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LABORATORY TRIAL OF MAIZE SEEDS USING SIGNAL OF SPECIAL FORM (SSF) TECHNOLOGY

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Objective: To determine biological effect of the SSF on the germination and early growth characteristics of maize seeds.

Protocol:

1. Sixty seeds of maize were divided into the control and test cohorts of 30 seeds in each.
2. The test and control seeds were separated from each other.
3. The test cohort was prepared for SSF activation by separating from the control cohort at a maximal distance and transferring into a single open container.
4. The container was put on a desk in the room maximally isolated from the strong sources of electromagnetic waves, such as microwave ovens, computer servers, high voltage cables and equipment, TVs, massive metallic objects and so on.
5. A 30-sec fixed video of the test container was captured using a smartphone and sent to SSF representative for activation.
6. After elapsing of the 72-hours duration, the two sets (activated test seeds and control separately) were transferred to three petri dishes (ten seeds in each petri dish) with a filter paper on the bottom and filled with 5 mL of water.
7. After 10 days, the following data were collected on both the test and control seed lot:

Root length (cm) RL,

Shoot length (cm), SL

Germination percentage (%), (GP) and

Seedling vigour index (%)(SVI) SVI = (RL + SL) x GP.

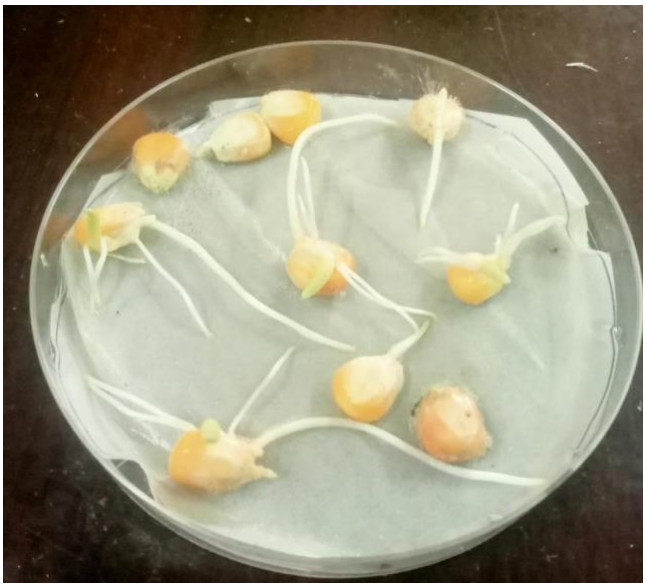
Results
The results for the control and test cohorts were as follows:
Control SL=8.53 cm, RL=8.2 cm, GP= 60% SVI=10.04
Test Cohort: SL=14.17 cm; RL= 8.53 cm, GP=70%, SVI=15.89

It can be deduced that the germination of the seeds from the test cohort increased by 16.7% (from 60% to 70%) compared with the control, there was also a significant difference in the seedling vigour index of the test cohort (about 60% increase) when compared with the control.

Early growth in any seed lot is a function of its vigour index. Good seedling vigour has been reported to translate into better crop establishment, uniformity and overall yield potential on the field. The trial can be revalidated with other crops and planting in screen house or field.

Photos

Control Day 4



Test Day 4

Prof. Kolawole ADEBAYO