MANUFACTURE OF POTASSIUM HUMATE FROM LIGNITE

BRIEF DESCRIPTION:

It is well-established fact that the humus in soil serves to stimulate the plant growth. Humic substances arise from chemical and biological degradation of plant and animal residues. Depending on the crops, dosage is fixed as soil application or as foliar application after suitable dilution. Humic acid or salts of humic acid have been shown to increase the availability and uptake of nitrogen, phosphorus, calcium, iron, and magnesium which increase the osmotic pressure; provide release of toxins and amino acids; and serves as quality substrate for microorganisms. Humic acid is found naturally in soils, but does not exist in all soils in quantities that will support optimal crop and tree growth. Adding potassium humate rich in humic acid to the soil is a positive, natural practice and promotes long term health of the soil. Potassium humate can be mixed with organic manures and fertilizers, applied during seed soaking treatment, root application, foliar application or used directly during fertigation. This patented process (Indian Patent No: 201577) invention provides an efficient method for extraction of humic acid in the form of potassium humate from lignite as raw material.

SALIENT FEATURES:

- Has favorable effects on plant tissue nutrient balance, fertilizer uptake, top and root growth, crop yield and quality for crops
- Increases soil N-utilization efficiency and also enhances the uptake of K, Ca, Mg, P and trace elements
- Increases the water holding capacity of soil
- Stimulates seed germination and viability, and root respiration, formation and growth
- Crop yields have increased from 10 to 30 per cent
- Improves drainage and increases aeration of the soil
- Establishes a desirable environment for development of rhizosphere microbes

SCALE OF DEVELOPMENT: Ready for licence.

