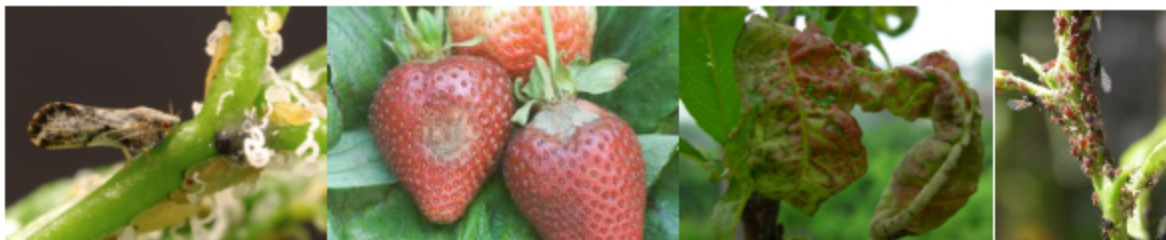




BOTANICAL PESTICIDES NO WASTE





CHARACTERISTICS AND PROPERTIES OF BOTANICAL BIOPESTICIDES

LOW IMPACT ON CROPS

- Low risk of phyto-toxicity.
- Nutritional value addition plants bio-stimulating effects.

SAFETY APPLICATOR

- No toxic effects to the applicator reducing health and safety risks at work.

SELECTIVITY

- Respectable with beneficial wildlife

TRANSLOCATIONS & SYSTEMICS

- The sap incorporates easily into your current botanical extracts as you would with products made from organic material.

LOW RISK OF RESISTANCE

- Repeats treatments without problems since pests and plant diseases do not create resistance problems.

HIGH EFFICIENCY

- Products incorporated into treatment plans within organic farming and conventional. We recommend applying at neutral pH values around 7.

EFFECT FORTIFYING

- Most of them increase the immune system.

WASTE

- 0 days

TERM SAFETY

- 0 days



REFUSE BIRDS



Bird repellent

Composition:

Methylantranilate 30% w/v

Product Features: It is a potent repellent biopesticide botanical origin with some action, formulated with extract of seeds and fruits of different plant species.

Mode of action: Irritating to mucous membranes and the trigeminal nerve, so the birds must come into contact with the product. It can be applied with hand sprayers, ground or aerial equipment, with a volume of dilution to properly cover the area to be treated. In **terrestrial applications** the volume applied should be **150 l/ha**. For **aerial applications** should be **20 l/ha with the addition of 1 l/ha of oil adjuvant**.

Do not make applications with high temperatures, low humidity, high winds, presence of dew or wet surfaces and with chance of rain. The implementation schedule is at twilight sunrise or dusk and at night when birds are NOT on the crop.

REFUSE MAMMALS



Mammal repellent

Composition:

Oleoresin capsium (hot pepper extract)..... 5% w/v

Product Features: is formulated from biodegradable food compounds. By smell and taste aversion repels birds and limits the damage they may cause to crops.

Mode of action: It is through contact but also penetrates into the sheet due to systemic, without affecting the crop. When applied in the culture creates an unfavorable environment for insects that cause damage to crops, producing an effect of appetite as these are uncomfortable to develop their life cycle. By the vapors given off makes an effective repellent action against rabbits, hares, rodents, birds and other pests to crops.

It is a broad spectrum product. Pests that controls, include: diamondback moth (*Plutella xylostella*), *Heliothis* spp, leaf miner (*Liriomyza trifoli*), aphids (*Myzus persicae*, *Aphis craccivora*), Blanga fly (*Bemisia tabaci*), thrips (*Frankliniella occidentalis*).



G&G ALSAT



Essential extract of garlic (*Allium sativum*). Botanical repellent

Composition:

100% Garlic juice (*Allium sativum*).

Active Ingredients: alina, allicin, cycloid alitina and diallyl disulfide own garlic.

Product Features: It is a product with high persistence on the crop. Made with garlic extract obtained by maceration and pressing Bilbos sterilized garlic to prolong its life. The product is effective against various pests and acts by inhalation, contact and ingestion, causing certain disorders plague. Garlic extract is completely biodegradable.

Application:

It can be applied prior dissolution in water at the indicated doses, using any type of manual or automatic spray both aerial or ground level, as also in localized application.

ARRASSE EC



Control of nematodes and ectoparasites Endoparasites with no environmental impact.

Composition:

Sesame oil..... 70% w/v

Lecithin.....30% w/v

Product Features: derived from extracts of specific cultivars of hybrid sesame plants. The mode of action includes nematotoxic and nemastatic effects and possibly disruption of nematode taxis to roots. These results account for the use of sesame for many centuries in crop rotation for its residual nematicide benefits to crops following sesame. It is liquid and soluble in water nematicide incorporated into the soil through the drip irrigation system, which is more effective.

Mode of action:

Create a buffer zone in the roots preventing soil nematodes cause crop damage. It is easily plugged absorbed by the plant and has double systemics, hence its good efficacy for controlling namátodos. It is easily metabolized by the plant into harmless substances. It is biodegradable and does not disturb the natural balance of the soil.



TEOIL-SIGA



Organic Biofungicide based on *Melaleuca alternifolia*

Composition:

Te tree oil.....	23% w/v (230 g/L)
Seeds oil	77% w/v (770 g/L)

Product Features: Powerful fungicide controlling black Sigatoka and is a product for the sustainable production of bananas and plantains, with significant agragados values for the human environment and the environment. Part of the new generation of specific biofungicides in regard to control fungus Black Sigatoka.

This product also works in other horticultural crops controlling fungi type like: Mildew and Mildew of cucurbits.

CITREX 20



Botanical extract to control rot, fungi and bacteria.

Composition:

Citrus seed extract.....	20% w/v
Extract of essential oils.....	80% w/v

Product Features & Mode of Action: Product of high persistence on the crop without waste.

The mode of action of the product is based on altering the permeability of membranes. By inhibiting respiratory processes seedlings are protected. It gives the plant resistance to respond to pathogenic mechanisms thus breaking the chain of deterioration of the plant. The mechanisms of citric acid it disrupts the cell membrane of fungi and bacteria and do not create resistance. Natural resistance also inferred by inducing the creation of exoelicitores that aid in the formation of



CITREX INSECT



Botanical extract to control aphids, bugs, leafminers, mites, mealybugs, thrips, etc.

Composition:

Citrus peel extract and essential oils.....70% w/w

Product Features: Specially recommended for aphids, bugs, leafminers, mites, mealybugs (mango), mosquitoes and to potentiate the action of other insecticides that can be mixed.

Regarding their mode of action is an organic contact insecticide that acts by destroying the cell membrane of insects, mites and nymphs, preferably soft-bodied insects and larvae at levels L1 and L2.

Application:

It should be applied once visible mobile forms of the plague. Completely cover the beam and the underside of the leaves to drip point.

PROCITREX INSECT



Botanical extract to control aphids, bugs, leafminers, mites, mealybugs, thrips, etc.

Composition:

Citrus peel extract and essential oils.....25% w/w

Methyl ester of pine resin.....10% w/w

Diterpenic compounds.....8,5% w/w

Monoterpenic compounds.....9% w/w

Product Features: Specially recommended for aphids, bugs, leafminers, mites, mealybugs (mango), mosquitoes and to potentiate the action of other insecticides that can be mixed.

Regarding their mode of action is an organic contact insecticide that acts by destroying the cell membrane of insects, mites and nymphs, preferably soft-bodied insects and larvae at levels L1 and L2.

Application:

It should be applied once visible mobile forms of the plague. Completely cover the beam and the underside of the leaves to drip point. **Foliar application: 100 - 300 cc/ 100 L**



CITROCINNA



Insecticide, fungicide and acaricide natural origin.

Composition:

Cinnamon extract (*Cinnamomum zeylanicum*).....50% w/w
Citrus extract.....30% w/w

Product Features and Action Mode: Product highly effective against many aphids, spider mites, thrips and powdery mildew. Great respect for beneficial insects.
The product acts by contact, destroying the roof and unfolding chitin of the insect body. Have a repellent effect which alters the smell of the plant confusing the insect.

MIMOSSET 80



Fungicide and bactericide broad spectrum.

Composition:

Mimosa tenuiflora extract.....80% w/w

Product Features and Action Mode: Product particularly active against Botrytis, Mildew, Sclerotinia, Alternaria, Fusarium and different types of bacteria.

The product acts against systemically large number of fungi and bacteria, and can be applied preventively or curatively. Inhibit the enzymatic activity of pathogenic altering membrane formation or structural tissues of organisms, thereby causing immediate death of the pathogen and spore, their reproductive structures.



THYMER 80



Bioproduct used for pollination.

Composition:

Red Thyme.....80% w/w

Product Features: The product increases the activity of pollination to massively attract pollinating insects on crops that require it.

It can be applied in any culture, outdoors or indoors.

PYRET START



Extract natural pyrethrin insecticide.

Composition:

Pure natural pyrethrum extract.....6% w/v

Product Features: Biological insecticide derived from pyrethrum or pyrethrum extract of dried flowers from Kenya *Chrysanthemum cinerarifolium* characterized by rapid contact action, low toxicity to mammals, low risk of emergence of resistance and broad spectrum of activity.



ORTILER



Natural nettle extract.

Composition:

Nettle extract.....100% w/w

Product Features and Action Mode: Product formulated with concentrated aqueous Nettle, traditionally used in organic farming. Cultivation provides a fortifying effect against sucking insects.

Contains histamine, acetylcholine and serotonin irritant action of sucking insects but is not harmful to humans or other mammals on the other hand this product increases the formation of chlorophyll.

Its aplicacipón for all crops before harvest is recommended.

FORMULA NEEM



Systemic inhibitor of plant insects.

Composition:

Neem seed extract (natural oil).....70% w/w

Conditioners (aids).....70% w/w

Product Features: Insect inhibitors endowed plant extract. Systemic, preventive and curative. The Neem tree is an effective immunity against any insect larval and pupal. This demonstrated that they are protected against the following species: Coleoptera, Diptera, Hemiptera, Lepidoptera, Orthoptera, Thysanoptera and Nematodes.



KAPA 100



Natural Fungicide & Bactericide.

Composition:

Seed extract and orange pulp associated with Bioflavonoids.....100% w/w

Product Features: It is a natural fungicide and bactericide, with very low toxicity to humans and animals. Especially suitable for the control of Botrytis cinerea and sour rot in grapes, pisco and vine grapes.

With its signature natural organic product can be used without problems in crop residue (0-day grace period) after ensuring a good harvest.

KAPA 100 controls Botrytis breeds that are resistant to benzimidazole and dicarboximide fungicides.

KAPA 15



Natural Fungicide & Bactericide.

Composition:

Seed extract and orange pulp14,7% w/w
Bioflavonoids0,3% w/w
Sulfur DP (Dry Powder).....85% w/w

Product Features: It is a natural fungicide and bactericide, with very low toxicity to humans and animals. Especially suitable for the control of Botrytis cinerea and sour rot in grapes, pisco and vine grapes.

With its signature natural organic product can be used without problems in crop residue (0-day grace period) after ensuring a good harvest.

KAPA 15 controls Botrytis breeds that are resistant to benzimidazole and dicarboximide fungicides.

KAPA 15 needs no setup, comes ready to be used directly via dusting.



KAPA 50 LIQ



Natural Fungicide & Bactericide.

Composition:

Seed extract and orange pulp associated with Bioflavonoids.....50% w/w

Product Features: It is a natural fungicide and bactericide, with very low toxicity to humans and animals. Especially suitable for the control of *Botrytis cinerea* and sour rot in grapes, berries, tomato, pepper and other vegetables. Also exerts action as postharvest fungi. *Penicillium* sp, citrus and stone fruit, helping to slow resistant strains, *Botrytis cinerea* on nectarine and *Erwinia* sp. asparagus.

With its signature natural organic product can be used without problems in crop residue (0-day grace period) after ensuring a good harvest.

KAPA 10 CuS



Natural Fungicide & Bactericide.

Composition:

Seed extract and orange pulp10% w/w
Copper oxychloride17% w/w
Sulfur63% w/w

Product Features: It is a natural fungicide and bactericide, with very low toxicity to humans and animals. Especially suitable for the control of *Botrytis cinerea* and sour rot in vinegrapes.

KAPA 10 CuS contains three active ingredients in its formulation with different modes of action that have no cross-resistance to complement and enhance, reinforcing the simultaneous control of key diseases in grapevines, constituting an effective alternative to prevent or delay the emergence of resistant bacteria and fungi, being a tool for use in anti resistance programs.

KAPA 10 CuS needs no setup, comes ready to be used directly via dusting.



SUPER Q



Plant extract endowed insect inhibitors. Systemic preventive and curative

Composition:

Quassia amara extract.....100% w/w

Product Features: SUPER Q is a product of high persistence, 0 residue without term security, and can be applied to any crop cycle.

The plant Quassia amara, is endowed with natural active ingredients that control broad-spectrum insect. Use of this product provides effective control of insects of all kinds in the crops where it is applied.

CLENPAL



Pesticides enhancer and cleaner product

Composition:

Potassium salts of fatty acids of palm oil30% w/w

Product Features: This product is characterized as a sticky, moisturizing and wetting ideal. The potassium salt is safe and ideal for cleaning waste molasses and insects on stems and leaves that hinder themselves plant functions, allowing the plant grow more vigorously and better plant health.

Specially recommended for mixing with pesticides, to enhance its activity to soften the chitin exoskeleton or soft-shelled insects, thus allowing more effective penetration.

Cleaner: Insects have the need to filter the phloem-sucking, to remove excess sugars not useful. These droppings that make molasses dripping and preventing plant cover can optimally develop its vital functions.

Prevention fungi (bold): This produces molasses saprophytic fungi developing this molasses, giving a black coloring to leaves and stems. Once the bold is abundant plant respiration through their stomata and photosynthetic function are reduced.

Moisturizer: Promotes own vital plant functions

Boost for phytosanitary treatments: By having a mechanical operation effect destroying the protective layer of the insect and not via ingestion as current chemical insecticides, prevents insects develop defense systems and no resistances are created.



REGARD

Natural broad spectrum fungicide for controlling plant diseases.



REGARD is the new generation of fungicides botanicals without waste.

REGARD suppress pathogenic fungi colonies inhibit the growth and progression of injury. Prevents spore germination.

Composition:

Tea tree oil.....	23,8% w/w
Seed oil.....	77% w/w

Product Features: REGARD is a natural fungicide which acts in preventive and curative manner by growth inhibition of spore germination, mycelial growth inhibition and occupying lesion; inhibition of sporangia by colony suppression and eradication of pathogens present in the fruits and leaves.

Use control is recommended: **Botrytis in blueberries; Botrytis and powdery mildew in grapevines, table grapes and tomatoes; Powdery mildew in spinach, beet and spinach; Cladosporium, Oidium lycopersici in tomato** **Leviellula Tarica; Mildew on onions; Powdery mildew in pepper; Esclerotiniosis on lettuce.**

REGARD is compatible with the use of other fungicides, insecticides and foliar fertilizers.

REGARD is a natural fungicide based extract *Melaleuca alternifolia* plant, developed by G & G TOTAL AGRO. Thanks to its natural ingredients and unique *Melaleuca alternifolia* fungicidal properties, **REGARD** offers multiple modes of action in fungal cells.

REGARD demonstrates comparable to first-line systemic fungicides being used both in conventional agriculture as eco-efficiency. **REGARD** leaves no residue, is a, harmless to beneficial insects and bees organic fungicide.

Dosage and usage:

Apply when symptoms first occur at intervals of 5-7 days depending on disease pressure. Best results are seen with a penetrating applying adhesive (FITOFILM).

Dose 1 to 2 L / Ha



FITOFILM



Retainer - Fixer - Anti Drift.

Composition:

Terpene alcohols.....66,5% w/v (665 g/l)

Product Features: FITOFILM is a natural product derived from pine resin. Chemically very similar to the waxy cuticle of leaves, so is set immediately to the cuticle even when wet from rain, irrigation or dew. This increases the initial deposition of pesticide on the leaf, behaving as a natural agent depositor. FITOFILM is designed to control the duration of pesticides. Form a sticky, elastic film that encapsulates and tenaciously holds the pesticide on the crop foliage. This protective film reduces the degrading effects of environmental factors, which substantially reduces the effectiveness of pesticides.

FITOFILM temporarily encapsulates the active ingredient in a water-insoluble film on the surface of the sheet, which is dried in an hour.

FITOFILM gradually releases the active ingredient while the film is polymerized in monolayers. Thus, the active ingredient remains stable during encapsulation, while its biological activity is prolonged.

FITOFILM impedes pesticides erosion surface of the leaves, caused by rain or wind. Protects the residue of pesticide spraying heat and ultraviolet radiation, which causes the same spot pesticide degradation. Pesticide volatilization is minimized by the protective film.



BIO ORGANIC 85TE



Bio-stimulant nutrient solution.

Composition:

Organic matter.....	85% w/w
Organic carbon.....	45% w/w
Total humic extract.....	64% w/w
Humic acids.....	1% w/w
Fulvic acids.....	63% w/w
Total Nitrogen (N).....	5,2% w/w
Organic Nitrogen.....	4,6% w/w
Ammonium Nitrogen....	0,2% w/w
Potassium oxide (K ₂ O).....	12% w/w
Phosphorus pentoxide (P ₂ O ₅).....	0,2% w/w
Magnesium (MgO).....	1,12% w/w
Calcium (CaO).....	2,41% w/w
Copper (Cu).....	0,001% w/w
Zinc (Zn).....	0,005% w/w
Sulfur (S).....	1,160% w/w
Density.....	1,27
pH.....	4,5 - 5
C.E (mS/cm).....	20,45
C/N.....	10

Product Features: ORGANIC BIO 85TE is composed of organic materials, such as amino acids, proteins, lipids, enzymes, nucleic acids, chlorophyll, lignin, quinones, waxes, sugars and hormones. Nutrient minerals and inorganic substances soluble in water, which predominate in K, Ca, Mg and SO₄ ions.

It is biodegradable, decomposing compounds via microbial processes and taking advantage of its minerals.

BIO ORGANIC 85TE has several characteristics that make it a good choice for crop nutrition. It has a low molecular weight, and is applicable by leaf and root. This material is assimilable by beneficial microorganisms. pH 5, slightly acidic. K⁺ and exchange cations. Vitamins and probiotics unaffected by chemicals. It acts as a complexing agent. Composed with fulvic acid organic matter and nutrients for immediate availability. PH regulator, unlocker of saturated soils, mobilizing cation. Excipient for optimal settings of organic and organo-mineral NPK. Corrector of soil alkalinity, organic soil conditioner. Formation of aggregates and water retention in the root environment. Improves and enhances the uptake of fertilizer mixtures. Stimulates the transit of sap in the root-leaf system. Stabilization of organic matter in soils.

The phases for the development of BIO ORGANIC 85TE or physical type are biological (milling, filtering, anaerobic fermentation, crystallization, evaporation and concentration in mechanical and thermal). At no time involved heavy chemical elements by the addition of oxidizing agents or others. This operation will preserve all its constituents and biochemical properties to the last link of preparation.



VINECU XL



Copper Gluconate. Copper Systemic

Composition:

Copper Gluconate.....40% w/v (400 g/L)
Copper (Cu).....8% w/v (80 g/L)

Complexing Agent.....GH- Gluconic

Density.....1,33

pH.....5 - 6

Color..... Intense Blue

Ph range to ensure stability of the complexing agent: 4-9

Product Features: Fungicide, bactericide and cicatrizing a broad spectrum. Especially active against Botrytis, Mildew, Sclerotinia, Alternaria, Fusarium and different types of bacteria.

VINECU XL is a copper corrector. Copper is presented complexed with GH - Gluconic what contributes a great solubilidad in biological fluids, fully biodegradable in soil. The complex has a large asimibilidad, mobility and does not present any toxicity to plants. Copper as a trace element involved in many enzyme systems and especially in the production of phytoalexins and lignin synthesis. Improved self-defense system of the plant and prevents the plant from fungal and bacterial attack, being by their very effective in preventing attack by bacteria (Xanthomonas, Pseudomonas).

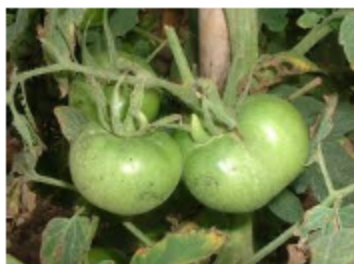
VINECU XL ensures optimum assimilation because of their extraordinary resemblance to the mobile forms of copper, which move within the plant tissue, correcting progressively prolonged copper deficiencies and increasing plant defenses against pathogens.

VINECU XL has a low-copper metal (80 g / L). In each application is reduced by 90% the amount of copper metal is applied in cultivation using other products. Environmental contamination and reducing the negative effect of elimina excess copper metal in the crop.

VINECU XL is rapidly absorbed by leaf and root and through the bark of trees due to their high translocation. It acts quickly on sensitive tissues, enhancing plant resistance to attack by fungi and bacteria.



SULCO 75 FLOW



Fungicide, bactericide and cicatrizing a broad spectrum. Especially active against Botrytis, Mildew, Sclerotinia, Alternaria, Fusarium and different types of bacteria.

Composition:

Copper (Cu).....	20% w/v
Copper Sulphate.....	75% w/v
Sulfur.....	26% w/v
Density.....	1,4
pH.....	5 - 6

Product Features: SULCO FLOW 75, is a fungicide presented as a concentrate suspension to apply foliar spray. Because the copper is in the form of sulphate and 80% the diameter of its particles is less than 1 micra lowers the dose applied.

It is characterized by its high resistance aderencia laundering. It is effective in the preventive control of many diseases caused by endopathogenic fungi and some bacteria .

The product acts by contact and systemic against many fungi and bacteria, and can be applied preventively or curatively always foliar. It inhibits the enzyme activity of the pathogen by altering the formation of membranes or structural tissues of organisms causing the immediate death of the pathogen and its reproductive structures (spores).

OXICUP 20



Fungicide, bactericide and cicatrizing a broad spectrum. Especially active against Botrytis, Mildew, Sclerotinia, Alternaria, Fusarium and different types of bacteria.

Composition:

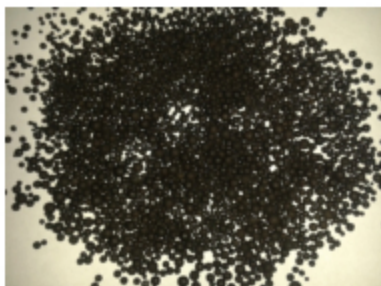
Copper oxychloride.....	20% w/w
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Product Features and Action Mode: It is a last generation fungicide that acts by contact and systemic against many fungi and bacteria, and can be applied preventively or curatively always foliar. It inhibits the enzyme activity of the pathogen by altering the formation of membranes or structural tissues of organisms causing the immediate death of the pathogen and its reproductive structures (spores).

Dose: 150 - 300 cc / 100 l water every 7 - 15 days.



ORGANOPERL 80



Organic matter pearl 2 - 4 mm

Composition:

Total Nitrogen (N).....	10% w/w
Organic Nitrogen (N).....	5% w/w
Ammonium Nitrogen (N).....	5% w/w
Potassium Oxide(K ₂ O).....	5% w/w
Sulfur trioxide (SO ₃).....	5% w/w
Organic matter.....	80% w/w
Fulvic and humic acids.....	9,7% w/w

WHY USE ORGANOPERL 80:

- * Organic Nitrogen slow release
- * Nice smell
- * Is not a powder product: better to handle

BENEFITS OF ORGANOPERL 80:

- Increase production even in conditions of stress
- Increase disease resistance
- Increase root growth
- Releases nutrients locked on the soil
- Acts like a water reservoir
- Increase the benefits of the microbial flora

ORGANOPERL 80 is ideal for all types of crops that can be used as direct fertilizer or mixed with other fertilizer products. Provides a significant amount of organic matter to the crop.

The recommended dose is 200-400 kg / ha year, spread over 1-2 applications. It is recommended to increase the dose in soils low in organic matter and intensive cultivation (400-600 kg / ha) in recovery of mineralized soils.

It is recommended for vegetable crops contribute a portion of the product at the time of planting.