A product of Terra Optima AG <u>www.terra-optima.ch</u>

The Future of Viticulture



Humiverse[®]Plus – The Future of Viticulture

- Promotion of soil life
- Improvement of soil structure and increase of humus formation
- Increasing the availability of macro- and micro nutrients
- Increase of cation exchange capacity
- Increase of water holding capacity
- pH value equalisation on (strongly) acidic and alkaline soil
- Improvement of salt- and pollutantcontaminated soil
- Enzymatic effect on the formation of important plant hormones
- Protects the plant from UV radiation and increases chlorophyll formation



Other Advantages:

- Improvement of nutrient uptake (activity / root extracts)
- Dissolution of salts and renewed bioavailability
- Increased resistance to abiotic stress, e.g. drought, heat, UV radiation, frost, salinated soils (due to overfertilisation with NPK fertilisers), Nutrient deficiency and pH-valuedeviations
- Promotion of root growth (rhizosphere, gravitropism)
- General growth stimulation (seed germination, flowering and fruit development)
- Increase of disease resistance (e.g. fungal diseases, low hyperglycemia in the plant)
- Improvement and safeguarding of the qualitative and quantitative properties of the harvested products

"Humiverse®Plus is an organic biostimulant of the highest purity and represents a new world standard. After scientifically accompanied tests and successful use in practice, nothing more stands in the way of product introduction in both organic and conventional agriculture. Humiverse®Plus means more quality and more yield the natural way." **CEO Terra Optima AG, Heiko Petermann**



Bundesamt für Ernährungssicherheit BAES



Zulassung gemäß § 9a Düngemittelgesetz 1994 idgF. beim BAES, Österreich Zulassung gemäß EU Öko Rechtsvorschriften, etc. bei der Fibl, Deutschland

Humiverse[®] Plus (Pat. pend.) is a registered trademark ^{TERRA OPTIMA AG.} of Terra Optima AG Switzerland

Humiverse[®]Plus – The Future of Viticulture Practical viticultural trial

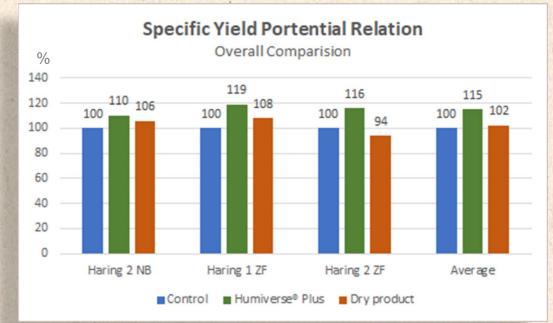
Study on the effect of Humiverse[®]Plus in comparison with a dry humic acid product and a zero variant (Dipl.-Ing. Dr. Eduard G. Taufratzhofer, Austria)

General study conditions

- Basic fertilisation with Bio-Agenasol (BAS) with 1.000 kg/ha
- Humiverse[®] Plus liquid
 20% Active Agent Content (50 kg/ha)
- Dry product
 85% Active Agent Content (50 kg/ha)
- Vineyard: Haring (Ried, Oberer Badenweger, Gemeinde Gumpoldskirchen)
- Wine varieties:
- Time period:

May – October 2023

Zierfandler (ZF) and Neuburger (NB)



Test results in 2023 (1st year)

Improved root formation and Water absorption capacity

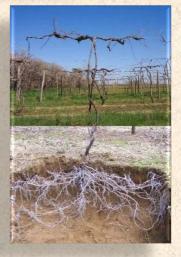
- Growth in deeper soil layers
- "Specific yield potential" +15%
 - Grape yield +18%
 - Sugar yield netto +15%



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Humiverse[®] Plus - The Future of Farming **Recommendations for agricultural practice**

These recommendations are based on scientifically monitored on-farm trials. Humiverse® Plus can be applied pre-emergence, but also post-emergence. A concrete recommendation depends very much on the respective conditions such as previous crop, soil condition and region.

Crop Farming	As a soil additive for regeneration: Depending on soil type/humus content: Water application rate: Single dose or splitting possible.	20,0 - 50,0 l/ha 500,0 l/ha	FO h
	Follow the regional recommendations! As a biostimulator on the Plant: From 2-leaf stage	4,0 - 6,0 l/ha	Humiverse* Natürlich mehr Ertrag
	Water application rate:	300,0 l/ha	Humiverse [®] Plus is applied liquid and has
Green spaces, Grassland, Pastureland	As a biostimulant on the Plant: Water application rate:	3,0 – 5,0 l/ha 300 l/ha	an immediate effect on plants and soil. With use of Humiverse®Plus
Viticulture, Fruit growing Special crops	As a biostimulant on the Plant: Water application rate:	50 ml/Plant 10,0 l/Plant	
Compost, Substrates Soil Production	For optimal effect: Application rate depending on origin and weight of the raw material.	0,5 <i>–</i> 6,0 l/m³	Without use of

For soil recultivation, irrigation and fertilisation, take advantage of the direct advice from our team!

Consultancy and Sales:

Please send product related questions to: Please send orders to:

hkp@terra-optima.ch info@terra-optima.ch

Humiverse[®]Plus

TERRA OPTIMAAG Rathausstrasse 14 CH-6340 Baar www.terra-optima.ch info@terra-optima.ch

