Data Dictionary for: Mozambique_FertilizersCoverCrop data

This data dictionary refers to files:

- Mozambique_FertilizersCoverCrop_plantdata.csv
- Mozambique_FertilizersCoverCrop_soildata.csv

These data can obtained from: http://dx.doi.org/10.25380/iastate.8214428

These data support published journal article in African Journal of Agricultural Research.

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ABOUT

Improved production systems for pigeonpea and common bean in Mozambique was compiled to test whether improved farming systems can increase yield of pigeonpea and common bean in Gùrué District, Mozambique. Using the databases, we report how NP fertilizers and lime affected soil fertility after the pigeonpea cover crop was terminated, and common bean plant height at four dates following application of limestone, N, P, and K. Usage of this dataset has no copyright or propriety restrictions other than citation of the appropriate manuscript.

FUNDING

TIMELINE

Creation/Collection – 10 January 2016
Last Update – 11 Dec 2017
Temporal Start – 10 January 2016
Temporal End – 20 August 2017

REFERENCES

https://pdfs.semanticscholar.org/903f/b6d3aa335b780cefc29d401c3002bfc8f070.pdf

KEYWORDS

Common bean; Phaseolus vulgaris; Pigeonpea; Cajanus cajun; acid soil; bean height; nutrient availability;

Phosphate_N_lime_pigeonpea_bean_Gurue_Mozambique_soildata.csv

The data table contains 12 columns and 187 rows of information.

Name	Label	Type
i01	Plot location (north, south, or east in the block)	Discrete
i02	Block	Discrete
i03	Treatment (1-7), see separate table for definitions	Discrete
i04	Treatment time (postharvest of pigeonpea cover crop)	Discrete
i05	Depth_cm (0-10 cm or 10-20 cm)	Discrete
i06	pH	continuous
i07	Phosphorus (Mehlich-3, ppm)	continuous
i08	Potassium (Mehlich-3, ppm)	continuous
i09	Calcium (Mehlich-3, ppm)	Continuous
i10	Magnesium (Mehlich-3, ppm)	Continuous
i11	Aluminum (ppm)	Continuous
i12	Manganese (mg/cm3)	continuous

Treatment definitions for i03 for file Phosphate_N_lime_pigeonpea_bean_Gurue_Mozambique_soildata.csv

Treatment	Lime (t/ha)	N (kg/ha)	P (kg/ha	K (kg/ha)
1	0	0	0	0
2	0	20	20	0
3	1	20	20	0
4	3	20	20	0
5	6	20	20	0
6	3	20	0	0
7	3	0	20	0

The data included in columns were used in one journal publication

Example	Source Type	Description
Rocha et al. 2017	A published journal article	Rocha, A., R. Maria, U.S. Waite, U.A. Cassamo, K. Falinski, and R. Yost. 2017. Improving grain legume yields using local Evate rock phosphate in Gùrué District, Mozambique. *African Journal of Agricultural Research* Vol. 12(22), pp. 1889-1896, 1 June, 2017. DOI: 10.5897/AJAR2017.12331

NPK_lime_commonbean_Gurue_Mozambique_plantdata.csv

The data table contains 11 columns and 145 rows of information.

Name	Label	Type
i01	Block	Discrete
i02	Treatment (1-8), see separate table for definitions	Discrete
i03	Farmer (1-4)	Discrete
i04	Limestone	Continuous

i05	N (nitrogen fertilizer applied, kg ha)	Continuous
i06	P (phosphorus fertilizer applied, kg ha)	Continuous
i07	K (potassium fertilizer applied, kg ha)	Continuous
i08	Bean ht (inches, DOY 48 2017)	Continuous
i09	Bean ht (inches, DOY 58 2017)	Continuous
i10	Bean ht (inches, DOY 72 2017)	Continuous
i11	Bean ht (inches, DOY 129 2017)	Continuous

Treatment definitions for i02 in NPK_lime_commonbean_Gurue_Mozambique_plantdata.csv

Treatment	Lime (t/ha)	N (kg/ha)	P (kg/ha)	K (kg/ha)
1	0	0	0	0
2	0	20	20	0
3	1	20	20	0
4	3	20	20	0
5	6	20	20	0
6	3	20	0	0
7	3	0	20	0
8	0	0	0	20

The data included in columns were not used in a journal publication.