## **Amino Acid Humic Acid Organic Fertilizer**

Organic Fertilizer contains approx 20% humic and amino acids These organic acids are formed during the composting process of the prime material.

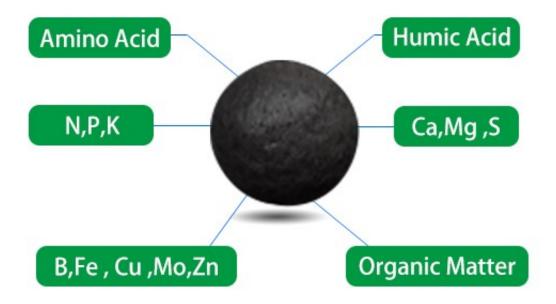
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Not all organic material is converted into these acids during composting, most of the material humifies when it is put into the soil. This is a slow process during which the humic acids are released gradually. The presence and formation of these acids is the basic part of Organic Fertilizers and essential for efficient crop cultivation. These organic acids form chemical complexes with inorganic soil particles, resulting in the release of blocked nutrients in the inorganic particles such as phosphorous.

The clay-calcium-humus complex has an important function in the soil. This complex has the ability to absorb anions and cations and facilitates the release of these ions again into solution, making them available to plants. The same complex maintains water, the clay-calcium-humus complex can absorb water until 15 times it's weight. Resulting in a moist soil that prevents dehydration, protects the soil from erosion, ensures bacterial viability in the soil and ensures water and nutrients uptake by the crop. This humus complex also reacts with tricalcium phosphate and sesquioxide complexes, whereby locked and immobilized phosphorous in these inorganic complexes is unblocked and released into the soil.

There are two types of humic acids in nature; humic acids and fulvic acids. Fulvic acid molecules are smaller than the ones from humic acids and fulvic acids dissolve better then the larger humic acids. The logical step in nature is that organic material, fresh organic substance decomposes by bacterial action in humic acid and this will be transformed into fluvic acid.

Naturally this material decomposes slowly, humic- and fluvic acids are formed slowly so the soil is feeded with these essential acids. Beside this, our Organic Fertilizer contains a lot of proteins. The proteins are broken down during the fermentation process and are transformed into amino acids. The amino acids activate the bacterial life in the soil and stimulate the root activity of the crops.



## **NUTRIENT CONTENT**