

Comparison of LR AGRI- compost and Conventional compost

Sr. No.	Particulars	LR AGRI- compost	Conventional Compost
1	Organic Nutrients	Higher, due to complete decomposition	Lesser, due to partial decomposition
2	Capability	To supply macro & micronutrients in organic form with controlled gram +ve microorganism	To supply macro & micronutrients in a mixture of inorganic & organic form with un-controlled mixture of gram +ve & gram -ve microorganism
3	Microorganism activity	Positively active	Less active
4	Pest Control Capacity	Higher , can control / eradicate soil bound gram -ve organism with basal dose & can control insects by foliar spray	Lower , due to un-controlled microbial population
5	Effect on Salinity	Can break salinity & utilizes the mineral part of salt as a nutrient as a chelated organic salt	Not effective
6	Effect on soil & water pH	Can control the pH of soil & water for optimum agriculture output	Less effective

Comparative analysis of NPB compost and Vermi compost

From

Municipal Solid Waste

Sr.	Particulars	Vermicompost	LR AGRI- compost
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1	Basic Technology	Composting by Worms	Composting by a group of gram +ve Microbes
2	Requirement of Land, for 10 TPD	15-20 Acre	10 acre
3	Requirement of Other Inputs	Yes , cow dung, environment etc	No
4	Batch Cycle Time	45-60 days	21-25 days
5	Shed	Yes	No
6	Digging of Pits	Yes	No
7	Moisture Management	Daily	Only on Day 1st & 5th
8	Requirement of water ¹		
(a)	Quantity	At least 50 % of MSW	20-30 % of MSW
(b)	Quality	Less than 1200 TDS	Any, sea water also can be used
9	Segregation of Non-biodegradable waste prior to processing	Advisable, otherwise the cycle time may increase. Segregation process is QUITE infectious to the labours²	Not Required, can be done at the end in a hygienic condition, hence, no chance of infections to labours
10	Leachate Collection, Treatment & Release as per the guidelines issued by MoEF	Not Possible	Possible & the end product can be sold as a liquid manure-cum-micronutrient
11	Precaution against Predators & overfeeding	Must be saved from the attacks of Moles, Centipedes, Birds, Ants, Mites etc ³ & Protein poisoning (Due to over feeding)	Not at all required

12	Yields in terms of manure ⁴		
(a)	MSW	40-50 %	50-70 %
(b)	MSW + other in puts	10-20 %	40-60 %
13	FIELD APPLICATIONS		
(a)	Requirement / Acre	2000 kg	1500 kg
(b)	Multiplication in soil	Dependent of Moisture, pH, Acidity, Temperature of soil. Young worms may die in adverse environmental conditions, hence, the probability of multiplication is LOW	In adverse environmental conditions, Microbes become dormant & in favourable conditions gets activated , hence, the probability of multiplication is VERY HIGH
(c)	Effect of salinity	Can hamper its mobility & growth. In case of more than 1200 TDS, due to imbalance of body moisture, gets killed	Have the capability to grow in Sea Water also. Can break the inorganic salts & converts it in to organic salt to make it bio-available.