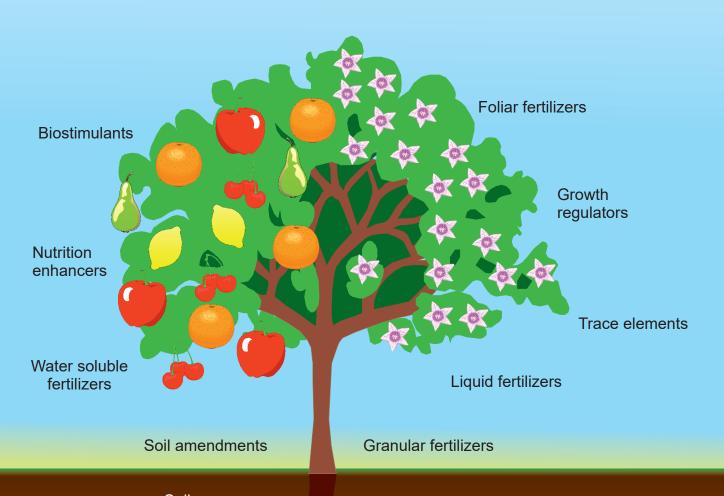
# **HUMOFERT**



With environmental approach ...

and natural methods of production ....

we increase the yields ....



Soil activators

Biofertilizers - Bioeffectors

Root stimulants

... and the profit of the farmers



















# Nutritional products for ...

HUMOFERT SA was one of the first Greek companies to discover the great properties and the multiple benefits of the seaweed extracts applications on all crops. Since the early 90s our company promotes natural organic fertilizers from the marine plant extract of the genus Ascophyllum nodosum, the richest in nutrients and natural plant hormones seaweed in the world. HUMOFERT SA promotes the reliable nutritional products from marine plant extract Proton-P (water soluble powder), Proton-C (concentrated liquid) and Proton-L (liquid). The huge field-level research that has been carried out on the application of **Proton** natural organic fertilizers in almost all crops for many years is a guarantee for every farmer that with **Proton** he can achieve the maximum possible yield in his crop.

#### **ORGANIC GRANURAL FERTILIZERS**

successful crops are built. The organic granular fertilizers are the optimum solution for the basal fertilization for all crops since they combine the simultaneous and perfectly balanced supply of nutrients and organic matter to the plants regardless of the growing practice that the farmer follows (conventional or organic). HUMOFERT S.A. organic granular fertilizers **BIOFERTIN** derive from excellent quality natural raw materials, which are processed according to the regulations of hygiene (HACCP) and under strict quality control (ISO) to ensure certain results to the grower. BIOFERTIN fertilizers are available in various NPK formulations in order to meet the nutritional needs of all crops and soils and they have a very high content of organic matter that makes them an excellent quality soil amendment besides organic fertilizers.

#### **ORGANIC SOLUBLE FERTILIZERS**

The basal fertilization with inorganic nutrients Nutrients provided by the fertilizers to the plants do and organic matter is the foundation upon which not necessarily derive from inorganic chemical raw materials. In nature there are many organic materials which usually come from plant and animal by-products and contain not only the essential macro- and micro-nutrients that plants need, but also organic compounds (amino acids, proteins, humic acids etc.) that increase the organic matter of the soil and have a catalytic effect on the biological processes taking place inside the plant tissues. When these organic raw materials are used in the production of fertilizers, then the resulting organic fertilizers provide the crops the potential to maximize their yield. The organic fertilizers of HUMOFERT SA rank among the top organic fertilizers of the market due to the high quality raw materials that are being used for their production. FISH-FERT, BIOFERTIN-L, AMINA-SOIL and BIOGENESIS are only some of the most well known organic fertilizers of HUMOFERT SA.

#### **TRACE ELEMENTS**

Apart from macro-nutrients (N, P, K, Ca, Mg, S) plants require also a range of micro-nutrients or trace elements (Fe, Zn, Mn, Cu, B, Mo, Co) to obtain a full and integrated nutrition. In many crops certain trace elements are totally essential for the completion of their biological life cycle and in almost all crops some or even all trace elements are needed in order to achieve high yields with qualitative characteristics. Providing micronutrients should be made promptly and in a manner that ensures trace elements will not only be available to the plants but will be quickly assimilable by the plants since their absence leads to the degradation of the crops, plant nutrient deficiencies, weakening of plants and reduced yields.

HUMOFERT SA features many series of chelated trace elements. The ELEM product series is composed by trace elements in water soluble form which are chelated with the most popular chelating agent EDTA. The ELEM series includes Iron, Zinc, Manganese, Copper, Calcium, Magnesium, Boron (Boron salt) and Molybdenum (Molybdenum salt). The top chelated Iron FERRUM belongs in the same product range but Iron is chelated by the excellent chelating factor EDDHA in the product providing the ability of being assimilable by the roots in all soil types.

HUMOFERT SA supplies the growers with two further chelated micronutrient series under the brand names AMINA (AMINA-Fe, AMINA-Zn, AMINA-Mn, AMINA-ZiBoMo, AMINA-Cu etc) and DIA (DIA-B, DIA-Fe, DIA-Zn, DIA-Mn, DIA-CU etc). Both series combine the trace elements with L-amino acids resulting in increased uptake by the plant cells and rejuvenation of plant tissues. AMINA micronutrients are formulated in liquid form while DIA are formulated in solid water soluble form.

Of course micronutrient mixtures couldn't be missing from the catalogue of HUMOFERT SA. ELEM-MIX, COMBI-MIX, DIA-MIX, AMINA-MIX and MINER-ALL contain various combinations of all the micro-nutrient elements in chelated form and high purity so that the farmers who apply micronutrient mixtures on their crops can rest assured that their plants have all the required nutrients to perform the maximum benefits.

#### **BIOSTIMULANTS**

Throughout the life-cycle of all crops, there are some critical stages or periods that largely determine the crop yield and therefore the success of the grower. The period of vegetative growth, the flowering, the fruit set, the fruit sizing and the fruit maturation are such cases. The contribution of certain substances and nutrients to the completion of the processes involved during the critical growth stages is crucial. The role of biostimulants is to provide such elements (plant hormones, amino acids, vitamins, carbohydrates, etc.) that are required in every important stage of the plant growth.

HUMOFERT SA provides a complete range of biostimulants for every situation that guarantees the desirable outcome for the grower. NATREG, FERTAMINO, PERFECT, S-M-F and BRIX-IN are only some of the biostimulants we put at the disposal of the growers.

#### **ROOT BIOSTIMULANTS**

Root is the most important plant tissue. It is the means for the establishment of the plants in the soil, is the base which supports the above ground part of the plants, absorbs water which is necessary for the survival of the plants and assimilates nutrients for the function of the rest plant systems as well as the plants development. For all these reasons the creation of a powerful, voluminous and healthy root system is the concern of every farmer who desires high performance and reduced risk in his investment. HUMOFERT SA has developed two powerful weapons for the growers in order to achieve this target. These are the natural root biostimulant RIZOCYN and the organic root biostimulant with beneficial soil microorganisms RIZOBAC. Both products ensure quick and safe establishment of the plants in the soil and create a rich in depth, width and branches root system. Additionally **RIZOBAC** contirbutes to the improvement of the plant nutrition and the enhancement of the plant defence against biotic factors.





































#### SOIL CONDITIONERS

Many times we see the phenomenon plants and trees fertiled with satisfactory or even excellent nutrition in terms of inorganic nutrients to perform poorly. The main cause of this phenomenon is the inadequate absorption and assimilation of nutrients by the roots. Soil conditioners are solving this problem. They are liquid and/or solid water soluble products rich in organic matter which affect the chemical and biochemical reactions occurring in the soil as well as between the roots and the soil and improve the properties of the plant growth substrate (increased retention of water and inorganic nutrients, metals chelation, increase of the population of soil beneficial microorganisms, etc.). At the same time they increase the cation exchange capacity between roots and soil enhancing plant growth.

In this category HUMOFERT SA offers a wide range of products in liquid and solid water soluble form which depending on their synthesis provide various elements to the soil according to the needs of each crop. Our most popular products are STRONG-26, STRONG-N, ACT-1, BOMBA, DRY-HUM, AZOHUM and FULVIC POWDER while many others supplement the most complete catalogue of soil conditioners that a farmer can come across in the market of agricultural supplies.

#### LIQUID FERTILIZERS

The application of liquid fertilizers through foliar sprays and fertigation is gaining more and more ground in modern agricultural practices since their handling by the farmers is easier and also saves them time and cost. On the other hand, many new technologies have contributed in the development of liquid fertilizers with attributes and characteristics that are not found in granular and/or water soluble fertilizers. Such nutritional products have upgraded significantly the available resources for the grower who wants to increase the production with low cost applications. The catalogue of HUMOFERT SA foliar liquid fertilizers includes categories and products with excellent properties and unique characteristics such as the slow release nitrogen fertilizers GROWER (NPK 30-0-0, 22-0-16, 8-32-5, 10-10-10, 15-5-5 etc), the potassium phosphite fertilizer GROWER 0-29-26, the nitrogen and potassium thiosulphate fertilizers THIO-S-KAL, THIO-S-AM and AZOTO-S, the special application fertilizers DYNAMIC and NBA as well as other nutritional products which aim at the vigour of plants and the successful growth of profitable crops.



Thio-S-Am



Thio-S-Kal













#### **BIOFERTILIZERS - NUTRITIONAL PRODUCTS WITH BENEFICIAL MICROORGANISMS**

Biotechnology is one of the major areas that HUMOFERT SA has been focusing in the recent years. By investing in laboratory and machinery equipment, developing of a R & D department staffed with skilled and highly trained personnel and after systematic research which begins from the laboratory and ends up in the field, HUMOFERT SA has managed to create innovative nutritional products that combine organic and inorganic nutrients along with beneficial for the plants microorganisms (bacteria and fungi). These new nutritional products known as Biofertilizers-bioeffectors offer new opportunities to farmers since they provide nutrients to the plants like the rest fertilizers but in the same time the beneficial microorganisms enhance nutrition, improve the growing conditions and fortify the defense of the plants against various biotic factors just as in nature.

This product category of HUMOFERT SA includes AZOSPIR and AZORIZ which increase the levels of nitrogen in the soil since they contain nitrogen fixing bateria, PHOSBACTIN which chelates the insoluble phosphorus in the soil, SUCCOR and BACTILIS which enhance the growth of the roots and reduce plant stress caused by diseases and BIONEM which improves the physicochemical properties of the soil and restores its natural microflora resulting in reduced nematicides applications. Furthermore, BACTAMIN and LEAF POWER rejuvenate the destroyed microbial environment due to the frequent applications of insecticides and fungicides on the above groung part of the plants. LIVE SOIL and SUPER SOIL are applied after chemical disinfection or solarization of the soil in order to reconstruct its damaged biological composition and flood it with beneficial bacteria and fungi creating excellent growing conditions for healthy crops. Continuous research of HUMOFERT S.A. on this scientific field promises that new products will be released soon meaning that farmers who wish to cultivate ecologically will have increased choices to achieve their purpose.

#### WATER SOLUBLE FERTILIZERS

The growing trend of installing drip irrigation and A very common problem in the recent years which well as the enhanced role of foliarly applied nutrients have increased the use of water achieved through the reduced quantity of applied fertilizers and labor cost combined with the targeted supply of nutrients when the plants really need them, are important factors that lead to the increased use of water soluble fertilizers has introduced in the recent years a complete range of water soluble N-P-K fertilizers under the solutions for the growers of all crops. This series of water soluble fertilizers includes 3 important categories; the FAST-GROW drip category which is suitable only for fertigations and includes various N-P-K formulations with/or without chelated trace elements, the FAST-GROW+TE category which includes more than 10 N-P-K formulations with chelated trace elements and is suitable both for applications through fertigation and foliar sprays and the top category FAST-GROW plus that includes many N-P-K formulations with very high content of chelated micronutrients and it is enriched with

### **SOIL AMENDMENTS**

fertilization systems in more and more crops as is going to be very intense in the future is the soil depletion due to continuous and intensive cultivation of the fields which can not support the soluble nutrients. The savings which are increased production needs and the demand for overreaching a minimum efficiency level in order the growing in these fields crops to be profitable. Since finding new cropland is very difficult, the building activity is constantly expanding limiting rural areas and the food needs of humanity grow at replacing granular fertilizers. HUMOFERT SA a very rapid pace, the solution to the problem of maximizing the efficiency of the cultivated land becomes more and more imperative. To achieve commercial name FAST-GROW which provide this, the replenishment of the organic matter in crop fields on annual basis is necessary. For this reason HUMOFERT S.A. suggests a regular application of the very rich in organic matter granular fertilizers BIOFERTIN as well as the organic-mineral granular fertilizers ECO-plant-FOOD. Each one of these products contains different organic compounds (humic acids, carbohydrates, amino acids, proteins etc.) in combination with nutrients and as a result their application before planting or sowing restores the organic matter of the soil at normal levels, improves the soil structure and increases the fertility of the soil. Consequently these products 2% L-Amino acids and 1% high quality seaweed create expectations among the growers for highly profitable yields.

# qualitative crops



## Research

Research is the cutting edge for HUMOFERT S.A. The R&D department conducts ongoing research on new materials, microorganisms and methods that improve the fertility of the soils and increase the yield of the plants. In collaboration with national universities and research institutions as well as with European and international research bodies, HUMOFERT S.A. participates in research projects aimed at improving the cultivating methods according to the requirements of the agriculture of the future.

One of the main pillars of HUMOFERT S.A. is innovation. Through research conducted by the R&D department, new products are being developed which are characterized as original and unique and open new horizons in plant nutrition notion as well. For this reason, many of our clients have connected HUMOFERT S.A. with the word "innovation" in their subconscious.

Innovation





# **Experimentation**

For us, experimentation is a very important step in the process flow for the development of new products. Prior to the placement in the market the products of our company have been tested first in the laboratory (in vitro) and later in the field (in vivo). In this way we ensure the effectiveness of our products and the reliability of HUMOFERT SA.

We provide solutions for all the existent methods of fertilizer application (fertigation, foliar spray, injection, top-dressing fertilization, base-dressing fertilization) and for all the methods of crop cultivation (conventional, organic, integrated). We want our products to meet the criteria of all the cultivating techniques giving every time the maximum benefit to the farmer.

Application





High Yield

At the heart of our philosophy is always the development of robust and healthy plants that will produce high-yield crops for the farmer. For this reason we design, produce and promote high quality, creditable and consistent nutritional products for the farmers.

The increase of the crops yield as well as the improvement of the harvest quality lead the profits of the growers to higher levels. The key of the success for the grower is always a complete and proper plant nutrition. Use today the nutritional products of HUMOFERT S.A. in order to unlock the door of your own success.

Success





