

**ESWATINI INTERNATIONAL
TRADE FAIR, 2025
MINISTRY OF AGRICULTURE
SOIL TESTING UNIT**

SOIL DATA:MARKET SUCCESS

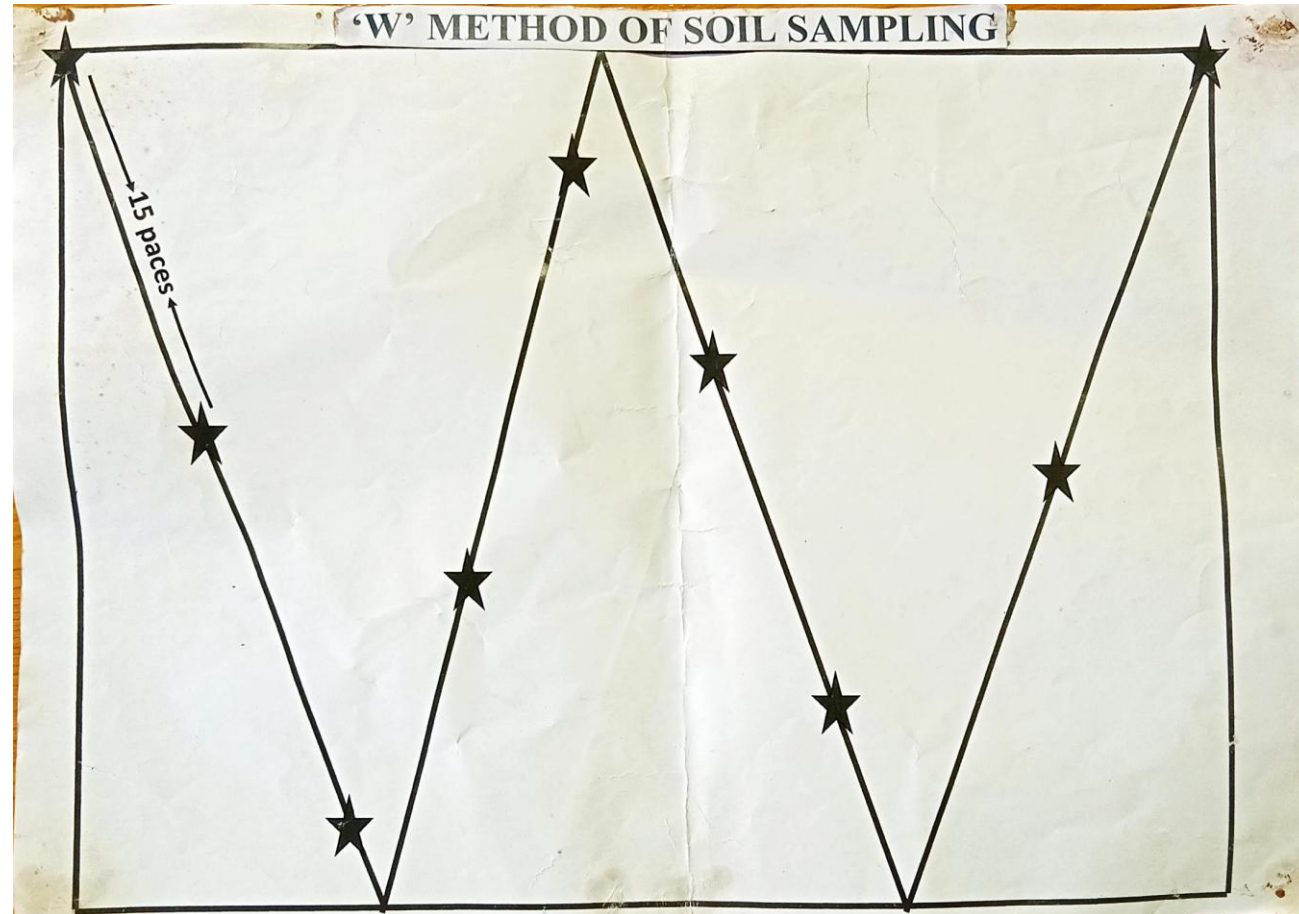
WHY DO SOIL TEST



SOIL SAMPLING EQUIPMENT



IN-FIELD SOIL SAMPLING PATTERN



IN THE FIELD



MIX THE SOIL AND PUT IN THE SOIL SAMPLE BAG



SOIL SAMPLE TAG INFORMATION

- NAME OF FARMER/GROUP:.....
- PIN:.....
- ADDRESS/CELL NO.:.....
- COMMUNITY/AREA:.....R.D.A.....
- CROP:.....
- FIELD NUMBER:.....
- FIELD SIZE (Ha.):.....
- SAMPLING DATE:.....

SOIL TESTING UNIT-RECEIVING



AIR DRYING

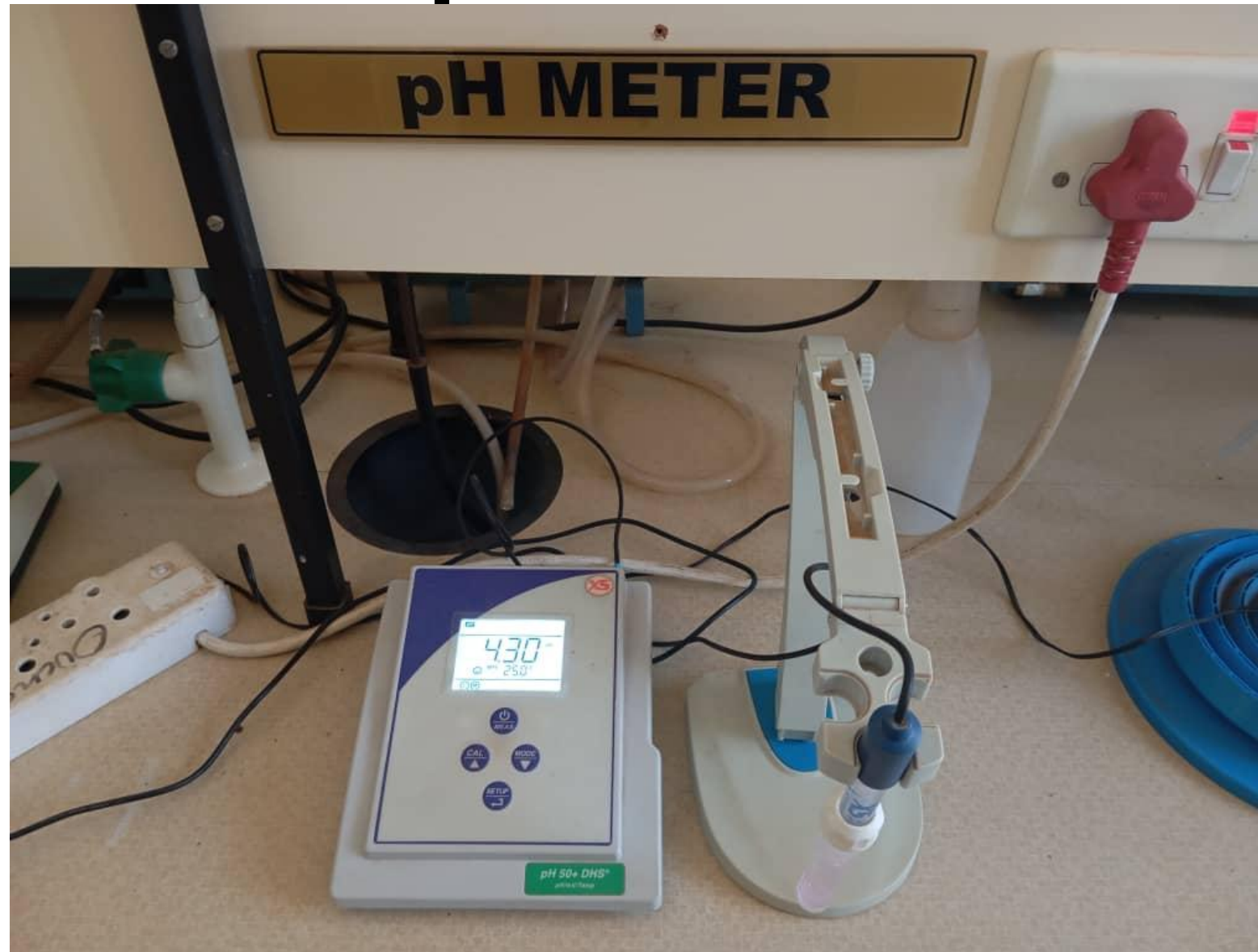


EXTRACTION STAGE



READING INSTRUMENT

pH Meter



READING INSTRUMENT

Titration (Exchangeable Acidity)



READING INSTRUMENT FLAME PHOTOMETER (K, Na, Li)



READING INSTRUMENT UV-VIS (Phosphorus)



READING INSTRUMENT

Atomic Absorbance Spectrophotometer (Mn, Mg, Pb, Cu, Fe, Zn, Mo, B)



SOIL TEST RESULTS AND RECOMMENDATIONS



SWAZILAND GOVERNMENT

MINISTRY OF AGRICULTURE
SOIL TESTING UNIT

Malkerns Research Station, P.O. Box 4, Malkerns. Telephone: 25274118 Fax: 25507172
E-mail: soiltestingunit@swazi.net

Our Ref: M/7 (1328)	Your Ref:	Date: 26/7/2024
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Samkeliso Vilakati
Sihhohhwani
Box 4
Malkerns

Dear Sir/Madam

These are your Soil Test Results/Recommendations

Sample/ Panel No.	Panel Size (ha)	Crop	pH (H ₂ O)	Excha. Acidity (meq/100g)	P (mg/kg)	K (mg/kg)	Amount of Dolomitic lime required
1		Maize	4.5	0.50	26.48	105	2 t/ha or 40 bgs/ha

Fertilizer:
Maize: Apply 2:3:4 (39) + Zn at 200 kgs/ha or 4 bgs/ha. Top dress with L.A.N. (30 – 28%) at 100 kgs/ha or 2 bgs/ha.

N Mzileni
For Agricultural Officer (STU)



LIME



LIME APPLICATION CHART

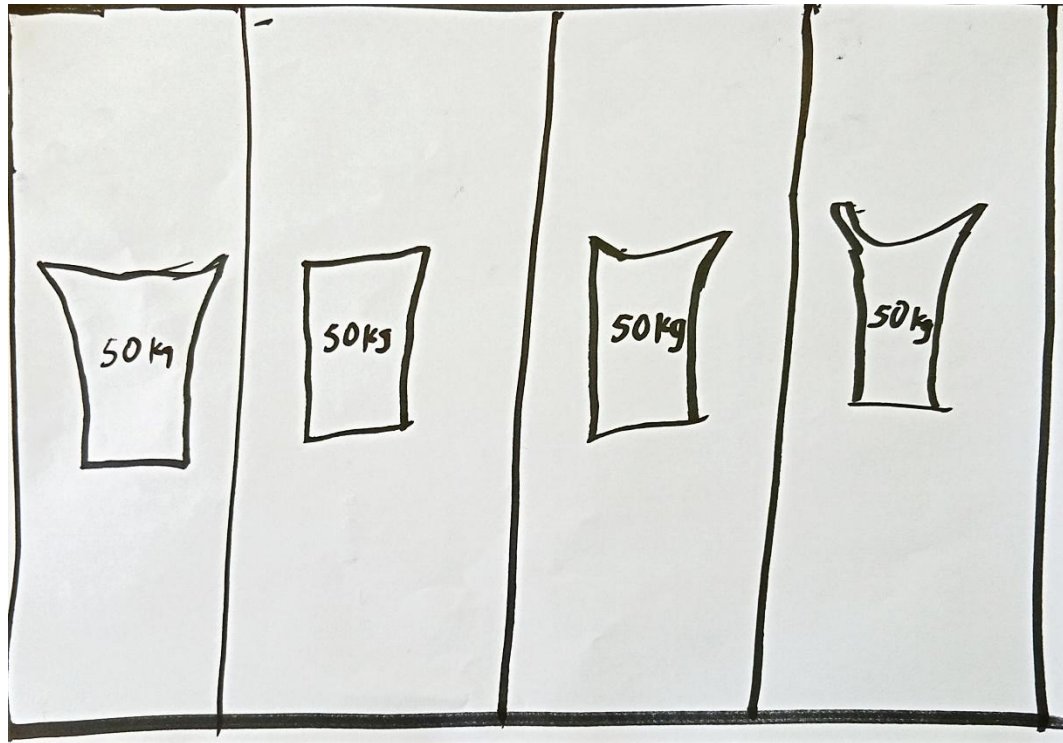
LIME APPLICATION CHART

MEASUREMENTS OF AREA FOR ONE 50kg BAG

[illegible]

LIME APPLICATION

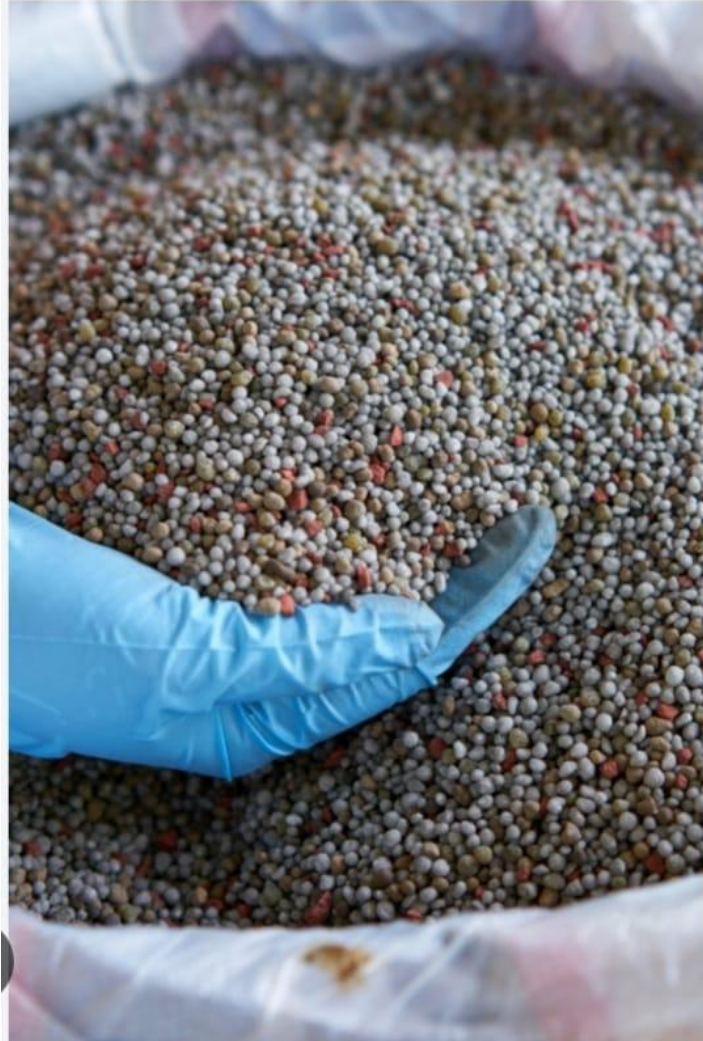
FIELD PARTITIONING AND LIME SPREAD



LIME INCORPORATION



INORGANIC FERTILISER



- COMPOUND FERTILISER
 - 2:3:2 (22)
 - 2:3:2 (37)
 - 2:3:4 (39)
 - 5:1:5 (45)
- STRAIGHT FERTILISER
 - L.A.N.
 - Urea
 - DAP
 - MAP
 - TSP
 - SOP
 - MOP

ORGANIC FERTILISERS



Goat Manure



Cattle Manure

FERTILISER APPLICATION



IN A NUTSHELL



SIYABONGA

MASWATI LAMAHLE