

Thick and heavy tomatoes grown after using EM Super Cera. Rich taste, firm pulp, longer shelf life.

Mr. Norikatsu Ito wanted to see if he could grow safe, high quality, delicious tomatoes using only the least possible amount of pesticides and chemical fertilizers with EM Super Cera Easy Farming.

His success made him continue using EM Super Cera Easy Farming until the present, using greenhouses in a combined area of about 4,000m². Two harvests were done in one year.

The results have shown that his tomatoes have firm pulp. They are thick and heavy and submerge easily in water. Many of those who have tasted the tomatoes have commented that these have a natural taste, just like chemical-free tomatoes a long time ago. The tomatoes tasted great either when eaten raw or when mixed with sauces at restaurants. Similarly, wholesalers like the tomatoes since they have a longer shelf life.



Naturally pest repellent soil made with EM Super Cera

Mr. Minoru Tsukada shares his application method: When making a compost heap, EM Super Cera C is scattered in between layers of the compost. Also, an Activated EM / EM Super Cera C mix is sprayed on the leaves in order to increase the protective property of EM and the antioxidant effect on the leaves. Mr. Tsukada was able to suppress pest attacks with minimal use of chemical fertilizers and pesticides compared to much chemicals used in highland conventional farming.

Observations:

- Suppressed insects by the use of EM Super Cera:
 - Leaf-miners, army worm, caterpillars, cabbage butterfly larvae, aphids, spider mites
 - * *Helicoverpa armigera* was difficult to control.
- The number of harmful nematodes in the soil dropped sharply.
- Use of agricultural chemicals has become almost unnecessary, lowering production costs.
- Diseases related to continuous cropping have not occurred.
- Improved quality and increased thickness in the lettuce leaves.
- More uniform quality and stable growth with the flower heads.



Pictures: Mr. Minoru Tsukada, his lettuce field, lettuce seedling with holes.

- Lettuce seedling leaf grown in soil without EM treatment shows holes from a leaf miner attack. Eggs have also been found. After being transplanted to the EM field, the lettuce grew without any more attacks and very few miner eggs have been observed. Furthermore, the eggs that have been observed on the seedling leaves have not developed and become insects.
- Compost mixture: 2kg of EM Super Cera Ferment : 1t of compost. EM Super Cera C is sprinkled between layers of the compost and then left to ferment. It is ready for use after half a year.
- For the autumn soil treatment: 4t of the compost mixture and EM Super Cera C are applied per 1,000m² of the field.

Increased efficiency with EM Super Cera Easy Farming

Summary of Kamikita Green Farm Co. Ltd.'s application:

- Greenhouse cultivation in a 1 hectare area.
- High efficiency: 6 harvests per year (no heating even during winter time). Increased growing space due to suppression of diseases related to continuous cropping.
- Easy harvesting: Uniformity in the growth of the spinach even during winter makes harvesting easier. The EM grown spinach have dark-greener leaves compared to conventionally grown ones.
- Longer shelf life and better taste (even raw): added value in sales.
- Pest suppression: Aphids are suppressed using the EM natural pesticide; the leaves look as nice as those sprayed with pesticides.
- Good seedling growth: No blight, other diseases in the seedbed.
- Uses hog dung and woodchips compost from an EM hog raiser company. *BasicSync* ricebran pellet is added to the compost.
- The compost can be stored for a long time, hence there is no problem in stock shortage.



Soil in greenhouse before cell seedling planting. Seedlings are grown in EM treated seedbed soil (using seedbed soil and mountain sand). Immediate tillage after harvest. On the following day, seedlings are planted. No problems observed. The soil is mixed with the EM compost from Kawamura Hog and Dairy Raiser Association.