

SMART Farm Trials

Results from Malawi - Dwangwa: Illovo Nchalo 2022-2023



OVERVIEW



Randomized Treatment Groups



Germination Test Tikolore - 79% SC Serenade - 80%



Planting Date Jan-27-2023



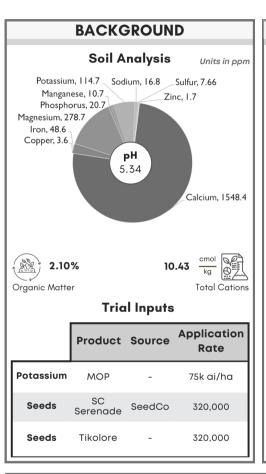
Harvest Date May-12-2023

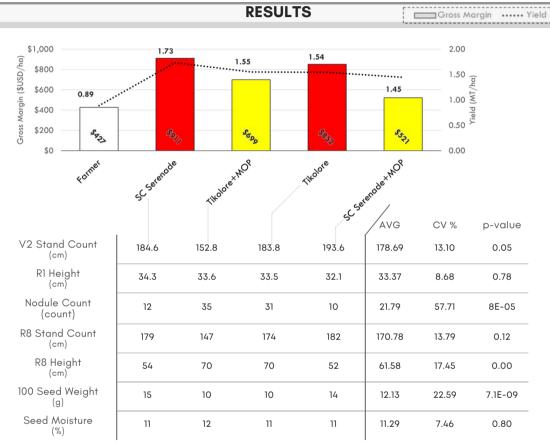


Average Monthly Weather

	Min Temp (°C)	Max Temp (°C)	Rainfall (mm)
Jan	21.5	27.3	118.3
Feb	21.7	27.1	71.3
Mar	26.2	21.4	202.5
Apr	26.4	20.9	9.6
May	19.7	26.7	0.7

= left to right: Minimum and Maximum Temperature The input omission trial comprised 4 treatment combinations of Muriate of Potash (MOP) and the soybean varieties "SC Serenade" and "Tikolore". The treatments were randomized and replicated 4 times. The seeds were planted in 3x5 meter plots with a ~4 cm seed spacing. Each plot contained 4 rows with a 75cm row spacing. Muriate of potash (MOP) was broadcasted on the soil surface after planting.





CONCLUSION

The Red Bundle is recommended for the Dwangwa location. The Red Bundle is the standard growing package. This includes the usage of certified soybean seeds and the adoption of best management practices (early planting, planting in rows, increased seed population, and timely weeding). The red bundle including the "SC Serenade" soybean variety, generated an average gross margin of \$911 USD, a marginal ratio increases of 2.13 compared to the standard farmer and yielded 1.73 MT per hectare. This produces a 2.52x return on certified seed costs and provides an implicit wage of \$3.21 USD for every \$1.00 USD of labor spent (a 221% increase in wages compared to the typical farmer).



