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# Maple EM POWER - organic manure

Soil fertility is linked intrinsically to soil organic matter, because it is important in maintaining good soil physical conditions, which contribute to soil fertility, and it is an important nutrient reserve. Organic matter also contains most of the soil reserve of nitrogen and large proportions of other nutrients such as phosphate and sulphur.

Organic manure also plays a pivotal role in soil structure management. To achieve better soil structure, workability and soil aggregate stability and the advantages that this conveys, frequent input of fresh organic manure is required. The wider aim of soil management through addition of organic manure is to create a healthy, biologically active soil flora and fauna by maintaining good levels of soil organic matter and minimizing soil disturbance caused by tillage.

## **Problems with Chemical Fertilizer application**

- Jeopardized environment through nitrate poisoning and exterminating the beneficial micro flora and micro fauna by adversely altering the chemical and physical structures of the soil.
- Soil structure is regarded as the key to the soil fertility as it has a pronounced effect on porosity, infiltration, water holding capacity, hydraulic conductivity and erodibility.
- Destroy the micro organisms/micro flora present in the soil.
- Soil tends to be saline
- Impair drainage system
- Increases the bulk density and reduces porosity of soil

#### What is EM Power?

- Maple EM Power is complete organic manure, rich in nitrogen, phosphorus and potash which are essential for the growth of plants.
- It also contains micronutrients like calcium, magnesium, sulphur, zinc, boron, iron, copper, manganese etc.
- It is a well-decomposed organic matter fortified with effective microorganisms, beneficial nitrogen fixing bacteria, coir pith, phosphate solubilising bacteria (PSB) etc. Bio-fertilizers which could give nitrogen and phosphate for instant uptake, liberates growth promoting hormones, vitamins that ultimately help to improve soil-fertility.
- It is non toxic, environmental friendly and ecologically compatible organic manure.

#### Why EM Power?

- It contains NPK in organic form.
- It enhances availability of both the added and native nutrients.
- It increases porosity and water holding capacity of the soil.
- It serves as the principal store house for anions such as nitrates, sulphates, borates, molybdates, and chlorides that are essential for plant growth.
- It controls temperature, improves aeration of the soil and helps in the development of vigorous root system.
- It improves water conducting properties and drainage of the soil.
- It reduces bulk density of the soil.
- It improves content of organic carbon in the soil. When applied, the fixation of soil phosphorus and the leaching losses of secondary and micronutrients will be comparatively less.
- It predominantly contributes for high cation exchange capacity (CEC) values which influences the nutrient fixation
  and availability. It acts as a buffer against rapid changes caused by acidity, alkalinity, salinity, pesticides and toxic
  heavy metals.
- It improves carbon and nitrogen (C/N) ratio and regulates/improves mineralization.
- It imparts Induced systemic resistance (ISR) and prevent soil acidification.
- It supplies food for beneficial soil organisms like earthworms, symbiotic nitrogen-fixing bacteria, and Mycorrhizae (beneficial fungi).
- Improve activity of PSB.
- It neither leave any harmful residue in the soil and nor cause pollution.
- It is an effective input for Integrated Nutrient Management (INM).

### Application: Dose/time/method

Crop	Dose	Crops	Dose
Cerals	100-150 kg/acre	Cotton	150 kg/acre
Vegetables & Flowers	120-150 kg/acre	Sugarcane	200kg/acre
Chilli, Tomato, Brinjal	120-150 kg/acre	Tea, Coffee, Cocoa, Pepper	150-200 kg/acre
Banana	1 kg/plant	Grape	5 kg/vine
Pomearanate, Citrus, Mango	2.5-5 kg/plant	Potato	200 kg/acre

- Tea-Mature / Young tea: 150 200 kg/acre either during March-April or October-November Planting pit: 100 gm/pit to be mixed with soil
- Fruit trees: 2.5-5 kg/plant depending on the age and size mixed with soil.
- Other crops: 100-200 kg/acre at the time of field preparation.

Packing

25 kg HDPE bag