



EFFECTIVE MICROORGANISM

INDIGENOUS MICROORGANISM

- In ecology, an indigenous species is an organism which is native to a given region or ecosystem.
- Contrast with introduced species (naturalized or exotic species) which is an organism that is not indigenous to a given place, but has been transported there as a result of human activity.
- *Lactobacillus* culture.

WHAT IS EM?

- Complex microorganism solution.
- It contains mainly 3 species such as Lactic acid bacteria, Yeast, Phototrophic Bacteria.
- Collected from food industries and nature.
- All microorganisms in EM are non genetic bacteria.

Types of EM

- Lactic acid bacteria: *Lactobacillus plantarum*; *L.casei*, *Streptococcus lactis*
- Photosynthetic bacteria: *Rhodospseudomonas palustris*, *Rhodobacter sphaeroides*.
- Yeast: *Saccharomyces cerevisiae*; *Candida utilis*
- Actinomycetes: *Streptomyces albus*; *S. griseus*
- Fermenting fungi: *Aspergillus oryzae*; *Mucor hiemalis*

BENEFICIAL INFLUENCE OF EM IN AGRICULTURE

- Promotes germination, flowering, fruiting and ripening in plants.
- Improves physical, chemical and biological environments of the soil and suppresses soil borne pathogens and pests.
- Enhances the photosynthetic capacity of crops.
- Ensure better germination and plant establishment
- Increases the efficacy of OM as fertilizers.
- Develops resistance of plants to pests and disease.