



PRODUCT INFO  
& DATASHEET

## **SICORGAN GEL 100% organic PLANT NUTRITION range** **PREMIUM ORGANIC PLANT NUTRITION IN GEL FORMULATION** **FOR DEMANDING FARMERS.**

### **Introduction & Benefits & Sales Rationale**

- Made in E.U. -

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#### **1/ INTRODUCTION**

The benefits of organic fertilizers in agriculture have been used for a long time with the intention of increasing the fertility of soils, in addition to improving their characteristics for the benefit of the proper development of crops. Today their use is of great importance, as they have proven to be effective in increasing yields and improving the quality of products. A large number of investigations proves that organic matter is a soil component of great importance for the proper development of crops. Unfortunately, under certain management schemes, agricultural soils tend to gradually lose their organic matter content, which manifests itself with a gradual decrease in yield with the passage of crop cycles. When some type of organic material is incorporated into these soils with the potential to provide organic matter to the soil, the response of the crop is extraordinary, and increases in yield of up to 10 times can be achieved in some cases. Organic matter, particularly when it comes from plant extracts, contains significant amounts of most of the essential nutrients for plants.

Our 100% ORGANIC PLANT NUTRITION products are extraordinary options for organic fertilizers due to their important contributions of nutrients; However, it is necessary to follow an appropriate procedure in its storage to avoid the loss of nutrients, mainly nitrogen (leaching or volatilization). In large livestock farms, manure production must be very careful and under adequate conditions, otherwise, due to anaerobiosis, methane and other polluting and bad-smelling gases can be produced, in addition to the proliferation of organisms potentially harmful to humans and plants. In general, organic fertilizers can provide the following benefits to crop production:

#### **2/ BENEFITS OF SICORGAN GEL ORGANIC PLANT NUTRITION**

- Contribution of some or almost most of the essential elements for plants, depending on the organic fertilizer used. They have greater residuality than inorganic fertilizers.
- They have the particularity of releasing nutrients gradually, which guarantees a certain supply of nutrients for the crop during its development. They improve soil structure, porosity, aeration and water retention capacity.
- They have the ability to form organic complexes with nutrients, making them more available to plants.
- Organic matter has a greater cation exchange capacity (CEC) than clays, so the incorporation of organic fertilizers has the capacity to increase the CEC. This is very favorable especially in soils with low CEC (sandy soils).
- They release carbon dioxide (CO<sub>2</sub>) during their decomposition that forms carbonic acid (H<sub>2</sub>CO<sub>3</sub>) which solubilizes nutrients from other sources.
- They are a source of organic carbon for the activity of heterotrophic organisms present in the soil.
- They increase water infiltration, reducing surface runoff which helps reduce soil losses due to water erosion. They promote greater stability of soil aggregates.

#### **3/ SO MANY BENEFITS of our 100% complete organic GEL fertilizers**

- Complete organic fertilizers (they contain the three primary nutrients: nitrogen, phosphorus and potassium) provide numerous benefits to the crop compared to the use of chemical fertilizers and even manure. Faced with the variability of manure, they guarantee the fertilizer units (N,P,K), as well as ensuring the absence of weed seeds or pathogens that can transfer manure to the crop. Furthermore, in organic farming many manures are not allowed: those from intensive livestock farming would probably be contaminated with antibiotics, traces of pesticides, heavy metals...
- On the other hand, some manures that are very rich in macronutrients such as nitrogen, if not mixed with poorer ones or with plant remains, despite composting, have a tendency towards imbalance.
- Regarding chemical fertilizers, the benefits are evident, both for the crop and the environment, in the short and, especially, in the long term but although the use of inorganic fertilizers provides the plant with immediately available nutrients, it is riskier to apply in excess or in deficiency and: chemical fertilizers do not amend the soil.

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Apart from the possible contamination of surrounding and underground water, and the increase in toxic salts in the soil when applied in large quantities, an important risk in the sole use of chemical fertilizers is the degradation of soil life by eliminating microorganisms useful for the plant nutrition. And, in reality, chemical fertilisers do not manage to modify the substrate, but simply feed the plant.

- With the application of organic fertilizers, the same soil microorganisms are the ones that degrade the fertilizer to form water-soluble compounds that the plants use. Another valuable characteristic is that they manage to increase the action of bacteria and fungi that benefit the soil. In fact, they promote the proliferation of fungi responsible for plants taking advantage of nutrients.

**Therefore, they improve the structure of the soil, help retain nutrients, allow carbon fixation in the substrate and promote the crop's ability to absorb water.**

#### **4/ 100% ORGANIC GUARANTEE**

This natural effectiveness can be found in fertilizers with specialized formulations adapted to the requirements of each crop at each moment of the production cycle. The different lines of SICORGAN GEL ORGANIC fertilizers are an example of the best options for natural nutrition, we offer fertilizers with a 100% organic guarantee, backed by the corresponding ecological certificate, and ideal for integrated production.

The balanced composition of the products in the SICORGAN ORGANIC PLANT NUTRITION lines ( liquid and solid organic) position them as soil regenerative models due to their ability to balance the substrate by nourishing it, improving its structure, composition and microbial activity.

SICORGAN GEL ORGANIC plant nutrition products also encourage the formation of aggregates in the soil that improve the friability of the soil, facilitating agricultural work and avoiding waterlogging and root suffocation. In the same way, they incorporate raw materials of plant origin with a high degree of refinement in their formulation that avoid problems of precipitates and clogging in drip irrigation systems.

**They ensure a fertilizer of organic origin, free of pathogenic elements, antibiotics and weed seeds, and free of salmonella, enterobacteria and streptococci.**

Applied regularly, they are the best solution to enrich and recover eroded, compacted or depleted soils, as they increase the porosity of the substrate, allowing greater air circulation, as well as rapid infiltration and greater retention of rain or irrigation water.