Supplementary Table 1 Application rates of soil amendments calculated based on titratable alkalinity of the amendments and LBC_{eq} of the soil. In the lime + organic amendment mixes, the organic amendment rate is 15 g kg^{-1} soil.

Soil amendments	Respective application rates (g kg^{-1} soil)
Unamended soil	-
Lime	2.81
Organic amendments	
Wheat straw	471.1
Faba bean straw	127.8
Blended poultry litter	31.2
Biochar	32.6
Compost	15.4
50:50% mixture of organic amendments	
Wheat straw + compost	235.6 + 7.7
Faba bean straw + biochar	63.9 + 16.3
Lime-organic amendment combinations	
Lime + wheat straw	2.72 + 15
Lime + faba bean straw	2.49 + 15
Lime + blended poultry litter	1.49 + 15
Lime + biochar	1.54 + 15
Lime + compost	0.13 + 15

The liming value of 15 g of each organic amendment is presented in Table 3.

Supplementary Table 2. Correlation matrix between pH_W of amended soils and basic chemical properties of the amendments (incubation in a 1:5 soil to water)

	pH of OA	EC of OA	Excess cations	Alkalinity	Soil pH (60% FC)	Soil pH (100% FC)	Soil pH (150% FC)
pH of OA	1						
EC of OA	-0.09	1					
Excess cations	0.47	0.78**	1				
Alkalinity	0.60*	0.69**	0.98**	1			
Soil pH (60% FC)	-0.44	-0.43	0.69**	0.72**	1		
Soil pH (100% FC)	-0.45	-0.48	0.72**	0.75**	0.99**	1	
Soil pH (150% FC)	0.90**	0.22	0.72**	0.82**	0.77**	0.78**	1

* Correlation is significant at 0.05 level, ** Correlation is significant at 0.01 level of significance, OA: organic amendment, EC: electrical conductivity