Local Plant Booster Fertilizer
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Introduction

In mtwara region majority of people especially women live difficult life this is simply because many people fail to identify opportunities that surround them in their communities. And if they will be opened their mind to identify the wealth of opportunities that surround them in their society the problem of poverty and difficult life will be solved and life will be good.

Local plant booster fertilizer for vegetable growing in Mtwara this idea behind came after observation made by students to some women indigenous near the school who are poor who uses to come at school compound with their children to collect mangoes ask for clothes washing jobs from students, some time ask for shoes, clothes food remain helps. Meanwhile there is a big opportunity for them to grow vegetables because of many sources of water and supply those vegetables at school and get a lot of money to drive their lives

We as science students asked these women about them to start growing vegetables and supply to our school because the school need them but they said that their land land is not blessed to grow vegetable by god nothing is growing well even if you apply fertilizer and manure. We made simple research and we identify o problem of leaching . this phenomena lead to washing of nutrients way down the soil and leave the plant without nutrients to feed and from there we came out with the hypothesis Local plant booster. This local plant booster is water soluble plant growth regulator used to speed up growth rate of plant leaves ,flowers, and stem in vegetable grown in gardens

Procedure

LOCAL PLANT BOOSTER,MATERIAL,PREPARATION AND USES

(a)LOCAL PLANT BOOSTER

This is water soluble fertilizer which is plant growth regulator it speed up growth rate in plants leaves, flower and sterm in vegetables. This plant booster contain large amount of nitrogen, phosphorous, potassium, magnesium and other trace elements needed by plant for growth. This diffuse in plant leaves ,stem through stomata pore cuticle layer and and lent cells of a plant after reaching the plant tissues stimulates growth in roots,stem,and leaves cell hence growth to the plant.

(b)MATERIAL AND PREPARATION OF PLANT BOOSTER

Materials needed to make this plant booster includes moringa leaves, Banana seta(male part), paw paw leaves . These ingredients are cut into small pieces and crushed together in a motor until they are fine then add water stir and leave it to settle for about five to six hours to make nutrients to dissolves into water from plants cells then decant the mixture or filter the mixture to get solution this solution is what we call LOCAL PLANT BOOSTER

MATERIALS AND THEIR RATIOS

Paw paw leaves 1kg:banana seta(male Part)2kg:water 5litre this is enough to make a concentrated solution of five liter that is suitable for plant growth

CHEMICAL ANALYS OF PLANT BOOSTER

The qualitative analysis tests and biochemical laboratory test reveals that the solution contain cations of calcium, potassium, magnesium and anions of nitrates, carbonates, phosphate and bi carbonate, the presence of amino acids

(C) USES OF PLANT BOOSTER

Dissolve 1cup of tea of solution in 15litre of water and stir it or shake then spray to the whole plant in garden especially in leaves .it is recommended to apply during the evening to avoid effect of evaporation by the sun and during this time stomata of plant leaves and young stem open make the plant booster diffuse slowly into the plant body.

Apply plant booster every after 7 days for better growth results

This plant booster work best in spinach species, Chinese cabbage, potatoes due to softness of their leaves and stem
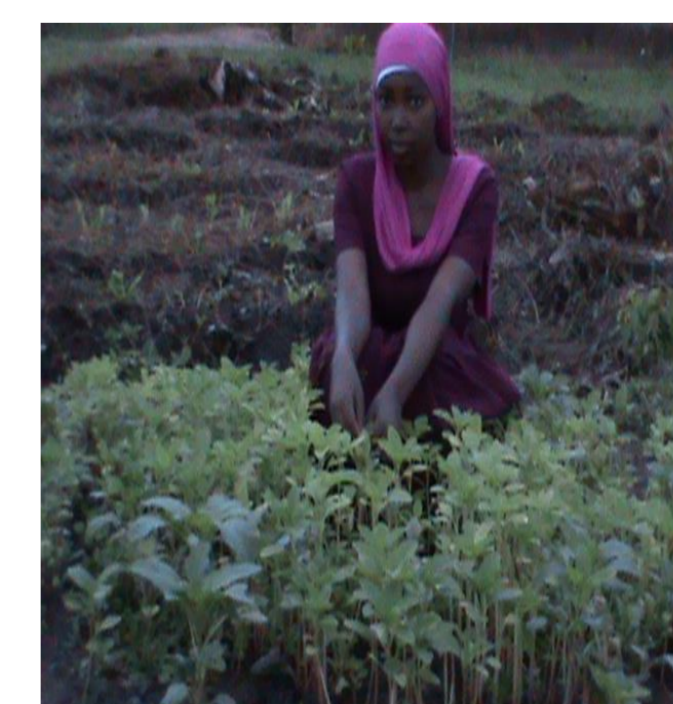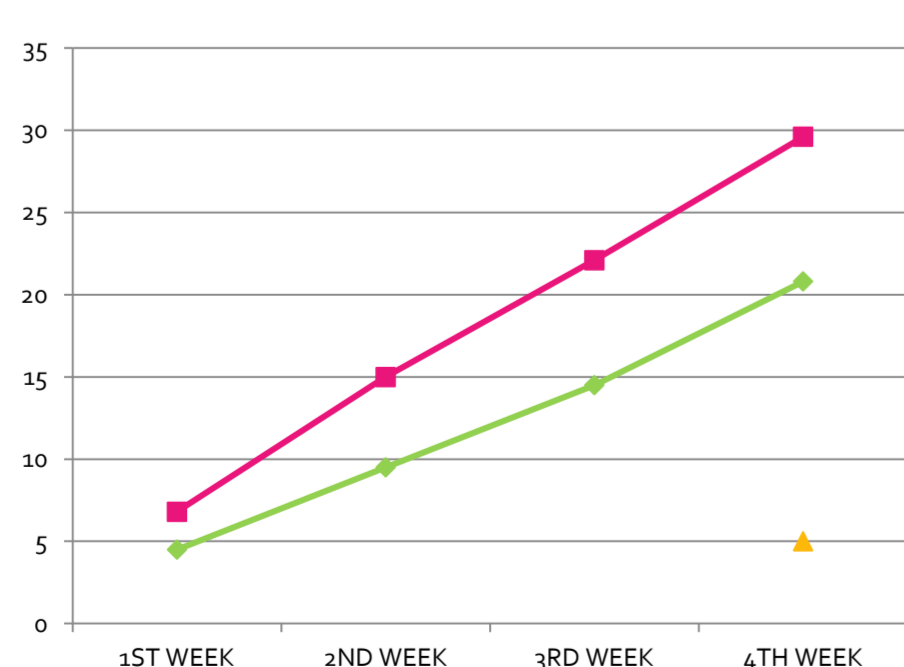
Results

Two garden are introduced garden A and garden B where A is control and B is variable

At garden A plant are cultivated without use of booster fertilizer and at B plant are cultivated by using Local plant booster .Height of plants will be measured every after 7 days then recoded and mean growth will determined for 4 week.

The information that can we get from the graph is that the red line curve for garden B lie above the blue line curve for garden A showing that the application of plant booster has lead to acceleration of plant growth for the plants in garden B so plants of garden B has grown higher compare to garden A the booster supplied necessary nutrients for plant growth.

Also other information obtained from garden B is that the plants leaves were complexly green while those obtained from garden A were yellow in color this show absence of nutrients for their growth

RESULTS OF EXPERMENTS

FIRST WEEK

GARDEN A

PLANTS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HEIGHT(CM)	4	3	4.5	5	5.3	4.5	4	4	5	5.3	5.4	4	5	5

MEAN HEIGHT =68/15 ==4.5cm

GARDEN B

PLANTS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HEIGHT(CM)	6.5	7	6.7	7	7	6.3	7	7	7.2	7	7.2	6.6	6.8	6.9	7

Mean height =103.2/15 =6.8cm

SECOND WEEK

GARDEN A

PLANTS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HEIGHT(CM)	9	10	9.3	9.1	8	10	9	12	10	10	10	9	9	9.5	9

Mean height=142.9/15 =9.5cm

GARDEN B

PLANTS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HEIGHT(CM)	15	15.5	16	14.5	15	15.2	15	14.8	14.5	14.6	15	15.4	15.7

Mean height =226.2/15 =15cm

THIRD WEEK

GARDEN A

PLANTS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HEIGHT(CM)	14	14	15	14.5	14	14.6	14.4	14	14.3	14.7	14	14.5

Conclusions

It is recommended that local plant booster is to be used by the farmer this is a good solution for the problem of leaching in those area around the school compound