



## VIGORHUMUS H-50 (4-5-12)

**PRODUCT SUITABLE FOR ECOLOGIC AGRICULTURE UNDER REGULATION (CE) Nº 834/2007**

Organic-mineral fertilisers give the cultivation all the nutrients needed for its correct vegetative development. There are some nutrients that should be pointed out, such as the main macronutrients (phosphorus, nitrogen and potassium) and secondary macronutrients, and micronutrients. Not only do they improve the structure of the soil but they also provide organic matter to the cultivation given their organic composition.

**VIGORHUMUS H-50** is an organic-mineral fertiliser NPK, with a high richness in potassium (12%) and in main macronutrients (4% Nitrogen, 5% phosphor), as well as other macro and micro nutrients. The content in organic matter improves the fertility of the soils, and the product is of easy application thanks to its "pellet" format.

**VIGORHUMUS H-50** combines the individual qualities of the organic and the mineral fertilisers, which results in a better and more efficient fertilizer.

**VIGORHUMUS H-50**, is inscribed in the *Registre of Fertilisers as stated in the Royal Decree 506/2013, with number F0003062/2027. The product is suitable for ecologic agriculture in agreement with the Regulation (CE) nº 834/2007 with licence from the Organism of Control and Certification Sohiscert. Number of Certificate: CT71PAE-11.*

### Composition

**VIGORHUMUS H-50** presents a high richness in organic matter, with a significant percentage in humic and fulvic acids, making the ionic exchange in the soil-plant complex easier and thus improving the cationic exchange capacity and also improving the physical properties of the

soil. Concretely, they favour the porosity, ventilation and water circulation in clay soils, and provide structure to sandy soils.

The Carbon/Nitrogen relation corresponds to a rank of stable values of nitrogen mineralization, which makes the nutrients assimilation by the cultivation easier.

PARAMETREO	UNITS	VALUE
ORGANIC MATTER	% s.m.s.	45,0-50,0
TOTAL HUMIC EXTRACT	% s.m.s.	16-20
HUMIC ACIDS	% s.m.s.	4,5 -6,0
FULVIC ACIDS	% s.m.s.	11,5 -14,0
C/N RELATION	-	6-8

This fertiliser is produced with compost enriched with humic matter and extracted organic seeds, which have a great hummus content potential.

The production process, as well as the final product, is under our strict quality controls in order to achieve both the clients' satisfaction and a deep environmental respect in all our activities.

**VIGORHUMUS H-50** allows a constant and progressive nutrition of the plant because of its organic nitrogen content, as the nitrogen is supplied regularly during the cultivation cycle, avoiding excessive releases and losses by leaching.

The high levels of humic extract contribute to the phosphorus and micronutrients availability in the soil-plant complex. The block of these nutrients is usually produced in calcareous soils – because of their pH- and with a low content in organic matter, which is why VIGORHUMUS H-50 reduces the block problem.

PARAMETRE	s.m.s.	s.m.f.
HUMIDITY (%)	-	10 – 20
pH	6,0 – 6,5	6,0 – 6,5
Total NITROGEN (N) (%)	4,4 – 5,2	4,0
ORGANIC NITROGEN (N) (%)	4,0 – 4,4	3,7
PHOSPHORUS PENTOXIDE soluble with water and neutral amonic citrate (P <sub>2</sub> O <sub>5</sub> ) (%)	5,5 – 6,0	5,0
POTASSIUM OXIDE soluble with water (K <sub>2</sub> O) (%)	13,2 – 14,4	12,0
HEAVY METALS (Class)	A	A
Total CALCIUM (Ca) (%)	6,6 -7,2	6,0
<i>Salmonella</i> (presence in 25g)	0	0
<i>E. Coli</i> (NMP/g)	< 3	< 3
GRANULOMETRY (90% of the product)	< 10 mm	< 10 mm

## Characteristics

The exclusive use of chemical and inorganic fertilisers leads to a deterioration of the fertility of the soil, as they don't provide the needed structure and characteristics for its correct physical, chemical and microbiological development, unlike the use of organic and mineral fertilisers such as VIGORHUMUS H-50, which contributes to the fertility of the soil while it represents a source of mineral nutrients for the crops.

**VIGORHUMUS H-50** has a high richness in potassium (NPK balance 1-1.5-3), ideal for the blooming stadiums, and especially for the fruition of the cultivation, as they are the stages that demand the most nutrients.

The potassium is an important nutrient in the prevention of diseases in plants, as it is involved in many cellular processes that influence the severity of the disease. The contribution of VIGORHUMUS H-50, rich in potassium, helps improve the resistance to diseases in plants, especially in winter when the temperatures are low.

## Format, application and dosage

**VIGORHUMUS H-50** is served in bulk, Big-Bag or 25Kg plastic sacks (over American or British retracted pallet 100 x120 cm).

It is presented in the "pellet" format to improve its use and distribution in the fields, minimizing the loss of the product during its use.

The product can be applied as a base or a cover fertiliser, given its organic and mineral characteristic. The table below presents, as a guide, the recommended fertiliser dosage for each kind of crop.

CROP	Dosage (*)
Fruity, citrus, subtropical	1,6 - 2,0 TM/Ha
Vine and olive	500 kg/Ha
Horticulture and flower growing	1,6 - 2,4 TM/Ha
Gardening	40 kg/100 m <sup>2</sup>
Grass	20 kg/100 m <sup>2</sup>

(\*)The doses are calculated for a working depth of 20cm. For a deeper working zone, it is necessary to proportionally increase the dose.

Prevent access to land fertilized with this product to farm animals for at least 21 days after application.

Our Technical Department will assess you with the most appropriate Fertilising Plan for your crop.

It is recommendable to apply the product in the beginning of the vegetative growth stages of the crops, (end of winter-beginning of spring or end of summer-beginning of autumn, depending on the crop).

It is also recommended to bury the product around the root-development area using a superficial labour in the preparation of the terrain..



**VIGORHUMUS H-50** is suitable for the following application fields: extensive agriculture; forests, fruit trees, ornamental and vine plantations; reforestation and landscape restoration; horticulture; parks and gardens; sportive terrains; fertiliser for cultivation substrates.

Thanks to our production system, exempt of chemical treatment, **VIGORHUMUS H-50** completely maintains the quality, the content in organic matter and the activation of microbial flora, which provides important advantages:

- Thanks to a better stabilisation of the hummus of the organic matter, the application dosage can be reduced, improving the performance in the crops and lowering the cost of the treatment.
- It is easy to use, which implies the minimization of the product loss and the lowering of the doses compared to the dust format fertilisers. This property makes its application in great cultivation extensions possible.
- Possibility of application with any kind of fertilising machine.
- Easy disintegration of the pellet once it is applied to the soil, favouring the incorporation of its nutrients in the soil-plant complex, improving its vegetal assimilation.

