

Organic Waste Management Practices

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Organic Waste Management: “Nowadays our farmers are facing problems like diminishing soil fertility, poor health, crop pests, weeds, and unsatisfactory product quality. These are creating obstacles to the economic prosperity of the farmer. Various types of decomposed or decomposed manures, excessive chemical fertilizers, and indiscriminate use of pesticides are adversely affecting the soil quality. Therefore, it is very necessary to mix the organic wastes available on the farm, organic wastes obtained from the crops, and animal dung manure in the soil to maintain the quality of the soil. There are many modern methods of proper management of organic wastes and crop residues available on the farm. Through these, quality manure can prepare by decomposing field waste easily in less time. By using this, better quality yield can obtain by reducing the expenditure of farmers on chemical fertilizers.

Earthworm Manure Waste Management: The waste material obtained by earthworms after digesting organic matter call earthworm manure. It is full of humus and nutrients. Earthworms are also called farmers & friends and natural pudding. By providing earthworms with crop residues, litter, garbage, weeds, rotten leaves, kitchen wastes of fruits and vegetables, and other urban/rural biodegradable residues as food in an artificial structure with a mixture of cow dung and soil. Earthworm manure obtain.

Structure of Earthworm Manure Waste Management: Permanent and transient buildings can use to put together earthworm compost. Temporary buildings are 2.5 toes excessive and three toes wide, whose size can save as per requirement and availability of space. The backside of the buildings has to be sloping and depart a gap in one nook at the backside so that the extra water can get away thru it.

Dissolution

Earthworm Manure Waste Management: Leave all the gathered natural count numbers in a heap for about 20 days for semi-decomposition. At this time the decomposition accelerates with the aid of spraying dry animal dung or biogas slurry on the heap. The animal dung used needs to no longer be fresh, however, may additionally be dry or a few days old. Due to fast decomposition, extra warmth



generates at this time. Due to this, there is an opportunity for earthworms to die. The temperature of semi-decomposed resources is 12-21 °C appropriate for the launch of earthworms.

Filling of Structure Organic Waste Management: 3-5cm at the bottom of the structure. After laying the layer of soil, the pit fills with semi- decomposed material on top of it. Earthworms respire through their skin, so the structure must contain 50-60 percent moisture. For this, water should sprinkle from time to time.

Selection of Earthworms: Only earthworms living on the surface should select. For this mainly three types of earthworms use. These include African earthworms, red earthworms, and Asian earthworms. Of these, African earthworms are best suited, as they make more manure in less time. They also give rise to new earthworms in large quantities during the period of composting.

Use of Paddy Straw and Wheat Residue: Organic Waste Management- In some parts of Punjab, Haryana, Delhi, Uttar Pradesh, and Madhya Pradesh, where paddy and wheat are harvested with combined harvesters, a large amount of crop residue is left in the fields. Due to this, farmers have to face a lot of problems during the preparation and sowing of the field for the next crop. To overcome this problem, farmers usually burn the crop residue by setting fire to the fields, which in the case of wheat amounts to about 5.5-6.0 tonne per hectare. In this way, the burning of crop residues in the fields destroys the fertility of the land and also harms the environment. To get rid of all these problems, crop residues should pile outside the field in a shady place by spraying decomposer solution. In this way, in about 45-60 days, this pile rots and becomes good manure, and the management of crop residue does easy.



Release Earthworms: Earthworms should be left on the surface. They automatically go to the bottom, eating organic matter. After releasing the earthworms, they should cover with wet sackcloth. About 1000 earthworms require one-meter length, one-meter width, and half-meter height

Precautions: Structures should locate in a shady place or artificial shade should provide. Save earthworms from rats, dogs, cats, peacocks, birds, chickens, etc. Must be free of organic matter, ants, termites, and flies. Keep checking



the temperature and humidity inside the structure regularly and spraying water in case of lack of moisture.

Importance of Earthworm Manure

- Proper administration and decomposition of natural waste accessible on the farm to convert it into excessive first-rate manure.
- To make farmers self-reliant by decreasing their dependence on chemical fertilizers and growing their utilization efficiency.
- Avoiding the damage brought on by way of the use of semi-decomposed or non-decomposed fertilizers, connecting unemployed rural adolescence with employment with the aid of coaching them to make earthworm manure.
- To enhance the physical, chemical, and organic situation of the soil by growing a wide variety of microorganisms.

Organic Waste Management increases the structure, texture, air circulation, and water holding capacity of the soil, its storage, maintenance, and use are easier than dung manure, it is free from pathogens, toxic elements, and weed seeds, and earthworm manure reduces the loss of nutrients. Various types of enzymes, vitamins, auxin, and hormones like gibberellin are found in it, which are beneficial for crops. It is cheaper than chemical fertilizers.