

## **EM Bean sprouts cultivation**

The bean sprouts are the economy vegetable. There is the consumption 200,000 kgs./day especially in Bangkok. There is high nutrition value such as protein, vitamin and mineral. Bean sprouts cultivation usually uses a lot of water but we will suggest you to save the water which we use EM for water situation adjustment and reuse the water. There is a container to put EM for water catchment and drain into the cultivation container which is the good drainage hole in order to recycle the water.

### **Materials and accessories**

1. Bucket 2 pieces (Bucket size is 20 liters)  
1<sup>st</sup> bucket : is punched out in order to put the tap (to make the drip system)  
2<sup>nd</sup> bucket : is a cultivation container and punch out 3 big holes (1/2 inch) for drainage
2. Basin or bucket for water catchment for recycle the water
3. Gunny bag or thin white-cloth or nylon net
4. A plastic water bottle is cut at 1/4 part of a bottle and used the part of bottle cap to spray the water by the drip system.
5. Green beans
6. EMAS + EM fermented with water from rice washing + fresh milk hormone + fruit hormone + EM5
7. High big basin in order to drench for the cultivation

### **Methodology:**

1. Take the green beans to drench into EMAS or EM fermented with the water from rice washing as ratio at 1:500 (it takes time 6-9 hours)
2. Take the green beans to put into the cultivation container and ground with a thin white-cloth to scatter the green beans to be 3 - 4 shelf and the last shelf is covered with the thin white-cloth or thick gunny bag and put the part of bottle cap in order to spray the water by the drip system
3. 1<sup>st</sup> Day (24 Hours)
  - Used the water without chlorine at 15-20 liters
  - Put EMAS for 1-2 bottle caps for the water situation adjustment
  - Take the bucket to underlie the water in order to recycle the water2<sup>nd</sup> Day (24 Hours)
  - Put fresh milk hormone + EM fermented with water from rice washing or fruit hormone as ratio at 1:1,000 (use the recycled water)
  - Spray the water in the morning, daytime and evening by putting in the big basin for 5 minutes alternate to spray the water by the drip system
  - The big basin put EMAS + EM fermented with water from rice washing + fresh milk hormone as ratio at = 1:500 (1 tablespoon of mixing all materials / 5 liters of water)
  - It takes time for 24 hours; we will get the quality bean sprouts
  - The time totally is 2 days or 48 hours

**Fresh Milk Hormone Formula:**

1. Fresh milk = 1 box
2. EM1 = 1 bottle cap (20 cc.)
3. Honey or molasses = 2 bottle caps (20 cc./bottle cap)

**Methodology:**

- Mixing all materials in the plastic bottle and fermented it for 7 days
- You should often shake the bottle in order to protect the curdy milk
- 1-2 days for draining the gas out
- You can use it after 7 days

**Technical Experience**

- Cleaning of all materials and accessories
- Without chlorine water
- Don't often open to see the bean sprouts
- Protect the bean sprouts from the sunlight
- Spray a lot of water to the bean sprouts
- To check the water situation in the basin
- At the hour of 23<sup>rd</sup> - 24<sup>th</sup> of the 2<sup>nd</sup> day; please check the bean sprouts, if the bean sprouts length is as your requirement, you can stop to spray the water
- 2 days (48 hours) are completely, you will get your required bean sprouts and you can keep them in the refrigerator for 7 - 15 days

**Schedule of Times and Days for Cultivation**

- 1<sup>st</sup> day - Cultivation starting time is 7:00 a.m. to 7:00 p.m. (1 day = 24 hours)
- 2<sup>nd</sup> day - Cultivation starting time is 7:00 a.m. to 7:00 p.m., you can get the bean sprouts

\* \* 1 kg. of the green beans are to get 5.6 kgs. of the bean sprouts \* \*

**Benefit of EM Bean Sprouts**

1. Head part of the bean sprouts have calcium, phosphorus, iron, vitamin B1, B2 and C
2. Middle or stem part of the bean sprouts help for the excretion system
3. Root part of the bean sprouts help for the age retardation

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