Production of clean potato seedlings through hydroponics system – Part 1

Changes in weather patterns have caused unpredictable rainy seasons leading to floods and severe droughts affecting food security hence low crop and food production from farms.

Kenya is a potential potato producing country due to cool temperatures in the highland regions. Climate smart agriculture helps farmers counter inadequate water challenges during food production and on the proper irrigation practices. Efficient irrigation systems include mist, sprinkler, drip and hand watering although hand watering is the least effective method of irrigation. Water conservation practices include, mulching and using basin to retain water within the plant.

Potato production

Low production of potatoes is as a result of farmers using recycled or regenerated seeds which tend to harbour pests and reduce yields.

Tissue culture permits rapid propagation of hundred thousand identical plant and can be produced in eight months. The conventional method requires about four and a half years for the seed to move from basic to certified seeds.

Hydroponics

Hydroponic plants have healthy seedling propagation and are free from soil borne diseases. Mix coco peat and pumice, plant the cuttings at a spacing of about 20 cm. Plant them near each other.

Coco peat are able to hold moisture that can provide water for

the apical rooted cuttings. Pumice is from volcanic rock materials, its highly porous, bacteria and fungi cannot grow in them. From a particular cutting one can get as many as 15 mini-tuber. It is expensive to sterilize farm soils and bulky.

Read more on Production of clean potato seedlings through hydroponics system Part 2