

## Cucumber growing lesson

The *cucumber* is one kind of crops that farmers like to grow and eat green cucumber. It is sources of vitamins and has many and different kinds of mine substances such as water, protein, oil, fat, energy of iron substance and vitamin C and so on.

### **1. The techniques of growing cucumber**

#### **1.1 Choosing cucumber seed**

Collecting cucumber seed is a first important factor for growing to determine yields and demanding of the markets.

The important factor for choosing cucumber seed as followings:

- Seed has the apparent source (domestic seed or hybrid seed)
- An age of seed is right.
- Good seed can grow from 85% to 90%.
- Seed is good purebred.
- Seed is patient with weather, bugs, and other illnesses. Hybrid seed

cannot keep growing to continue.

#### **1. 2 Preparing the soil**

- 1) Plough and harrow soil from 2 to 3 times.
- 2) Dry soil up for 10 or 15 days.
- 3) Crush soil and clean grass out.

#### **1. 3 Raising the ridge**

- Raise height of the ridge from 15 to 25 cm in dry season, 25 to 30 cm in rainy season and width is 100 cm and length depends on possibility that can do.

- Use natural fertilizer from 5 – 6 kg in 1 square metre and mix with soil and then harrow to cover on it in order to make soil flat.

## 1. 4 How to grow

### A. Growing seed directly

- After raising the ridge, dig a hole in deep from 20 - 30 cm.
- Use 0.5 kg of compost fertilizer for a hole.
- Dry seed up for 1 hour, wash it with water and soak in the water for 4 – 5 hours and then wrap it with cloth and then bury in the moist soil for 1 night.
- Put 1-2 cucumber seeds for a hole and then put short pieces of straw or natural fertilizer to cover or sprinkle on the hole and then water quickly in order to make seed quick to grow up.
- A clump of cucumber to another is spaced out 30-50 cm as letter V and space for walking is 50 cm and chest for this crop is 40-50 cm.

### B. Budding cucumber seed

- Mix together, 50 per cent of non-virus finely sand and 50 per cent of fertile soil (cover with plastic tent on the sand and dry with sunlight for 2-3 days) and then stuff into plastic bags, leave bowls or seedbeds.
- Pierce on bottom of plastic bags or bottom of leave bowls in order to absorb water out and then take seed to sow.

### C. Growing young cucumber

- If we compare how to grow young cucumber is the same how to grow seed directly above.
- Farmers can grow young cucumber when it has 2 or 3 leaves.
- Have to grow young cucumber in the evening; that is better.

- After growing, take small pieces of dry straw to sprinkle on base of cucumber to keep moisture.

## **2. Taking care**

### **2.1 Scarifying soil, making a mound of soil at a base of cucumber and clean grass**

Clean grass, scarify soil, make a mound of soil at a base of cucumber and take some young cucumber when see it is narrow before using fertilizer. Use water for cucumber 2 times a day, in the morning and evening until stop collect results.

### **2.2 Using fertilizer**

Use 0.5 - 1 kg of compost fertilizer at bottom of a hole for one hole.

### **2.3 Watering cucumber**

- Use water for cucumber in the morning and evening.  
- Keep 60-70 per cent of moisture. If there is high moisture it will be able to cause illnesses in the soil.

### **2.4 Making trellis**

- When young cucumber starts climbing after growing for 10-15 days, we start making trellis by taking branches of tree or young tree or bamboo to push in the ground and then tie together along the length of ridge with 1.5-2 m of height.

- When cucumber has suckers after growing for 20-25 days, we have to control and put cucumber to climb up the trellis as well.

## **3. Harvesting results and keep seed**

### **3.1 Harvesting results**

We can harvest results of cucumber fruits after growing or having age as followings,

- Cucumber is 35-40 days for short time.
- Cucumber is 40-50 days for medium time.
- Cucumber is 50-60 days for long time.
- If harvesting cucumber is late, it will make its fruits become ripe and worthless at the market.

### **3.2 Keeping cucumber seed**

We have to collect big and ripe cucumber fruit and have no illness and no bugs destroyed. After picking up fruit, leave it for 3-5 days in order to seed coming out of pulp. Cut and squeeze and wash with water and dry it with sunlight and then stuff into a bottle or grass (keep 1 of 3 parts of bottle) and cover lid closely and keep safety, shade place and there is air can exit and enter enough.

## Chinese Mustard Green growing lesson

### 1. The Techniques of growing Chinese mustard green

#### 1. 1.Preparing the soil

- ❖ Plough the soil and dry it up from 7-15 days and do it from 20-30 cm in deep.
- ❖ Scarify soil from 2-3 times to make grass or other plants up and down and make them rotten become fertilizer and kill worms and insects under the soil and make soil loose and have good oxygen.

#### 1.2. Raising the ridge

- ❖ Make width of ridge=1m, length of ridge= 10m or depends on possibility.
- ❖ Between in a ridge to another is 25-30 cm.
- ❖ Raise a height of the ridge, 20-25 cm as a shell of the turtle in rainy season or higher than this according to situation of the soil.
- ❖ In the dry season, raise a height of ridge, 10-15 cm and hollow ridge in the middle.
- ❖ Use natural fertilizer or compost in bottom of a hole from 10-15 kg and then mix with soil in that ridge.

#### 1.3. How to grow

##### A. Sowing seed

- ❖ Dry seed with sunlight for 20-30 minutes and soak it for 3 hours and then keep hidden for 1 night to make seed bloom.

- ❖ Make the seedbed well, finely soil and then mix seed with 4 shares of sand and then sprinkle it in the seedbed loosely.

- ❖ Scatter ashes around the seedbed to protect ants not to carry seed out.

## B. Taking and planting

- ❖ Planting has to do it when Chinese mustard green is 15-20 days or when it has 3 or 4 leaves.

- ❖ Stop watering for 2 days before taking young Chinese mustard green to grow. Do like this to make young Chinese mustard green patient with the sun heat.

- ❖ Before taking young Chinese mustard green, water on the seedbed to get wet so that makes it easy to take.

- ❖ Have to take young Chinese mustard green after watering immediately.

- ❖ Plant in between from 15-20cm and between bed from 24-30cm (in average from 16-20 trunks in a square meter)

- ❖ Cover young Chinese mustard green that has planted to protect from sun heat.

- ❖ If there is rain falling down wetly in the bed, drain the water outside.

- ❖ Have to increase quantity of water from planting to harvesting.

➤ ***One more type*** is, after mixing seed with sand, sow seed in the bed and then sprinkle small pieces of straw on it to protect seed not to jump away, sun heat and keep moisture. Water it daily and make roof cover on it if there is. When Chinese mustard green appears shoots or leaves,

take root out. When young Chinese mustard green is 15-20 days, pull it from very narrow place and plant more in the very loose place.

## 2. Taking care

### 2.1 eliminating grass and loosen the soil

- ❖ Cleaning grass is to make by hands, spades, hoes and bamboo strip for loosening the soil. This way is easy to practice around the bed and between the beds.

- ❖ Cleaning grass and loosening the soil is to do it when planted young Chinese mustard green is 10 days and do it carefully, do not touch its root that causes it to get fade or die.

### 2.2 Water Chinese mustard green

- ❖ Water 2 times a day, in the morning and evening.
- ❖ Even though there is heavy rain, have to water to clean small pieces of soil that linked together or was in the cob of Chinese mustard green causing it rotten.

### 2.3 Using fertilizer

Use 0.5 - 1 kg of compost fertilizer for 1 square meter of surface of land by placing at the bottom of bed before planting and then water it wetly.

## 3. Harvesting

- ❖ Harvesting is to practice according to different ways. They can take root of Chinese mustard green or just cut trunk, but it depends on demanding of the market.

❖ Before cutting or taking Chinese mustard green, don't use water for it by keeping its leaves to dry for protecting bruise or touching lightly.

❖ Chinese mustard green can harvest when it is 45-50 days for sowing directly and 50-60 days for taking young Chinese mustard green to plant.

❖ Yields as average is between from 16-18 tons a hectare, but it also depends on growing, taking care and kind of seed.