

RELEASE NATURAL HUMIC ACIDS

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Humic acids are products of plant decomposition. Humates are dry versions of humic acids. Fossilized humates, such as leonardite, are mined from ancient seabeds and other areas where organic matter accumulated during the Mesozoic era. Humates are also “mined” from peat in bogs where decomposition is extremely slow due to high moisture and low temperatures, allowing humates to build up over centuries.

Various chemical processes are used by manufacturers to extract humic acids from decomposed and fossilized organic matter. The key characteristic of humates that benefit plants are their ability to help soils hold positively charged nutrients in solution. Keeping nutrients such as ammonium, iron and manganese in solution increases their availability for root uptake.

Lignins, proteins, fibers and other carbon rich components harvested from agricultural grain by-products are the primary ingredients in C20. As C20 is fed upon by soil microorganisms, humic acids are released into the soil. This active release of humic acids through decomposition provides better utilization of nutrients being released by the microbial mineralization processes. Over time, humic acid accumulation results in increased cation exchange capacity that alters the soil chemistry. These “natural” changes can be more favorable for the health of many landscape plants.

Soil fertility is enhanced through the release of natural humates by C20 microbial decomposition. However, humates are just one component of active microbial soil building. Reduced soil bulk density, increased soil porosity and natural nutrient mineralization from C20 fed microbes increases plant root penetration and proliferation, resulting in better uptake of water and nutrients.



Peat and leonardite are mined from bogs and prehistoric lake beds, respectively. They may be considered organic, but their source material is not sustainable.

