IBEX Bionomics

AGRICULTURE CATALOG

BIOTROPICO®
Products Assessed for Organic Agriculture
Producer Registration: BT091851401Ei1E

IBEX BIONOMICS
www.IBEXBionomics.com
E-Mail: info@IBEXBionomics.com

ALL LIQUID PRODUCTS ARE
AVAILABLE IN THE FOLLOWING PRESENTATIONS:

High Density Plastic Container

Volume: Bottle: 4 liters
Bottle: 20 liters
Drum: 60 liters
Container: 1000 liters

ALL SOLID PRODUCTS
ARE AVAILABLE IN THE FOLLOWING PRESENTATIONS:

High Density Plastic Container

Weight: 1 kilogram
25 kilograms

BIOTROPICO®

IBEX Bionomics

IBEX Bionomics agricultural products are certified organic and provide biological and natural treatments that enhance the plant's defenses, reduce the pathogen's protection capacity, and enhance the growth and proliferation of beneficial microorganisms.

All IBEX Bionomics agricultural products are fully biodegradable and harmless to the environment.

IBEX MICROORGANISMS

IBEX Bionomics agricultural products are either enzymatic, made from the fermentation of plant metabolites, or biological, composed of beneficial microorganisms with specific contributions to the efficacy of the products.

All microorganisms used in IBEX products are delivered in sporulated form, adopting the fundamental characteristics of the native colonies of microorganisms when they break latency.

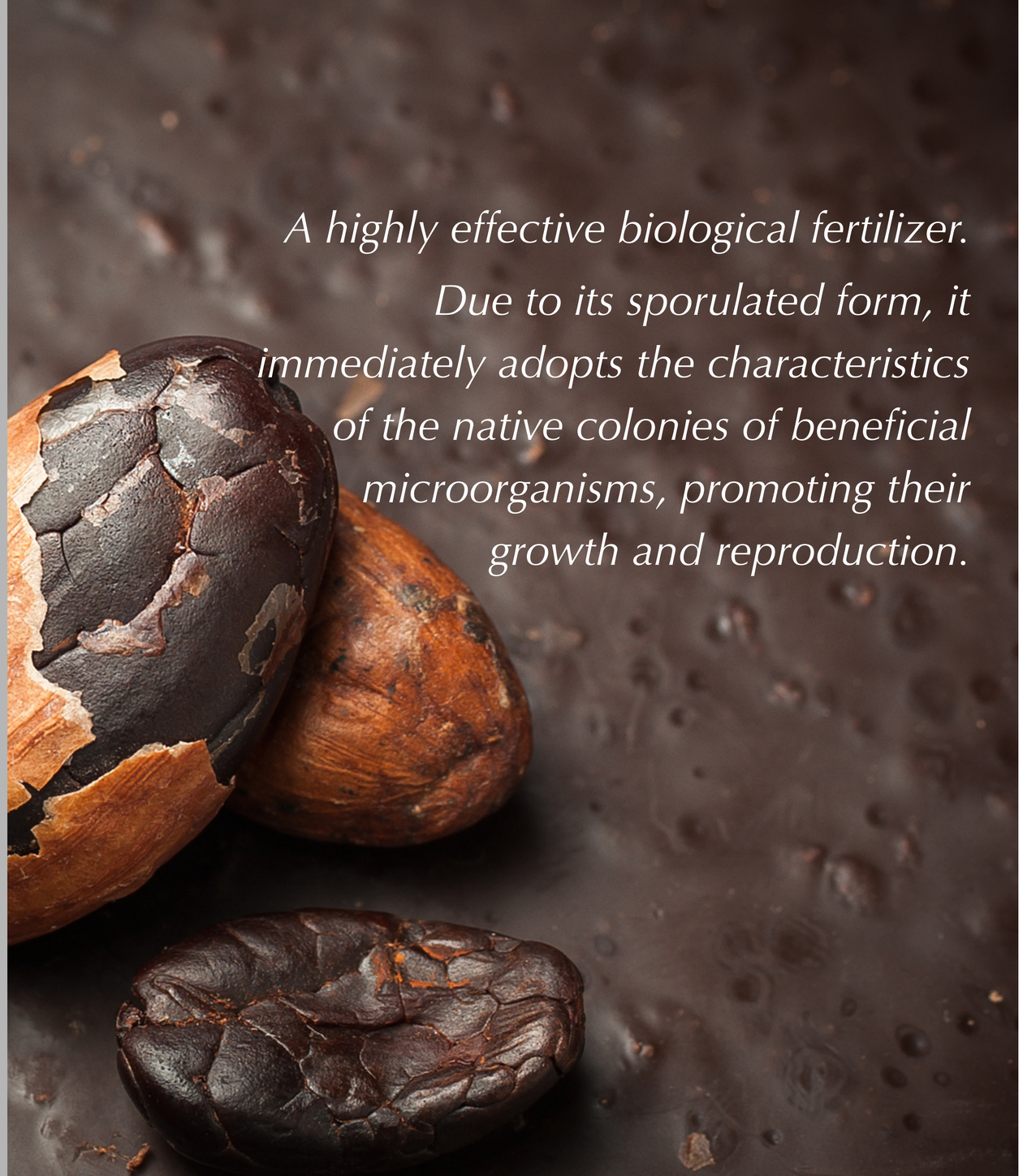
They are produced through careful isolation, selection, and reproduction, guaranteeing chemoresistant and extremophile strains, able to resist high salt, metal, and toxic concentrations and to function at extreme pH (3 - 12) and temperature (1°- 99° C) levels.

All IBEX microorganisms are classified as Biosafety Level 1 by the American Type Culture Collection (ATCC) and are harmless to humans.

IBEX Bionomics

Plant Nutrition

Plant Nutrition



A highly effective biological fertilizer. Due to its sporulated form, it immediately adopts the characteristics of the native colonies of beneficial microorganisms, promoting their growth and reproduction.

RHYZOMAC

BIOLOGICAL NUTRITIONAL REGULATOR

A concentrated and stable liquid fertilizer composed of highly resistant spores of Azotobacter and other rhizospheric microorganisms that fix atmospheric nitrogen and solubilizes phosphorus and potassium present in the soil.

MODE OF ACTION

Natural fertilizer that transforms conventional soils, optimizing biological and organic activity. Actively promotes the degradation of organic matter, producing humic and fulvic acids, improving soil structure and water retention.

Mineralizes organic compounds in the soil, improving pH levels and the action of the mineral salts that affect crops. Stimulates the indigenous populations of microorganisms, and is antagonistic to phytopathogenic microorganisms. Increases bioavalability of phosphorus and potassium present in the soil.

Increases the plants natural defenses to diseases, and low temperatures.

RHYZOMAC contains bacteria that absorb atmospheric nitrogen, then secure, convert and release it to the plant. This ability to fix the free atmospheric nitrogen, is of vital ecological importance and contributes significantly to increase the fertility of the soil and habitat where they develop. This also prevents nitrogen from leaching into streams and other bodies of water.

ACTIVE INGREDIENTS:

Sporulated Azotobacter and other rhizospheric microorganisms.

USES

- Pre-sowing treatment of soil.
- Applications in soil.
- Inoculant for seeds, seedlings, and transplants.
- Inoculant for nursery crops and potted plants.
- Fertilizer for vegetables, fruit trees, flowers, fodder, cereals, and flooded crops, such as rice.

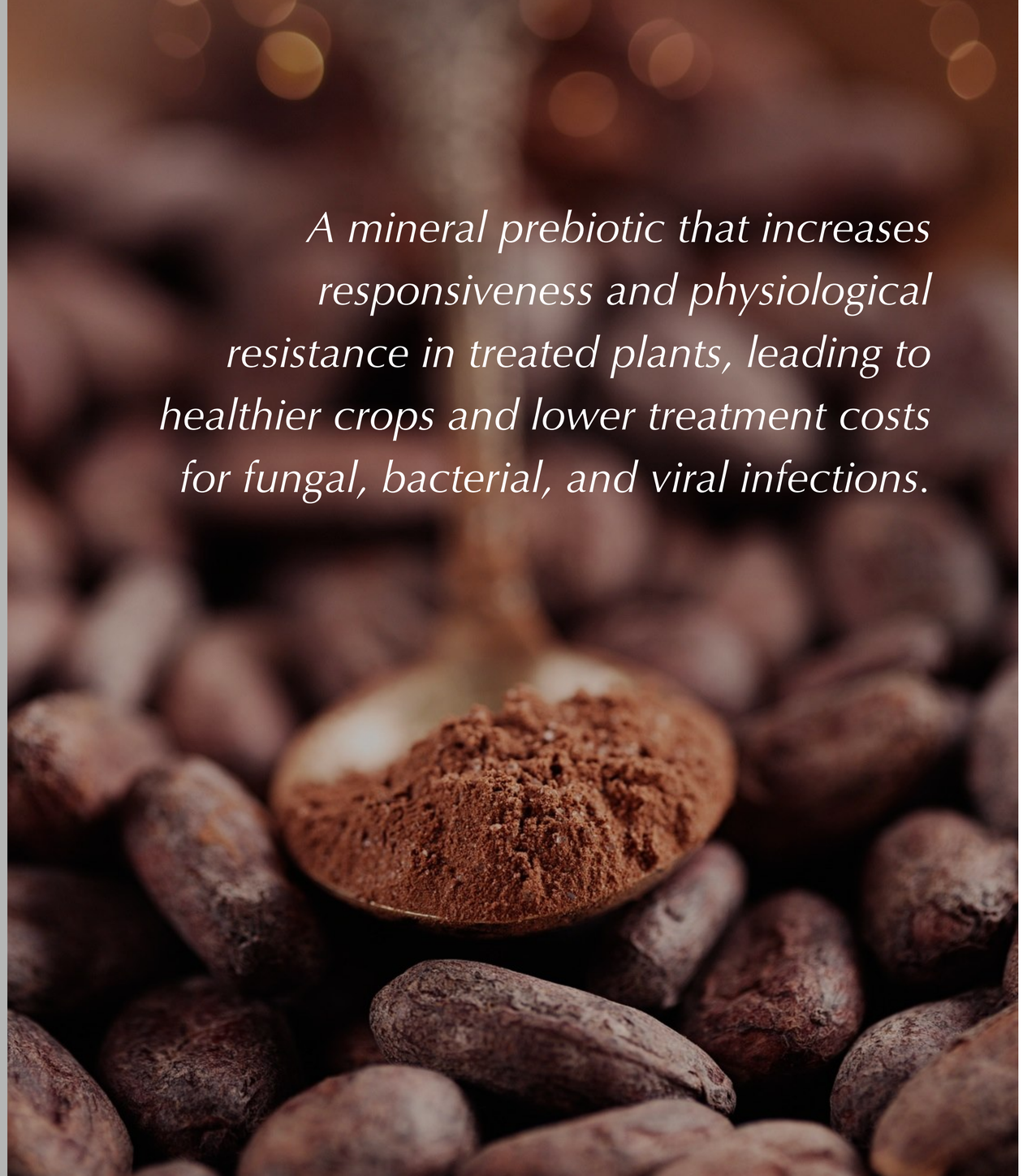
MODE OF USE

RHYZOMAC may be applied directly to the soil by spraying, or may be mixed with irrigation water, whether by drip, pump or gravity.

Does not require safety waiting periods after application for access or harvest.

Liquid product

Plant Nutrition



A mineral prebiotic that increases responsiveness and physiological resistance in treated plants, leading to healthier crops and lower treatment costs for fungal, bacterial, and viral infections.

RHYZOMIN

POTENTIATING MINERAL PREBIOTIC FOR AGRICULTURAL USE

A pulverized, insoluble mineral compound for foliar and edaphic application.

Through the remineralization of plants and soils, depleted or diminished mineral reserves are replaced in necessary quantities.

ACTIVE INGREDIENTS:

Pulverized calcic and silicic rock and other mineral traces with prebiotic characteristics.

MODE OF ACTION

For certain beneficial bacteria, fungi, and other microorganisms, the mineral elements contained in **RHYZOMIN** allow the restoration of biochemical reactions, leading to soil remediation and plant enrichment.

RHYZOMIN promotes ideal nutritional conditions for Ecological Farming by Remineralization (EFR), so plants can express their full bromatologic proteome (entire set of proteins), correcting the most common mineral and vitamin deficiencies commonly found in crops.

Improves biological activity of the existing beneficial microorganisms by intensifying and increasing the soil's biokinetic capacity.

The activation of the bacterial microflora through this biomineral enhancer allows for the development of a non-restrictive, optimum level of efficiency in biological environments through natural and non-toxic elements.

MODE OF USE

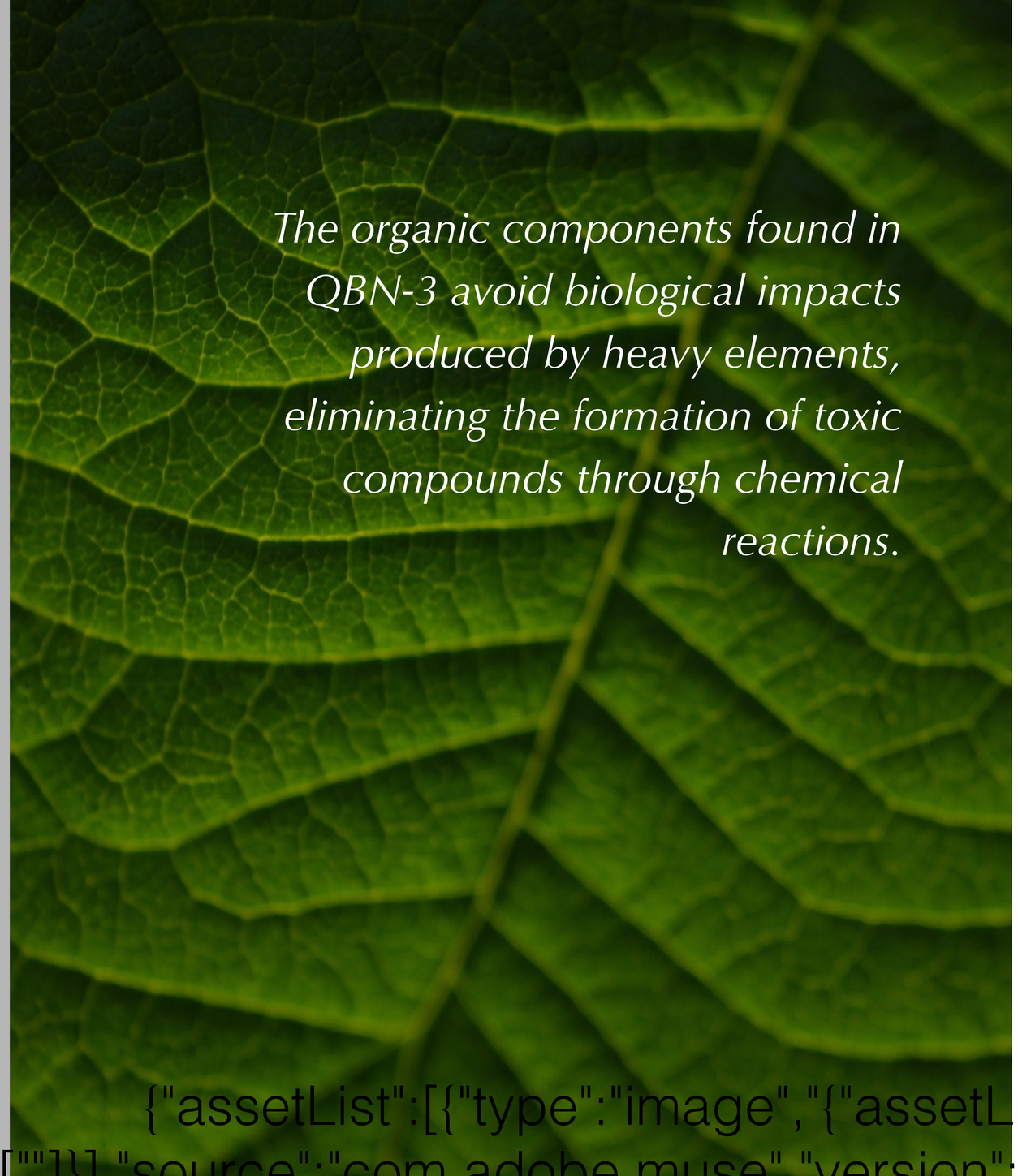
The continued use of **RHYZOMIN** increases crop productivity and optimizes the cost-benefit ratio of agricultural holdings.

Application rates are minimal by hectare and its use is completely safe for field personnel.

Does not require safety waiting periods after application for access or harvest.

Solid Product

Plant Nutrition



The organic components found in QBN-3 avoid biological impacts produced by heavy elements, eliminating the formation of toxic compounds through chemical reactions.

QBN-3

ORGANIC ENZYMATIC FERTILIZER FOR EDAPHIC AND FOLIAR USE

Nutritional supplement - eliminates and degrades toxic compounds.

MODE OF ACTION

QBN-3 stimulates the production and facilitates the action of auxins, gibberellins, and cytokinins, promoting growth and development.

Stimulates the production of chlorophyll and amylases, allowing the plant to process nutrients and solar energy more efficiently.

Prevents nutrient losses caused by evaporation and leaching.

Prevents biological impact shocks produced by heavy elements, preventing the generation of toxic compounds through chemical reactions.

MODE OF USE

QBN-3 is designed for foliar applications but may be used edaphically for seedlings in nurseries. It is also ideal for hydroponic plant nutrition.

Does not require safety waiting periods after application for access or harvest.

Liquid Product

ACTIVE INGREDIENTS:

Natural extracts and organic metabolites of vegetable origin.

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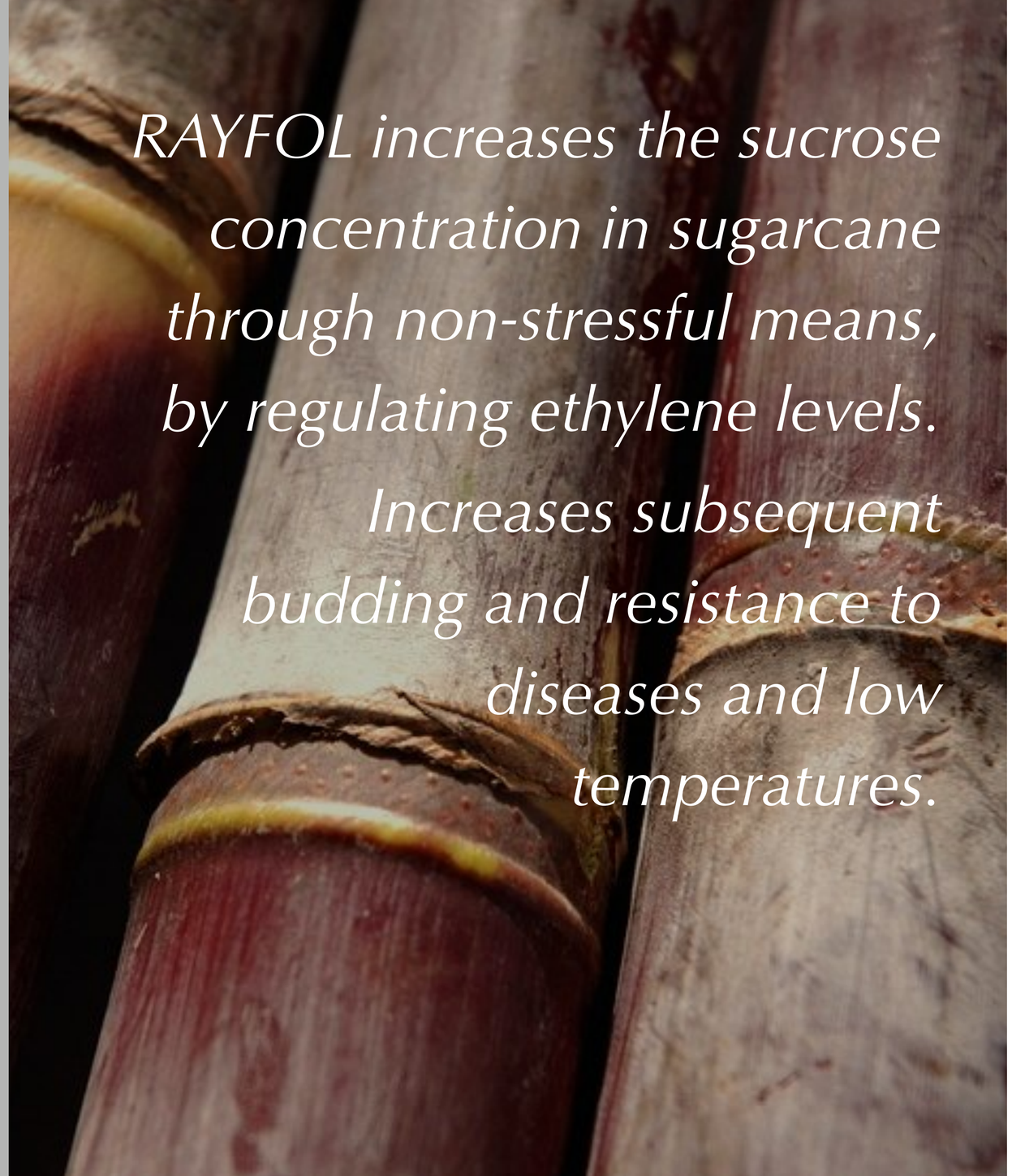
IBEX Bionomics

Fruit Ripening and Concentration of Sucrose in Sugarcane

Fruit Ripening and Sucrose Concentration



RAYFOL increases the sucrose concentration in sugarcane through non-stressful means, by regulating ethylene levels.

Increases subsequent budding and resistance to diseases and low temperatures.

IBEX Bionomics

RAYFOL

ORGANIC RIPENER AND SUCROSE CONCENTRATOR

Natural, non-stress based ripener and flowering agent for use in sugarcane as a sucrose concentrator and with other fruit crops as flowering and fruiting agent.

MODE OF ACTION

RAYFOL is an organic complex formulated from the fermentation of vegetable metabolites.

Promotes the production of hormonal compounds in plant tissues, regulating gibberellin and ethylene.

In sugarcane crops, **RAYFOL** increases sucrose accumulation in the stalk, improving its efficiency in transporting sugars from the leaves to the storage cells. This allows a higher concentration of sucrose in the upper third of the stalk.

Increases root development of plants. In sugarcane it stimulates production of tillers after planting or harvesting.

Increases natural defenses and resistance to diseases, water stress and low temperatures.

Naturally ripens and concentrates sugarcane sucrose. Replaces stress-based chemical ripeners. Will not harm neighboring crops.

ACTIVE INGREDIENTS:

Natural extracts and organic metabolites of vegetable origin.

MODE OF USE

Product for foliar application.

Sugarcane Ripener: Apply 1 liter per hectare three months before harvest.

Flowering, fruit setting, and fruit ripening: Apply 1 liter per hectare at the beginning of each vegetative stage. (Dosage may vary by crop)

Does not require safety waiting periods after application for access or harvest

Liquid Product

Biological Control of Pests and Diseases

IBEX Bionomics

Biological Control of Pests and Diseases

Promotes natural resistance against different types of pathogens (fungi, viruses, and bacteria) that make up the complex diseases proliferating in monoculture crops.

ACTIVE METABOLITES

Allicin	Alilo	Choline
Garcilina	Nicotinamide	Sulfides
Eucaliptol	Eudesmol	Filandreno
Filosterine	Garcilina	Histamine
Nicotinamide	Pinene	Seratonin
Sulfides	Tannins	

IBEX Bionomics

Q-COMPLEX

INDUCES PHYSIOLOGICAL RESISTANCE AGAINST COMPLEX PATHOGENIC ATTACKS

Q-COMPLEX is an organic inducer of physiological resistance in plants, which primarily and specifically activates mechanisms related to the reduction of the physiological and morphological impact caused by fungal, bacterial, and viral complexes.

MODE OF ACTION

The metabolites present in **Q-COMPLEX** provide the plant with primary sources for the production of proteins that that interrupt the formation of soluble substances that nourish a vast array of pathogens, providing the plant with resistance against complex attacks.

Q-COMPLEX is an effective metabolic regulator for the plant, stimulating enzymatic activity, initiating a local response around any points of necrosis. It induces a rapid increase in the synthesis of salicylic acid and activates a number of genes, encoded for the production of proteins that protect against a variety of pathogens, whether fungi, bacteria, or viruses.

Allows the plant to create systemic resistance in all its organs through the production of phytoalexins.

BENEFITS

- Prevents and reduces the damage caused by complex fungi, bacteria, and viruses.
- Promotes continued growth in plants with better development and productivity.
- Ensures high recovery rates.
- Prevents the onset of symptoms caused by infections.
- Reduces or prevents the spread of the complex through the plantation.

Liquid Product

ACTIVE INGREDIENTS:

Natural extracts and organic metabolites of vegetable origin.

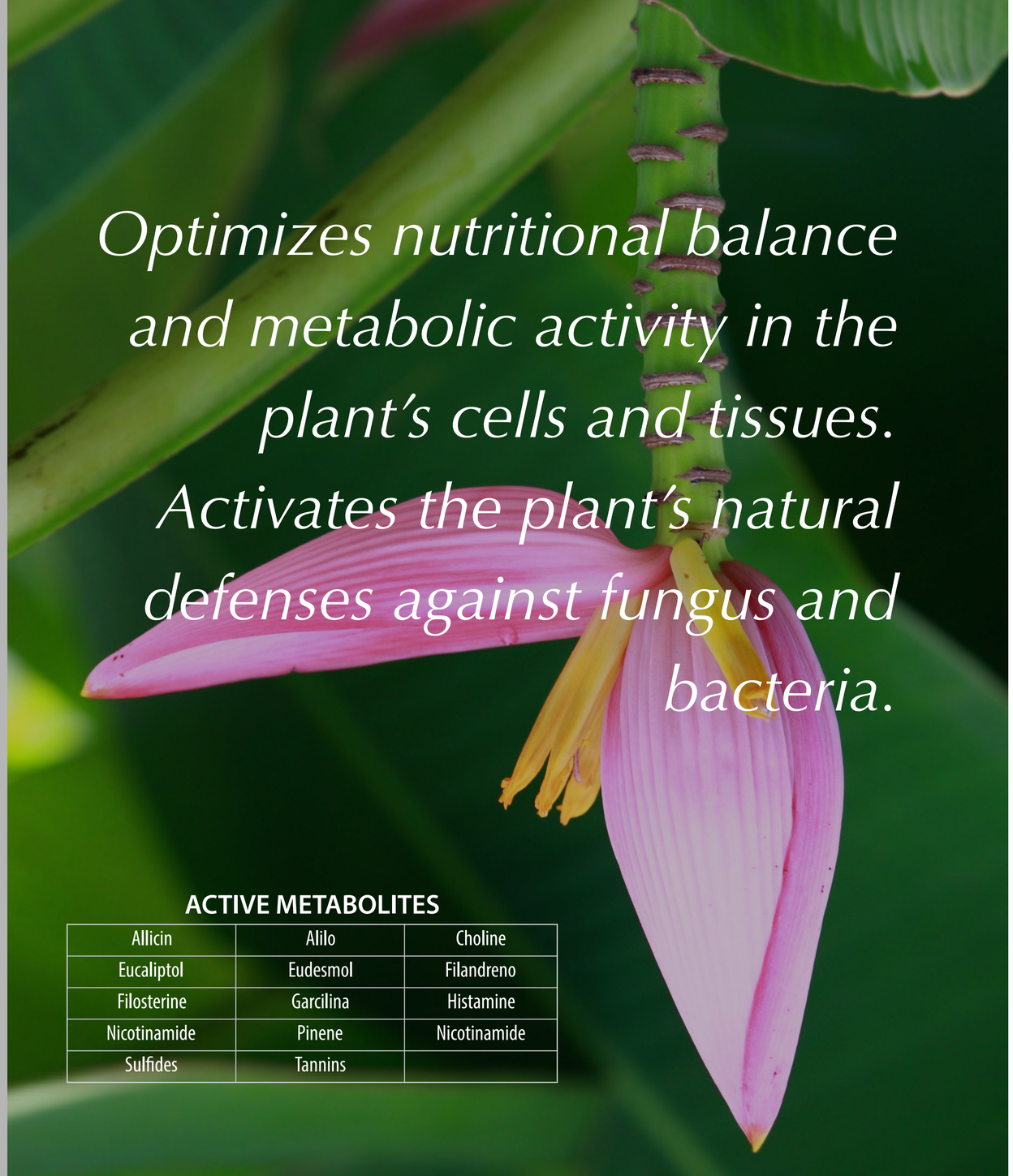
MODE OF USE

Q-COMPLEX should be used as a foliar spray.

A dose of 1 to 2 liters per hectare is recommended.

The lower dose acts as a protector for monthly preventive use.

The higher dose acts as a corrector for curative purposes and should be used bi-weekly for three applications before proceeding to the lower, preventive dose.



Optimizes nutritional balance and metabolic activity in the plant's cells and tissues. Activates the plant's natural defenses against fungus and bacteria.

ACTIVE METABOLITES

Allicin	Alilo	Choline
Eucaliptol	Eudesmol	Filandreno
Filosterine	Garcilina	Histamine
Nicotinamide	Pinene	Nicotinamide
Sulfides	Tannins	

IBEX Bionomics

Q-CLEAN

ORGANIC FUNGICIDE AND BACTERICIDE FOR AGRICULTURAL USE

INDUCES THE PRODUCTION OF PHYTOALEXINS (NATURAL DEFENSE METABOLITES)

A biological fungicide and bactericide with nutritional character for foliar use. It is a complex of natural ingredients that provides essential nutrients promoting sound metabolism and plant development.

ACTIVE INGREDIENTS:

Natural extracts and organic metabolites of vegetable origin.

MODE OF ACTION

Q-CLEAN's systemic nature acts on the hormonal system by stimulating production of phytoalexins and other substances linked to the plant's defense metabolism. It provides greater tolerance and resistance to fungal and bacterial attacks that damage internal and external organs such as roots, leaves, flowers, fruits and bark

May be applied by air or land, with low or high volumes of water, **Q-CLEAN** ingredients are easily absorbed and incorporated by the plant, promoting positive hypersensitivity reactions and subsequent activation of protein production with a broad resistance spectrum.

MODE OF USE

A dose of 1 to 2 liters per hectare is recommended.

The lower dose acts as a protector for monthly preventive use.

The higher dose acts as a corrector for curative purposes and should be used bi-weekly for three applications before proceeding to the lower, preventive dose.

Does not require safety waiting periods after application for access or harvest.

Liquid Product

Biological Control of Pests and Diseases

Contains metabolites that affect, repel and deter insects through contact and chemical signals, and increase the plant's entomological defenses.

ACTIVE METABOLITES

Allina	Boreol	Borneol
Concanavalin	Camphene	Calendulina
Cineol	Ciñelo	Citronellal
Dipenteno	Disulfides	Estregol
Phellandrene	Filosterina	Geraniol
Histamine	Inulin	Leneol
Linalol	Menthene	Menthol
Mentola	Methyleugenol	Nerol
Rutina	Serotonin	Thujone
L-limonene		

IBEX Bionomics

Q-COMBAT

INDUCER OF PLANT PHYSIOLOGICAL RESISTANCE AGAINST INSECT PLAGUES

Q-COMBAT inhibits, repels, deters and affects phytopatogenic insects of different types (crawling, flying, sucking, defoliators, etc..), while it stimulates vital plant processes to fortify and protect them against these attacks.

ACTIVE INGREDIENTS:

Natural extracts and organic metabolites of vegetable origin.

MODE OF ACTION

Q-COMBAT has a dual form of action by affecting both, the plant and its specific plagues. It interrupts the feeding habits of phytopatogenic insects through a reduction of the plant's stress levels and the stimulation of production of secondary metabolites that adversely affect the nutrition of insects at all stages of development.

At the same time, **Q-COMBAT** affects insects directly or indirectly. It acts as an insect repellent, disrupting the chemical communication that allows insects to find their food and sexual partners, decreasing both, reproduction and colonization of crops.

Q-COMBAT affects insect fertility leading to low-fertility ovular deposits, mitigating proliferation by reproduction and lowering the associated costs and losses.

Treated plants will have greater resilience to attacks and better healing with less risk of infection.

MODE OF USE

Q-COMBAT should be used as a foliar spray.

A dose of 1 to 2 liters per hectare is recommended.

The lower dose acts as a protector for monthly preventive use.

The higher dose acts as a corrector for curative purposes and should be used bi-weekly for three applications before proceeding to the lower, preventive dose.

Does not require safety waiting periods after application for access or harvest.

Liquid Product

Biological Control of Pests and Diseases

SUBTIFOL

FOLIAR INHIBITOR OF PESTS AND DISEASE

Composed of Bacillus Subtillis and other rhizospheric microorganisms with facultative character that interrupt the life cycles of pests and diseases on foliage.

MODE OF ACTION

SUBTIFOL interrupts chemical signals to pathogens, preventing the plant foliage from being recognized as a food source or appropriate place for egg laying.

Stimulates the growth and concentration of beneficial microorganisms on leaf and stem surfaces.

SUBTIFOL, like all IBEX products, is biodegradable and environmentally harmless.

MODE OF USE

Designed for use as a foliar spray mixed with water.

A dose of 1 to 2 liters per hectare is recommended.

The lower dose acts as a protector for monthly preventive use.

The higher dose acts as a corrector for curative purposes and should be used bi-weekly for three applications before proceeding to the lower, preventive dose.

Does not require safety waiting periods after application for access or harvest.

Liquid Product

ACTIVE INGREDIENTS:

Bacillus Subtillis and other rhizospheric microorganisms

Causes inhibitions and complex changes in the cell membrane of fungi and pathogenic bacteria, blocking their enzymes by unfolding the proteins.

ACTIVE METABOLITES

Allicin	Alilo	Choline
Garcilina	Nicotinamide	Sulfides

Also effective in the protection of post-harvest fruits and flowers.

LANCE TIP

INTERRUPTOR OF PATHOGENIC DEFENSE MECHANISMS

Organic bactericide and fungicide with broad-spectrum action on the defense mechanisms of pathogens.

ACTIVE INGREDIENTS:

Natural extracts and organic metabolites of vegetable origin.

MODE OF ACTION

LANCE TIP initiates and sustains oxidative reactions that damage the cell wall of pathogens, while enhancing the growth of beneficial microorganisms.

Pathogens can only offer minimum resistance due to the complexity and multiple points of action of the product.

The product interferes with the pathogen's interpretation and understanding of the chemical messages from the environment that trigger defense mechanisms of fungi and pathogenic bacteria. Also limits the growth and reproduction of pathogens that have not been affected by direct contact with the product.

Does not require safety waiting period after application for access or harvest.

MODE OF USE

A dose of 1 to 2 liters per hectare is recommended.

The lower dose acts as a protector for monthly preventive use.

The higher dose acts as a corrector for curative purposes and should be used bi-weekly for three applications before proceeding to the lower, preventive dose.

PREVENTS

LANCE TIP prevents and provides ongoing control of the damage caused by pathogenic fungi and bacteria at all growth stages of the plant in both, greenhouse and field conditions.

PROTECTS

LANCE TIP protects seeds, leaves, flowers, fruits and the surrounding soil near the root.

Protects open wounds in plant tissues and promotes healing.

IBEX Bionomics

Creation of Suppressive Soils

Plant Growth Promoting Rhizobacteria (PGPR) And the Creation of Suppressive Soils

Suppressive soils are those in which pathogens do not find ideal conditions to establish themselves or to persist.

If a pathogen does establish itself in these soils, its attacks will not provoke any notable damage or disease, due to interruption of quorum sensing.

The main biotic characteristic of natural or induced suppressive soils is the presence of a high rate of actinomycetes, an elevated metabolic potential, and a co-metabolism of the living agents necessary for the high productivity of crop soils.

Suppressive soils contain microorganisms (fungi, Bacillus, Pseudomonas, Streptomyces and yeast) which produce protective elements against fungosis, bacteriosis, viroses, and plague insects.

PGPR is the treatment and protection of soils by the biopotentiation of the rhizosphere, be it for protecting autochthonous organisms or through the inoculation of living microorganisms.

The microorganisms colonize the root surface and adhere to the soil interface.

Free rhizobacteria and endophytes use common mechanisms to promote the growth of the plants and to control phytopathogens.

Rhizobacteria contribute to fix the nitrogen in the soil, to solubilize phosphorus, and to increase the bioavailability of potassium and mineral elements for plants. Their principal contribution is directed to the stabilization of organic materials, providing the soil with exceptional physico-chemical characteristics.

Rhizobacteria are antagonistic to the presence of pathogenic organisms.

Control Mechanisms

Our suppressive soil products use the following mechanisms for pathogen control:

- Direct parasitism leading to the death of the pathogen.
- Rhyzospheric competition with pathogens for space and food source.
- Direct toxic effects on the pathogen through the release of antibiotic or alelochemical substances (organic acids, aminoacids and specific sugars, siderophores, volatile biocidal antibiotics, litic enzymes, detoxifying enzymes).
- Indirect toxic effects through the release of volatile substances through antagonistic activity, such as ethylene.
- Induction of Systemic Resistance (ISR) of plants.

The lictic enzymes produced by the PGPR are hydrolases (degrading the celular walls of pathogenic fungi), chitinases (degrading the chitin of pathogenic fungi and insects), proteases (bacteriocins), and glucanases (viricidal, micocidal, insecticidal) .

The detoxifying enzimes degrade enzymes that are considered pathogenic factors (cutinase, endo and exo-polygalacturonases, esterases, lyases, proteases, etc). With these they control the first stages of the attack by fungi to the plants tissue.

One of the mayor positive effects of the production of alelochemical substances from the aforementioned antagonistic rhizobacterias is the degradation of the auto-inducing signals of pathogens (Quorum Sensing), thus blocking the expression of numerous pathogenic genes produced by various species of fungi and bacteria.

The induction of systemic resistance of the plants (ISR) is narrowly linked to bacterias of the bacillus kind, especially subtillis, agglomerans, megaterium and pseudomonas. This mechanism allows plants to reduce the diseases produced by fungi, bacteria or viruses.

USES IN SOIL TREATMENT

Contributes to the mineralization process of toxic and dangerous compounds from previous agrochemical applications, rendering them inert.

Accelerates the stabilization process of organic mater in soils so as to greatly reduce its ability to become host to pathogenic microorganisms, while mitigating environmental impacts generated by contaminating odors and vectors.

IBEX Bionomics

SUBTISOIL
NOVATER

These two products work together in the creation of suppressive soils through the degradation of toxic compounds and organic material, and the inoculation and nutrition of beneficial microorganisms in the soil.

The products are specifically formulated to break down and degrade the short and long molecular chains of fats and oils in the soil, whether vegetable, animal, or mineral.

IBEX Bionomics

Subtisoil and Novater are composed of facultative microorganisms possessing excellent action capacity for the generation of suppressive soils:

- Support wide ranges of pH levels. (3-12), but their higher expression level is achieved between pHs of 4.5 to 10.5.
- Withstand wide temperature ranges (1 - 99°C) but their highest expression level is achieved between 5 to 50ºC.
- Hold up to high concentrations of salts and heavy metals.
- Withstand high exposure to ultraviolet light.
- Mitigate the environmental impacts generated by vectors and odors as a result of decomposition of organic materials.
- Contribute to humification of organic matter.
- Contribute to fixing organic matter in soils .
- Degrade fats and oils, both organic and inorganic, that cause nutrient immobilization in soils.
- Activate the biokinetics of soils and bodies of water.
- Contribute to detoxification of soils resulting from contaminating compounds (organochlorines, organophosphates etc.) from prior chemical applications.
- Prevent the generation of gases, such as methane, hydrogen sulfide, and ammonia compounds, in the decomposition of organic matter.

Creation of Suppressive Soils

SUBTISOIL

DEGRADATION OF TOXIC ELEMENTS IN THE CREATION OF SUPPRESSIVE SOILS

SUBTISOIL mineralizes and degrades toxic and dangerous compounds in the soil, leading to the creation of suppressive soils.

MODE OF ACTION

SUBTISOIL, composed of Bacillus Subtillis and other rhizospheric microorganisms, is specifically designed for the creation of suppressive soils. It is antagonistic to pathogens, stimulates growth of beneficial microorganisms and possesses phytosanitary characteristics.

SUBTISOIL increases the plant's natural defenses by cutting plague and disease cycles in the soil. It increases the plant's resistance to low temperatures and reduces the inoculating capacity (Quorum Sensing) of pathogenic microorganisms.

SUBTISOIL contributes to the mineralization of toxic and dangerous compounds from previous agrochemical applications to the soil preventing their reaction with organic matter.

ACTIVE INGREDIENTS:

Bacillus Subtillis and other rhizospheric microorganisms

MODE OF USE

Use as a soil spray mixed with abundant water.

A dose of 1 to 2 liters per hectare is recommended.

The lower dose acts as a protector for monthly preventive use.

The higher dose acts as a corrector for curative purposes and should be used bi-weekly for three applications before proceeding to the lower, preventive dose.

Does not require safety waiting periods after application for access or harvest.

Liquid Product

Creation of Suppressive Soils

NOVATER

DEGRADATION OF ORGANIC MATTER IN THE CREATION OF SUPPRESSIVE SOILS

NOVATER aids in the creation of suppressive soils by accelerating the composting process and the biodegradation of organic matter and interfering in the Quorum Sensing process of pathogenic organisms in the soil.

MODE OF ACTION

NOVATER composed of Bacillus Megaterium and other rhizospheric microorganisms, is specifically designed for the creation of suppressive soils and antagonistic to attacks by pathogenic pseudomonas.

NOVATER accelerates the composting process and the biodegradation of organic matter. It increases the plant's natural defenses by cutting the plague and disease cycles, and increases the plant's resistance to low temperatures.

NOVATER reduces the inoculating capacities (Quorum Sensing) of pathogenic microorganisms in the soil.

MODE OF USE

Use as a soil spray mixed with abundant water.

A dose of 1 to 2 liters per hectare is recommended.

The lower dose acts as a protector for monthly preventive use.

The higher dose acts as a corrector for curative purposes and should be used bi-weekly for three applications before proceeding to the lower, preventive dose.

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ACTIVE INGREDIENTS:

Bacillus Megaterium and other rhizospheric microorganisms

Liquid Product

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BIOTROPICO®

Products Assessed for Organic Agriculture

Producer Registration: BT091851401Ei1E

NOVATER SUBTISOIL RHYZOMAC

Microorganisms classified as "class 1".

Do not contain organism modified genetically.

Do not have traces of salmonella, and other pathogens.

MSDS

MSDS

I.- PRODUCTINFORMATION		
CLASSIFICATION	NFPA	HMIS
HEALTH	1 - Normal	1 - Normal
FIRE	0 - Minimum	0 – Minimum
REACTIVITY	0 - Low	0 - Low

II.- DANGEROUS INGREDIENTS					
CHEMICAL NAME	% W	TABLE Z-1-A			
		CAS	TWA	Stel	Celing
NONE	-	-	-	-	-

III.- PHYSICAL PROPERTIES	
Boiling Point	99ºC
Freezing Point	<2ºC
Specific Gravity	1.02 g/ml.

IV.- HAZARDOUS DATA ON FIRE AND EXPLOSION	
Flash Point (Metod: ASTM-D56)	N/A
Ignition Point	N/a
Flashpoint	N/a
Fire Hazards	NONE
Explosion Hazards	NONE
Flame Extension	N/A
Extinguishing Media	N/A
Special Fire Fighting Procedures	N/A

V.- HAZARDOUS DATA ON HEALTH	
Threshold Limit Value	NONE
Primary Routes of Entry	NONE

Effects of overexposure and Conditions to Avoid
Eye irritan. Respiratory system irritating.

Emergency and First Aid	
Eyes	Wash with water without soap.
Skin	Water wash.
Ingestion	Do not induce vomit. Drink enough water.
Inhalation	Move to a ventilated place, first aid.

NOVATER SUBTISOIL RHYZOMAC

Microorganisms classified as "class 1".

Do not contain organism modified genetically.

Do not have traces of salmonella, and other pathogens.

IBEX Bionomics

MSDS

TOXICOLOGICAL INFORMATION			
CARCINOGENICITY			
OSHA	NO	NTP	NO
IARC	NO	X-LIST	NO

VI.- DATA ON REACTIVITY OF THE PRODUCT	
Stability	Stable
Polymerization	N/A
Conditions to avoid	Bases and Acids
Materials to avoid	None
Hazardous Descomposition Products	None

VII.- SPILL OR LEAK PROCEDURE
Collect as much of the spill, and the rest wash it with water.

VIII.- SPECIAL PROTECTION MEASURES	
Respiratory System	Mask
Ventilation	Enough ventilation
General Security	Gloves and Glasses
Additional Protection	None

STORAGE CONDITIONS
Keep all containers properly labeled and protected from soil moisture. Store in ventilated areas.

PRECAUTION
These products **should not be mixed with bleach** or products containing it.

EFFECTS ON METALS AND OTHER SURFACES
These products do not affect any surface with which they come into contact.

EFFECTS ON FAUNA AND FLORA
These products are harmless to wildlife and improves water quality, making it safer and healthier. It reduces the BOD (Biochemical Oxygen Demand).

MSDS

QBN-3
Lance Tip
Q-Combat

Q-Clean
Q-Complex
Rayfol

Microorganisms classified as "class 1".

Do not contain organism modified genetically.

Do not have traces of salmonella, and other pathogens.

IBEX Bionomics

MSDS

I.- PRODUCT INFORMATION		
CLASSIFICATION	NFPA	HMIS
HEALTH	1 - Normal	1 - Normal
FIRE	0 - Minimum	0 – Minimum
REACTIVITY	0 - Low	0 - Low

II. DANGEROUS INGREDIENTS					
CHEMICAL NAME	% W	TABLE Z-1-A			
		CAS	TWA	Stel	Celing
NONE	-	-	-	-	-

III.- PHYSICAL PROPERTIES	
Boiling Point	99ºC
Freezing Point	<2ºC
Specific Gravity	1.02 g/ml.

IV.- HAZARDOUS DATA ON FIRE AND EXPLOSION	
Flash Point (Metod: ASTM-D56)	N/A
Ignition Point	N/A
Flashpoint	N/A
Fire Hazards	NONE
Explosion Hazards	NONE
Flame Extension	N/A
Extinguishing Media	N/A
Special Fire Fighting Procedures	N/A

V.- HAZARDOUS DATA ON HEALTH	
Threshold Limit Value	NONE
Primary Routes of Entry	NONE

Effects of overexposure and Conditions to Avoid
Eye irritant. Respiratory system irritant.

Emergency and First Aid	
Eyes	Wash with water without soap.
Skin	Wash with water.
Ingestion	Do not induce vomit. Drink plenty of water.
Inhalation	Move to a ventilated place, seek first aid.

CARCINOGENICITY			
OSHA	NO	NTP	NO
IARC	NO	X-LIST	NO

QBN-3
Lance Tip
Q-Combat

Q-Clean
Q-Complex
Rayfol

Microorganisms classified as "class 1".

Do not contain organism modified genetically.

Do not have traces of salmonella, and other pathogens.

IBEX Bionomics

MSDS

VI.- DATA ON REACTIVITY OF THE PRODUCT	
Stability	Stable
Polymerization	N/A
Conditions to avoid	Bases and Acids
Materials to avoid	None

VII.- SPILL OR LEAK PROCEDURE
Collect as much of the spill, and the rest wash it with water.

VIII.- SPECIAL PROTECTION MEASURES	
Respiratory System	Mask
Ventilation	Provide Enough Ventilation
Additional Protection	Gloves and Glasses

STORAGE CONDITIONS	
Flash Point (Metod: ASTM-D56)	N/A
Ignition Point	N/A
Flashpoint	N/A
Fire Hazards	NONE
Explosion Hazards	NONE
Flame Extension	N/A
Extinguishing Media	N/A
Special Fire Fighting Procedures	N/A

EFFECTS ON METALS AND OTHER SURFACES
These products do not affect any surface with which they come into contact.

EFFECTS ON FAUNA AND FLORA
These products are harmless to wildlife and improves water quality, making it safer and healthier. It reduces the BOD (Biochemical Oxygen Demand).

Emergency and First Aid	
Eyes	Wash with water without soap.
Skin	Wash with water.
Ingestion	Do not induce vomit. Drink plenty of water.
Inhalation	Move to a ventilated place, seek first aid.

CARCINOGENICITY			
OSHA	NO	NTP	NO
IARC	NO	X-LIST	NO

QBN-3
Lance Tip
Q-Combat

Q-Clean
Q-Complex
Rayfol

Microorganisms classified as "class 1".

Do not contain organism modified genetically.

Do not have traces of salmonella, and other pathogens.

IBEX Bionomics

MSDS

VI.- DATA ON REACTIVITY OF THE PRODUCT	
Stability	Stable
Polymerization	N/A
Conditions to avoid	Bases and Acids
Materials to avoid	None

VII.- SPILL OR LEAK PROCEDURE
Collect as much of the spill, and the rest wash it with water.

VIII.- SPECIAL PROTECTION MEASURES	
Respiratory System	Mask
Ventilation	Provide Enough Ventilation
Additional Protection	Gloves and Glasses

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Ignition Point	N/A
Flashpoint	N/A
Fire Hazards	NONE
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CARCINOGENICITY			
OSHA	NO	NTP	NO
IARC	NO	X-LIST	NO