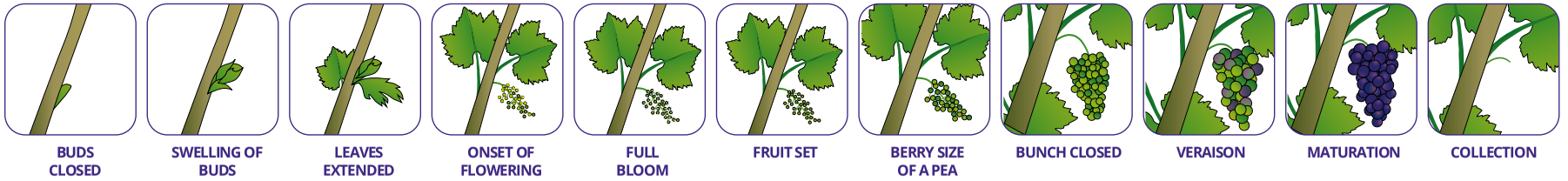
CROP NUTRITION

- Glucosei F y R: 1-3 L/ha
- Glucosei F y R: 1-3 L/ha
- Glucosei F y R: 1-3 L/ha
- Carmine R: 1-4 L/ha
- Turisei K F: 3-5 L/ha R: 5-12 L/ha

Applications:
F: foliar R: root

Certifications:

VINE CROP PROGRAMME



PROTECTION

- Pirecris F: 0.5-1.5 L/ha
- Pirecris F: 0.5-1.5 L/ha
- BT 32 F: 0.5-1 kg/ha
- BT 32 F: 0.5-1 kg/ha
- Septum F: 2 L/ha
- Fungisei F: 1-3 L/ha
- Fungisei F: 1-3 L/ha
- Basei 2C F: 0.42-2 kg/ha
- Basei 2C F: 0.42-2 kg/ha
- Basei LEC F: 75 ml/hl

BIOSTIMULATION

- Bryosei F: 4 L/ha
- Kynetic4 F: 2.5 L/ha
- Kynetic4 F: 2.5 L/ha
- SeiZen F: 0.5-1.5 L/ha
- SeiZen F: 0.5-1.5 L/ha
- SeiZen F: 0.5-1.5 L/ha
- Radisei R: 3 kg/ha
- Radisei R: 3 kg/ha
- Radisei R: 3 kg/ha

CROP NUTRITION

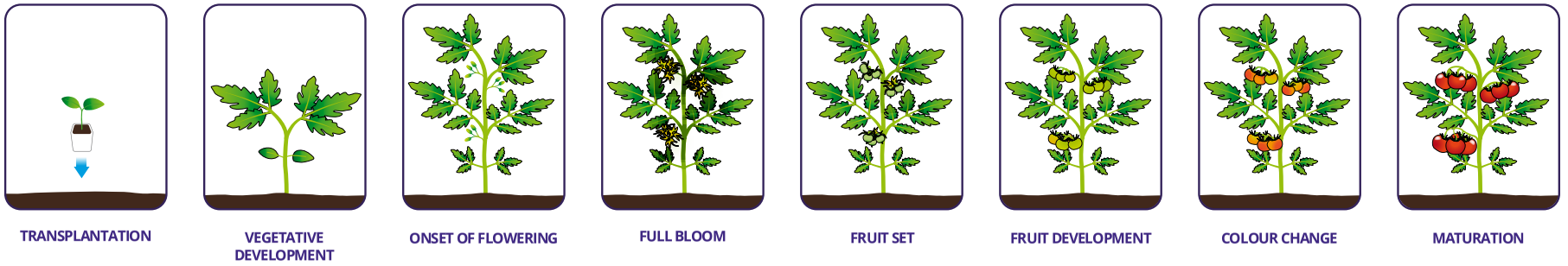
- Carmine F: 1-4 L/ha
- Abenta nt F: 1-3 L/ha
- Glucosei F: 1-3 L/ha
- Glucosei F: 1-3 L/ha
- Seisil F: 1.5-3 L/ha
- Terrasei EQUILIBRIO R: 5-10 L/ha/2.5 weeks
- Multisei nt R: 30 L/ha/month

Applications:
F: foliar R: root

Certifications:

seipasa

TOMATO CROP PROGRAMME



TRANSPLANTATION | VEGETATIVE DEVELOPMENT | ONSET OF FLOWERING | FULL BLOOM | FRUIT SET | FRUIT DEVELOPMENT | COLOUR CHANGE | MATURATION

PROTECTION

- Pirecris F: 0.75-1.5 L/ha
- Septum F: 2-3 L/ha
- Basei 2C F: 2.5-5 kg/ha
- BT 32 F: 0.5-1 kg/ha
- Basei LEC F: 1.5 L/ha
- Fungisei F: 1-3 L/ha

BIOSTIMULATION

- Bryosei F: 2-3 L/ha
- Kynetic4 F: 2-3 L/ha - R: 5-15 L/ha
- Sweetsei F: 2-3 L/ha
- Radisei R: 2.5-5 kg/ha
- Radisei R: 2.5-5 kg/ha
- SeiZen F: 0.5-1.5 L/ha
- SeiZen F: 0.5-1.5 L/ha

BIOACTIVE LINE

- RIGUER flow R: 2-8 L/ha

CROP NUTRITION

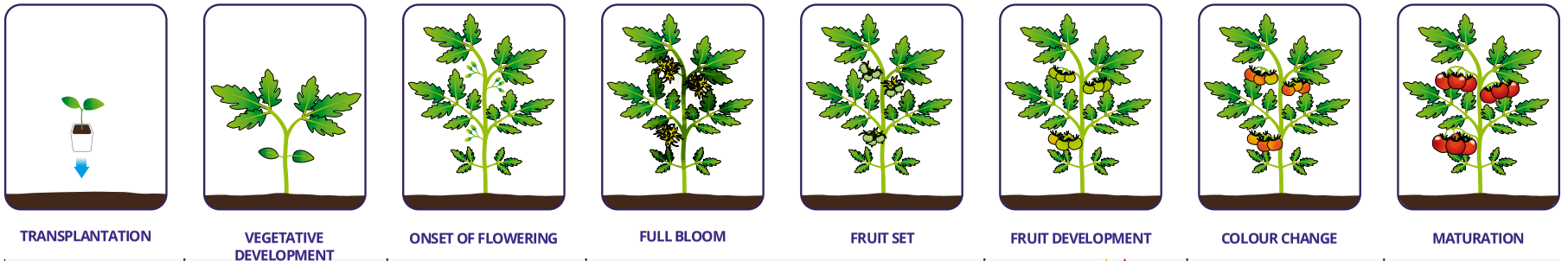
- Mitsei F: 1.5-3 L/ha
- Abenta nt F: 2-3 L/ha
- Glucosei F: 1.5-3 L/ha
- Multisei nt R: 5-10 L/ha week

Applications:
F: foliar R: root

Certifications:

seipasa

INDUSTRIAL TOMATO CROP PROGRAMME



TRANSPLANTATION | VEGETATIVE DEVELOPMENT | ONSET OF FLOWERING | FULL BLOOM | FRUIT SET | FRUIT DEVELOPMENT | COLOUR CHANGE | MATURATION

PROTECTION

- Pirecris F: 0.75-1.5 L/ha
- Septum F: 2-3 L/ha
- Basei 2C F: 2.5-5 kg/ha
- BT 32 F: 0.5-1 kg/ha
- Basei LEC F: 1.5 L/ha
- Fungisei F: 1-3 L/ha

BIOSTIMULATION

- Bryosei F: 2-3 L/ha
- Kynetic4 F: 2-3 L/ha R: 5-15 L/ha
- Sweetsei F: 2-3 L/ha
- Radisei R: 2.5-5 kg/ha
- Radisei R: 2.5-5 kg/ha
- Radisei R: 2.5-5 kg/ha
- SeiZen F: 0.5-1.5 L/ha
- SeiZen F: 0.5-1.5 L/ha

BIOACTIVE LINE

- RIGUER flow R: 2-8 L/ha

CROP NUTRITION

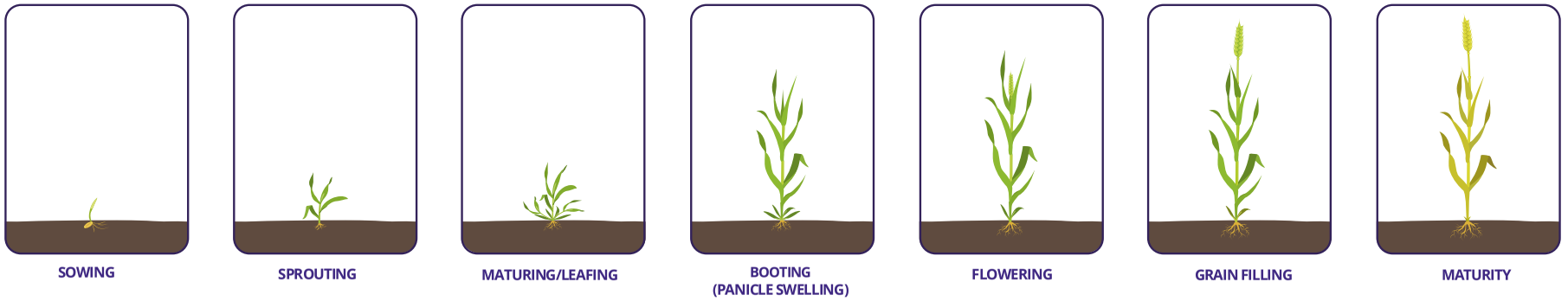
- Mitsei F: 1.5-3 L/ha
- Mitsei F: 1.5-3 L/ha
- Glucosei F: 1.5-3 L/ha
- Abenta nt F: 2-3 L/ha
- Multisei nt R: 5-10 L/ha week

Applications:
F: foliar R: root

Certifications:

seipasa

CEREAL CROP PROGRAMME



BIOSTIMULATION

- Bryosei F: 1-3 L/ha
- Kynetic4 F: 1-3 L/ha
- SeiZen F: 0.5-1.5 L/ha

BIOACTIVE LINE

- FILER flow R: 3-8 L/ha
- RIGUER flow R: 2-8 L/ha
- ROKER flow R: 5-10 L/ha

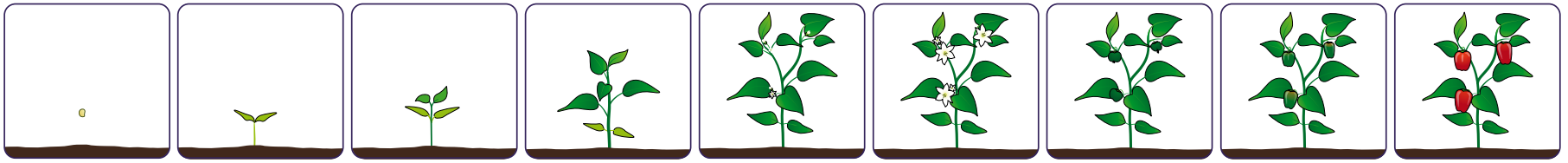
CROP NUTRITION

- Carmine F: 1-2 L/ha
- Seisil F: 1.5-3 L/ha
- Seipafol MIX F: 2-5 L/ha
- Seipafol ZnMn F: 2-5 L/ha
- Turisei K F: 3-6 L/ha
- Multisei nt R: 5-10 L/ha week

Applications:
F: foliar R: root

Certifications:

PEPPER CROP PROGRAMME



GERMINATION | POST TRANSPLANTATION | 3-4 LEAVES | VEGETATIVE DEVELOPMENT | PRE-FLOWERING | FLOWERING | FRUIT SET | FRUIT DEVELOPMENT | MATURATION

PROTECTION

- Fungisei F: 1-3 L/ha
- Pirecris F: 0.7-1.2 L/ha
- BT 32 F: 0.5-1 kg/ha

BIOSTIMULATION

- Kynetic4 F: 2-3 L/ha
- Sweetsei F: 2-3 L/ha
- SeiZen F: 0.5-1.5 L/ha
- SeiZen F: 0.5-1.5 L/ha
- Bryosei F: 2-3.5 L/ha
- Radisei R: 2.5-5 kg/ha

BIOACTIVE LINE

- RIGUER flow R: 2-8 L/ha

CROP NUTRITION

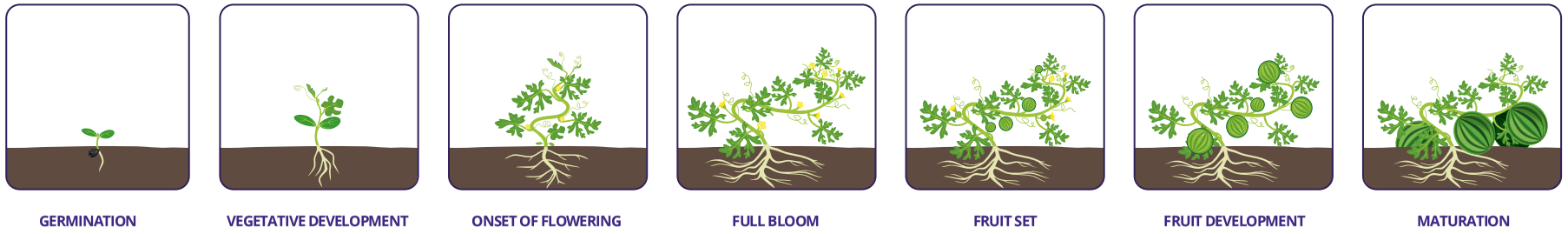
- Mitsei F: 1.5-3 L/ha
- Mitsei F: 1.5-3 L/ha
- Glucosei F: 1.5-3 L/ha
- Abenta nt F: 2-3 L/ha
- Multisei nt R: 5-10 L/ha week

Applications:
F: foliar R: root

Certifications:

seipasa

MELON AND WATERMELON CROP PROGRAMME



PROTECTION

- Fungisei F: 1-3 L/ha

BIOSTIMULATION

- Bryosei R: 1.5-1 L/ha
- Kynetic4 F: 2-3 L/ha R: 5-15 L/ha
- Sweetsei F: 2-3 L/ha
- Radisei R: 2.5-5 kg/ha
- SeiZen F: 0.5-1.5 L/ha

BIOACTIVE LINE

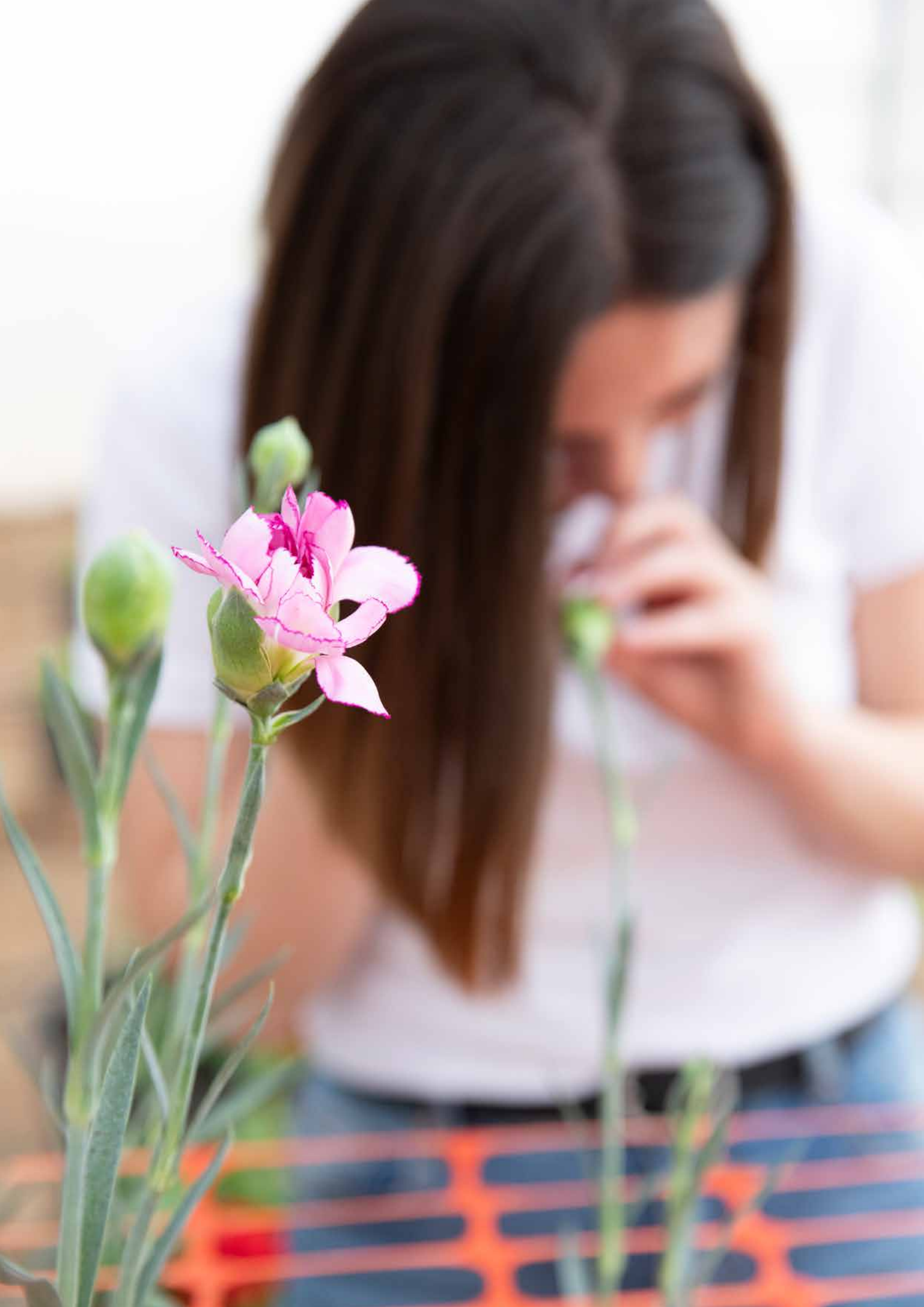
- FILER flow R: 3-8 L/ha
- RIGUER flow R: 2-8 L/ha

CROP NUTRITION

- Mitsei F: 1.5-3 L/ha
- Abenta nt F: 2-3 L/ha
- Seipafol MIX F: 2-3 L/ha R: 2-4 L/ha
- Glucosei R: 1-3 L/ha
- Multisei nt R: 5-10 L/ha week

Applications:
F: foliar R: root

Certifications:



OTHER INFORMATION OF INTEREST

Types of packaging and palletising

Packaging for liquid products

500 ml

1 L

5 L

10 L

20 L

Packaging for solid products

1 kg

5 kg

Packs

Outer size in cm	12 X 1 L	4 X 5 L	2 X 10 L	1 X 20 L	20 X 1 KG	4 X 5 KG
Length	376	376	334	285	360	360
Width	276	276	240	240	265	265
High	270	306	400	380	490	490

Palletisation for the Spanish market

Packaging	No. packs per box	No. of stacks	No. of cartons/ jerrycans pallet	Volume/pallet
1 L	12	5	40	480 L
5 L	4	4	32	640 L
10 L	2	3	36	720 L
20 L		3	48	960 L
1 kg	20	3	36	720 kg
5 kg	4	3	36	720 kg

Palletisation for International markets

Packaging	No. packs per box	No. of stacks	No. of cartons/ jerrycans pallet	Volume/pallet
0.5 L	20	6	48	960 units
1 L	12	6	60	720 L
5 L	4	5	50	1000 L
10 L	2	3	36	720 L
20 L		3	48	960 L
1 kg	20	3	36	720 kg
5 kg	4	3	36	720 kg

Palletised in boxes

Packaging	Box dimensions	Net weight of the box	No. of bags per box
5 kg bags	80 x 120 x 152 (height)	250 kg per box (total 500 kg)	50

Seipasa logistics warehouse.

Tank filling order

Practical tips for a correct application to avoid possible problems of incompatibilities and to achieve maximum efficacy of the preparation

Order of addition:

1º pH regulators*

2º Water soluble bags (WSB)

3º Soluble granules (SG)

4º Dispersible granules (WG)

5º Wettable powders (WP)

6º Suspension concentrate (SC, Flow)

7º Capsule suspensions (CS)

8º Emulsifiable liquids (EC, EW, ME)

9º Soluble liquids (SL)

10º Surfactants / Wetting agents

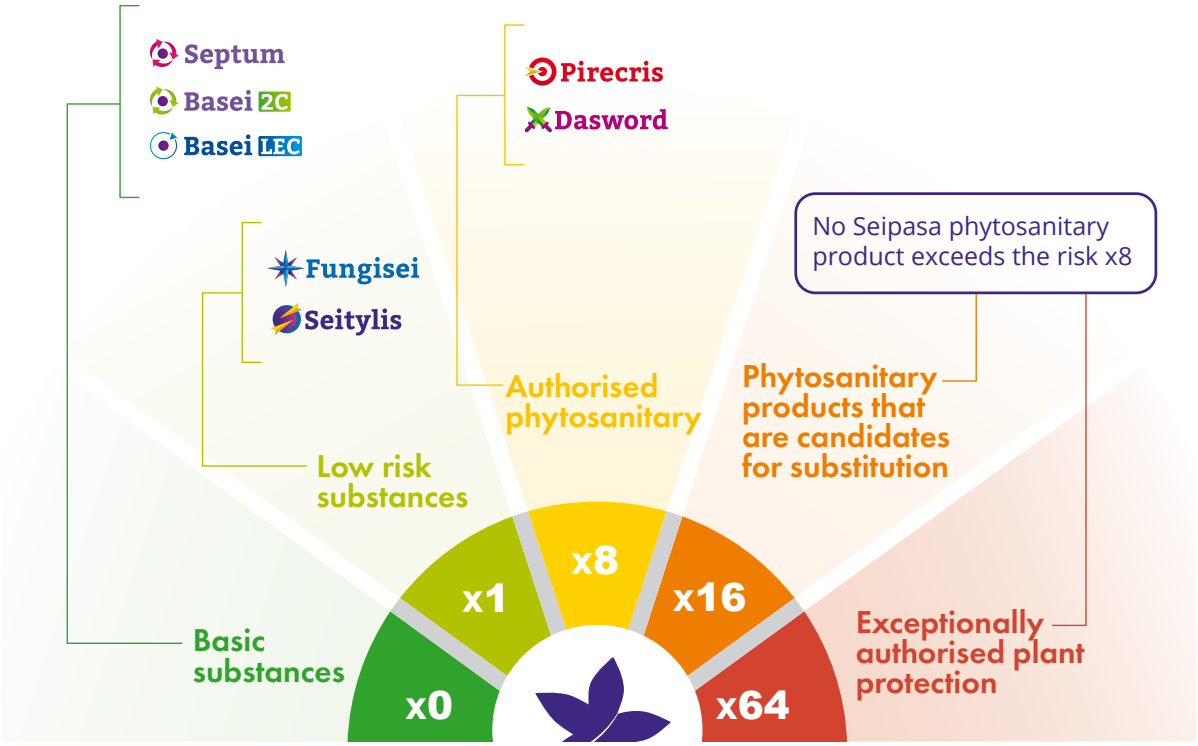
11º Foliar fertilisers

12º Anti-drift liquids

*To be introduced first only in the case of specific pH regulators. When using substances with wetting properties and which have a pH-regulating effect, they must be introduced into the tank in the order assigned to the surfactants/wetting agents. Exception: in Fosetyl-Al formulations, concentrated suspensions (Flows) must be added before Fosetyl-Al-containing products.

Low risk or zero risk phytosanitary products

Our biocontrol products present no or very low risk in their interaction with humans, the environment and water.*



*The risk rating of products is calculated by multiplying volumes sold by the risk of each product from the following formula: volume x Tox index (*HRI 1 = Σ Vi ri*).

Royal Decree 555/2019 of 27 September, amending Royal Decree 1311/2012 of 14 September, **establishing the framework for action to achieve the sustainable use of phytosanitary products**.

Map of areas and commercial managers

Spain

Zone 0

Francisco Romero
Sales Manager Seipasa Spain
fromero@seipasa.com

Francisco Ignacio Sánchez
fsanchez@seipasa.com

Zone 1

Carles Casals
ccasals@seipasa.com

Zone 2

Miguel Ángel Romera
mromera@seipasa.com

Cristina Sánchez
casanchez@seipasa.com

M.ª Eugenia Oliver
eoliver@seipasa.com

Zone 3

Leo Rodríguez
lrodriguez@seipasa.com

Zone 4

José María Domínguez
jmdominguez@seipasa.com

Ángel Ortega
aortega@seipasa.com

Zone 5

Roberto Ruíz
rruiz@seipasa.com

Zone 6

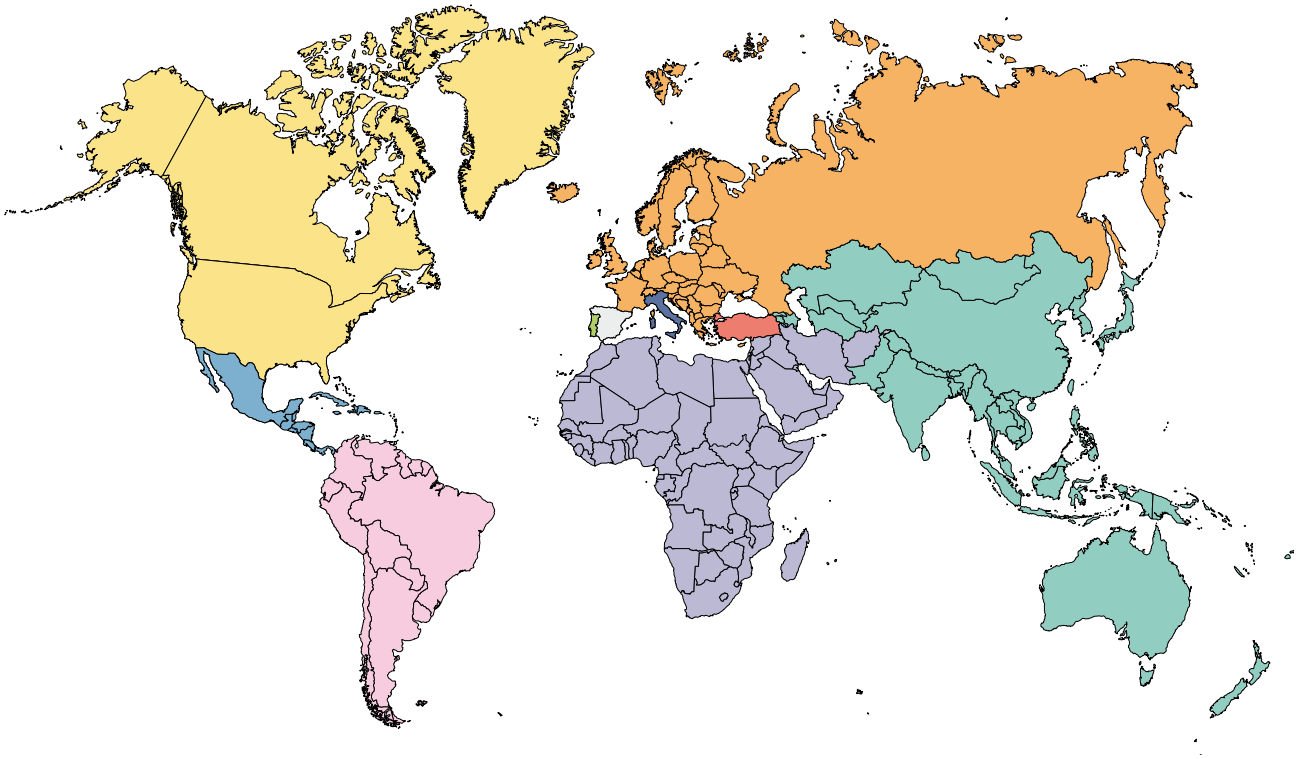
Andrés Sánchez
asanchez@seipasa.com

Zone 7

Javier Sánchez
jsanchez@seipasa.com

Zone 8

Jorge Montón
jmonton@seipasa.com



International

Mexico and Central America
Carlos Castro
Commercial Director Seipasa Mexico
ccastro@seipasa.com

LATAM
José Luis Egas
Head of Business Unit Seipasa LATAM
jlegas@seipasa.com

Europe
Ricardo Nuno Ferreira
Business Development Manager Seipasa Europe
rferreira@seipasa.com

Portugal
Pedro Mota
Area Manager Seipasa Portugal
pmota@seipasa.com

Italy
Diego Gornati
Country Manager Seipasa Italy
dgornati@seipasa.com

Turkey
Hüseyin Günerergin
Business Development Manager Seipasa Turkey
hgunerergin@seipasa.com

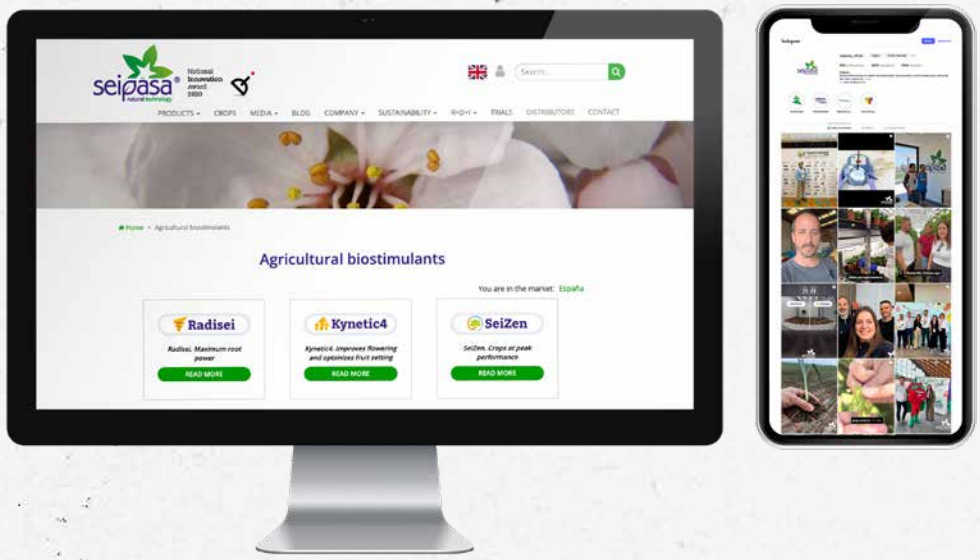
Africa-MEA
Abdellatif Oussalah
Business Development Manager Seipasa Africa
aoussalah@seipasa.com

USA / Canada
Mike Green
Business Development Manager Seipasa
USA & Canada
mgreen@seipasa.com

Asia-Pacific
Luciano Fioramonti
Business Development Manager Seipasa APAC
lfioramonti@seipasa.com

Chief Commercial Officer
José Ángel Talavera
jatalavera@seipasa.com

We research, develop and produce natural solutions to make your crops profitable



Visit **seipasa.com**
and find up-to-date information
on our products, field tests,
news and blog

www.seipasa.com

www.seipasa.com
contact@seipasa.com
Tel. +34 962 541 163

SEI 09/25_4