Date: 08/03/2018

Water convolvulus growing lesson

I. Summary story of growing water convolvulus

The *water convolvulus* crop is the easiest one of crops to grow and it is also a type of the seasonal calendar crop.

When the *water convolvulus* crop is about twenty-two to twenty-five days old, we can harvest the yield by counting from the initial time of growing or sowing. In addition, we can be often used as vegetable for eating or for selling and get income easily. One of particular points is the *water convolvulus* growing without prejudicing any season.

This crop needs from 80 percent to 100 percent of temperature to support its trunk, and it also needs water and cool moisture permanently, next it will make this crop grow well and quickly get the yield.

II. The plan of growing water convolvulus

To raise the *water convolvulus* crop, we should have seven points for growing plan as follows:

- 1. At first choose the location for raising *water convolvulus* crop.
- 2. Hoe or plough and harrow and dry the soil up well about one week.
- There is a water source for using.
- 4. There is *water convolvulus* seed for growing.
- 5. There is natural fertilizer for using.
- 6. There are involved materials such as hoes, spades, watering cans, two-handled baskets, and energy for drawing, etc.
- 7. One more important point that is energy for taking care and techniques.

III. Methods or techniques of growing water convolvulus

To grow the water convolvulus crop, we have to have following techniques:

- 1. At first, raise the bed for growing the *water convolvulus* after hoeing or ploughing and harrowing the soil.
- 2. Completely mix together, the natural fertilizer and the soil in the bed of water convolvulus.
- 3. Make a ridge across the width row of the bed.
- 4. Wrap *water convolvulus* seeds with cloth and soak it in the bucket of water for one night.
- 5. Take seeds to grow after soaking it for one night.
- 6. Water the water convolvulus in the morning and in the afternoon, and take care it every day.

Notice:

The important point of the size of raising the bed of the *water convolvulus* is, width= 1 metre, length= 5 or 10 metres, height of the edge of the bed= 10 centimetres, each bed chest (path or space for walking) in between from a bed to another one= 40 centimetres (4 Toeks, measurement of Khmer).

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Lettuce growing lesson

The Techniques of growing Lettuce

A-Preparing the soil

- 1) Plough and dry the soil 7 to 15 days
- 2) Have to scarify the soil 2 or 3 times so that evil insects die, grass is rotten, soil get fertile, soil has oxygen and make soil loose and finely (small pieces).
- 3) Plough into the ground 30 centimetres in deep to make the soil moisture deeply and loose.

B-Preparing the seedbed and the ridge

- 1- The width of seedbed is 1 or 1.2 metres, length of the seedbed is to depend on the demand and height of the seedbed is 10 to 20 centimetres or 25 centimetres.
- 2- As for the ridge makes the same the seedbed but the length of the ridge can be longer.
- 3- Use 20 to 25 baskets of the compost or organic fertilizer for 20 metres of the length of the seedbed or ridge.

4- Between from one ridge to another one or path for walking is spaced out 30 to 40 centimetres.

C-Growing lettuce

- 1. After making the seedbed or ridge, have to take the organic fertilizer or compost to sprinkle on the seedbed and then mix together and completely, soil in the seed and organic fertilizer.
- 2. Wrap seed with cloth and soak in the water for one night and keep hidden for one night. (Seed left from sowing, have to keep it in the bottle or can and then close lid of the bottle don't let wind come out or enter.)
- 3. Take the seed that kept hidden to sprinkle on the seedbed that has been already prepared.
- 4. After sowing seed, take small pieces of straw to sprinkle on the seedbed to protect drop of water and keep moisture for a long time.
 - 5. Make the roof to protect the sunlight and rain.
- 6. After young lettuce is 10 to 15 days old, they can take it to plant but have to choose good young lettuce. (Have to remember: before taking young lettuce to plant, stop watering and using organic fertilizer for 2 days to make trunk of the lettuce strong.)

- 7. Before using compost fertilizer (organic fertilizer) in the ridge, have to keep it for 2 to 3 hours to make its heat empty and then can grow young lettuce. If we grow or plant lettuce suddenly during organic fertilizer with heat, it will make young lettuce rotten because it has ammonia substance.
- 8. Growing from a clump of lettuce to another is to space 15 centimetres and have to make the roof to protect young plant for 2 or 3 days and then take it out.

D-Taking care

- 1) Water lettuce at least 2 times in the morning and evening.
- 2) After planting lettuce for 7 or 8 days, have to pull grass and break soil to become small pieces at the clump of lettuce; don't let grass grow so long.
- 3) Have to use organic fertilizer when lettuce is 8 days old and have to water once 3 days. And when lettuce is 12 days, have to water it once a week.

E- Methods to protect

1- Have to grow other plants nearby to scare evil insects such as lemon grass, Sbai Roeung (Khmer name) flower or

use natural medicine to kill insects, use 1 litre of natural medicine for 17 litres of water to spray.

- Matural medicine such as Bandoul Pich, Krobb Slegng,
 Meum Kduoch, Ple Slak, Brong (Khmer Names), leave of
 sweetsop,and galanga,etc. Chop them finely and then soak in
 the water and keep hidden for one month but have to stir it
 many times. After that we can decant it and keep it in the bottle
 or Bedong (Khmer Name, container for keeping liquid) and
 keep in the cool place.
- © <u>Organic fertilizer</u>: 3kg of bananas, 1kg of palm sugar, and 3kg of ripe papayas. Chop them finely and mix together and then keep hidden for 1 month and can decant it to use.
- How to use: use 2 spoonful of fertilizer with 20 litres of water for 20days-old-small young crops and have to water 2 times a day in the evening. If water it in the morning or afternoon after 10 minutes, have to water it usually to wash its leaves. This fertilizer can attract useful insects like bees, wasps and Sraings (name of insect similar to wasp but smaller) and so on.

F-Harvesting lettuce

- 1. When lettuce is 30-35 days old, they can star harvesting (from sowing until harvesting for 35 days).
 - 2. Before harvesting it, have to stop watering for 1 day.
- 3. Have to pull lettuce in the morning or evening but in the evening is better.
- 4. How to harvest is to use a small spade or a knife for cutting root of lettuce and then pull it and also shake soil away.
- 5. Have to put lettuce in the shade, and then wash its base well, next put it in the basket with putting leaves of bananas under so that having wind inside or outside.