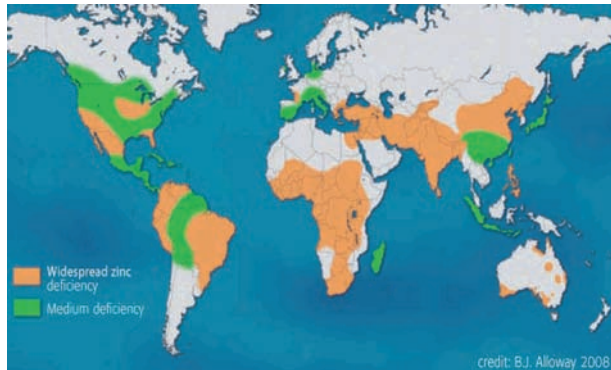


Nutrient Bioactivation

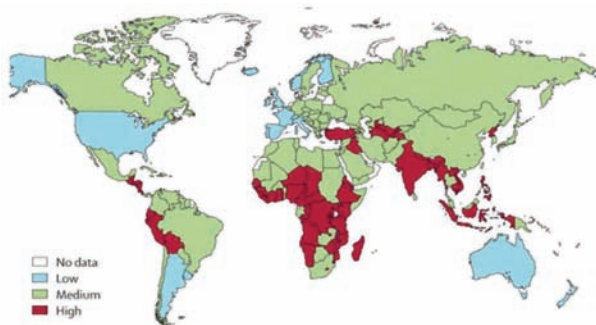
(Integrated Plant Nutrient Management through Nutrient Bio-Activation)

Efficient, economical and sustainable use of crop nutrients is highly dependable on IPNM (holistic use of all factors, synergetic & balance use of nutrients, focus on soil health by maintaining population of NSM & PGRM microbes).

Global Zinc Deficiency in Soil



Global Zinc Deficiency in Human Being



* Source International Zinc Association

At Niha Corp we focus on Integrated Plant Nutrient Management (IPNM) for Sustainable Life. We have developed a novel Nutrient Bio-activation Technology.

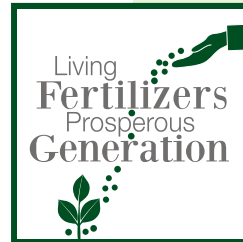
Bio-activation Technology is based on nature principals. We produce Bio Active Nutrients in natural manner thru Bio Technological Techniques. It is PCT patent Technology of Niha Corp.

Bio-activation Process

Transforms Immobile/Less Mobile mineral crop nutrients thru microbes in the presence of organic matter in to organically encapsulated nutrients. Our Patent Bioactivation technology to makes unavailable mineral in to organic plant available form.

Bio-activation Technology is unique approach and it has following key ingredients:-

- Isolated & Modified Microbial Strains
- Selective & Processed Organic Matter
- Elector Static Binding Agents
- Organic Acids



It is three stage production process:-

Stage I –Raw Material Processing

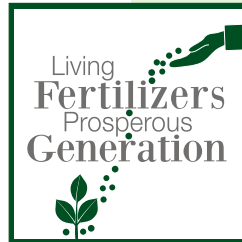
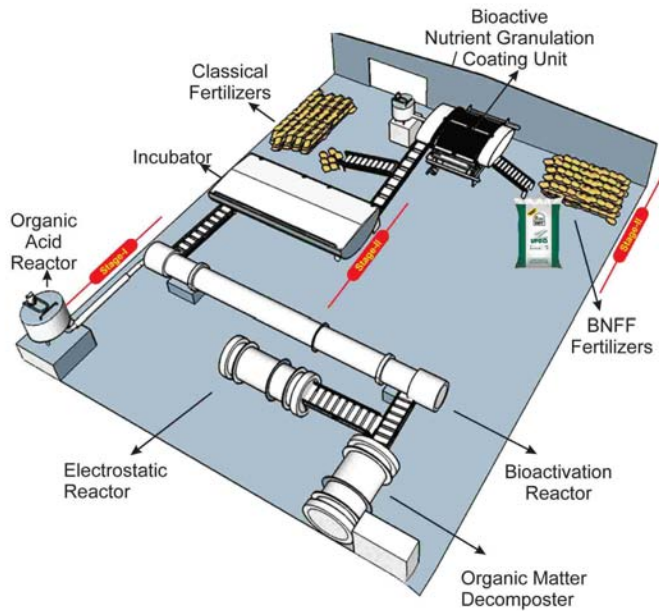
In this process we transform/ produce Organic Acid, Electro Statically Activated Nutrient, Decomposed Organic Matter in separate reactors under controlled conditions from identified wastes.

Stage II – Target Material Bio-activation

All the intermediate products are placed in Bio activation Reactor where thru our Patent Bioactivation technology target immobile / less mobile nutrients are converted in to Bioactive Nutrient. (A nutrient encapsulated in organic matter).

Bioactive Nutrient can be applied directly to crop like Bio Organic Phosphate (BOP) or can be used as synergetic supplement (Bio Active Zn etc) on classical fertilizers like DAP, Urea etc to produce Bio Active Nutrient Forti®A5ed Fertilizer.

Bio-activation Flow Chart



Stage III –Surface Biding / Granulation

All Bioactive nutrients are converted in to granules or loaded on classical fertilizers Urea, DAP etc. granules through organic binding agent developed by Niha Corp.

This research based binding agent promotes and sustains the growth & life of target NSM & PGRM. We have developed Standard Operating Procedures (SOP's) for each product.

Bio-active Nutrient Fortification on Fertilizers (BNFF)

BNFF fertilizers are unique in its nature and produced thru our Patent Technology.

We have successfully demonstrated the production of:



Benefits of Bio Activation & BNFF Fertilizer

- Bio-activation is a natural process
- Bio-active nutrients are free from fixation or leaching losses
- Bio-activation process is eco friendly no pollution or industrial waste
- BNFF fertilizers have synergetic effect
- BNFF fertilizers are 15%+ more efficient than Chemical Fertilizer
- BNFF fertilizer have less losses due to organic coating
- BNFF fertilizers improves soil health

Cross Section of BNFF Fertilizer Granules

