

BIOLOGICAL SPECIFICATION COMPARISON

Vermicast vs. Chemical Fertilizers in Soil¹

Criteria for Comparison	Chemical Fertilizers	Vermicast
Macro Nutrient Contents	Mostly contains only one (N in urea) or at the most two (N & P in DAP) nutrients in any one type of chemical fertilizer	Contains all i.e. nitrogen (N), phosphorus (P) & potassium (K) in sufficient quantities
Secondary Nutrient Contents	Not Available	Calcium (Ca), manganese (Mn) & sulphur (S) is available in required quantities
Micro Nutrients Contents	Not Available	Zinc (Zn), boron (B), manganese (Mn), iron (Fe), copper (Cu), molybdenum (Mo) and chlorine (Cl) also present
pH balancing	Distorts soil pH which creates saline and alkaline conditions	Helps in the control of soil pH and corrects the salinity and alkalinity in soil
EC Correction	Creates imbalance in soil EC affecting nutrients assimilation	Helps in balancing the EC to improve plant nutrient adsorption
Organic Carbon	Not Available	Very high organic carbon and humus contents improves soil characteristics
Moisture Retention Capacity	Reduces moisture retention capacity of the soil	Increases moisture retention capacity of the soil
Soil Texture	Damages soil texture to reduce aeration	Improves soil texture for better aeration
Beneficial Bacteria & Fungi	Reduces biological activities and thus the fertility is impaired	Very high biological life improves the soil fertility and productivity on sustainable basis
Plant Growth Hormones	Not Available	Sufficient quantity helps in better growth and production

¹ M.R. Morarka-GDC Rural Research Foundation;
www.morarkango.com/vermiculture/vermicast_specification.html