ARC • LNR

Enquiries:
DG Paterson

Ref. No:
P07000018

AGRICULTURAL RESEARCH COUNCIL
NATURAL RESOURCES AND ENGINEERING

SOIL, CLIMATE & WATER
Private Bag X79, Pretoria, 0001
SOUTH AFRICA
600 Belvedere Street, Arcadia, 0083
Tel: 012 310 2500 • Int: + 27-12 310 2500
E-mail: adril@arc.agric.za
Website: www.arc.agric.za

AGRICULTURAL ENGINEERING
Private Bag X519, Silverton, 0127
SOUTH AFRICA
141 Cresswell Road, Weavind Park, 0184
Tel: 012 842 4000 • Int: + 27-12 842 4000
E-mail: stoltze@arc.agric.za
Website: www.arc.agric.za

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To whom it may concern:

LABORATORY TRIAL OF SORGHUM SEEDS USING SSF TECHNOLOGY

Objective

Agricultural Research Council-Soil, Climate and Water carried out a basic laboratory trial to assess the potential beneficial effects of Special Spectra Form (SSF) technology on the germination and growth of seeds.

Protocol

The protocol was as follows:

1. Sorghum seeds (60 in total) were used as experimental material.
2. 30 seeds were separated to serve as test material, the remainder were used as a control.
3. A short cell phone video of the test seeds was sent to the SSF representative and this was used to treat these seeds remotely.
4. The test seeds and control seeds were placed in three Petri dishes (ten seeds in each) on filter paper, which was wetted. The two sets (test and control) were kept separate from each other).
5. After approximately five days, the seeds were removed and the following parameters measured:
   - Shoot length (mm) - SL
   - Root length (mm) - RL
   - Germination percentage (%) - GP
   - Seedling Vigour Index (RL + SL * GP)
6. The results were collated and are presented below.

Results

There was very little difference between either the ***root length*** (average 54.4 mm for the Control batch, 54.0 mm for the Test batch) or the ***shoot length*** (average 20.7 mm for the Control batch, 19.4 mm for the Test batch), but the ***germination percentage*** showed a significant difference (70% for the Control batch, 90% for the Test batch), which caused an increase in the ***seedling vigour index***, namely 55.2 for the Control batch as opposed to 66.6 for the Test batch.

The duration of the trial was not sufficient to make any meaningful conclusions about the growth performance of the seedlings, as the maturation period of sorghum is between two and three months, but the increased germination percentage of the seeds (see photos below) is promising. The recommendation would be to scale the research up to either a pot trial (using soil as growth medium) or a field trial, or both.

Yours sincerely,

DG Paterson (Dr)

Research Team Manager: Soil Science
ARC-Soil, Climate and Water

garry@arc.agric.za
012 310 2601 or 083 556 2458

PHOTOS:

Control batch, Day 5

Test batch, Day 5