SUSFORM-NOW (LDC) News No 29.6: Technical guideline for planting climbing bean

1. General description:

- Climbing bean is a fruiting vegetable, easy to grow, requiring a short time from planting to harvesting (about 55-60 days) with yields from 15 to 20 ton/ha/year. Climbing bean can grow on different types of soils, but the most appropriate is sandy soil, rich humus, well – drained and moderate acidic soil (pH level of 5,5 - 6,5). Beans require moisture soil due to the shallow root system with a few roots. The proper soil moisture is 65%. Blooming period needs higher moisture.

- Bean suitably grows in moist ground. During the period before flowering, proper soil moisture for plant growth and development is 65%, plant needs higher moisture in flowering time.



2. Apropriate planting season:

Beans can be planted and harvested all year round, but main season is winter – spring. Normally, farmers sow seeds from Nov. to Dec. In the region where the weather is cold in Dec., farmer can sow seeds in Oct. – Nov. because at this time the weather is cool and can help plants grow well and the plant shows the highest yield.

3. Sowing, fertilizing, and tending:

(1) Bed size: 1.5-1.8min width, 0.2min height, trench of 0.2-0.25m.

(2) Basal application: needs fertilizers in the amount of 1-1.5 kg of composted manure & 100g of ash or lime for 1m².

(3) Sowing: Sow seeds in 2 rows in bed with distance of 80 – 90cm; seed spacing of 30-40cm. Put 3 to 4 seeds per

planting hole and water the bed to maintain enough moisture on the surface of the bed after sowing.

Note: Need to put the navel downward and cover soil layer as thick as seed size.

(4)Plant tending: After seeds germinate, remove weak saplings, keep 2 strong saplings for each planting hole. When plant develops vines, need to make a frame by bamboo sticks or stetch meshes for plant climbing. When the plants reach the top of the meshes or sticks, prune those buds that have developed out of the top for side buds to grow. When plants flower, start pruning foliole and disease leaves, or reduce leaves density to make favorable condition for plant growth in oder to increase fruiting ability. Provide enough watering to keep proper soil moisture



for plants, especially at flowering and fruiting period. First dressing fertilizeris provided at developing vines and second dressing at blooming flowers period. Apply composted manure and organic fertilizer, especially biogas waste water is very effective. Dilute biogas waste water at ratio of 1:2 and then apply for watering.

5. Pest and disease control:

- Bollworms are objects for prevention, fields should be checked regularly to detect them in time.
- Should remove the plant that suffers from root rot, rust disease and fungus disease and then, burn them in order to prevent deseases.
- Using Maneb for prevention of disease.

6. Harvesting:

Harvesting 50-55 days after planting. Productivity of winterspring season reaches 200-220 kg/100m².



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