



Rice Husk Fermentation Booster

A liquid booster that speeds up the composting of rice husk

AINA Co. Ltd.
www.aina-kyousei.co.jp

AINA is a biotechnology company that promotes the symbiosis of land and agriculture.

Rice husk is a major agricultural waste difficult to compost or burn due to its material hardness. AINA developed a liquid booster that significantly speed up the complete fermentation of rice husk in 2 weeks. The fermented rice husk can be used as a soil improvement agent as it has a high water retention capacity, or as an organic fertilizer. When mixed with animal manure and composted for the second time. AINA booster liquid is diluted (0.6L of booster in 800L of water) and sprinkled onto the rice husk.

Rice Husk ≪ waste



Mixing of the booster



Fermentation process



Fermented rice husk



Items	Input Volume of fermented Husk (kg/100m ²)		
	0	50	Ratio(%)
Nongermination rate (1 week , %)	30.49	21.28	70
Average leaf number(leaf)	12.33	15.13	122
Average diameter of leaf (cm)	8.96	10.73	119
Average length of leaf (cm)	17.7	22.56	127
Average length of root (cm)	3.5	7.0	200
Number of bacteris	2.3x10 ⁶	1.9x10 ⁹	1,000 times
Amount of yield (kg/100 m2)	105	130	123

Fermented rice husk improves the growth and the yield. A study with lettuce production revealed that the application of 50kg of fermented rice husk in 100m² increased significantly the number of benign bacteria by 1000 times, and immediately increased the growth and the yield of lettuce.