

Supplementary Information

Contribution of improved varieties to maize productivity under climate change in Uganda

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SI1: Information on soil characteristics used in the modelling

Information Source	Name	Characteristics	URL
HC27	The Harvest Choice Soils Generic	The 27 soil profiles were generated based on three criteria that crop models are most responsive to: texture, rooting depth (proxy of water availability), and organic carbon content (proxy of fertility). Three levels for each category were classified using the boundary conditions based on the meta-analysis	https://hdl.handle.net/10568/144338
ISRIC	World Soil Information Soils	ISRIC is a system for digital soil mapping that makes use of sample soil profile information and covariate data to model the spatial distribution of soil properties across the globe. ISRIC is a collections of soil property maps produced using machine learning at 250 m resolution. Predictions are made at six standard depths. ISRIC uses global models that are calibrated using all available input observations and globally available environmental covariates.	https://www.isric.org/
WISE	World Inventory of Soil Emission Potentials	WISE comprises a set of harmonised soil profile data considered to be representative for the soil units of the FAO Soil Map of the World. These profiles were used to develop consistent taxo-transfer rules to estimate soil property estimates, by FAO soil unit and depth zone, including: organic carbon, total nitrogen, pH water, cation exchange capacity, base saturation, aluminium saturation, calcium-carbonate and gypsum content, exchangeable sodium, electric conductivity, bulk density and the sand, silt and clay fractions	https://www.isric.org/explore/wise-databases