

**BENEFITS OF HUMIC SUBSTANCES:
QUICK REFERENCE CARD**

BIOLOGICAL BENEFITS - Plant Stimulation

1. Stimulates plant enzymes.
2. Acts as an organic catalyst.
3. Stimulates growth and proliferation of desirable soil bacteria, algae and yeast.
4. Increases root respiration and formation.
5. Increases vitamin content in the plant.
6. Increases germination of seed and viability.
7. Stimulates plant growth by accelerating cell division.
8. Increases the yield of dry matter.

CHEMICAL BENEFITS - Chemically changes the fixation properties of the soil.

1. Increases buffering properties of soil.
2. Chelates metal ions under alkaline conditions
3. Rich in both organic and mineral substances essential to plant growth.
4. Retains water-soluble inorganic fertilizers in the root zone.
5. Releases water soluble inorganic fertilizers to plants when needed.
6. Possesses extremely high ion-exchange capacities.
7. Promotes the conversion of essential elements into forms available to plants.

PHYSICAL BENEFITS - Modifies the soil.

1. Makes soil more friable or crumbly.
2. Improves soil workability.
3. Increases aeration of soil.
4. Increases water holding capability.
5. Improves seedbeds.
6. Reduces soil erosion.

LITERATURE CITED:

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