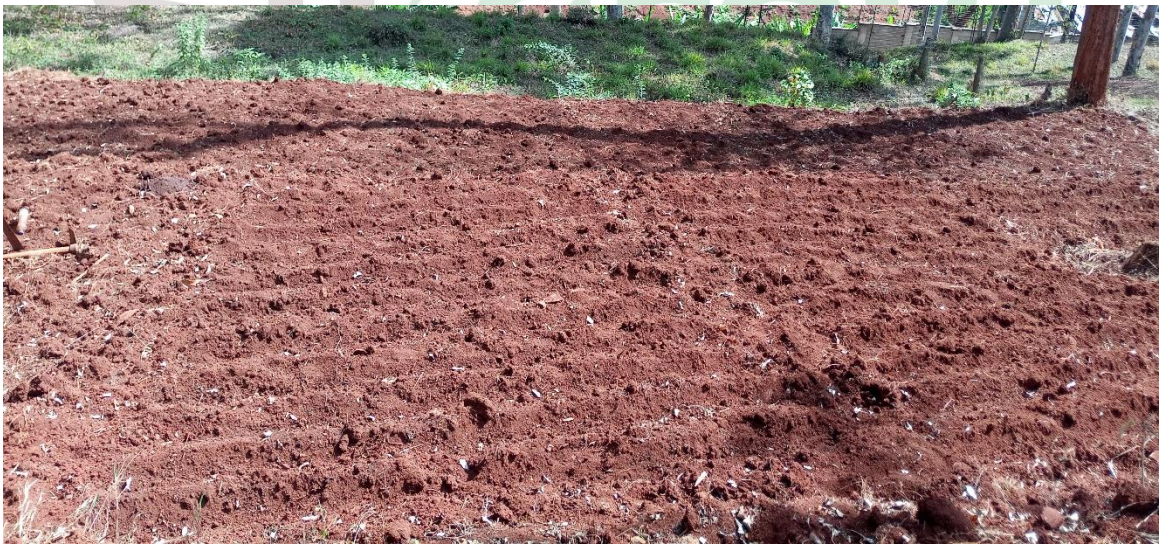
SILGROW APPLICATION REPORT

Land clearing and seedbed preparation at the Muthaiga SILgrow farm commenced on Friday 14th October 2022. The main aim of setting up the demonstration farm was to assess the effect of applying Silgrow on different crops and comparing with crops without Silgrow (control). The standard farm practices and other input application remain constant for all crops the only exception being the Silgrow application.

Land & Seedbed Preparation



LIST OF CROPS GROWN IN THE SILGROW FARM.

SEEDS	SEEDLINGS
1. Coriander 2. French beans 3. Beetroot 4. Red onions 5. Carrot 6. Habanero Pepper 7. Beans 8. Leek 9. Texas Grano Onions 10. Watermelon 11. White Radish	1.Spinach 2.Cayenne pepper 3.Bulb Onions 4.Red & Green Cabbage 5.Capsicum 6.Lettuce

First Application

***Half of all the planted varieties will be treated with Silgrow and the other half left as Control for comparison.**

Silgrow Application was done at a rate of 2ml/Liter (40ml/20Litre Knapsack)

The first Silgrow application was done before planting/transplanting on half of each crop. For the seeds growing on the seedbeds application was done on half of the seedbed portion which was marked.

On the seedlings the first application was done on the foliage and soil before transplanting.

Second Application

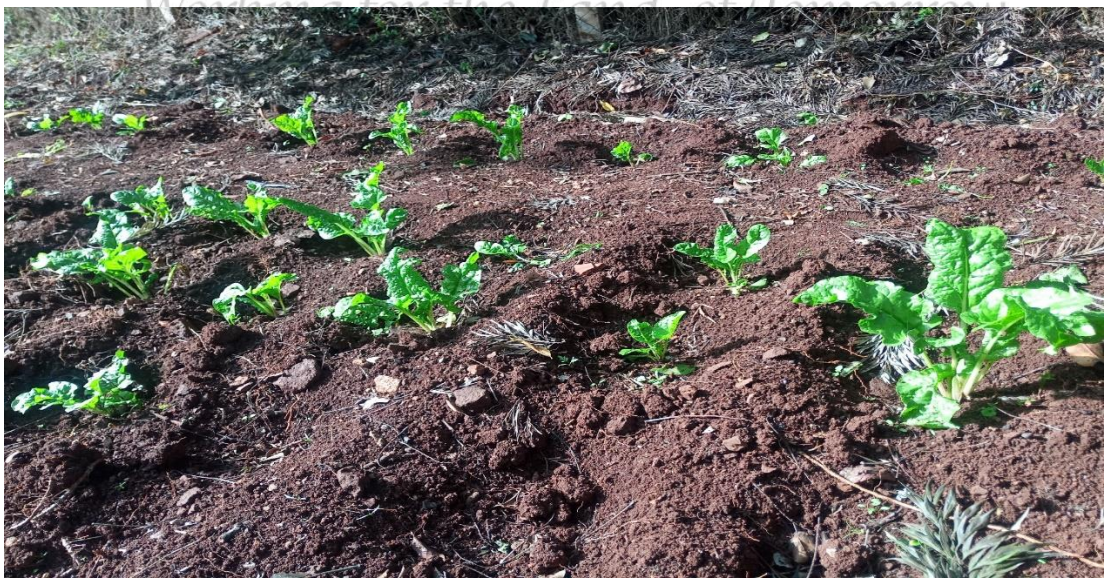
Twenty-one days after emergence/ transplanting, the second application was done on the Silgrow blocks. The application rate was maintained at 2ml/L (40ml/20LWater).

CROPS @21 DAYS

1. Spinach

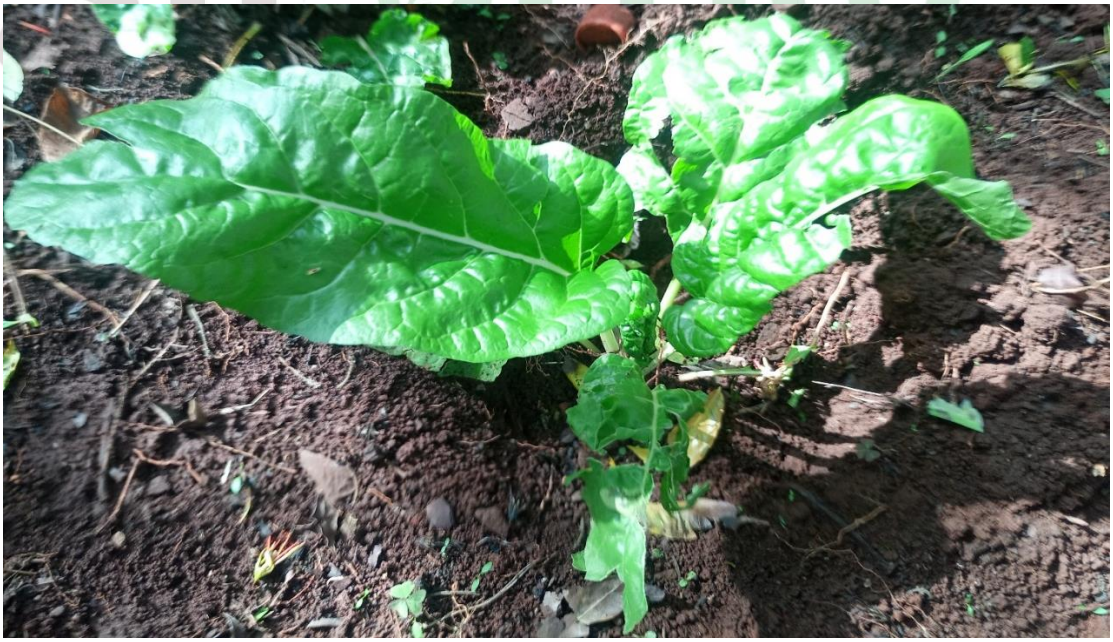
Silgrow

Control



The spinach at 21 days have started showing a difference in canopy formation and foliage appearance. The vegetative growth of the spinach with Silgrow is more vibrant; the spinach producing leaves with a bigger surface area compared to the control. The lushness on SILgrow rows is also more pronounced compared to the control side. More assessment on resilience to extreme weather, pests and other factors will continue to be monitored.

NOTE: There was an infestation by crickets and other sucking insects hence the holes on the spinach leaves. The morning dew was also causing stress on the crop but the crop was sprayed with Emerald and Absolute to control the infestation and environmental stress.



Spinach after application.

2. Cabbage (Red and Green)

Control	Silgrow
	

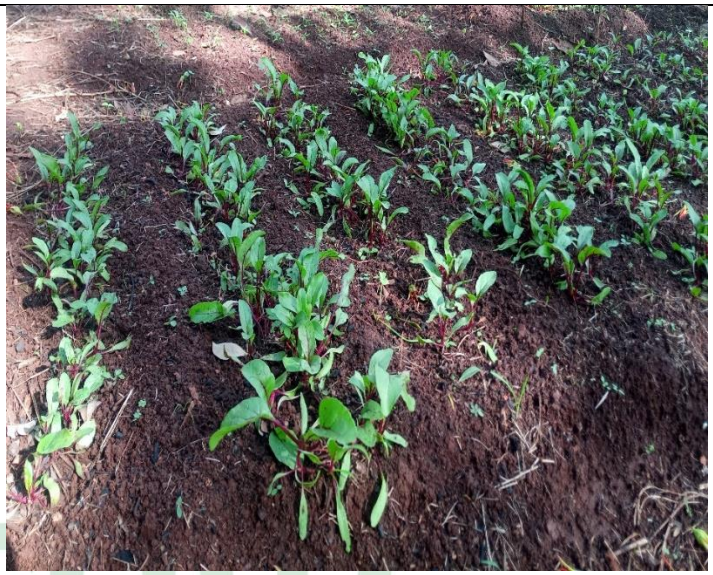
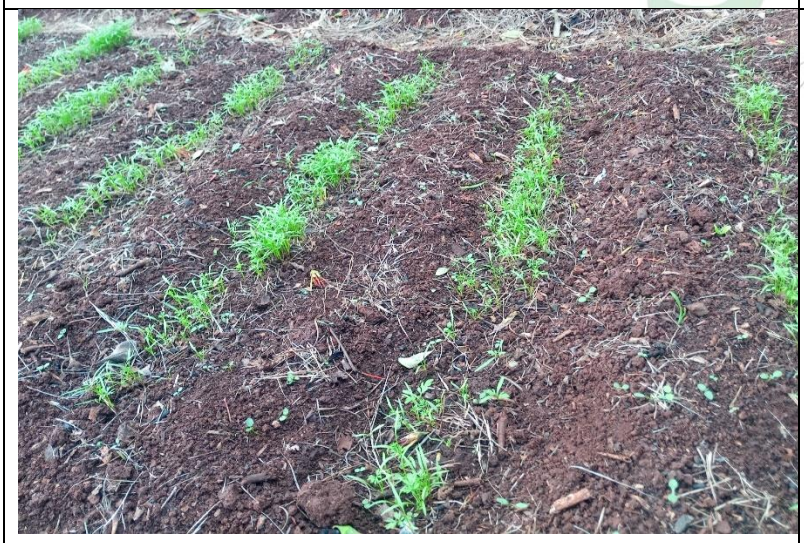
At 21 days after transplant there is a notable difference between SILgrow and the control. SILgrow rows had better foliage formation with more vibrant growth in comparison. With a growth cycle of up to 90 days, more factors will be assessed as the cabbage heads start to form up to the yield and yield attributes.

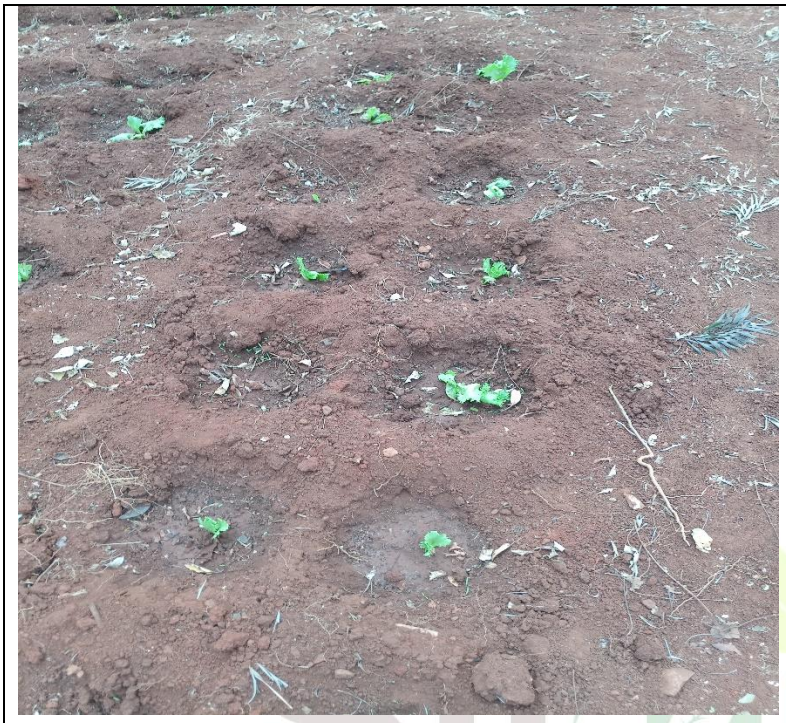
3. Coriander

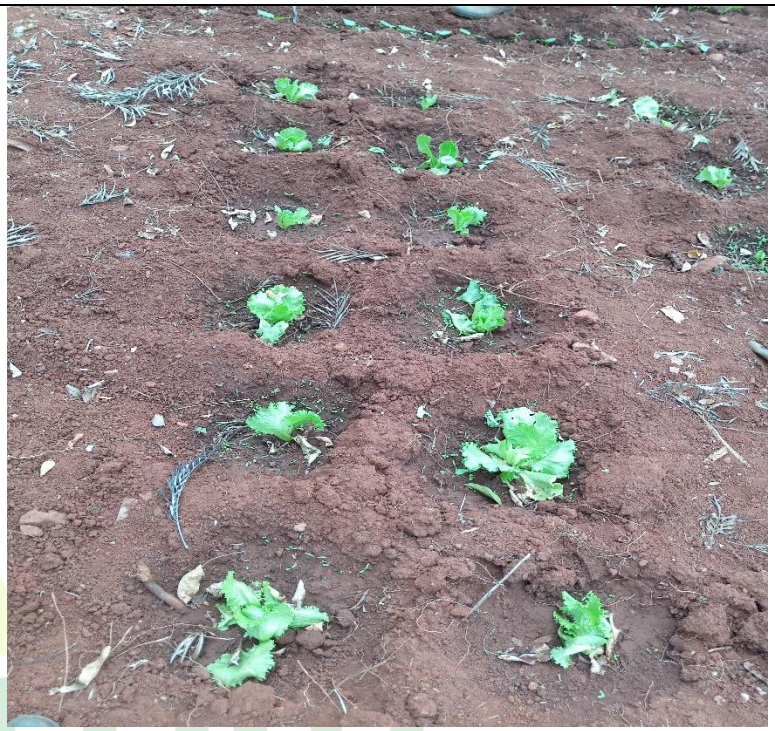
Control	Silgrow
	

During the second application the coriander had a significant difference in emergence. The Silgrow rows were greener, healthier and had a better canopy formation compared to the control rows. During the 3rd Application, roots analysis will be done.

4. **Beetroot**

Control	**Silgrow**
	
Control - Carrots	**Silgrow**
	
Lettuce – Control	





OVERALL OBSERVATIONS

NOTE: The seeds were planted at the same time

The overall observations made from the crops above was accelerated growth from emergence, significant difference in appearance; with the Silgrow the crops had broader leaves, more vigor and accelerated growth. The germination rate and uniformity on SILgrow rows was also higher compared to the controls.

Other Crops that have been planted are still at emergence stage and assessment will be done once well established.