

fertil4 reten4

Substrates enhancers.
MAXIMUN growth with
MINIMUM water consumption and fertilizer.



Integrated Green Solution Introduction

- **Who we are?**

Integrated Green Solution, MBV GLOBAL's company, has a large experience in industrial consulting projects and in finding solutions to improve the management of customer industries.

- **What we offer?**

- Solutions to current world problems through our products specialized in the following areas :
 - ✓ **Human Food** : nutritional support for the population.
 - ✓ Agricultural recovery and improving land productivity.
 - ✓ **Livestock**: increase the production and quality of products obtained from a farm by reducing risks of contaminants.
- Taylor-made products (Agricultural, Industrial and Food human or animal).
Formulations Improve our customers by Departamento I + D + i.
- Development consulting industries and rural cooperatives of all types industrial processes, agriculture and livestock.
- Advice on the purchase of materials (food, industrial, agricultural ...).
- Appropriate training for site workers.
- Support site.



MBV GLOBAL: Growing Substrates Enhancers

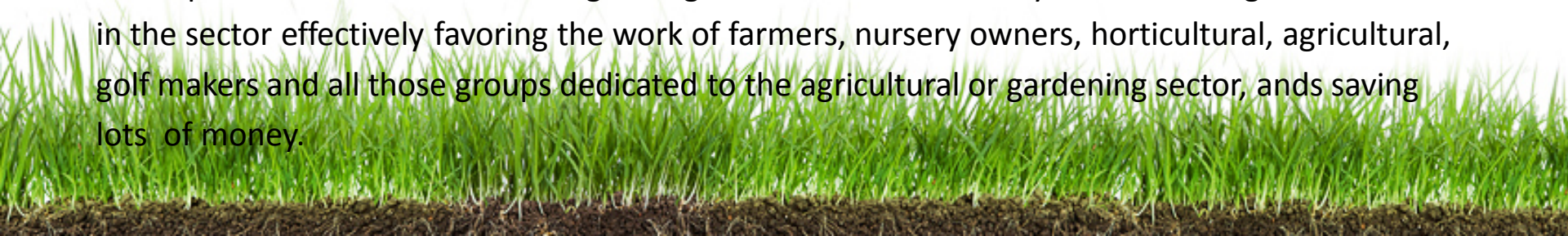
MBV GLOBAL, introduce its chemical industry department with a lot of experience and knowlegment in the world of agricultural. **Integrated Green Solution** it's a **MBV GLOBAL** company that has a team of highly qualified professionals who provide efficient and innovative solutions.

Integrated Green Solution has developed an INNOVATIVE solution to answer to the most difficult challenges into the world of agriculture through its new products **FERTIL4[®]**, **FERTIL4[®] PLUS** and **RETEN4[®]**, **RETEN4[®] PLUS**.

CHALLENGES: Lack of enough watering available, and Poor nutrients soils.

OUR SOLUTIONS: **FERTIL4[®]**, **FERTIL4[®] PLUS** and **RETEN4[®]**, **RETEN4[®] PLUS**.

These products are a revolution in growing substrates because they offer advantages alternatives in the sector effectively favoring the work of farmers, nursery owners, horticultural, agricultural, golf makers and all those groups dedicated to the agricultural or gardening sector, and saving lots of money.



Current Agricultural Overview ¹


- **Water**

- Highly irregular rainfall according to the seasons.
- Water shortages in certain areas.
- Excessive consumption of water for irrigation.
- Insufficient network potable water supply in some areas.
- Leaching losses.
- Contamination of groundwater aquifers, springs and rivers.
- Salinization of soils due to use of water unsuitable for agricultural use.

- **Soil**

- Depletion, degradation and declining arable ground.
- Soil compaction causing little infiltration therein.
- The grazing soil suffer during the dry season in many regions.
- Desertification and ground deforestation due to fires to clear the land of trees and shrubs and used for crops.
- Increased soil degradation due to overuse of fertilizers.
- Increase arid and desert areas.

(1) Source: FAO, 2012



Current Agricultural Overview ¹

- **Profitability**

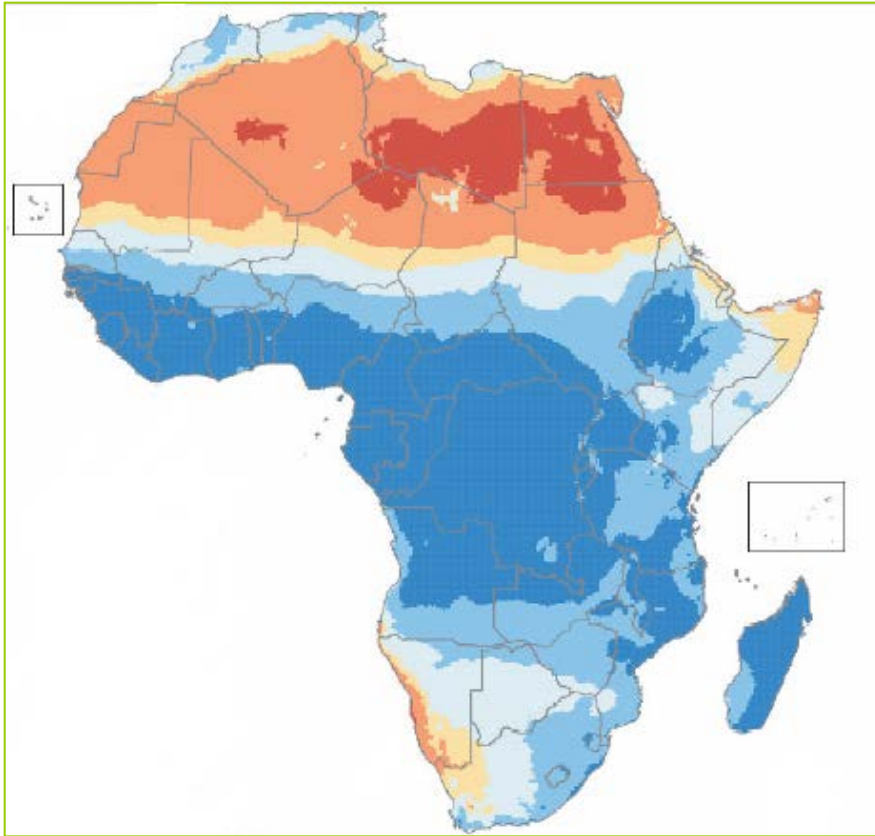
- First necessity food shortages globally.
- Subsistence farming in many areas due to the low productivity of land.
- Low soil productivity due to soil degradation.
- Reduction of arable land due to increased degraded areas and desert.
- Increased use of fertilizer and more frequent and manures to try to increase the productivity of land.
- Increased pollution of underground aquifers, springs and rivers due to irrational use of chemicals to cropland.
- Seasonalization production.
- Increased economic cost due to agricultural dependence









POTENTIAL IMPROVING PRODUCTIVITY AREA : graphics.



POTENTIAL IMPROVING PRODUCTIVITY AREA ¹: AFRICA



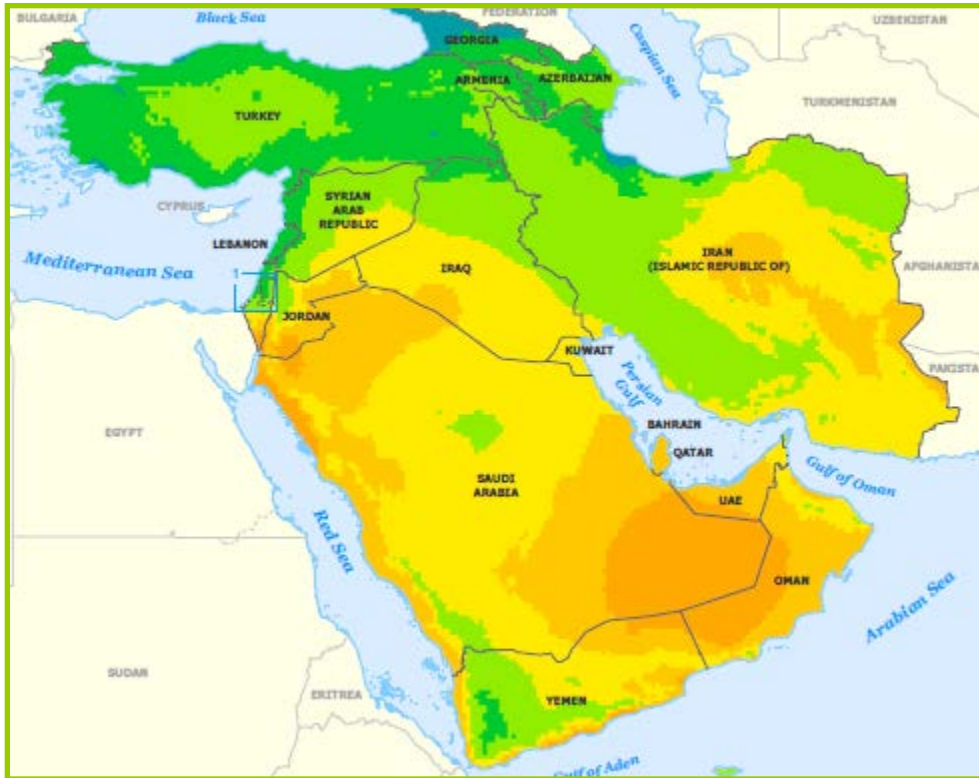
Rainfall mm/year

< 10 mm		Barren desert areas.
10–100 mm		Dry areas and / or warm with low production potential.
100–200 mm		Area with low production potential.
200–500 mm		Area with low-medium production potential.
500–1 000 mm		Area with medium-high production potential.
> 1 000 mm		Area with high production potential.

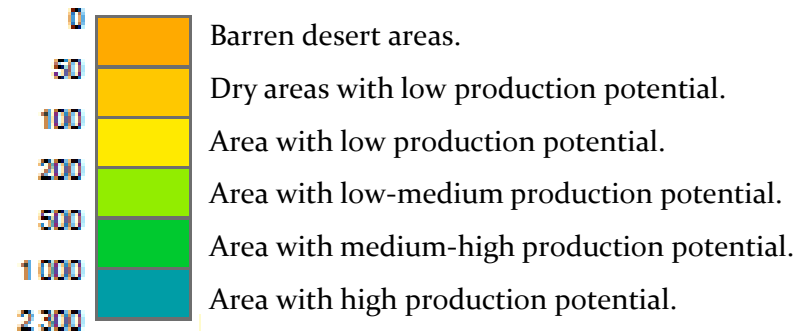
(1) source: FAO –Aquastat, 2005



POTENTIAL IMPROVING PRODUCTIVITY AREA ¹: Middle East

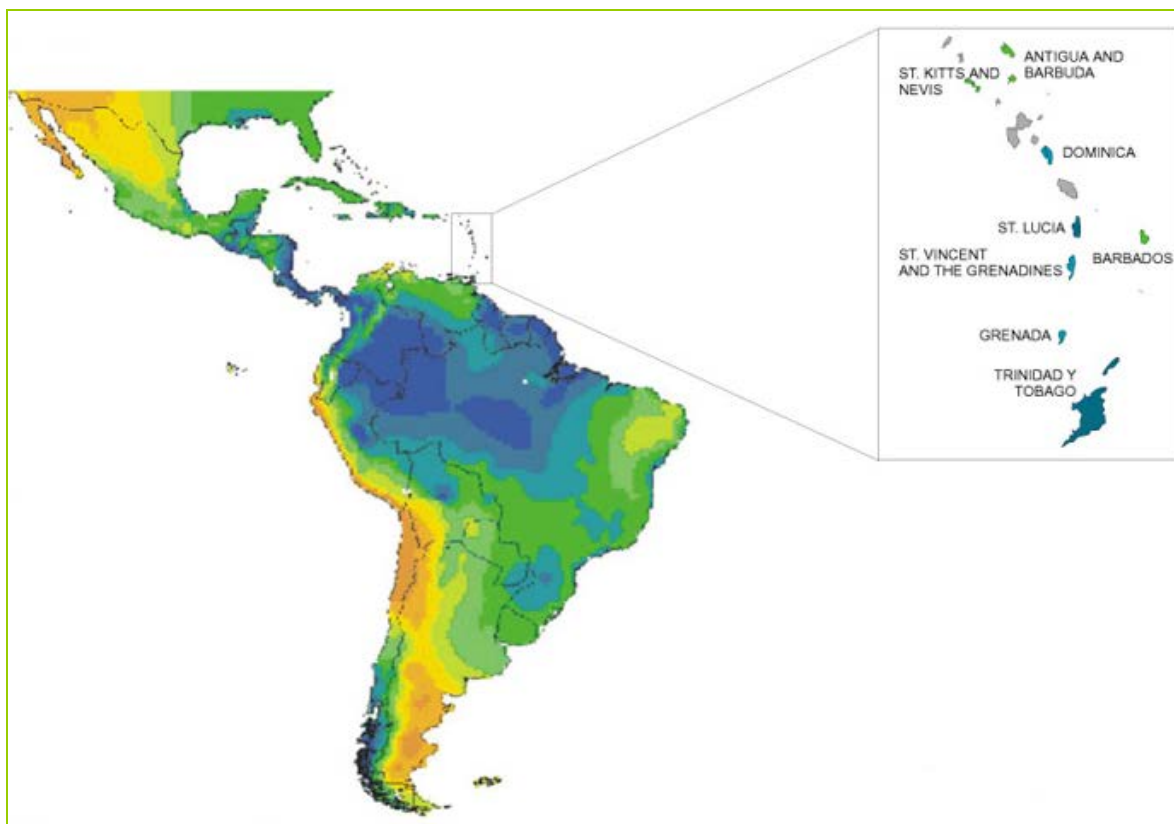


Rainfall mm/year

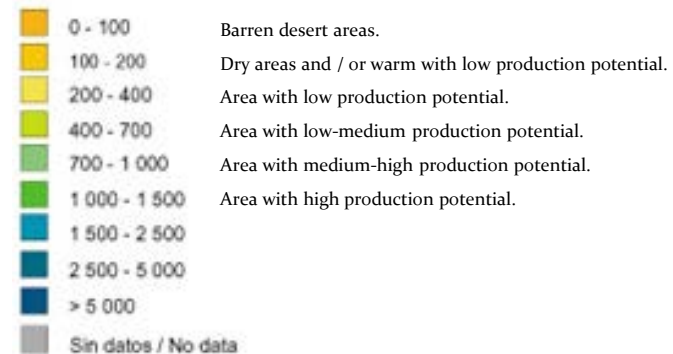


(1) source: FAO -Aquastat, 2009

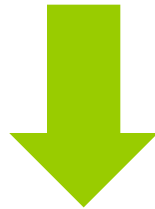
POTENTIAL IMPROVING PRODUCTIVITY AREA ¹: CARIBE and SOUTH-AMERICA



Rainfall mm/year



Current Agricultural Problems



Solution:

INDESVER GROUP Substrates Enhancers Products



SUBSTRATES ENHANCERS PRODUCTS

LAND RECOVERING

FERTIL4[®]

**FERTIL4
PLUS[®]**

LAND PROFITABILITY

RETEN4[®]

**RETEN4
PLUS[®]**



Land recovering: FERTIL4®

- **Description**

FERTIL4® is a **revolutionary, new** and **unique** product in the market.

Is defined as a universal agriculture substrate Enhancer with **FERTILINA®** which allows regeneration and increasing performance in all types of soils as well as increasing water and nutrient retention, even in those soils who are in a state of desertification, depleted or no nutrients. Properties can last from 3 to 5 years.

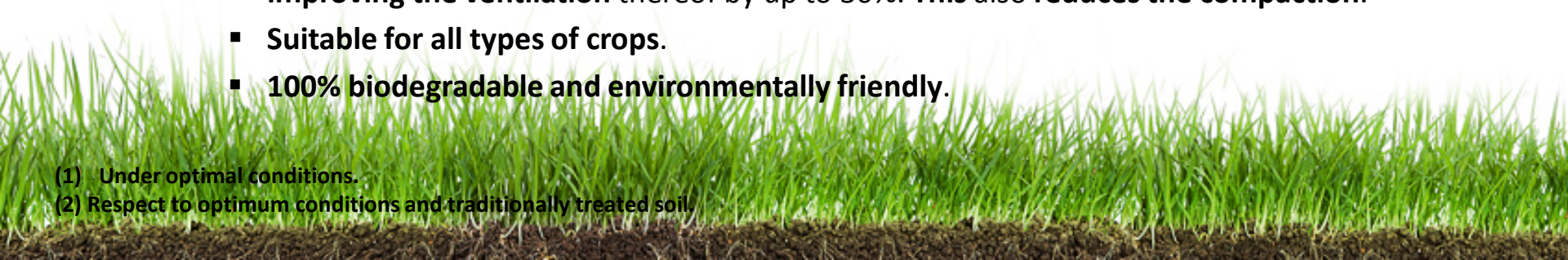
- **FERTIL4® Advantages**

- ❖ **About the soil**

- **Recovery and regeneration** of soil desertification status and / or exhaustion.
- **Minimum 3 times increase of water retention capacity** ¹.
- **Minimum 3 times increase of nutrients' retention capacity** from manures and fertilizer present in the substrats ².
- **Increasing the number of organisms present in the subsurface**, and hence of oxygen, **improving the ventilation** thereof by up to 30%. **This also reduces the compaction.**
- **Suitable for all types of crops.**
- **100% biodegradable and environmentally friendly.**

(1) Under optimal conditions.

(2) Respect to optimum conditions and traditionally treated soil.



Land recovering: FERTIL4®

❖ About the water

- **Minimum 3 times increase of water retention capacity** ¹.
- **Saving up to 70% water consumption**² due to its retention capacity.
- **Absorption of as much as 30% ambient moisture** ¹.
- **Slow release of water** (available in the short, medium and long term) **throughout the growing season** due to the action of the FERTILINA®.
- **Capture up to 45% over the damp night (fog and frost)** ¹.
- **Optimization of water resources by reducing watering frequency by up to 75%.**
- **Increased production** in periods of hydric stress².
- **Reduction of up to 80% of water losses by lixiviation**¹.
- **It prevents contamination of groundwater** by leaching.
- **Ability to irrigate with partial salted waters because helps to purification.**

(1) Under optimal conditions.

(2) Respect to optimum conditions and traditionally treated soil.



Land recovering: **FERTIL4[®]**

❖ On agricultural product

- **Providing micronutrients and essential nutrients** for agricultural growth.
- Contribution to a **state of growth and development** of the plant **without stress as a controlled release of water and nutrients in 3 stages: short, medium and long useful lifetime of the product and, therefore, during the cycle of cultivation**¹.
- **Improved disease resistance** because it has a better oxygenation, nutrition and healthier roots.
- **Improved root development**, either in the vegetative or survival or disease resistance.
- **Major roots of plants in all soils.**

(1) Respect to optimum conditions and traditionally treated soil.



Land recovering: **FERTIL4[®]**

❖ On profitability

- **Seasonality of production**, thanks to more frequent crop¹.
- **Optimization of water resources** ².
- **Delayed wilting point**.
- **Long life**, even when subjected to extreme conditions¹.
- **Contribution of nutrients and micronutrients in a controlled manner throughout the growing season optimum care and favoring plant growth**.
- **Increased production** in periods of water stress ¹.
- **Reducing the rate of application of fertilizer and / or manures** ².
- **It prevents contamination of aquifers** by leaching.
- **Increased up to 15% of production** in rain fed crops ².

(1) Under optimal conditions.

(2) Respect to optimum conditions and traditionally treated soil.



FERTILINA®

FERTILINA® is a unique compound, designed by the R+D+i **Indesver Group**, which contains **the four elements necessary** to support the regeneration of any type of soil and the optimal growth of crops and plants: **roots stimulator, aerating the soil, absorption of up to 3 times nutrients and water and the ability of water and nutrient release in different phases (short, medium and long term).**

Therefore, the use of **FERTIL4®** incorporating **Fertilina®** causes a remarkable improvement of the physical, chemical and biological soil.



Land recovering: **FERTIL4[®] PLUS**

- **Description**

For all season cycle through **the same features** as the new **FERTIL4[®]** but also **incorporates all the necessary nutrients for the entire growing season** of any agricultural product: more nitrogen, potassium and phosphorus.

Specific composition added, up to demand.

- **FERTIL4[®] PLUS Advantages**

- **With all the advantages of INBIFERT[®].**
- **Contribution of all essential nutrients 1 in any one type of crop.**
- **Continuous slow release of these nutrients to the plant throughout the growing season.**
- **No need to fertilize during the growing season, once it has been treated with INBIFERT[®] PLUS.**

(1) Organic matter, nitrogen, sodium, potassium, calcium, phosphorus, magnesium sulfates and other micronutrients.



Profitability of Land: RETEN4®

- **Description**

RETEN4® is an innovative product in the market.

Is defined as a universal culture substrate enhancer containing RETENILINA® which confers the arrangement to increase performance in all types of soils, due to their large water retention capacity and nutrients.

- **RETEN4® Advantages**

- ❖ **On the soil**

- **High recovery and regeneration of soils** including those subject to extreme conditions.
- **Minimum increased to 5 times of the water retention capacity¹.**
- **Minimum increased to 5 times of the nutrients retention capacity from manures and fertilizer present in the substrate².**
- **Increasing the number of organisms present in the subsurface, and hence of oxygen, improving the ventilation thereof by up to 60%. This also reduces the compaction.**
- **Suitable for all types of crops.**
- **100% biodegradable and environmentally friendly.**

(1) Under optimal conditions.

(2) Respect to optimum conditions and traditionally treated soil.



Profitability of Land: RETEN4®

❖ On the water

- **Minimum increased to 5 times of the water retention capacity** ¹.
- **Saving of up to 90% of water consumption** ¹ due to retention capacity.
- **Absorption of up to 50% relative humidity** ¹.
- **Slow release of water** (available in the short, medium and long term) **throughout the growing season** due to the action of the **Retenilina®**.
- **Capture up to 65% over the damp night (fog and frost)** ¹.
- **Optimization of water resources by reducing watering frequency by up to 85%.**
- **Increased production** in periods of water stress².
- **Reduction of up to 95% of water losses by leaching** ¹.
- **It prevents contamination of groundwater** by leaching.
- **Ability to irrigate with partial salted waters because helps to purification.**

(1) Under optimal conditions.

(2) Respect to optimum conditions and traditionally treated soil.



Profitability of Land: RETEN4®

❖ On agricultural product

- **Providing micronutrients and essential nutrients** for agricultural growth.
- Contribution to a **state of growth and development** of the plant **without stress** as a **controlled release of water and nutrients in 3 stages: short, medium and long useful lifetime of the product and, therefore, during the cycle of cultivation** ¹.
- **Improved disease resistance** because it has a better oxygenation, nutrition and healthier roots.
- **Delayed wilting point.**
- **Greatly improved root development**, either in the vegetative or survival or disease resistance.
- **Optimum roots of plants in all soils**, even in the most disadvantaged.

(1) Respect to optimum conditions and traditionally treated soil.



Profitability of Land: RETEN4®

❖ On profitability

- **Deseasonalisation of production**, thanks to more frequent crop ¹.
- **Optimization of water resources** ².
- **Delayed wilting point**.
- **Long life**, even when subjected to extreme conditions¹.
- **Contribution of nutrients and micronutrients in a controlled manner throughout the growing season** optimum care and favoring plant growth.
- **Increased production** in periods of water stress ¹.
- **Reducing the rate of application of fertilizer and / or manures**².
- **It prevents contamination of aquifers** by leaching.
- **Increased up to 25% of production** in rainfed crops².

(1) Under optimal conditions.

(2) Respect to optimum conditions and traditionally treated soil.



RETENILINA®

RETENILINA® is a compound made by the technicians of the I+D+i **Indesver Group**, containing the **4 necessary elements** to promote the optimum growth of all types of plants or crops: **aerating the soil, root stimulator, retainer water 5 times and nutrients and suitability of their progressive release.**

Therefore, the use of **RETEN4®** incorporating **Retenilina®** is an improvement in the physical, chemical and biological soil.



Profitability of Land: **RETEN4[®] PLUS**

- **Description**

It has identical properties to innovative **RETEN4[®]** and additionally the **micro and macro nutrients that maximize production throughout the growing season.**

It's done up to your demand.

- **RETEN4[®] PLUS Advantages**

- **With all the advantages of RETEN4[®].**

- **Contribution of all essential nutrients ¹ in any crop.**

- **Continuous release of these nutrients to the plant throughout the growing season.**

- **No need to take care for the entire growing season, once it has been treated with RETEN4[®] PLUS.**

(1) Organic matter, nitrogen, sodium, potassium, calcium, phosphorus, magnesium sulfates and other micronutrients.



How to apply the Integrated Green Solution products

FERTIL4® & RETEN4® products should be extended over cultivation soil in a ratio of:

- **FERTIL4®** minimum 0,50kg up to 7kg per square meter of soil to be treated.
- **RETEN4®** minimum 0,50kg up to 5kg per square meter of soil to be treated.

Once the product is spread over the soil, it's time to plow into a depth of minimum 10cm up to 20 cm.



1.- Spreading



2.- Plowing

FERTIL4® and RETEN4® properties can last from 2 to 5 years.



Contact:

Integrated Green Solutions

C/ Camí de la Caseta, 16, nave 5

Polígono Industrial La Serra II

08185 Lliçà de Vall (Barcelona)

España

Phone.: (0034) 93 844 51 21 Cell Phone: (0034) 630 047 460

info@integratedgreensolution.com

marta.bertolin@integratedgreensolution.com

