

# Production of PROM (Phosphate Rich Organic Manure)

## Description:

### Production of PROM (Phosphate Rich Organic Manure): An Emerging Biofertilizer, Manufacturing of PROM Fertilizer - Toward a Sustainable Agriculture

Phosphate rich organic manure is a type of fertilizer used as an alternative to di ammonium phosphate and single super phosphate. Phosphorus is required by all plants but is limited in soil, creating a problem in agriculture. In many areas phosphorus must be added to soil for the extensive plant growth that is desired for crop production. The solubility depends upon PH of the soil, ambient condition and bacteria present in the soil.

Phosphate Rich Organic Manure is produced by co-composting high-grade (32% P<sub>2</sub>O<sub>5</sub> +/- 2%) rock phosphate in very fine size (say 80% finer than 54 microns).

Phosphate Rich Organic Manure (PROM) is a value added product produced by co-compositing high-grade rock phosphate in fine size with organic matter collected from various sources such as FYM, straw of paddy or wheat, pressmud, karanj cake or waste from fruit industries and distillery etc. Phosphate Solubilizing Bacteria (PSB) and nitrogen fixing bacteria are added to improve the efficiency.

Production of phosphorus rich organic manure (PROM) by composting of press mud and distillery waste with rock phosphate into a value added product standardized to contain 18% P<sub>2</sub>O<sub>5</sub> with 22% moisture is a highly promising, natural, better and cheaper substitute of di-ammonium phosphate (DAP). The agronomic evaluation of PROM on paddy crop resulted in an enhancement of 29.41% yield over the DAP.

As the farmers are not much familiar with PROM, still use traditional fertilisers for their crops. This is very serious problem for all, these fertiliser harm the soil as well as environment, livestock, humans etc. Excessive use of chemical fertiliser such as Single Super Phosphate (SSP), Diammonium phosphate (DAP), Monoammonium phosphate (MAP) etc. in agriculture mitigates the number of free living beneficial microorganisms; those are directly or indirectly useful for any crop. Because the amount of these fertiliser utilised by plant upto 30% only. The remaining amount of these fertilisers accumulated in the soil and constantly increases the soil pH.

**For more details download PDF file.**

**Keywords:** Phosphate Rich Organic Manure Composition, Phosphate Rich Organic Manure Manufacture, How to Make Phosphate Rich Organic Manure, Organic Phosphate Fertilizer, PROM Fertilizer Manufacturing Process, PROM Fertilizer Composition, Biofertilizer and Phosphate Rich Organic Manure, Production of Phosphate-Rich Biofertiliser, Phosphate Rich Organic Manure as Fertilizer, Phosphate Rich Organic Manure, Organic Phosphorus Fertilizers, Organic Phosphorus Fertilizers, Organic Manures, Manure in Organic Produ

**Created At:** 07 May, 2018