ActivFert
Nature's Balance

ActivHumic™

Liquid Soil Conditioner

20% Liquid Humic Acid Extract
Supercharged with 5% ORMERGY

WHY USE HUMATES?

I. Biologically stimulates the plant.

II. Chemically changes the fixation properties of the soil, improving CEC (carbon exchange capacity).

III. Physically modifies the soil.

Chemical Benefits
Helps convert elements to plant food
Rich in organic / mineral substances
Retains soluble fertilisers in root zone
Has high ion-exchange capacities
Time releases nutrients as needed
Stabilises nitrogen applications
Breaks down salt complexes
Buffers pH of soils
Absorbs toxins like salt water and pesticides.
Carbon charges bind to the toxic molecule, allowing microbes to break it down
Physical Benefits
Make soils more friable or crumbly – breaks up hardpan
Increases water holding capacity (up to 7 times)
Breaks down crop residues
Improves soil workability
Increases aeration of soil
Builds organic matter
Reduces soil erosion
Improves seed bed
Stabilises soil temperature
Biological Benefits
Boosts growth of desirable soil life
Increases germination of seed
Improves plant respiration
Stimulates root growth
Stimulates plant enzyme
Improves nutrient uptake
Stimulates growth at all stages
Increases vitamin content of plants
Acts as an organic catalyst

Typical Analysis	%(wt/vol)
Humate and Fulvate	20
Organic Carbon	12
Potassium	6
pH	10.9
Specific Gravity	1.1g/cm3

Directions for use:

Shake Well Before Use
Apply ActivHumic with boomspray, or irrigation equipment.
Dilute with 100 litres water per hectare.
ActivHumic is compatible with most

Application Rates		
Crop	Rate/ha	Comments
Vegetable	5 - 10	Apply prior to planting
Fruit & Nut Trees	10 - 15	First application prior to bud burst then again after flowering
Turf	10 - 15	Split application and apply every month
Pasture	5 - 10	Apply after the first rain of the season
Cereals,cotton, sugarcane	5 - 10	apply at planting/sowing times
Fertiliser	5 L/tonne	Add concentrate ActivHumic to fertiliser whilst auguring. Do not add water

ActivHumic is a concentrated liquid humate derived from plant materials from natural deposits of Australian Leonardite. ActivHumic improves nutrient availability, stimulates biological activity and is a good food source for increasing fungal populations. This increase in biology will actively release locked up soil nutrients. Nitrogen fertiliser rates can be reduced by adding ActivHumic to the product.

CONDITIONS OF SALE
The purchaser acknowledges that Activfert has no control over the handling and storage of this product by the purchaser and accordingly takes no responsibility and gives no advice as to the purchasers application and use or misuse of this product. Activfert hereby disclaims responsibility for any loss or damage whatsoever arising from the use or misuse of this product.

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Humic Acid's Role in Improving Soil Quality and Plant Growth

What is Humus or Humic Acid?

The term "humus" dates back to the time of the Romans, when it was frequently used to designate the soil as a whole. It was later applied to the organic matter of soils and composts, or to different fractions of this organic matter; as well as, to complexes formed from a variety of natural organic substances. Humus compounds are complex natural organic compounds that are formed in soils from plant residues, by a process of "humification". Humus materials are complex aggregate of brown to dark coloured amorphous substances, which have originated during the decomposition of plant and animal residues by microorganisms, under aerobic and anaerobic conditions, in soils, composts, peat bogs, and water basins. Chemically, humus consists of certain constituents of the original plant material resistant to further decomposition; of substances undergoing decomposition; of complexes resulting from decomposition, either by processes of hydrolysis or by oxidation and reduction; and of various compounds synthesised by microorganisms.

"Humic acid " is the commercial term often used to refer to the combined humic and fulvic acid content found in these naturally occurring deposits. Humic acid is known to be among the most bio-chemically active materials found in soil.

Why Use Humic Acid?

Today, there is a recognised and increasing use of humic acids for their beneficial impact on the growth and cultivation of crops (vegetable & non-vegetable), citrus, turf, flowers, and particularly in organically deficient soils. Humic acid is not a fertiliser as it does not directly provide nutrients to plants, but is a compliment to fertiliser.

Benefits include:

- Addition of organic matter to organically-deficient soils
- Increase root vitality
- Improved nutrient uptake
- Increased chlorophyll synthesis
- Better seed germination
- Increased fertiliser retention
- Stimulate beneficial microbial activity
- Healthier plants and improved yields

How Does Humic Acid Improve Soil?

When applied to clay soils, humic acid can help break up compacted soils, allowing for enhanced water penetration and better root zone growth and development. When applied to sandy soils, humic acid adds essential organic material necessary for water retention thus improving root growth and enhancing the sandy soil's ability to retain and not leach out vital plant nutrients.

How Does Humic Acid Improve Plant Growth?

As mentioned above, one way plant growth is improved is through the structural improvement of both clay and sandy soil allowing for better root growth development. Plant growth is also improved by the ability of the plant to uptake and receive more nutrients. Humic acid is especially beneficial in freeing up nutrients in the soil so that they are made available to the plant as needed. For instance if an aluminium molecule is bound with a phosphorus one, humic acid detaches them making the phosphorus available for the plant. Humic acid is also especially important because of its ability to chelate micronutrients increasing their bio-availability.

How Does Humic Acid Effect Microbial Activity and What is its Role?

The activities of beneficial soil microbes are crucial for the sustainability of any soil and plant growth. Humic acid stimulates microbial activity by providing the indigenous microbes with a carbon source for food, thus encouraging their growth and activity. Soil microbes are responsible for solubilising vital nutrients such as phosphorus that can then be absorbed by the humic acid and in turn made available to the plant.

Additionally, microbes are responsible for the continued development of humus in the soil as it continues to break down not fully decomposed organic matter. This in-situ production of humus continues to naturally add to the humic acid base and its benefits.

Humic Acid's Role in Fertilisation

Humic acid is technically not a fertiliser, although in some walks people do consider it that. Humic acid is an effective agent to use as a complement to synthetic or organic fertilisers. In many instances, regular humic acid use will reduce the need for fertilisation due to the soil's and plant's ability to make better use of it. In some occurrences, fertilisation can be eliminated entirely if sufficient organic material is present and the soil can become self sustaining through microbial processes and humus production.

Distributor Details:

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