

RWP Enzyme composter

Organic Fertilizer composter-Rwp Enzyme is a high tech product developed by Hebi Renyuan Bio tech microbial engineering center. The product can strongly decompose organic Waste and most agriculture residual (livestock and poultry manure, distiller's grains, furfural residue, bagasse, traditional Chinese medicine residue, etc.) the main ingredients include Fungi, bacteria, filamentous bacteria, yeasts and other strains and related enzymes are compounded.

It has strong aerobic fermentation and protein decomposing strength, within very short time,the composting can reach the ideal temperature, thus deodorizes, eliminates pests and diseases, weed seeds and enriches the nutrients.



Features & Function

1. Applicable objects: pig, chicken, duck and other livestock & poultry manure (including farm manure).
2. Scope of application: large-scale organic fertilizer plants, large-scale breeding farms and large-scale plantations, etc.
3. The temperature rises rapidly. When the ambient temperature above 0°C, the composting heap temperature will rise to above 55°C within 48 hours. Can fully decompose organic sulfide, organic amides produced by livestock and poultry manure, the smelly odor can be eliminated after 2-3 days of fermentation.
4. The composting cycle is short, fully decomposed within 10-15 days.
5. The high temperature of composting heap can be sustained, capable to kill harmful bacteria, virus, insect eggs and weed seeds in process of fermentation, and effectively decompose the chemical residues in the animal dung.
6. Less nutrient loss in the composting process, the content of humic acid is high, and the content of ammonia obviously increased.

Specification

Effective living microbes (cfu) / ($\times 10^8$ / g (ml))	≥ 50.0
Cellulase activity (u/g(ml))	≥ 30.0
Protease activity (u/g(ml))	≥ 50.0
Amylase activity (u/g(ml))	≥ 50.0
Contamination rate	≤ 5.0
Moisture(%)	≤ 20.0
pH data	5.5---8.5
Particle size (mm)	≤ 2.0
Shelf life/ Month	24

Application method

1kgRwp composter-Rwp Enzyme can treat 10-15 tons of livestock&poultry manure. When using, mix 1kg product with 10kg rice bran or corn flour evenly and incorporated into the composting substrate.

Notice

1. The product must be mixing evenly into the target composting substrate.
2. The product must be stored in a ventilated, cool and dry place.

RWC Enzyme composter

Organic Fertilizer composter-RwC Enzyme is a high tech product jointly developed by China Agricultural University, Chinese Academy of Agricultural Sciences and Hebi Renyuan Bio tech microbial engineering center. The product can strongly decompose organic Waste and most agriculture residual (livestock manure, distiller's grains, furfural residue, bagasse, traditional Chinese medicine residue, etc.) There are eleven strains of bacteria, filamentous fungi, yeasts, and related enzymes to compound the product.

It has strong aerobic fermentation ability and decomposition of crude fiber protein strength, within very short time, the composting can reach the ideal temperature, reach the effect of deodorizes, eliminates pests and diseases, weed seeds and enriches the nutrients.



Features & Function

1. Applicable objects: cattle, goat, sheep, horse, chicken, duck and other livestock & animal manure (including farm manure), agriculture stalk, grass, sewage treatment factory.
2. Scope of application: large-scale organic fertilizer plants, large-scale breeding farms and large-scale plantations, and large scale sewage treatment plant etc.
3. The temperature rises rapidly. When the ambient temperature above 0°C, the composting heap temperature will rise to above 55°C within 48 hours. Can fully decompose organic sulfide, organic amides produced by livestock and poultry manure, the smelly odor can be eliminated after 2-3 days of fermentation.
4. The composting cycle is short, fully decomposed within 10-15 days.
5. The high temperature of composting heap can be sustained, capable to kill harmful bacteria, virus, insect eggs and weed seeds in process of fermentation, and effectively decompose the chemical residues in the animal dung.
6. Less nutrient loss in the composting process, the content of humic acid is high, and the content of ammonia obviously increased.

Specification

Effective living microbes (cfu) / ($\times 10^8$ / g (ml))	≥ 50.0
Cellulase activity (u/g(ml))	≥ 50.0
Protease activity (u/g(ml))	≥ 30.0
Amylase activity (u/g(ml))	≥ 30.0
Contamination rate	≤ 5.0
Moisture(%)	≤ 20.0
pH data	5.5--8.5
Particle size (mm)	≤ 2.0
Shelf life/ Month	24

Application method

1kg RWC composter Enzyme can treat 10-15 tons of livestock & poultry manure. When using, mix 1kg product with 10kg rice bran or corn flour evenly and incorporated into the composting substrate.

Notice

1. The product must be mixing evenly into the target composting substrate.
2. The product must be stored in a ventilated, cool and dry place.

SDA composter

SDA straw decay composter is the compound product of thermophilic, heat-resistant bacteria, fungi, actinomycetes and enzymes, the product is capable to strongly decompose cellulose, hemicellulose and lignin.

Under suitable conditions, it can quickly degrade the carbon, nitrogen, phosphorus, potassium, sulfur... within the straw heap, to form the organic matters, decompose and mineralize to form simple organic matter, thus further decomposed into nutrients that can be absorbed by the crops. At the same process, to a certain extent, the harmful substances like the pests, disease and weeds seeds in the straw heap also being eliminated. The product is environmental friendly, and some of the functional microorganisms contained in the products, also played the role of bio-fertilizer, which is beneficial to the growth of crops.



Features & Function

1. Applicable objects: dried and fresh corn stalks, wheat stalks, rice stalks, grain stalks, sweet potato vines, broad bean stalks, rape stalks, weeds, leaves, and high fiber contents domestic rubbish.
2. The efficient & beneficial microorganisms in the product will multiply rapidly after being applied to the soil, inhibit and kill the pathogens in the soil and reduce crops diseases risks, effectively resist the damage caused by repeated cropping and soil-borne pathogens.
3. Decompose rapidly. When the temperature above 0 °C, the stack temperature can reach 50~60 °C after 3 days. Under normal circumstances, the straw will be fully decomposed within 15~20 days. The heap will become brown or dark brown.
4. Kill pests and diseases, during composting process, there will be a higher stack temperature, which can kill the germs, eggs and weed seeds in the straw, and reduce the pests and weeds harm or pollution. The high-efficiency beneficial microorganisms in product can multiply during the composting process and after being applied to the soil, they will inhibit and killing pathogenic fungi in the soil and reduce crop diseases.
5. High fertility value. The straw composting fertilizer by using SDA product can increase the organic matter content in the soil and improve the nutrient status of the soil, besides will improve the utilization rate of chemical fertilizers, enhance the disease resistance of crops, promote the absorption of nitrogen, phosphorus, potassium, trace elements, and promote crops fast growth.

Application method

(1) The straw heap decomposed

1. Crush the straw with a pulverizer or cut it with a straw machine, and the appropriate length is 3~5 cm (wheat straw, rice stalk, leaves, weeds, peanut seedlings, bean straws, also the straw or stalk can be directly used for fermentation, but the fermentation effect is better after crushing).
2. Wet and watering the crushed or cut straw, add 2~5% diammonium phosphate when watering (based on the dry weight of the straw, the amount of different materials added differs) Mix evenly with straw, and the moisture content of straw should be about 60~70%. 10-15% feces can also be used instead of diammonium phosphate.
3. Add SDA as per the ratio of 1vs 10,000 of the dry weight of the straw, and adopt step-by-step mixing method (first mix evenly 100g SDA with 500g corn flour, then mixed the mixture into the straw heap).
4. Pick up the heap, then seal it with plastic film to prevent water evaporation, pile temperature diffusion and nutrient loss.

(2) Field straws decomposed:

Northern field: After the crop stalks (wheat, rice, corn, etc.) are crushed or chopped, they are scattered in the field, and the stalks are returned to the field. Sprinkle the SDA evenly on the surface of the straw, then plow the crop straw and SDA into the field together, the depth is about 15-20 cm, so most of the the straw buried in the soil. The consumption of SDA is 2 Kg per Mu (666m²). Add 30 kg of water per Mu and soak for 24 hours, and apply 5 kg of urea to adjust the ratio of carbon/ nitrogen, then splashing.

After the crop stalks (wheat, rice, corn, etc.) are crushed or chopped, spread the stalks in the field, and sprinkle the SDA on the stalks. Use 2 kg of SDA per Mu, and apply 5 kg of urea per Mu to adjust the carbon-nitrogen ratio. (if the field already applied base fertilizer, then can replace the urea) Stir 10 kg of rice bran into the SDA agent, then evenly sprinkle it on the straw.

After the straws are laid flat or buried in a trench, evenly spread the well-stirred urea and SDA on the surface of the straws, then lightly tap them with a stick and shovel to make The SDA material evenly falls into the straw. After that, pour on the straw again (to ensure a humidity of 60%, when the straw held by hand, and there is a small drop of water seeping out).