

Composting promoting materials match the characteristics of swine manure



Development by Toyota Motor Corporation

Buta-resQ

Suppresses the odor of lower fatty acids



90% reduction of odors of swine manure during composting.

Odors of swine manure is mainly lower fatty acid and ammonia. "Buta-resQ" reduces odors during compost by up to 90% at the maximum with decomposing lower fatty acid with microorganism* and also suppressing volatilization of ammonia. Furthermore, Buta-resQ can also decompose persistent organic matter such as plant fibers, so it can be expected to have an effect of composting promotion.

*Microorganism (TAB7 strain) was patented by Toyota Motor Corporation in March 2014.

- No toxicity or danger (Biosafety level 1)
- It is not genetically modified microorganisms
- Decompose lower fatty acid and persistent organic matter
- The growth temperature is 20-60°C

Efficient compost production while suppressing odor

As a result of actual use of "Buta-resQ" at a swine farm and comparing the concentration of lower fatty acid with which when it is not used, the following numbers are obtained.

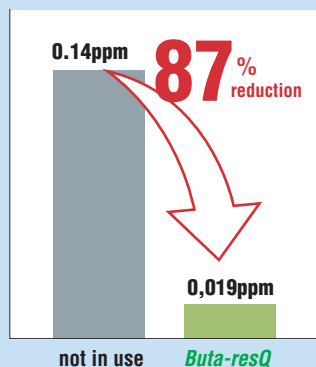
Effects



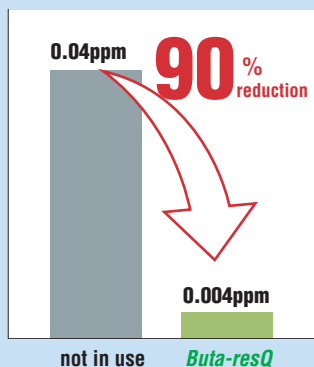
odors analysis data of 1 week from the start of composting at the demonstration farm

60-90% reduction of lower fatty acids!

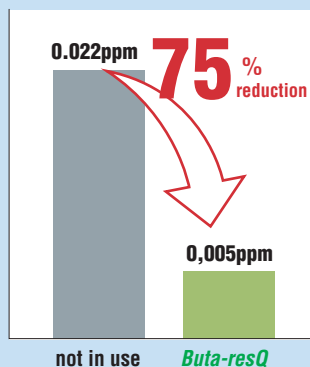
● Butyric acid



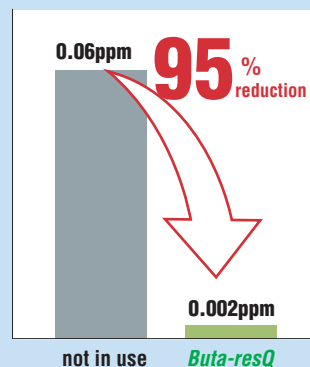
● Propionic acid



● Valeric acid



● Isovaleric acid



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Gathering composting know-how 75% reduction in electricity bills and increase processing capacity. Please feel free to contact us.

How to use

When using "Buta-resQ", please pay attention to the following directions and point of use.

Use amount	Use 1 bag onto about 10m ³ of swine manure
Composting method	Regardless of composting method, always use 1 bag per 10m ³
Equipments	1. Lane type 2. Fermentation Tank 3. Cylindrical fermentation tank

Point of use

Please be sure to raise the temperature by adjusting moisture and supplying appropriate oxygen.

- Without temperature rise, it may not be able to obtain a sufficient deodorizing effect.
- Due to the characteristic of swine manure, we have seen many farms which have not been able to raise the temperature with fermentation.
- The effect of "Buta-resQ" is not an improvement in composting itself. This part needs to be improved by the farmers.

Actual usage

● Fermentation tank

- 1 Spray 1 bag of "Buta-resQ" for every 10 m³ of livestock manure.
(When stirring raw material and subsidiary materials, add "Buta-resQ" at the same time.)

- 2 Put into fermentation tank.



● Lane type

- 1 Put manure into the lanes after adjusting moisture for fermentation.

- 2 Spray "Buta-resQ" on the surface and stir with a machine.
(Spray 1 bag of "Buta-resQ" for about 10 m³ of livestock manure.)



Description



Buta-resQ 9.5kg

- ① Microorganism (genus bacillus: TAB7 strain)
- ② Subsidiary materials: Perlite, etc.

About microorganism (TAB7 strain)

- (1) Search of microorganism
Search for microorganisms which decompose lower fatty acid in composting samples from various parts of Japan (about 100 farms)
- (2) Identification of microorganism
Identified as a thermophilic bacteria belonging to genus Bacillus (TAB7 strain)
Patented by Toyota Motor Corporation in March 2014



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